

Towards a non-toxic environment in South-East Asia

Phase II



Program document

– Application for a second phase of 5 years –

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| Programme title: | Towards a Non-Toxic Environment in South-East Asia. |
| Overall objectives (long-term impact): | <p>The programme contributes to:</p> <ul style="list-style-type: none"> • Better management and more sustainable use of agricultural, industrial and consumer chemicals • Reduced risks from chemicals to human health and the environment • More sustainable intensification of agricultural production and improved resilience to climate change |
| Programme objectives (medium-term outcome): | Strengthened capacity and regional collaboration for efficient in pesticide risk reduction and chemicals management within and among partner countries |
| Donor: | Swedish International Development Cooperation Agency (Sida) |
| Lead implementing agency: | Swedish Chemicals Agency (KemI) |
| Implementing partners: | <ul style="list-style-type: none"> • Food and Agriculture Organization of the United Nations (FAO) • Pesticide Action Network – Asia and the Pacific (PAN-AP) • The Field Alliance (TFA) |
| Countries: | <ul style="list-style-type: none"> • Cambodia • China (selected provinces) • Lao PDR • Myanmar • Thailand • Vietnam |
| Starting date: | Phase I started in January 2007 and was prolonged by 3 years in June 2010. The envisaged start of phase II is 1 July 2013. |
| Purpose of application: | To scale-up and consolidate results of the programme in a sustainable manner, to include more stakeholders and to expand the programme area with two new countries to a total of six Greater Mekong Sub-region countries. This requires a second phase of the programme, from 1 July 2013 to 30 June 2018 with a budget of SEK 99 Million. |
| Justification: | An independent evaluation conducted by Professional Management in 2011 stated that phase I of the programme has been successful in addressing concrete needs of the countries concerned, meeting Sida's criteria and has delivered considerable and important results. It also confirmed that the 10 year horizon that was adopted at the inception of the programme had been realistic and recommended a second phase to scale up and consolidate achievements and to maintain the momentum towards fulfilment of the programme's long-term objectives. |

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1 Acronyms and abbreviations

| Acronym | |
|---------|---|
| ABD | Agro-biodiversity |
| APPPC | Asia & Pacific Plant Protection Commission |
| ASEAN | Association of Southeast Asian Nations |
| CECAD | Center for Environment and Community Assets Development |
| CEDAC | Centre d'Études et de Développement Agricole Cambodgien |
| CGFED | Research Center for Gender, Family and Environment in Development |
| CPAM | Community-based Pesticide Action Monitoring |
| CSO | Civil Society Organisation |
| DALY | Disability Adjusted Life Year |
| EU | European Union |
| FAO | Food and Agriculture Organisation of the United Nations |
| FFS | Farmer Field School |
| GHS | Globally Harmonised System |
| GMS | Greater Mekong Sub-region |
| ICEVN | Initiative for Community Empowerment |
| IFCS | International Forum for Chemical Safety |
| IPCS | International Program on Chemical Safety |
| IPM | Integrated Pest Management |
| IPPC | International Plant Protection Convention |
| JICA | Japan International Cooperation Agency |
| KemI | Swedish Chemicals Agency |
| LFA | Logical Framework Approach |
| MDG | Millennium Development Goals |
| MoA(I) | Ministry of Agriculture (and Irrigation) |
| MoAC | Ministry of Agriculture and Cooperatives |
| MoC | Ministry of Commerce |
| MAF(F) | Ministry of Agriculture, Forestry (and Fishery) |
| MARD | Ministry of Agriculture and Rural Development |
| NALD | Non-profit Association for Development and Environment |
| NGO | Non Governmental Organisation |
| OISAT | Online Information Service on non-chemical pest management in the Tropics |
| PAN-AP | Pesticides Action Network Asia & Pacific |
| PAN-NA | Pesticides Action Network North America |
| PEAC | Pesticide Eco Alternative Center |
| PIA | Pesticide Impact Assessment |
| PIC | Prior Informed Consent |
| POP | Persistent Organic Pollutants |
| RBM | Result-based Management |
| RCRD | Research Center for Rural Development |
| REAL | Rural Ecological Agriculture for Livelihood |
| SAEDA | Sustainable Agriculture & Environment Development Association |
| SAICM | Strategic Approach to International Chemical Management |
| SEK | Swedish kroner |
| SENSA | Swedish Environmental Secretariat for Asia |
| Sida | Swedish International Development Cooperation Agency |
| TFA | The Field Alliance |
| TEF | Thai Education Foundation |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WHO | World Health Organisation |

2 Background

2.1 Introduction

Over the past few decades, there has been a growing concern that chemicals, while essential for virtually every aspect of modern life and the economy, can cause significant adverse effects on human health and the environment. As a result, there was a global response to deal with the challenge through different commitments for action. These included the Bahia Declaration on Chemicals Safety in 2000, the Johannesburg Plan of Implementation adopted by heads of state in 2002 and the global adoption of the Strategic Approach on International Chemicals Management (SAICM) in 2006.

Despite such international commitments, when it came to chemicals management, the gap between industrialized and developing countries was widening. In developing countries, and particularly in South-East Asia, it was noted that there were major gaps in government policies and a lack of implementation of sound chemicals management. The harmful effects of chemicals, particularly pesticides, were further compounded by poverty, illiteracy and a lack of awareness of their dangers. For example, it was common to witness poor small-scale farmers who unknowingly mixed highly toxic pesticides with bare hands, the dumping of hazardous chemicals that infiltrated groundwater, open air burning of environmentally harmful substances and unacceptably high levels of pesticide residues in food.

Sida was concerned about such chemical related issues in the region and commissioned, in 2004, several studies to get an overview of the situation and to develop ideas for possible interventions. The studies documented that there were serious issues that needed immediate attention and that vulnerable groups were disproportionately affected. The studies highlighted that there was virtually no enforcement of laws and regulations around the management and use of such chemicals and a serious lack of capacity and political commitment to tackle the problem. This prompted a recommendation that regulations governing pesticides should be an important initial target in order to phase out WHO Hazard Class I (extremely and highly hazardous) pesticides. It recommended that a multi-sectorial approach including more effective regional cooperation should be used to tackle the issues.

In response to the recommendations, the programme, “Towards a Non-Toxic Environment in South-East Asia”, was initiated in January 2007. The programme builds on a strong partnership with well established organisations that together had many years of experience on dealing with chemicals management issues in the region. At present, the programme comprises four different components that contribute to awareness raising and capacity building with regards to pesticides, industrial and consumer chemicals in the Greater Mekong Sub-region through multiple pathways. The programme’s overall aim is to contribute to reduced health and environmental risks and better management of agricultural, industrial and consumer chemicals. Key results from the on-going programme can be found in Annex 1 and specific progress is highlighted in the table below.

During September-November 2011, a mid-term evaluation of phase I of the programme was conducted by independent consultants from Professional Management and the FAO Office of Evaluation. The evaluation confirmed that the programme has produced expected outputs and

outcomes. The content of the programme remains highly relevant to the recipient countries and continues to fit well with the Swedish government's priorities in the region. The evaluation acknowledges that it was correct to adopt a 10 year horizon for the programme in order to reach sustainable changes in the region. The management responses to all of the main recommendations are summarised in Annex 2.

While optimistic in what has and can be achieved, programme partners are aware of the challenges that still remain; the UNEP report "Global Chemicals Outlook" of 2012 predicts that global sales of chemicals will grow about 3 % per year until 2050 and the major part of the increase will be in Asia. The report acknowledges the need for urgent action to increase the awareness about the negative impact of chemicals and has clearly articulated the way forward: "Sound chemicals management must become a national and international environmental, public health and economic and business development priority". The report highlights that the financial cost of chemical exposure on national economies and the public are often both substantial and unrecognized and that only with sound chemicals management can significant benefits be achieved in terms of economic development, poverty reduction, human health and environmental quality. A conservative estimate for pesticide users on smallholdings in the sub-Saharan African region reveals that the cost of injury (lost work days, outpatient medical treatment and inpatient hospitalization) from pesticide poisonings, in this region alone, amounted to 4.4 billion US dollar in 2005. This is an underestimate as it does not include the cost of lost livelihood and lives, environmental health effects and effects of other chemicals. The projected cost from 2015 to 2020 is estimated to be 90 billion US dollar. The pace of industrialization and the intensification of agricultural production for food security in the South-East Asia region add to the urgency to build capacity in chemicals management and reduce pesticide risk on human health and the environment.

As a result, programme partners are now applying for support to start phase II of the programme.

Highlighted achievements

- More than 8 000 people have been involved in the "No Pesticide Use Day" Campaign, training, seminars and workshops on the risks of pesticides and over 2 200 farmers have been made aware of the health impacts of pesticides, the availability of highly hazardous pesticides as well as banned and restricted pesticides.
- PAN-AP has spearheaded the "Ban endosulfan" campaign by providing timely technical information on the hazards of endosulfan and its alternatives and actively participated in the technical committees. Endosulfan is now listed in the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention.
- Capacity of relevant government agencies (extension services, crop protection services) and non-governmental development partners to conduct IPM field programmes has been strengthened in all 4 GMS partner countries. New curricula and training materials were developed with a focus on fortification of IPM-FFS with pesticide risk reduction learning modules. By June 2012 some 280 government extension workers had participated in Pesticide Risk Reduction Training of Trainers courses and 43 705 farmers had participated in 'fortified' Farmers Field Schools supported by FAO with project resources in the Greater Mekong Sub-

region. During this period, thousands of additional farmers benefited from participation in local government and/or other donor funded FFS programmes that were implemented with FAO technical and coordination support.

- The Field Alliance and its partners successfully implemented the Rural Ecological Agriculture for Livelihood (REAL) program in Cambodia, China, Laos, Thailand and Vietnam. Curriculum have been translated into local languages and integrated into the school and community action and learning programs. Over 150 teachers, officials and community members were strengthened on their understanding and application of agro-biodiversity and impact of pesticide use and approximately 2 500 students have participated in REAL activities. Regional workshops and exchange visits were organized to share successes, progress, plans, and solicit policy support in participating countries.
- Three countries were assisted with the preparation of new pesticide legislation. In two of these the new legislation has been adopted, while the third one is in the final stages of internal review. Inspection schemes for the enforcement of pesticide legislation were piloted in 2 countries and scaling up to national level has started in one of these.
- A network and a working group for regional cooperation on chemical management with representatives from key ministries and government agencies are established.
- Development of legislation and strategies for chemicals management in Lao PDR, Cambodia and Vietnam has been enhanced through regional cooperation.

2.2 Swedish priorities

The Swedish national plan for development (PGU), which has chemicals as a focus area, recognizes the need to improve information at the international level on chemical substances in articles as one of the key objectives to help reduce environmental and health risks throughout a product's lifecycle. The PGU also recognizes the importance of supporting countries that wish to develop national chemical control systems.

The Swedish policy for environmental and climate issues recognizes that strengthening institutional capacity in public administration for chemicals management is a priority area of activity to fulfil the aim of the policy. Efficient environmental management is achieved through competent, well-functioning and democratic public institutions on the regional, national and local level. By cooperating with different actors Sweden shall support capacity building including the development of legislation and tools for monitoring, supervision and enforcement at environmental management institutions.

The strategy for regional development cooperation with Asia, focusing on South-East Asia, states that based on Swedish comparative advantages, particular consideration shall be given to chemicals management. Support aimed at strengthening regulatory frameworks governing environmentally harmful trade can also be provided.

2.3 Next phase

Following the recommendations from the mid-term evaluation, Swedish priorities and the global, regional and local development in the area of chemicals management, this application concerns a

second phase of the programme of five more years, from 1 July 2013 to 30 June 2018 with a new fund allocation of SEK 99 Million.

This new phase will enable the various components to continue to roll out their training programmes to reach a critical mass of beneficiaries and other relevant stakeholders in new regions. It will also enable the programme to strengthen regional cooperation and to continue the reform of the regulatory framework for the control of pesticides and further strengthen enforcement activities. Besides pesticide risk reduction, the management of industrial chemicals will continue to be addressed through further development of the regional chemicals management forum, other regional activities and pilot projects. Special emphasis will be put on strengthening of regional cooperation and facilitation of information sharing.

Regional, national and local ownership will be reinforced through consolidation of activities into government programmes and budgets, through mainstreaming of activity lines in programmes of CSOs, education programmes and in practices of farming communities. For the management of industrial chemicals efforts will be made to identify existing institutions that can become the institutional home for effective regional chemicals management and to strengthen these institutions to effectively fulfil this responsibility.

In view of the positive impacts of the programme, described in reports and the mid-term evaluation, an expansion is planned to cover additional countries within the South-East Asian region and more aspects of chemicals management.

3 Programme description and approaches

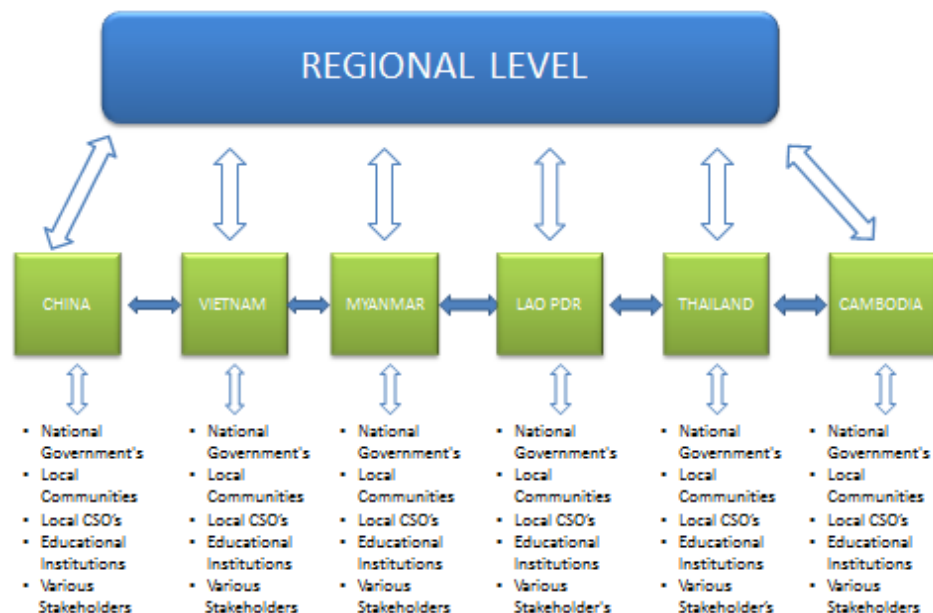
The programme has during five years made considerable achievements. New legislation has been developed and adopted, availability and use of WHO Hazard Class I pesticides has decreased significantly, the use of IPM/FFS is increasing and governments has begun to support the concept both with funding and by including it in the government extension service, school curriculum for agro-biodiversity has been developed and used in a large number of schools, a forum for discussions and exchange of information and experiences on chemicals management issues has been established.

These initial achievements now need to be scaled up and consolidated. Phase II will aim at achieving national coverage for pesticide inspection work, scaling up of the farmer field school , education and advocacy programmes of the different partners, further enhance regional collaboration and coordination in all project areas, strengthen the synergies between the different project components and ensure they are institutionalised in government and CSO policies and programmes.

The programme considers safe food a “right” of all and not a privilege of a few. Farmers, their families and their communities have a right to live in a non-toxic environment and consumers have a right to eat food that is healthy and free from pesticide residues. All programme activities are designed and implemented taking into account cross-cutting issues, such as gender aspects, the rights perspective, anti-corruption and good governance, in order to ensure transparency, inclusiveness and safe food for all. All implementing partners acknowledge the importance of taking such aspects into account and undertake to work actively with these issues. Specific indicators at all levels ensure that the cross-cutting issues are continuously monitored and evaluated.

The intervention logic for the programme is described in the overall LFA matrix (Annex 3). The programme objective (medium-term outcome level) “Strengthened capacity for pesticide risk reduction and chemical management within and among partner countries” is supported by five immediate objectives (logically developed to achieve the short-term outcomes and medium-term outcome).

The geographical scope of the Programme is South-East Asia and has a primary focus on the Greater Mekong Sub-region. In addition to the current partner countries Cambodia, China, Lao PDR and Vietnam, the programme will be expanded to include Myanmar and Thailand. Regional activities under this programme might also involve other countries from the region.



Some new areas of attention that will be elaborated during phase II are highlighted in the box below:

New attention areas for Phase II:

- Involvement of the private sector where this can contribute to fulfilment of objectives without conflict of interest.
- Linking farmers to consumers and value chains where this can be beneficial to farmers in obtaining recognition for their agro-ecological approaches in the form of higher prices or preferential market access that helps stabilise production.
- Consumer awareness on food safety issues will be promoted to develop the demand-side for products that have been produced with minimal use of chemicals
- Use of new media platforms for advocacy purposes and for dissemination of project materials will be explored and developed.

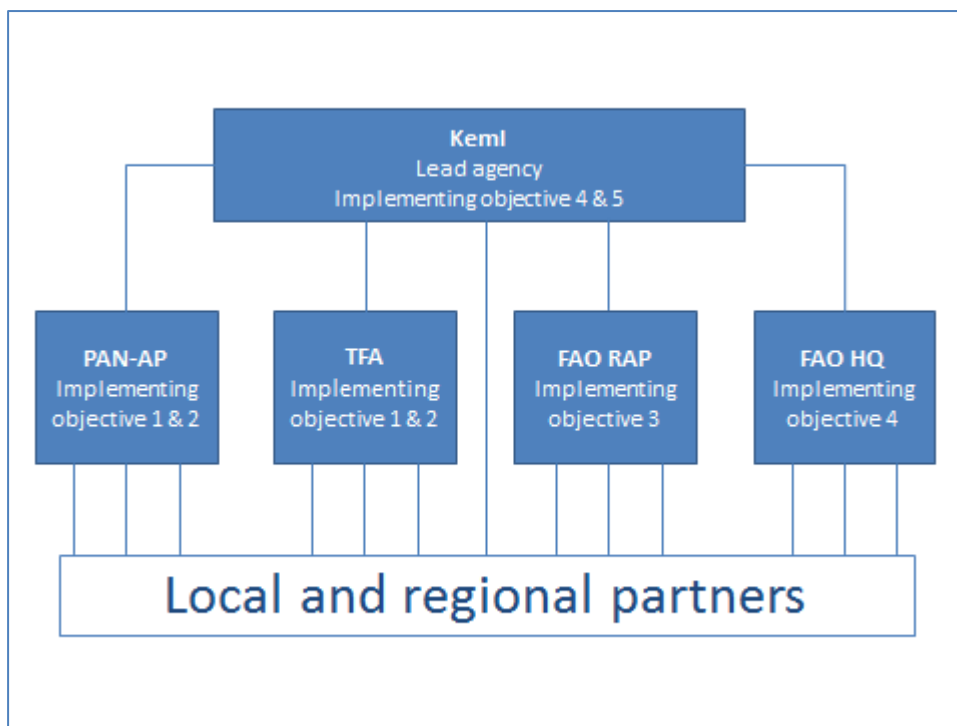
3.1 Implementing organisations

3.1.1 General description

Most of the work on pesticide management is sub-contracted to three implementing partners, two CSOs (PAN-AP and TFA) and FAO, with on-going work on pesticide risk reduction in South-East Asia. These partners are all very knowledgeable on the region as well as on local stakeholders. This strategy of anchoring activities in on-going programmes of regional organisations aims to ensure sustainability of the Programme.

KemI plays, besides its coordination responsibilities for the overall programme, an active technical role in implementation of immediate objective 4 together with FAO HQ. Further, KemI is responsible

for implementation of immediate objective 5, focusing on chemicals management in a broader sense, through capacity building and networking with officials at chemicals management forums.



Each of the partner organisations in the programme has long and extensive experience in running projects in the field of chemicals management, has established implementation networks and has good regional knowledge. They have a broad understanding and experience regarding sustainability measures and the importance of including different segments of stakeholders in the society. The programme is managed according to the principles of RBM (Results-Based Management), focusing on a participatory approach, continuous monitoring and learning from results.

More information on each partner organisation is presented in the text below.

3.1.1.1 The Swedish Chemicals Agency, KemI (implementing objective 4 and 5)

In December 2010 a new framework agreement was signed between Sida and KemI, the first in its kind. Prior to this new agreement Sida made an assessment of KemI, which shows that Sida has ascertained that KemI, being an authority with mandate for overarching policies and legislation on chemicals management in Sweden, has unique knowledge and wide understanding and experience for the area. The chemicals legislation is, in principle, harmonized within the EU, and KemI actively participates within the EU in development and improvement of the regulations, and also actively takes part in the international work on conventions in the chemicals area. Internationally, KemI has a leading role in chemical management, which implies that the staff at KemI has a wide national and international network.

Furthermore, KemI is the central authority as regards the human health and environmental risks from chemicals. Among main responsibilities of KemI are to:

- Implement EC regulations in Sweden as well as to elaborate Swedish national rules in the chemicals area.
- Participate in the development of international conventions and their implementation.
- Supervise chemicals manufacturers and importers and guide municipal authorities in their supervision of chemicals control.
- Maintain a product registry on chemicals and contribute to national statistics on chemicals manufacture and import.

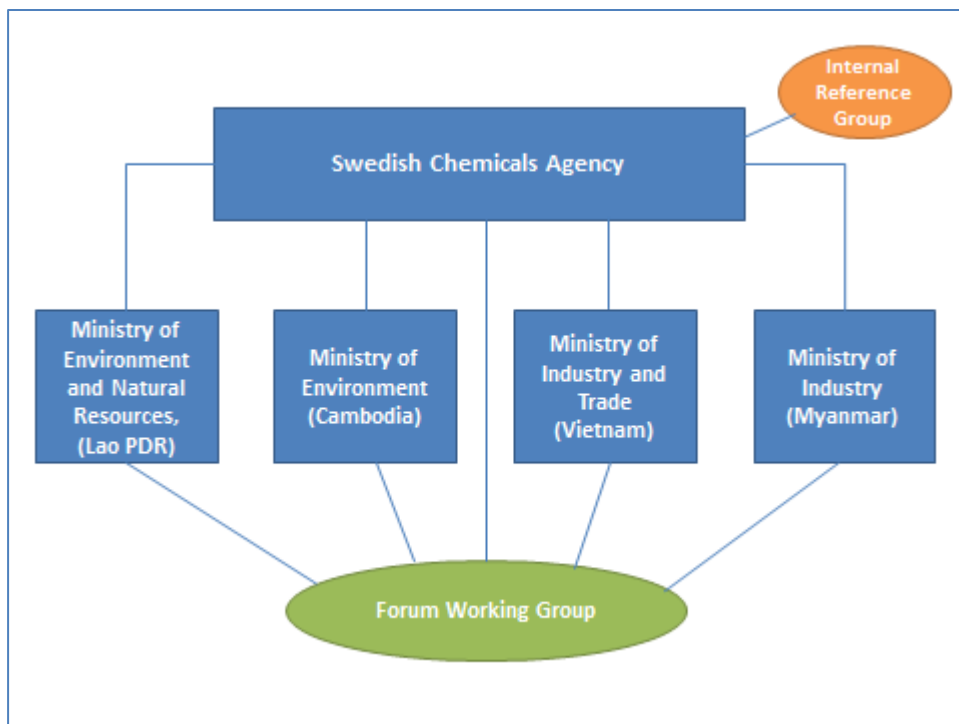
This makes KemI a qualified partner to run a programme on chemicals management in South-East Asia since the agency possesses the human resources for sustainable capacity building for efficient chemicals control.

The KemI strategy for international development cooperation has been presented at the management board, is included in the annual plan for KemI and implemented by the head of the international secretariat.

Development cooperation at KemI is organized by the international secretariat. The secretariat has 12 fulltime staff and access to experts from all divisions at KemI. Presently about 37 experts from KemI are engaged in the implementation of different development projects. The group has competence in inspection, risk assessment, risk reduction measures, development of legislation, approval systems, product registration, economy.

In order to secure alignment with KemI's (and the Swedish government's) priorities, an internal reference group has been established. The group consists of the head of the international secretariat, the two persons responsible for the programme (programme manager and deputy programme manager) and two persons with large experience in development cooperation.

In the work on strengthening capacity for sound chemicals management, KemI collaborates with different concerned government ministries and agencies in the partner countries. The key ministry in each country has been identified and members from these ministries constitute a Forum Working Group (see organogram below). The working group meet on regular basis in order to make plans and prioritize topics for the regional Forum meetings and other regional workshops.

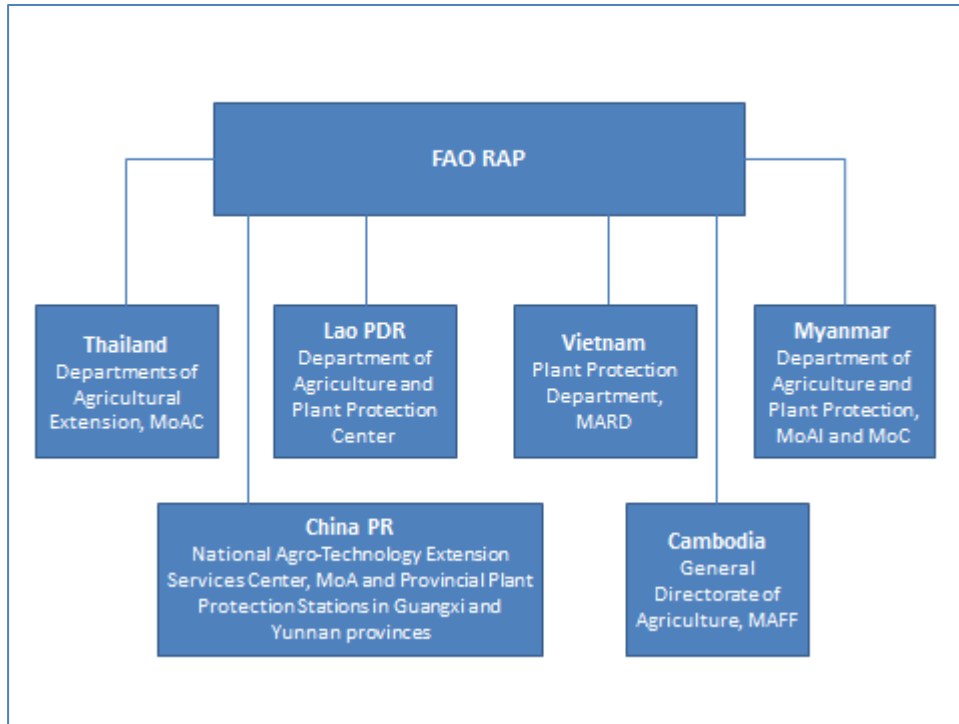


3.1.1.2 *FAO Regional Office for Asia and the Pacific (implementing objective 3)*

Works directly with relevant government departments in the countries concerned in developing and implementing national IPM programmes, and provides the Secretariat for the Asia and Pacific Plant Protection Commission.

Based at FAO-RAP, the Chief Technical Advisor (CTA) and Programme Development Officer for the IPM field component will work closely with relevant FAO country representations and national government counterparts to implement project activities in all member countries. The CTA will consult regularly with the FAO coordinator of the policy component (objective 4) and relevant other FAO colleagues in RAP, most notably the Senior Crop Protection Officer. This coordination will ensure consolidated FAO technical advice on matters pertaining promotion of good practices for pest and pesticide management.

The primary contacts in the partner countries are at DG or Director level with departments of agriculture, agricultural extension and plant protection (key ministries are presented in the organogram below).



Project related decisions are made by the project Chief Technical Advisor in consultation with relevant FAO colleagues and government counterparts. Travel by the CTA and Programme Development Officer needs to be approved by the RAP-Budget Holder. Organisation-wide decisions about administrative procedures (such as for instance salary levels and allowances, travel entitlements, etc.) are made by FAO's governing bodies, to which Sweden is a Member.

Staff funded by the programme for this component:

FAO Chief Technical Advisor (80 %) and FAO Programme Development Officer (50-60 %) who are responsible for coordination and management and programme development/training support of this component; direct technical advisory services related to most of the activities; reporting and administration. This component will also support staff contracts for General Service (1 administrative (80 %) and 1 driver (50-60 %) in each of the member countries in view of facilitating the processing of farmer training grants to multiple training recipients and locations and to facilitate field training monitoring and evaluation activities. Consultants and other FAO staff are contracted on an as and when actually needed basis at daily fees in accordance with established FAO schedules.

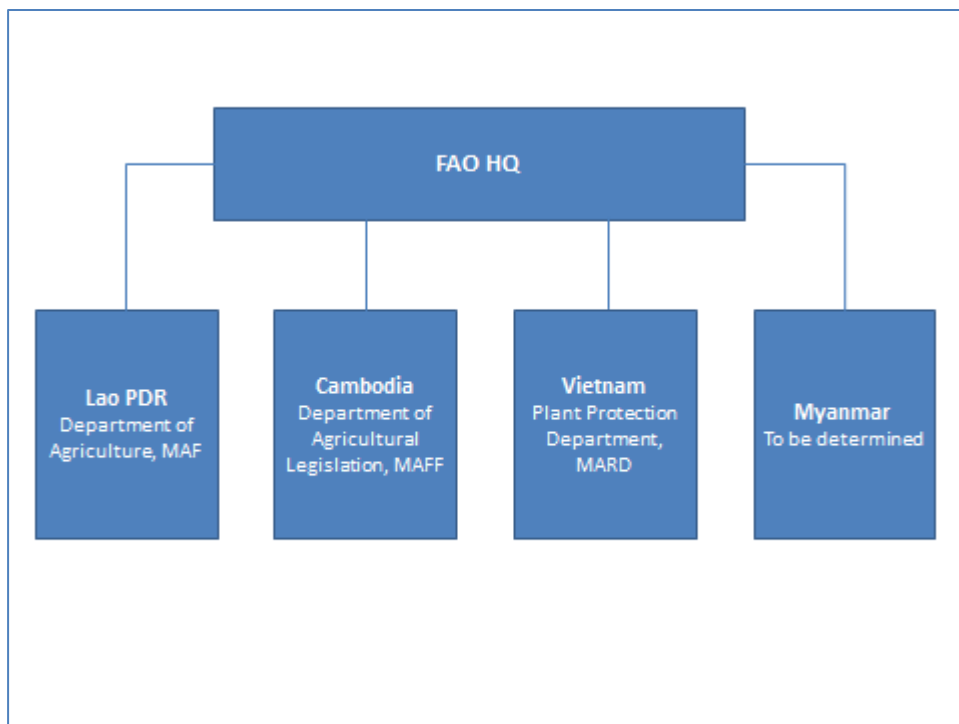
3.1.1.3 FAO Headquarters, Pesticides Risk Reduction Group (implementing objective 4)

The FAO Pesticide Risk Reduction Group is responsible for the development of the international normative framework for the sound management of pesticides. It serves as the Secretariat for the International Code of Conduct on the Distribution and Use of Pesticides and the Joint FAO/WHO Meeting that draws up technical guidelines for specific areas of the Code of Conduct. In addition, the Group provides technical assistance to countries to strengthen their capacity for the implementation of the Code of Conduct.

As such, the group works directly with government departments responsible for regulatory control of pesticides and receives assistance from the FAO Legal Development Service and the Secretariats of the Rotterdam Convention.

Within FAO, the coordinator for the component works closely with the FAO Pesticide Risk Reduction Group, the Secretariat for the Rotterdam Convention and the Law Development Service, Regional FAO Office in Bangkok and the National FAO Offices in the countries concerned.

The primary contacts in the partner countries are at DG or Director level with plant protection departments or similar authorities responsible for pesticide registration (key ministries are presented in the organogram below).



Project related decisions are made by the project coordinator in consultation with colleagues. Travel by the project coordinator needs to be approved by his Director and Team Leader. Organisation-wide decisions about administrative procedures (such as for instance salary levels and allowances, travel entitlements, etc.) are made by FAO's governing bodies, to which Sweden is a Member.

Staff funded by the Programme for this component:

FAO Senior Officer on Pest and Pesticide Management (40-50 %) who is responsible for coordination and management of this component; direct technical advisory services related to most of the activities; reporting and administration. Consultants and other FAO staff (e.g. legal experts) are contracted on a when actually needed basis at daily fees in accordance with established FAO schedules.

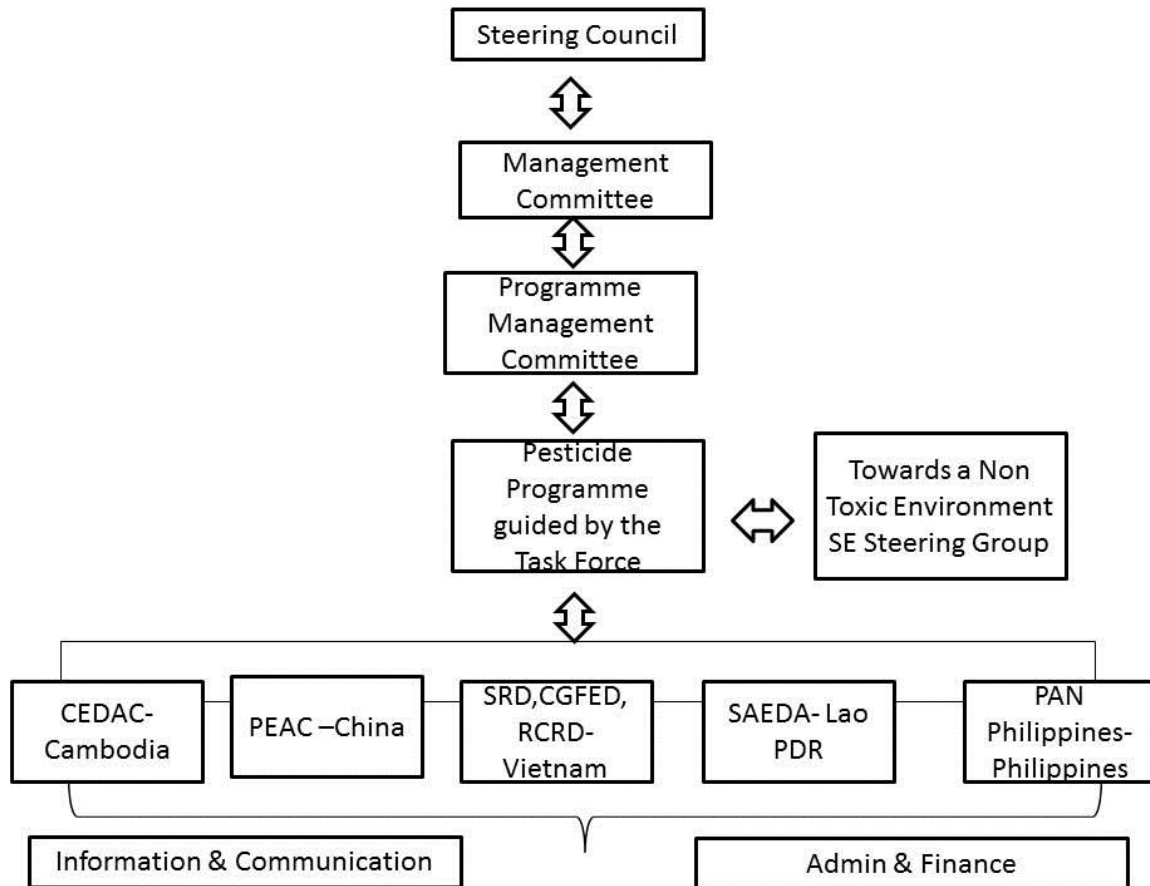
3.1.1.4 Pesticide Action Network for Asia and the Pacific (implementing objective 1 and 2)

Has a longstanding programme on awareness raising about pesticides and on community involvement in monitoring pesticide use. Under this Programme, PAN-AP assists national partner CSOs in the Programme countries with initiating or strengthening programmes on awareness raising, advocacy and monitoring.

PAN-AP is one of the regional coordinating centres of PAN International and collaborates with the other PAN centres to bring local monitoring results, as well as policy briefs to relevant regional and international policy advocacy arenas including the discussions of Stockholm and Rotterdam Conventions.

PAN-AP has several decision making bodies including the Steering council, Management Committee, Programme Management Committee, Task Forces and partners. Decisions are taken, through lateral

and open communications to incorporate multiple inputs in order to establish shared ownership and action.



Steering Council

The Steering Council is the governing body of PAN AP. Its functions are:

- Policy development
- Programme development
- Network expansion
- Network representation
- Financial planning and funding
- Appointment of the Executive Director and determining functions of the PAN AP Secretariat
- Electing the Management Committee and Board of Directors
- Appointment of Chairs and Members of Task Forces & their Terms of Reference

The Steering Council consists of the members of the company and will be present at its Annual General Meeting (AGM). The Steering Council will be responsible for analysing the annual report, the audited accounts as well as to pass resolutions of the company. They are also responsible for electing the members of the Management Committee.

PAN AP Steering Council consists of up to a maximum of 12 members selected on the basis of the following criteria:

- Actively involved and committed in the pesticide/ecological agriculture/women in agriculture/food sovereignty issues and in the PAN AP network.
- Provide sub-regional representation in the Steering Council as far as possible.
- Members of organizations.
- Network builders and mobilizers.
- Have a range of leadership skills and understanding of issues

The Steering Council will operate in a flexible, open, and non-hierarchical way. There will be no office bearers and chairing at meetings will be shared. PAN-AP staff will be involved in the Steering Council meetings. The Steering Council members will ensure that there is trust and commitment and good working relations between them and between Steering Council members and staff.

The Steering Council will meet once a year and may invite to their meetings, other individuals and organisations with special interests, expertise and geographical representation as and when required.

Management Committee

The Management Committee members will be decided by the Steering Council at its annual meetings. The Management Committee is responsible to implement the decisions of the Steering Council together with the Secretariat. Since PAN AP operates as network, it shall ensure that its working methods are participatory in nature and involves participating groups.

Programme management committee

The programme management committee is responsible for the proper management and the implementation of activities within PAN-AP. Members are usually programme coordinators or senior programme officers.

Task Forces

The Steering Council for specific areas of work will appoint the task force chairs and members and the Terms of Reference. Every appointment will cease at the end of three years unless re-appointed by the Steering Council.

The setting up of the task force will depend on the needs of PAN partners in the region and developments in the region and internationally as well as PAN AP needs.

The functions of the task force are to:

- Sharpen analysis, strategies and actions
- Strengthen local and national activities and action
- Expand the consultative process
- Widen participation of the network base in programme formulation and implementation
- Strengthen collective work and actions in each area of work
- Identify areas of strategic intervention and collaboration

PAN AP Secretariat

The PAN AP Secretariat shall facilitate the coordination of PAN AP programmes and activities. It shall be responsible to fulfill the functions of PAN AP and play an enabling and supporting role.

Between Steering Council meetings, the Secretariat will be supervised by the Management Committee.

Staff for the KEMI programme

There are 3 full time project staff, 1 administrative staff (25%), and part-time consultant
3 full time staff will be focused on:

1. CPAM training and policy advocacy and media training, developing modules and CPAM monitoring
2. Work on highly hazardous pesticides, public education and campaigning on pesticides issues
3. Policy advocacy – international and regional advocacy and support for national advocacy

1 Part-time staff – 25% time

1. Administrative – maintaining files, records of payments and financial reports, etc.

1 part-time Consultant: 2-3 days a week – technical papers, data sheets, and drafting inputs, papers, reports to POP ROC, PIC CRC, etc.

PAN AP Partners

PAN AP Partners are groups that collaborate closely with PAN AP to implement projects/activities or programmes in the country. Partners meet once year to discuss plans and currently events. In this project, PAN AP partners are

- Research Centre for Gender, Family and Environment and Development (CGFED), Vietnam
- Research Centre for Rural Development, An Giang University (RCRD), Vietnam
- Centre for Sustainable Rural Development (SRD), Vietnam
- Cambodian Centre for Study and Development in Agriculture (CEDAC), Cambodia
- Pesticide Action Network Philippines (PAN Philippines), Philippines
- Pesticides Eco-Alternatives Centre (PEAC), China and
- Sustainable Agriculture and Environment Development Association (SAEDA), Lao PDR

Level of compensation

The average level of compensation for persons working in the programme is USD 1,700/- per month. This includes the gross salaries, all mandatory contributions required by the Malaysian government and medical expenses.

3.1.1.5 The Field Alliance (implementing objective 1 and 2)

The TFA is a CSO network in South-East Asia that works through educational programs, schools, colleges under the Ministries of Education and other concerned ministries on the development of curricula and awareness building activities on pesticides, agro biodiversity and ecological agriculture. The underlying assumption to the strategies employed is that the education of children in rural areas in these subjects will influence not only their own approach to farming later, but also has a proven direct positive effect on the wider farming practices of their parents. The approach is specifically designed to engage parents and children in discussion on chemical and agricultural to encourage action towards less toxic rural environment.

TFA utilize the regional workshop to solicit inputs for program designs, implementation, and monitoring of progress from counterpart civil societies and governmental representatives. Each partner is required to submit proposal in accordance with the agreed upon directions, expectations and budget and letter of agreement is issued accordingly. Decisions are mainly made by TFA director with advice from TFA advisors or steering committee when needed.

TFA's partners include the followings:

| Country | Civil Societies Partners | Government | Remarks |
|----------|---|---|--|
| Cambodia | Agriculture and Technology Services Association (ATSA) | Participating schools | Schools provide policy supports, personnel for implementing REAL activities. |
| Lao PDR | Non Profit Association for Lao Development (NALD) | Participating Schools, The Non-Formal Education (NFE), The Ministry of Education | Participating Governmental agencies provide policy supports, personnel for implementing REAL activities. |
| Myanmar | | | To be identified, 2013 |
| Thailand | Thai Education Foundation | Participating schools, NFE, Colleges, and Pollution Control Department, the Ministry of Natural Resources and Environment | Counterpart governmental agencies provide policy, personnel and funding support to implement REAL activities |
| Vietnam | Centre for Initiatives on Community Empowerment and Rural Development (ICERD) | Participating schools, the Department of Continuing Education, the Ministry of Education. | Counterpart governmental agencies provide policy, and personnel supports to implement REAL activities |
| | The Centre for Environment and Community Assets Development (CECAD) | Hanoi University | |

3.1.2 Coordination arrangements

From the start of the programme, overall coordination has been contracted to the Swedish Chemicals Agency. Coordinating arrangements is suggested to remain largely the same in the second phase of the programme. This means that KemI will:

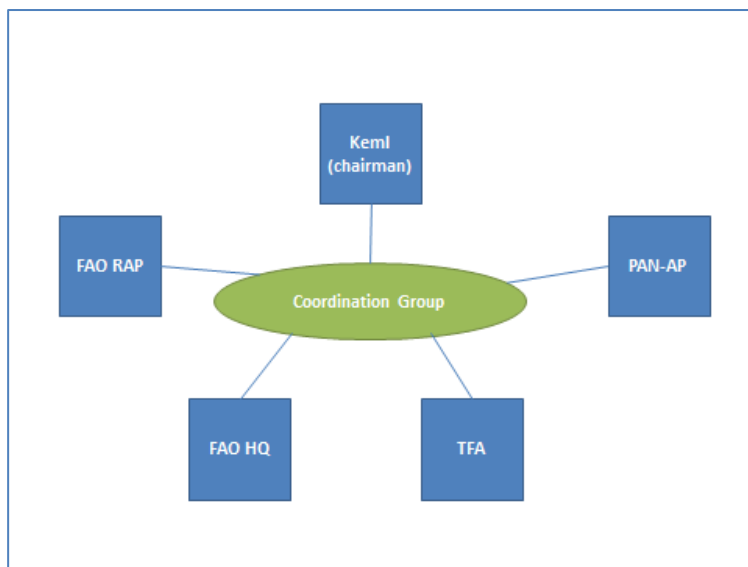
- Serve as secretariat for the coordination group (arrange bi-annual meetings and act as chairman)
- Be responsible for joint communication and information regarding the programme and
- Be responsible for monitoring and reporting activities, including reports to Sida.
- Be responsible for evaluation activities of the programme

Monitoring and reporting arrangements are described in more detail in section 6.

The success of the project lays in its multi-pronged approach that combines advocacy and grass roots mobilisation (PAN-AP, TFA) with direct technical and policy assistance to governments (FAO, KemI). Effective collaboration and coordination between partners with such inherently different roles requires an entity that can support both project areas and this responsibility is therefore best assigned to KemI.

Chemicals management is a horizontal issue touching the responsibility of many ministries, agencies and other institutions. The problems associated with agriculture, industrial as well as consumer chemicals are therefore often handled by many different stakeholders. Due to this fragmentation many countries fail to handle chemicals safety issues efficiently. These problems will benefit from being addressed in one context. KemI has a very broad mandate and an unusual technical capacity to cover the whole range of chemical products. Combined with the established contacts and the on-going program the new phase will benefit from KemI as the overall coordinator of the program. In order to further enhance efficient coordination and synergies between the different programme activities, KemI plan to place an expert in the region during the next phase. The expert will also facilitate contacts with other institutions, arrange workshops and forum meetings and give expert advice in his or her own capacity.

The coordination group, which is made up of representatives of the implementing partners, will meet two times every year to review progress and monitored results, discuss risk management and conduct joint planning in order to optimize coordination, synergies and the aim to achieve sustainable results.



Pesticide stakeholder meetings, which bring together the key stakeholders in pest and pesticide management, will be held annually in the form of extended annual meetings of the IPM programme and will be hosted by FAO. During the past years this has proven an effective mechanism for broad sharing of programme results, exchange on innovations and enhancement of coordination and collaboration among countries. For the management of industrial and consumer chemicals, the regional chemicals management forums and the working group for the forum serve as this platform.

For a programme with four partners and six countries, efficient communication is crucial. During the coming phase, a system for more efficient dissemination of documentation and exchange of information among partners will be developed.

3.2 Overall objective and programme objective (impact and medium-term outcome level)

The programme’s overall objectives (long-term objectives to reach impact) are mentioned below.

The programme will contribute to:

- Better management and more sustainable use of agricultural, industrial and consumer chemicals
- Reduced risks from chemicals to human health and the environment
- More sustainable intensification of agricultural production and improved resilience to climate change

The programme objective (medium-term outcome) is the following:

- Strengthened capacity and regional collaboration for efficient in pesticide risk reduction and chemicals management within and among partner countries

In order to reach sustainable results, pesticide issues are, within the programme, tackled from three angles that mutually reinforce each other:

1. Broad awareness raising among all relevant levels of stakeholders in the partner countries, including children, farmers, women, consumers and decision makers/policy makers;
2. Strengthening of regulatory control
3. Promotion of integrated pest management (IPM) to make farming communities less dependent on pesticides and to help them move away from hazardous products.

More specifically, the aim is to achieve a broad adoption of IPM in areas currently prone to high degrees of pesticide abuse. Participating governments will each have strong national IPM programmes that are backed up by government policy and local and national funding. Pesticide abuse will have been further curbed through stronger regulatory control of the distribution and use of pesticides. National IPM Programmes and efforts to strengthen regulatory control will have benefited from effective regional collaboration. The role of FAO IPM programme will gradually reduce to a facilitating and coordinating role as national programmes become more independent.

Awareness raising and advocacy campaigns of CSOs lead to a broader level of awareness about pesticide risks among the public, farming communities and policy-makers. Chemicals management will be at a level where the main issues have been identified and basic capacity to deal with these issues is expected to be established through training, effective regional collaboration, and targeted technical assistance towards the development of the regulatory framework.

Through chemicals risk reduction, the programme has a direct positive impact on poverty reduction through improved livelihoods for the rural poor. Pesticide risk reduction activities supported by the programme have a significant effect on reducing negative health impacts of pesticides on the rural poor and associated economic costs such as medical treatment and loss of labour time. It has been repeatedly demonstrated that the promotion of IPM increases income of farmers through higher yields and reduced production costs. Notably the elimination of overuse of pesticides has, besides the positive health aspect, a significant positive impact on farmer income, as pesticides often constitute the largest component of production costs.

Reduced use of pesticides is important to allow for more effective ecosystem services, regulation of pest populations by natural biological control in particular. The conservation and utilization of ecosystem services is an important component of sustainable intensification of crop production. Reduced incidence and severity of pest population outbreaks will contribute to more sustainable crop yield and reduce yield variability across production seasons, resulting in more resilient crop production and farming systems. In addition with application of other climate smart practices, farmers can thus better cope with additional stress from climate change induced pest and production problems.

Parallel to pesticides the industrial and consumer chemicals will be tackled through the development of the regional forum for chemicals management and other regional activities. The forum will offer training for government officials and other stakeholders, exchange of experience and results from pilot studies, awareness raising to key stakeholders and the build up of regional networks.

3.3 Short term objectives (short-term outcome level)

The short term (immediate) objectives of phase II are:

1. Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives (implemented by PAN-AP and TFA)
2. Enhanced international, national and local advocacy on sustainable pest management/agriculture (implemented by PAN-AP and TFA)
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 (implemented by FAO RAP)
4. Strengthened regulatory framework for the control of pesticides in selected partner countries (implemented by FAO HQ and Kemi)
5. Strengthened capacity for chemicals management within authorities, industries and among relevant CSO's in the partner countries (implemented by Kemi)

3.4 Short term outputs and key activities

During the previous phase of the programme, the various partners have developed, adapted or refined their approaches and methodologies, ensured stakeholder buy-in, and started implementation of training programmes.

Partners are continuously working with training of staff and have long-term plans to prevent loss of key-competence.

Details about planned activities for the years 2013-2018 are provided in the LFA on activity and output level (Annex 4). Some of the main points are summarised below.

3.4.1 Objective 1: Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives.

3.4.1.1 Description of activities (PAN-AP)

PAN-AP supports local partners who will expand Community-based Pesticide Action Monitoring (CPAM) to new project sites and will begin initial work in Myanmar. Community monitoring and the surveys conducted in Phase I, revealed that an alarming number of highly hazardous pesticides and banned pesticides are being used in Cambodia, Vietnam, Lao PDR and China. Women and children are particularly at risk due to their social, political, cultural and biological vulnerability. There is a need for more documentation of the impacts of pesticides on community health and the environment to better expose the situation and to intensify campaigns for its reduction and elimination.

CPAM will focus on increasing awareness among farmers, rural women and various stakeholders of the adverse impacts of pesticides on their health and the environment. There will be an emphasis in

Phase II to outreach to consumers and to garner their support for the production of safe food and water so that they have the information to make informed choices as consumers are an emerging force for change in certain countries. Overall awareness building will cover all aspects of the right to health, information, and safe environment.

CPAM efforts will continue to document the practices and impact of pesticide use as well as monitor highly hazardous pesticides used and their impacts, trade of illegal pesticides, and to monitor the adherence of key provisions of the International Code of Conduct on the Distribution and Use of Pesticides in all partner countries.

Documentation of the above activities will be made available to relevant stakeholders via events, seminars, campaigns, new platforms of social media, mass media, training and awareness workshops. This phase will also focus on developing relevant information on the impact of highly hazardous pesticides and safer non-chemical alternatives including ecosystem based agriculture and the information will be publicised and distributed. Learning exchange programmes and capacity building activities among partner countries will be organised to gain knowledge and experience on the impacts of pesticide use and the best practices of biodiversity-based ecological agriculture.

3.4.1.2 Description of activities (TFA)

The Field Alliance and its partners have implemented the Rural Ecological Agriculture for Livelihoods (REAL) program. Schools and communities utilizing the participatory action research process have assessed, analyzed and prioritized the importance for their agro-biodiversity conservation and utilization for their livelihood. They have also assessed pesticides impact to health and the environment and developed actions to reduce the use of toxic chemicals and have adopted the ecological agriculture practices such as IPM and organic farming. The emphasis was focused on educating schools and/or educational institutions to create awareness, monitor and document the status of the ABD, pesticides impacts to health and the environment and was also engaged in various school and communities' activities and projects.

As the results, there were many successful agro-biodiversity conservation projects implemented by participating communities in Cambodia, Lao PDR and Thailand. Difficulties were encountered for peri-urban farmers in Vietnam due to small land holders and unavailable community land for conservation. The new project sites are suggested to be selected further away from the cities and near the borders of neighboring countries to support the ASEAN cooperation.

The pesticides impact assessment survey and documentation was most successful to create awareness of the pesticides uses and impacts to health and the environment. The amount and number of highly hazardous pesticides were reduced consistently in all project sites. Improvement of storage and disposals behaviors and management were observed and documented by schools. In addition, farmers adopted a more ecological agriculture approach through participation in IPM training supported by local governmental agencies. Several schools initiated their own vegetable gardens and agro-biodiversity projects.

The success of the REAL programmes attracted interests from all levels, particularly the policy level from the department of the Non Formal Education from Lao PDR and the department of Continuing

Education from Vietnam. They requested to expand the REAL programmes to more areas. However, the levels of governmental supports for REAL activities differ between countries and will have implications on the programme sustainability. While Thailand and Philippines' governments can provide both in-kind and budget supports for the programme, Lao PDR and Vietnam can only provide policy and in-kind support. There is only local governmental policy supports to programme in Cambodia.

As a result, TFA will:

- Provide technical supports to the government's programmes in Thailand,
- Respond to the requests from Lao PDR and Vietnam government to expand the programme to more areas
- Further enhance the regional cooperation and policy dialogues to ensure the supports needed for Cambodia and Myanmar in Phase II.

In addition, the programme curricula will emphasize food security through agro-biodiversity conservation and build communities' capacities in resilience to the impacts of climate change. This will be done through weather data collection and analysis for planning for adaptation and indigenous varieties/seeds conservations that can help farmers dealing with frequent flood or drought.

The on-going community-based surveillance program that links pesticide use to impacts on health and the environment will expand to include household chemicals. IPM and/or biodiversity-based ecological agriculture products will be promoted and links to local markets and concerned institutions such as schools and hospitals.

Various trainings will be organized for teachers, community leaders and officials from concerned agencies. Materials and media development will be strengthened to be more user-friendly, disseminated and advocated.

Regional workshops and visits will continue with more collaborations with programme partners to strengthen regional strategies, exchange programs, policy and dissemination amongst partners and relevant governmental agencies, CSO and international organizations such as FAO, UNEP, UNESCO and WHO and to generate future regional support.

3.4.1.3 Beneficiaries

PAN AP: Contribute to awareness raising among a broad sector of farmers, consumers, women, children, youth, students and policy makers. The target groups are small-holder farmers, agricultural workers, and particularly women from this sector. The general selection criteria are that the groups or communities consist mainly of the target sector (i.e. small holder farmers, rural women and agricultural workers in the respective target locality) that face exposure to pesticides as well as are poor and lack knowledge/skills in ecological agricultural practices and are closely known to the partner groups, have displayed strong community ties, and are willing to learn new skills and commit to the action for the programme period.

The final beneficiaries in all target localities will be the rural women, small holder farmers, agricultural workers and their families. Communities in and around the selected localities will also

benefit as the resultant effect of the programme will permeate beyond the target villages through social ties and networks and development.

TFA: The direct beneficiary groups for the capacity building and awareness raising from the REAL programmes are teachers, CSOs, involved governmental officials, students, parents and grandparents, community leaders, and farmers (the majority are females in most countries). The indirect beneficiary groups that provide supports to the programme include concerned governmental agencies, local authorities, related network of CSOs and international organizations.

3.4.2 Objective 2: Enhanced international, national and local advocacy on sustainable pest management/agriculture.

3.4.2.1 Description of activities (PAN-AP)

PAN-AP will also use international policy tools and advocacy, and campaigns to contribute to the improvement of pesticide policies and regulations. Specifically, PAN-AP will provide information and recommendations on the implementation of specific provisions in the International Code of Conduct on the Distribution and Use of Pesticides, as well as in the Strategic Approach to International Chemicals Management (SAICM) focusing on the highly hazardous pesticides. The Stockholm Convention and the Rotterdam Convention will be platforms to contribute to the discussions and to garner support for the inclusion of pesticides such as paraquat in the Rotterdam Convention and chlorpyrifos in the Stockholm Convention. PAN-AP is continuing to use these international conventions and instruments as these are important tools for the reduction and elimination of pesticides, for example endosulfan; to improve national policies and to create awareness of the risks of these pesticides as well as to advance best practices in pesticide management. While these efforts take time and resources, the use of these instruments create an impact.

Over the years, PAN's documentation has shown that pesticide companies are producing and marketing highly hazardous pesticides with little regard to human health and the environment. In addition, this region will see an expansion and increase of pesticides use. There are also international efforts to ensure corporate social responsibility and accountability. PAN-AP will be using human rights instruments to measure not only the corporate social responsibility but also to expose the violations of human rights by these companies. PAN-AP will assess and document cases of human rights violations using human rights instruments focused on pesticide poisonings on human health and the environment for example, paraquat poisoning in Asia.

The documentation will be used in follow-up campaigns to highlight the human rights violations. In the process, PAN-AP will use human rights instruments and explore the effectiveness of using existing corporate accountability instruments and mechanisms to document these rights violations. PAN-AP will also monitor and assess specific claims of green production by industry stakeholders and publicize the monitoring results.

3.4.2.2 Description of activities (TFA)

TFA will support various studies including pesticides exposure to rural school children, consumers' awareness and perceptions on safe foods as well as incidental reporting system from community to policy levels. The studies will be carried out with relevant governmental agencies, CSOs, and/or universities and disseminate information on chemical use to the public, policy makers and

communities as a means to ensure the rights of farmers and consumers for information on both agricultural and household chemical use that have direct links to food safety and the environment. TFA's partners will organize and/or participate in national forum and/or workshop to disseminate the program results.

3.4.2.3 Beneficiaries

PAN-AP: Since these activities will result in long term changes in policies and regulations controlling pesticide use including bans, the direct beneficiaries are communities that have been affected by pesticides and communities that are at greater risk of being exposed to pesticides. The beneficiaries are also the agricultural workers, rural women and farmers and their families particularly children and consumers who are exposed to pesticides in the environment i.e. air, water and food. In the long term, activities under objective II will indirectly benefit many generations of people and the environment as a whole.

TFA: The direct beneficiary groups, which will be involved in the studies and dissemination, are relevant governmental agencies, CSOs, universities, the public and policy makers. The indirect beneficiary groups are students, household members, teachers, community members and consumers.

3.4.3 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

3.4.3.1 Description of activities (FAO RAP)

The newly developed pesticide risk reduction training will be rolled out through the Farmer Field School programmes to reach a critical mass of trained extension workers and farmers. Innovative curriculum development and new training materials, including for rural community resilience to climate change, will be designed, pilot tested and made publicly available on the FAO-IPM programme website. Monitoring and evaluation system for quality control of training will be strengthened. Impact assessment in support of policy development will be advanced and is expected to produce concrete results. National IPM programmes will expand partnerships, including with formal education and health sectors. Selective partnerships with private sector will be strengthened to facilitate better farmer access to biological control and novel seed inputs. Opportunities for involving IPM farmers in more rewarding and private sector driven value chains will be captured. Strategic partnerships will be established and strengthened with government and CSO partners in Thailand for promotion of IPM and pesticide risk reduction. A National IPM programme will be established in Myanmar. Regional collaboration and sharing of information and experiences will be strengthened and expanded. Support for implementation of the work plans of the IPM Standing Committee of the Asia & Pacific Plant Protection Commission will be intensified.

Main lesson learned from Phase I and its implications: As a result of focused attention to pesticide risk reduction curriculum development and training efforts, rural communities have become more aware of pesticide risks and taken concrete actions to reduce risk. The best way to reduce risk remains reduced use of pesticides by adoption of IPM. Phase II will emphasize farmers' access to quality IPM training, preferably delivered through season-long Farmers Field School. Adoption of IPM

also required access to good quality seeds and biological control products and thus Phase II will also need to emphasize work with selective private sector partners to facilitate such access. Experience to date has also shown that governments are willing to invest in IPM/PRR farmer training and thus efforts to encourage governments to upscale IPM/PRR training will intensify during Phase II.

3.4.3.2 Beneficiaries

Smallholder farmers, female and male, young and old, will be the primary beneficiaries of on-farm IPM and pesticide risk reduction training activities supported under this objective. Rural communities will benefit from greater awareness and community action towards pesticide risk reduction, resulting into reduced pesticide poisoning cases and increased labor productivity. Government extension workers, both female and male, will benefit from participation in IPM and pesticide risk reduction training of trainer's courses. The strengthening of extension services and farmer education is expected to enable governments to implement more relevant and effective rural community outreach activities. Indirectly, consumers will greatly benefit from higher quality farm produce with reduced or no pesticide residues.

3.4.4 Objective 4: Strengthened regulatory framework for the control of pesticides in selected partner countries

3.4.4.1 Description of activities (FAO HQ and Kemi)

The project will continue to support reform of the regulatory framework for the control of pesticides in the project countries. In this regard, the following assistance will be offered during the second Phase:

1. Activities related to the finalising of a new law in Vietnam
2. Assessment of regulatory framework and revision of the primary legal instrument in Myanmar
3. Assistance to the formulation of secondary instruments (regulations) for all countries, in a manner that pursues regional harmonization

Regarding capacity building for enforcement of pesticide legislation, the project will build upon the pilot inspection schemes implemented during phase I and support the further development, roll-out and consolidation of nation-wide inspection schemes in Cambodia, Lao PDR and Myanmar. The focus will be on importers, distributors and retailers of pesticides.

A new line of activities will be developed to pro-actively involve the private sector in improving the availability of pesticide labels in the national language, and in enhancing the availability of non-chemical alternatives to pesticides. The current coverage with labels in the national language is about 5-10 % for Cambodia and Lao PDR. The aim is to significantly increase the coverage in these countries during the project period. An initial scoping of the market for biological control agents has been initiated in Vietnam and will result in plans for targeted efforts to make biological control products available in high potential areas. The project will play a facilitating role in the implementation of such plans and aims to generate specific investment projects to strengthen this sector and to enhance the availability of alternatives to synthetic chemical pesticides.

Regional collaboration on the control of pesticides will be expanded through collaboration with the Asia & Pacific Plant Protection Commission (APPPC), which has a standing committee on pesticide management that already received project support for a meeting when it drew up priorities for regional collaboration. The secretariat for the APPPC is provided by the FAO Regional Office for Asia and the Pacific. The project will support activities on pesticide management that have been prioritized by the Standing Committee and also meet project objectives. The focus will be on initiatives for harmonization of regulations and establishment of schemes for the exchange of information on registration decisions and monitoring of illegal pesticides.

Main lesson learned from phase I and its implications: Pilot inspection schemes were implemented in selected provinces in Cambodia and Lao PDR. Inspections in Cambodia were useful in the sense that they had considerable educational effect on pesticide retailers, many of whom voluntarily improved their practices. However, when it came to a small group of retailers that were not making adequate efforts to change, it turned out inspectors did not have sufficient formal mandate to enforce the pesticide legislation. It was therefore decided to postpone the nation-wide roll out in Cambodia until the necessary legislation is in place. Deficiencies have now been addressed in the new law that was issued in 2012 and secondary regulations regarding inspections are currently under preparation by the Department of Agricultural Legislation.

3.4.4.2 Beneficiaries

The component to strengthen the regulatory framework for the control of pesticides will contribute to reduced health risk for farming communities (highly hazardous pesticides taken off the market; better label information), improved food safety for consumers of vegetables (less risk of dangerous residues), improved export possibilities (less risk of rejections due to residues of banned pesticides) and less environmental contamination. As such it could be stated that the population at large will benefit from this component.

3.4.5 Objective 5: Strengthened capacity for chemicals management within authorities, industries and among relevant CSO's in the partner countries

3.4.5.1 Description of activities (KemI)

KemI will continue with the organisation of regional chemicals management forums that will be expanded by inviting Myanmar and Thailand to future meetings. The forums provide a regional meeting place for discussions, trainings and networking on chemicals management. Experts from participating countries receive the latest information about specific areas of chemicals management; meet other experts and exchange experiences and information. Evaluations of the Forums show that participants are satisfied with the organisation and content of the Forums. The following comments were expressed after Forum V (July 2012):

- Provides a good platform for Indo-China members in sharing experiences and lessons learned
- Transfers capacity from north to south
- Strengthens south- south and regional cooperation in relation to chemicals management
- Promotes green economy in the future
- Contributes to poverty reduction in the region

During the present phase of the programme an efficient organisation and format for the Forum meetings have evolved. A Forum working group has been created and this group will continue its work during the next phase. The regional chemical management forums will continue to be held approximately twice a year. In order to further strengthen the regional collaboration and bring the regional chemicals management forum to a “higher level”, the working group will start preparing a common action plan for the coming five years. This will put more obligations on participating countries and coordinated work on selected issues within the region will have the possibility to lead to greater impact.

Through the Forum a number of pilot activities have been initiated. Projects on mercury are currently on-going and other emerging issues will continue to be highlighted during the new phase.

Experiences from the present programme show that the Forum is not enough in order to strengthen capacity on specific issues connected to chemicals management and international conventions. Therefore, regional workshops on selected topics (e.g. enforcement and inspection activities) with a smaller number of participants will also be organised during the next phase.

One example of specific issues that will be highlighted during the next phase is climate change. The manufacture and use of chemicals accounts for about one tenth of all anthropogenic greenhouse gas emissions. Chemicals manufacture is generally energy intensive and heavily dependent of fossil fuels. In addition, several manmade chemicals degrade only slowly in the atmosphere, causing greenhouse effects by themselves. The effect of such long-lived substances might in extreme cases be several thousands times higher than that of carbon dioxide, per unit. The regional program will raise awareness about the close ties between climate change and chemicals production. Improved chemicals management will contribute to reduce the negative effect from chemicals productions to climate change.

Another issue that will be addressed is chemical risks for vulnerable groups (e.g. pregnant women, children and malnourished people).

Efforts will be made to involve regional organisations with a mandate in chemicals safety.

3.4.5.2 Beneficiaries

Direct beneficiaries will be government officials and others who participate in various programme activities and thereby gain knowledge about different chemicals related problems as well as various ways to tackle the problems and how to build an efficient regulation and management of chemicals. Since the activities will result in reduced risks from chemicals the indirect beneficiaries will be the society as a whole, both men, women and children as well as the environment.

3.5 The regional dimension

The regional collaboration has provided PAN-AP with greater support at the national and international level. At the national level, this collaboration has provided effective links to government officials and departments which have led to CSO participation in policy discussions and to comment on policies, as well as to collaborate on the ground in project implementation. For example, PAN-AP partners in Cambodia have been asked to participate and comment on a new legislation on pesticides. In Lao PDR, the survey on illegal pesticides involved government officials as team

members in the implementation of the survey questionnaire. Communities in Vietnam who had participated in the pesticide survey and had become concerned about their health requested the local group to talk to relevant government departments to implement IPM training in their area. Due to this regional collaboration, PAN-AP was successful in its request to the Department of Agriculture to undertake IPM training for these communities. At the regional and international level, the regional collaboration has provided a good working relationship that has advanced joint policy work. For example, during the review of the International Code of Conduct on the Distribution and Use of Pesticides, PAN-AP worked in tandem with the other Kemi partners in the programme to improve the provisions in the Code including the definition of the highly hazardous pesticides. In addition, PAN-AP's policy advocacy at the meetings of the Stockholm and Rotterdam Conventions has been more effective due to the synergy with Kemi and others in this programme and this strategy of cooperation has been successful, for example in achieving the inclusion of endosulfan in the Stockholm and Rotterdam Convention. Overall, PAN-AP has also improved its project implementation and campaigns through this collaboration. Developing the programme proposal collectively has created a better understanding of the context, strategy and plan of action of each of the partners and is a good basis of cooperation. For phase II, the process has created better synergies and has built specific areas of collaboration.

During Phase I, regional collaborations were implemented through the bi-annual committee meeting organized by Kemi and partners' regional meeting/workshop such as FAO and TFA. While the bi-annual committee meetings provided opportunities to share progress, discuss program issues and overall program management, the partner's regional meetings and workshops enhanced the country level collaborations among program governments and CSOs partners for sharing, training, plans and policy dialogues within the component of each partner. In order to strengthen the synergies between different programme components and to insure the institutionalisation in government and CSO policies and programmes in Phase II, periodically joint regional forum/meetings should be organized for government and CSOs from all project components to share, exchange and develop strategies for each country and for regional level. These forums/meetings should also involve important and/or relevant programmes and partners such as UNEP, IUCN, WHO, FAO, CSOs and private sectors to build the relationship and collaborations needed.

The annual meetings of the steering group has not only been a venue for sharing plan of actions and learning from the implementation but also served as a platform for constructive evaluation, identifying areas of cooperation and brainstorming improvements of each of the components. These annual meetings will be further strengthened with a facilitator who follows this process for the next five years to assist the programme to be more constructive in its evaluation, brainstorm the emerging issues and opportunities and assist in discussions for a more systematic regional collaboration.

Regarding the strengthening of IPM, regional collaboration will continue to focus on development of concerted approaches to common pest and disease problems, many of these invasive and thus 'new' in nature and regional in scope. This will be done through regional workshops that address both technical and policy aspects. In tandem, FAO will support awareness raising and pilot field activities aimed at developing capacity for spread prevention and management of (invasive) crop pest and

diseases. Current attention areas include rice planthoppers and associated viral diseases, cassava pink mealybug and *Bactrocera* fruit flies. These efforts will support and complement the work of the APPPC and its Standard Committee on IPM in particular. FAO will also support the implementation of several relevant regional initiatives, including the on-going ASEAN Biological Control Agents project supported by GIZ.

Regarding strengthening of regulatory control, collaboration with the Secretariat of the APPPC will be expanded as described above in 3.3.4. Project support will be aimed at enabling joint activities with a focus on harmonization of regulations and establishment of schemes for the exchange of information on registration decisions and monitoring of illegal pesticides. It may also involve joint training on issues of common interest, such as risk assessment in pesticide registration as there would be additional benefit of bringing registrars together and enable discussion and exchange on how to conduct risk assessment effectively with limited resources.

Thru the regional chemicals management forum the exchange of experience and proposals for new chemicals management legislation has increased. All countries are now in the process of developing new primary and secondary legislation. The forum has a unique possibility to support the countries to harmonize and develop new legislation. The support will be aimed at enabling joint activities with a focus on harmonization of regulations and establishment of schemes for the exchange of information on classification and labeling, risk reduction measures, product registration and inspection activities. It may also involve joint training on issues of common interest, such as risk assessment, inspection methodology, information exchange methods to enable discussion and exchange on how to work efficiently with limited resources.

3.6 Collaboration with other projects and organisations

3.6.1 On-going collaboration

Risk reduction and management of chemicals is a broad area that involves agriculture, health, environment, trade and other ministerial domains. Both at regional and national level there is a range of other projects that are involved in areas relevant to the objectives of this programme. The programme therefore constantly monitors what is going on in the programme countries and takes initiative to coordinate with other relevant projects.

Examples include:

IPM: At regional level, collaboration with, and support for, various relevant on-going and new FAO supported projects will continue, including:

- the AIT funded projects on System of Rice Intensification and *Bactrocera* Fruit Fly IPM in GMS
- the CFC funded Export-oriented Value Chain Development project in GMS
- the ADB funded Core Agricultural Support Programme for the GMS.
- the FAO Regular Programme Regional Rice Initiative in support of sustainable rice intensification in Asia as part of implementation of FAO's new Strategic Objective-SO2

At national level, FAO-IPM will continue to work with the local FAO Representations on several relevant FAO rural development initiatives with IPM/FFS components. Support will also be provided for other relevant government and CSO initiatives implemented under the umbrella of the on-going National IPM programmes existing (Cambodia, China, Lao PDR, Thailand, Vietnam) and newly to be developed (Myanmar) in the GMS.

Close collaboration has developed with the GIZ/ASEAN Programme on enhancing the use of bio-pesticides. Joint activities have been initiated in Vietnam.

Regarding regulatory control, the programme has, so far, collaborated with:

- WHO initiatives to strengthen management of public health pesticides
- Japanese assistance to pesticide quality control
- Various projects to develop and strengthen Good Agricultural Practices schemes
- GEF\FAO assistance for disposal of obsolete pesticides and site clean-up in Vietnam

3.6.2 Possible future collaboration

Since there are several other on-going projects in the Greater Mekong Sub-region that are focusing on areas that are connected to pesticide risk reduction and chemicals management the programme will, during the next phase, further explore collaboration possibilities. Programme partners will arrange meetings with responsible for those projects/organisations in order to explore possibilities for collaboration and synergies. If found relevant, ways for continuous communication and collaboration will be established.

The following projects/programmes/organisations are considered relevant for exploring possibilities for future/closer collaboration:

- ADB's Core Agricultural Support programme
- Regional Enforcement Network (REN)
- ASEAN
- AIT
- International Science Program (ISP)
- Stockholm Environment Institute (SEI)
- Asia and Pacific Plant Protection Commission (APPPC)

3.7 Cost-efficiency

Throughout project design and implementation, cost-efficiency is given high attention in order to ensure sustainability. Working through regional based partner organisations minimizes travelling costs and ensures efficient and rapid dissemination of results.

By using methods such as training of trainers and by giving priority to involvement of regional and national experts instead of international experts, cost-efficiency is further strengthened. Development of more web-based platforms for information sharing also contributes to reduced costs and enhanced use of existing information. Working through groups and schools makes it possible to reach a large number of beneficiaries at the same time.

3.8 Sustainability and exit strategy

Sustainability is promoted by gradual integration of operating costs into government budgets. For instance, the inspection schedules are designed to enable government to continue inspections on the very limited government budget that is available. No support is provided for laboratories that are unlikely to generate sufficient cost-recovery to continue independently. In such cases, preference is given to facilitating collaboration with existing laboratories in neighbouring countries.

For phase II targetted efforts will be made to involve the private sector in specific areas where there is limited risk of conflict of interest and where this can enhance sustainability and cost-effectiveness.

3.8.1 Sustainability at regional level

Sustainability is ensured by working through existing on-going regional programmes that build capacity in national and local partners that increasingly draw on sources of funding outside the programme. Established links with existing regional institutions (e.g. Asia & Pacific Plant Protection Commission, ASEAN) will be further strengthened during the next phase. For industrial and consumer chemicals issues, a regional forum has been established and efforts to further increase regional collaboration will be supported.

3.8.2 Sustainability at national level

The programme encourages governments to take decisions and allocate funds for permanent support to IPM field programmes and development and implementation of curriculum for agro-biodiversity. Sustainability of efforts to reduce pesticide risks is consolidated by linking broad IPM field programmes that help farmers to change their pest management practices with regulatory reform. Improved pesticide legislation and strengthened capacity for enforcement of such legislation are expected to sustainably consolidate pesticide risk reduction. Likewise, for the management of industrial and consumer chemicals, efforts will focus on developing regulatory frameworks and institutional capacity building.

As mentioned above, the programme has a very well developed approach to encompass capacity development at all levels of stakeholders in the society to ensure sustainable effects, from training teachers to inform school children to informing their parents, training famers, training pesticide inspectors, staff at chemicals management authorities as well as governmental staff. To reach sustainable results, pesticide issues are, within the programme, tackled from three angles that mutually reinforce each other:

1. Broad awareness raising among all relevant levels of stakeholders in the partner countries, from children and farmers to consumers and decision makers/policy makers;
2. Strengthening of regulatory control
3. Promotion of integrated pest management (IPM) to make farming communities less dependent on pesticides and to help them move away from hazardous products.

Most activities are coordinated with relevant ministries in the key countries e.g. Ministries of Agriculture, Industry and Environment.

3.8.3 Sustainability at local level

Sustainability at the local level is facilitated by the enabling and empowering processes employed in the awareness raising, education and action planning activities supported by programme partners. The processes are designed to strengthen ownership in planning, management and implementation of the local pesticide risk reduction programmes.

At rural community level, farmers become aware of risks associated with distribution and use of pesticides, learn about better management practices and agree on implementation of communication action plans for pesticide risk reduction. Local government and community organizations take part in implementation of action plans and work with the private sector to ensure enforcement of community regulations. As part of action plans, farmers can express interest in taking part in season-long Farmers Field Schools and learn about Integrated Pest Management practices. IPM-FFS graduate farmers organize, formulate groups and clubs, and then bargain for reasonable farm-gate prices for higher quality and safer food products through more rewarding value chains. Rural youth learn about the basics of ecology and IPM as part of their formal school curriculum and thus become literate about vital ecosystem services and agro-biodiversity for more responsible farming in the future.

3.8.4 Exit Strategy

The above mentioned efforts to build sustainability into the activities are the cornerstone of the exit strategy. Activities implemented by Keml and FAO are either irreversible (laws promulgated) or are specifically designed with a main criteria to enhance the ability of governments to continue such activities after the project. For instance, the inspection schemes as developed and implemented have been designed to have the maximum impact with the minimum input in order to be adjusted to realistic levels of longer term government abilities in terms of human and financial resources.

Regional collaboration in the area of pesticide management is embedded in the existing structure of the Asia-Pacific Plant Protection Committee, which has standing committees on pesticides and IPM. The project temporarily helps reinforce the work of these standing committees, which enables them to accelerate the implementation of key elements of their work programme. These APPPC standing committees will continue to exist after the project with the Secretariat provided by FAO.

The Forum on Chemicals management, which is managed by Keml, has established cooperation with key ministries. Governments have agreed on the most important areas in need for development. They are now on the way to create a permanent regional function for chemicals management issues.

PAN-AP and TFA are umbrella NGOs that operate at regional level. Their main task is to support national partners from within their respective networks with awareness raising and programme development and implementation. Implementation also involves funding. NGO programs, however, by their nature, remain dependent on donor funding. They implement programmes with multiple donor support and adjust their level of activities to available funding. The Programme enables them to intensify their work on community empowerment related to pesticide risk reduction in a manner that creates longer-term synergies with government programmes supported by FAO and Keml. At the end of the Programme it will sustainably have achieved: better connections between NGO and government programmes, including feedback loops from NGO monitoring into government policy

making processes; sustainably increased awareness among the population at large and a large range of farming communities in particular.

The Programme will deliver important and lasting improvements, but will not solve all problems by itself. Particularly in the area of chemicals management further work is envisaged. The development of a regulatory framework for industrial chemicals, and the associated capacity building, is a long and complex process to which a project can merely contribute. Given what has been invested in arriving where we are today in Europe, it is clear this will not be done overnight in Asia. There currently is a good momentum in Asia and the programme provides strategic catalytic inputs that will have lasting effects on the progress made, but for the next decade there will certainly be scope for further assistance to help Asia benefit from the experience gained in Europe.

3.9 Risk management

The programme partners are working according to the principles of RBM, which includes making continuous risk analysis and risk management plans and, if found necessary, make adjustments in the programme plan. There is and will continue to be an exit strategy and risk management approach in the programme by involving a broad group of stakeholders at different levels of the society. The broad capacity development approach is made possible through the mix of competences and focus among the partner organisations.

Risk management has been and will be a continuous attention point by the partner organisations during implementation of the programme. A risk analysis discussion will be held at each coordination group meeting and the partners are taking risk management actions as a continuous process. An initial risk analysis and risk mitigation exercise for phase II was made during the LFA workshop in Bangkok in July 2012. Each of the five programme components was analysed and a risk value was set for each identified potential risk. The risk matrix is presented in Annex 5. The risk factors will be monitored closely in the programme and, if found necessary, revisions of the plan will be made in order to ensure sustainable continuation of the work.

A summary of the identified potential risks are presented below:

- Insufficient local capacity, including awareness, insufficient knowledge and willingness to continue the process (inspectors, farmers and the public's knowledge).
- Corruption at all levels in the society, which may affect the risks below;
- Local ownership, including responsibility and interest for pesticide and chemical management. Political will and awareness, including authorities/countries willingness to make investments in IPM training and legislation and enforcement of legislation.

4 Cross-cutting issues

Cross-cutting issues are essential to include in order to reach the objectives of the programme. Partner organisations work actively to integrate human rights, gender aspects, anti-corruption etc. in planning, implementation and evaluation of activities. Partner countries have also made a commitment (e.g. in the Dubai declaration) to respect human rights and fundamental freedoms, to fight poverty and protect vulnerable groups, work towards effective and efficient governance of chemicals by means of transparency, public participation and accountability involving all sectors of society, in particular striving for the equal participation of women in chemicals management.

4.1 Gender

The programme will remain pro-active on gender issues and continue to recognise and address specific risks to women. Community based activities by FAO, PAN-AP and the Field Alliance are having an established track record of pro-active approach to gender issues. The beneficiaries of the programme are women, men as well as children in the communities. Most of the output and impact data are gender specific and are being utilized for gender-sensitive intervention planning. In many countries, Farmer Field Schools resulted in noticeable empowerment of women. Opportunities for women to participate in community-based activities, policy advocacy and campaigns are included. Emphasis will be given to enhance the capacities and leadership of women to ensure they become aware of their rights, build their confidence and become actively involved in the programme planning, implementation and evaluation. Their active involvement will then facilitate their empowerment in the communities.

In addition, during 2013, the program will expand its efforts to promote gender issues and reduce the negative effects thru targeted activities. To begin with, partners will follow the gender assessment of the program proposal and make a gender impact assessment study. The results will be used to add some gender specific outcomes to the program LFA as well as revising other outcomes, if appropriate. In this process, the programme will make use of the experience and knowledge on gender issues and the rights perspective within PAN-AP. Partners will also explore the possibilities to cooperate with other regional organizations focused on gender and human rights (e.g. Asian Farmers' Association (AFA), Asian Rural Women's Coalition (ARWC), Asia Pacific Forum on Women, Law and Development (APWLD) and Committee for Asian Women.

Internally, there is a good gender balance in the programme's coordination group and the programme planning and development ensures a strong gender perspective.

4.2 Social and political tensions

The programme partners are planning to involve Myanmar in the next phase, for environmental, regional and practical reasons. They are aware of the political tension in the country and the level of care this requires. The programme will continuously follow the political process closely in all participating countries. With regard to social tension, the programme has from the very start been involving the rural poor. Among measures taken is assistance to find less expensive/more cost-efficient, non-hazardous alternatives to the existing pesticides. These measures improve the health status and reduce poor families cost for agricultural production, which in the long run leads to reduced poverty and improved livelihood.

CSOs advocating the rights of people sometimes come in conflict with policies and development activities that may affect communities' livelihood and lives negatively. This creates social and political tensions at the local level. However, for CSOs to engage in development processes in a sustained and effective manner, it requires an enabling environment including enabling government policies, laws and regulations.

4.3 Anti-corruption and good governance (non-discrimination, openness and transparency, participation and accountability)

Anti-corruption measures are handled in a two- fold way in the programme, both on output/outcome level and on internal level.

Anti-corruption is a permanent topic on the agenda for the coordination group meetings. The partners are all well aware of the risk of corruption in the field of chemical management. On internal level of the programme, continuous audits are made on a yearly basis at each partner organisation.

By the broad capacity building approach in the programme, working with both governments and strengthening of the civil society, the programme has unique opportunities to enhance transparency in national activities regarding chemicals management.

Strengthening of the regulatory framework generally results in better transparency, responsibility and accountability. Requirements are written down in laws and regulations and it becomes clearer who is responsible and accountable.

Regarding enforcement, the project is aware of risk of abuse of power by inspectors given the very low salaries of inspectors. A system of checks and balances will be developed in collaboration with CSO programme partners.

The programme has, and have had from the very start in 2007, a very broad inclusive approach, by including people from different regions, different ethnic groups, different sex, different ages (from children to adults) in the different activities. The range of implementing partners includes Civil Society Organisations, UN agencies and a Swedish authority, KemI, all focusing on transparency.

The programme has a participatory approach during the planning and in the implementation (including monitoring) process. A close and continuous dialogue is taking place among programme partners as well as with concerned ministries, agencies and civil society organisations. All these different stakeholders are involved in the planning process and implementation as well as in the monitoring of the programme, through workshops and forums. An active RBM approach is used in the programme, which includes active involvement of local stakeholders.

All documentation produced by the project is available for all programme partners as well as for the general public. During phase two of the programme, there will be an increased emphasise on communicating and sharing results to a broader group of stakeholders through forums, websites and information brochures.

Farmer Field Schools empower farming communities, which tend to become more articulated in what they accept and what they do not accept from extension services and other government services. This tends to increase accountability of service providers and improve quality of services.

At national level, the programme helps enhance coordination between relevant ministries, which tends to lead to better coordination and more effective allocation of resources. CPAM activities and monitoring of adherence to the Code of Conduct on the Distribution and Use of Pesticides by CSOs also clearly enhances transparency and accountability. Programme assistance towards the reform or development of legislation includes emphasis on transparency, fairness and possibility of appeal.

5 Environmental Impact Assessment

The main objective of the programme is to enhance chemicals management and to strengthen risk reduction. The programme helps eliminate the use of highly hazardous pesticides and reduces reliance on chemical pest control in general. As such, the programme inherently and specifically provides direct contributions to reducing environmental impacts.

Impact assessments of the IPM Programme in Vietnam specifically looked at effects on the environment and demonstrated significant reductions in the environmental load from use of crop protection products. Awareness raising campaigns are targeting disposal of empty pesticide containers and school programmes educate children about the importance of biodiversity. These are examples of the wide range of project activities that specifically help reduce environmental impact by changing current practices.

Regarding possible environmental effects of project activities, the Swedish Chemicals Agency emphasizes sustainable work and is constantly trying to improve work methods to achieve the goals set by the Swedish government. KemI is certified according to the international standards ISO 9000 and 14000. KemI will share experience using these instruments in the programme and remains vigilant about any possible negative environmental aspects of project interventions.

In order to minimize environmental impact from travelling, programme partners will take the following measures:

- Arrange digital meetings, when possible
- Combine several activities/meetings in order to reduce the number of travels

6 Monitoring, reporting, evaluation and financial management

The implementation process is following the principles of RBM, i.e. a participatory approach, continuous monitoring and risk management, learning from results and communication through efficient dissemination of results.

The cooperation partners have used a participatory approach and through this approach defined “SMART” (Specific, Measurable, Achievable, Realistic, Time-bound) objectives with monitoring tools through indicators and sources of verifications to each level of objective, hence a monitoring and evaluation system is in place.

The programme will use the Sida guidelines for reporting and audit, and will follow the provisions of the overall agreement between Sida and KemI.

6.1 Monitoring

The partners will use the principle of directly including monitoring and evaluation activities into the plan of operation of the programme, as monitoring activities under each immediate objective. Hence, sources of verifications such as monitoring interviews, questionnaires, studies are included in the plan, not as a separate plan. This makes the monitoring process embedded into the daily routines of the programme, as a continuous learning process.

Following discussions at the coordination group meetings, partners will make necessary adjustments of the annual work plans.

6.2 Reporting

KemI, as the coordinating partner, will receive and review progress reports from each partner following an agreed schedule. KemI will compile the key information from each component of the programme into a consolidated progress reports to Sida, which will be submitted once a year in April. Progress will be reported against a results summary. Expenditure updates will be submitted twice a year in January and July. KemI will submit a Final Report latest by December 2018.

6.3 Review and evaluation

The arrangement of an evaluation of the next phase of the programme will be discussed with Sida during the implementation process. Funds for evaluations are included in the budget.

Due to the complexity of the programme, programme partners would like to discuss alternative approaches to a mid-term evaluation. Alternatives approaches could be:

- A follow up team that evaluate the programme on a continuous basis
- In depth evaluations of different focus areas

6.4 Financial management

6.4.1 PAN-AP

Each partner is required to sign a letter of agreement. In the letter of agreement, funds will be transferred to them twice a year. The partners are also required to submit a progress report and a financial statement every six months and an annual report and a full year audited financial report at the end of every year for the duration of the project. Financial records are kept for 7 years after project end. Financial reports are reviewed before transfers are made to the partners. Visits are conducted once every year by one PAN-AP staff or more. We are also in discussions with partners particularly with CEDAC, Cambodia to have a staff based in Cambodia to facilitate better links with partners and monitoring of the project.

6.4.2 TFA

Each partner is required to submit progress report and annual report included the financial statement endorsed by the accountant. Financial records are kept for 5 years after project end and

available for audit upon request at all time. TFA staff conducted monitoring visits at least 2 times per year to monitor the implementation, training, review/planning activities organized by partners.

The project funds to country partners are normally transferred 3 times per year and/or in accordance to the letter of agreement. Financial reports are reviewed before transferred is made.

6.4.3 FAO (RAP and HQ)

Financials management is a centralized and standardized service in FAO that meets requirements established by its governing bodies and donors. Expenditure and commitments are immediately visible in the FAO Global Resources Management System, which is based on Oracle.

Financial Statements, transaction listings, project status reports, etc, can be pulled out of the system at any time. Annual reporting to KemI involves submission of a certified Financial Statement that shows expenditure for each of the budget lines. Tracking of staff time spent on the project is done by the staff itself in an excel sheet.

6.4.4 KemI

Planning and reporting at the international secretariat is integrated in the common systems used at KemI. The system "Agresso" is used to report time that is spent on the programme and from the system it is possible to create various reports. To be able to report Sida funded work separate headings for reporting time and other expenses have been established. KemI has also adopted special routines for development cooperation within the KemI management system. KemI is certified according to ISO 9001 and ISO 14001.

KemI contracts an external auditor to audit the funds received by Sida and also requires audits from partners that receive funds from Sida via KemI. UN agencies use their own systems and usually don't share audit reports, which is accepted by Sida.

7 Budget and disbursement

7.1 Budget summary

The budget for the period 1 July 2013 – 30 June 2018 is SEK 99.3 Million, which approximately equals USD 14.190 000 Million (Exchange rate 1 USD = 7.00 SEK). A budget summary for this period is provided below (in Swedish kroner).

| Budget summary | | | Year | | | | | | Total | % of total budget |
|-----------------------------------|---|---------|--------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|
| | | | 2013 (July-Dec) | 2014 | 2015 | 2016 | 2017 | 2018 (Jan-June) | | |
| 1 | Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives. | PAN-AP | 1 006 250 | 2 012 500 | 2 012 500 | 2 012 500 | 2 012 500 | 1 006 250 | 10 062 500 | 10 |
| | | TFA | 980 000 | 1 925 000 | 1 925 000 | 1 925 000 | 1 925 000 | 980 000 | 9 660 000 | 10 |
| 2 | Enhanced international, national and local advocacy on sustainable pest management/agriculture | PAN-AP | 393 750 | 787 500 | 787 500 | 787 500 | 787 500 | 393 750 | 3 937 500 | 4 |
| | | TFA | 70 000 | 175 000 | 175 000 | 175 000 | 175 000 | 70 000 | 840 000 | 1 |
| 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. | FAO RAP | 3 360 000 | 7 385 000 | 7 385 000 | 6 790 000 | 6 790 000 | 6 790 000 | 38 500 000 | 39 |
| 4 | Strengthened regulatory framework for the control of pesticides in selected partner countries. | FAO HQ | 875 000 | 1 750 000 | 1 750 000 | 1 750 000 | 1 750 000 | 875 000 | 8 750 000 | 9 |
| | | Keml | 350 000 | 700 000 | 700 000 | 700 000 | 700 000 | 350 000 | 3 500 000 | 4 |
| 5 | Strengthened capacity for chemicals management within authorities, industries and among relevant CSOs in the partner countries. | Keml | 1 498 000 | 2 996 000 | 2 716 000 | 2 716 000 | 2 716 000 | 1 358 000 | 14 000 000 | 14 |
| 6 | General technical support to the programme | Keml | 420 000 | 1 085 000 | 1 330 000 | 1 085 000 | 840 000 | 490 000 | 5 250 000 | 5 |
| 7 | Overall programme coordination (including review, evaluation and communication) | Keml | 280 000 | 840 000 | 840 000 | 1 260 000 | 840 000 | 770 000 | 4 830 000 | 5 |
| Total Swedish kroner (SEK) | | | 9 233 000 | 19 656 000 | 19 621 000 | 19 201 000 | 18 536 000 | 13 083 000 | 99 330 000 | |

Funds allocated to partner organisations are transferred without administrative fees.

In some areas countries begin to set aside their own funds to expand the program by allocating their own funds, e.g. Vietnam and China to the IPM program. Some of the program components also have several donors supporting activities closely connected to the programme.

Breakdown budgets for each partner are provided below.

7.2 Detailed budgets

The detailed budgets are based on the average exchange rate for the Swedish Kroner versus the United States Dollar during 2012 (1 USD = 7.00 SEK).

Unfavourable developments in exchange rate will be covered from savings. However, if savings are not sufficient to cover the difference, then the budget will be proportionally reduced for all components. Savings from favourable changes in exchange rate will be allocated according to priorities or to off-set cost increases.

7.2.1 Detailed budget for PAN-AP

| Budget breakdown component 1a and 2a – PAN-AP | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total | % of total budget | Comment |
|---|--------|---------|---------|---------|---------|--------|---------|-------------------|--|
| 1. Community Empowerment through CPAM | | | | | | | | | 76 % Allocation for partners 6 % Staff salaries |
| China - PEAC | | | | | | | | | |
| Information support | 3 800 | 7 700 | 7 700 | 7 700 | 7 700 | 3 800 | 38 400 | | |
| Community-based Pesticide Monitoring | 4 000 | 8 000 | 8 000 | 8 000 | 8 000 | 4 000 | 40 000 | | |
| Promoting Pesticides Alternatives | 4 700 | 9 300 | 9 300 | 9 300 | 9 300 | 4 700 | 46 600 | | |
| No Pesticide Use Week | 2 100 | 4 200 | 4 200 | 4 200 | 4 200 | 2 100 | 21 000 | | |
| Policy Advocacy | 2 275 | 4 550 | 4 550 | 4 550 | 4 550 | 2 275 | 22 750 | | |
| Cambodia - CEDAC | 9 725 | 19 450 | 19 450 | 19 450 | 19 450 | 9 725 | 97 250 | | |
| Vietnam | | | | | | | | | |
| CGFED | 6 000 | 12 000 | 12 000 | 12 000 | 12 000 | 6 000 | 60 000 | | |
| RCRD | 6 000 | 12 000 | 12 000 | 12 000 | 12 000 | 6 000 | 60 000 | | |
| SRD | 6 000 | 12 000 | 12 000 | 12 000 | 12 000 | 6 000 | 60 000 | | |
| Laos - SAEDA | 6 750 | 13 500 | 13 500 | 13 500 | 13 500 | 6 750 | 67 500 | | |
| Burma - to be identified | 2 500 | 5 000 | 5 000 | 5 000 | 5 000 | 2 500 | 25 000 | | |
| Philippines - PAN Philippines | 10 000 | 20 000 | 20 000 | 20 000 | 20 000 | 10 000 | 100 000 | | |
| Annual PAN AP Partners Meeting | 6 000 | 12 000 | 12 000 | 12 000 | 12 000 | 6 000 | 60 000 | | |
| Travel | 9 000 | 18 000 | 18 000 | 18 000 | 18 000 | 9 000 | 90 000 | | |
| Staff Salaries | 5 100 | 10 200 | 10 200 | 10 200 | 10 200 | 5 100 | 51 000 | | |
| Subtotal: | 83 950 | 167 900 | 167 900 | 167 900 | 167 900 | 83 950 | 839 500 | 42 | |
| 2. Community Exchange Programme | | | | | | | | | 17 % Staff salaries |
| Community Exchange Programme | 4 000 | 8 000 | 8 000 | 8 000 | 8 000 | 4 000 | 40 000 | | |
| Travel | 2 200 | 4 400 | 4 400 | 4 400 | 4 400 | 2 200 | 22 000 | | |
| Staff Salaries | 1 200 | 2 400 | 2 400 | 2 400 | 2 400 | 1 200 | 12 000 | | |
| Subtotal: | 7 400 | 14 800 | 14 800 | 14 800 | 14 800 | 7 400 | 74 000 | 4 | |

| | | | | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----|---|
| 3. Policy Research and Advocacy | | | | | | | | | 24 % Staff salaries 14 % Consultancy |
| Policy Research and Advocacy (includes SAICM, JMPM and national and regional meetings) | 13 750 | 27 500 | 27 500 | 27 500 | 27 500 | 13 750 | 137 500 | | |
| Documentation & Publicising Greenwashing Human Rights Violations | 7 750 | 15 500 | 15 500 | 15 500 | 15 500 | 7 750 | 77 500 | | |
| Travel | 2 850 | 5 700 | 5 700 | 5 700 | 5 700 | 2 850 | 28 500 | | |
| Staff Salaries | 9 300 | 18 600 | 18 600 | 18 600 | 18 600 | 9 300 | 93 000 | | |
| Consultancy | 5 400 | 10 800 | 10 800 | 10 800 | 10 800 | 5 400 | 54 000 | | |
| Subtotal: | 39 050 | 78 100 | 78 100 | 78 100 | 78 100 | 39 050 | 390 500 | 20 | |
| 4. PIC & POPs Convention | | | | | | | | | 20% Staff salaries 11 % Consultancy |
| PIC & POPs Convention | 6 300 | 12 600 | 12 600 | 12 600 | 12 600 | 6 300 | 63 000 | | |
| Travel | 5 700 | 11 400 | 11 400 | 11 400 | 11 400 | 5 700 | 57 000 | | |
| Staff Salaries | 3 400 | 6 800 | 6 800 | 6 800 | 6 800 | 3 400 | 34 000 | | |
| Consultancy | 1 800 | 3 600 | 3 600 | 3 600 | 3 600 | 1 800 | 18 000 | | |
| Subtotal: | 17 200 | 34 400 | 34 400 | 34 400 | 34 400 | 17 200 | 172 000 | 9 | |
| 5. Public Education and Awareness Raising | | | | | | | | | 14 % Allocation for partners 20 % Staff salaries 11 % Consultancy |
| Public Education and Awareness Raising | 12 700 | 25 700 | 25 700 | 25 700 | 25 700 | 12 700 | 128 200 | | |
| China | 1 500 | 2 900 | 2 900 | 2 900 | 2 900 | 1 500 | 14 600 | | |
| Cambodia | 900 | 1 800 | 1 800 | 1 800 | 1 800 | 900 | 9 000 | | |
| Vietnam | 1 500 | 3 000 | 3 000 | 3 000 | 3 000 | 1 500 | 15 000 | | |
| Laos | 500 | 1 000 | 1 000 | 1 000 | 1 000 | 500 | 5 000 | | |
| Burma | 300 | 400 | 400 | 400 | 400 | 300 | 2 200 | | |
| Travel | 6 450 | 12 900 | 12 900 | 12 900 | 12 900 | 6 450 | 64 500 | | |
| Staff Salaries | 6 750 | 13 500 | 13 500 | 13 500 | 13 500 | 6 750 | 67 500 | | |
| Consultancy | 3 600 | 7 200 | 7 200 | 7 200 | 7 200 | 3 600 | 36 000 | | |
| Subtotal: | 34 200 | 68 400 | 68 400 | 68 400 | 68 400 | 34 200 | 342 000 | 17 | |
| 6. Online Database & Information Communication | | | | | | | | | 75 % Staff salaries 25% Consultancy |
| Staff Salaries | 5 400 | 10 800 | 10 800 | 10 800 | 10 800 | 5 400 | 54 000 | | |
| Consultancy | 1 800 | 3 600 | 3 600 | 3 600 | 3 600 | 1 800 | 18 000 | | |
| Sharing of Alternative Techniques | 5 000 | 10 000 | 10 000 | 10 000 | 10 000 | 5 000 | 50 000 | | |
| Administration Cost | 6 000 | 12 000 | 12 000 | 12 000 | 12 000 | 6 000 | 60 000 | 3 | |
| Subtotal: | 18 200 | 36 400 | 36 400 | 36 400 | 36 400 | 18 200 | 182 000 | 9 | |
| Total US dollar | 200 000 | 400 000 | 400 000 | 400 000 | 400 000 | 200 000 | 2 000 000 | | |

Budget priorities:

1. Community empowerment through CPAM will focus on CPAM training of farmers, local leaders, CSOs, government officials (certain countries); on-going monitoring, surveys, and documentation of impact of pesticides and compliance to the FAO Code; training and documentation of alternatives; monitoring and campaigning, information materials and translations, partners websites, e-tools development and use of media; and organising seminars, workshops and consumer outreach campaigns.
2. Community Exchange Programmes: Organised visits to communities, CSOs practicing ecological agriculture within and other countries;
3. Policy research and advocacy (SAICM, FAO Code, JMPM, Human rights meetings, national and regional meetings, etc): production of policy briefs, technical fact sheets and documents on alternatives to HHPs; preparations and participation in the relevant meetings; monitoring corporate accountability using human rights instruments, documentation, production of campaign and advocacy materials
4. PIC and POPs conventions: preparation and participation in technical meetings and Conference of Parties, developing specific policy briefs and information materials, learning exchanges on the Conventions
5. Public education and awareness raising: Campaign on highly hazardous pesticides including research and documentation of impact of pesticides on children, women and others; campaign materials, local campaigns on highly hazardous pesticides, documentation (including distribution) of safer alternatives and best agricultural practices.
6. Online database and information communication: website and using new media platforms
7. Sharing of alternative techniques: documentation of case studies, experiences and translation of materials of best practices and alternatives.

Total budget situation:

| Donor | Amount | Time period | Comment |
|---|----------------------------------|--|---|
| Evangelischer Entwicklungsdienst (EED), Germany | up to EUR 660 000 | January 2010 - December 2013 | EED has been providing institutional funding to PAN AP since 1996. The current funding cycle from EED is for 4 years |
| Funding Leadership and Opportunities for Women (FLOW), Ministry of Foreign Affairs, Netherlands | up to EUR 704 947 | January 2012 to December 2015 | The current funding cycle is for 4 years |
| Katholische Zentralstelle für Entwicklungshilfe (KZE), Germany | 1. EUR 180 000 2. EUR 100 000 | 1. April 2011 to March 2014 2. July 2011 to December 2013 | KZE has provided project funding to PAN AP since 2004 and is currently funding 2 projects: 1. Save Our Rice Campaign 2. Food Sovereignty and Ecological Agriculture Programme |
| European Union (EU) | up to EUR 95 000 | January 2012 to December 2013 | EU is providing a 2 year project funding for East Malaysia |

7.2.2 Detailed budget for TFA

| Budget breakdown component 1a and 1b - TFA | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total | % of total budget | Comment |
|--|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|--|
| Personnel | | | | | | | | | |
| Program Director (70 %) | 16 800 | 33 600 | 33 600 | 33 600 | 33 600 | 16 800 | 168 000 | 11 | Bi-lingual+10 years experience |
| Training Coordinator (50 %) | 6 000 | 12 000 | 12 000 | 12 000 | 12 000 | 6 000 | 60 000 | 4 | Bi-lingual+10 years experience |
| Administrative Assistant (100 %) | 3 000 | 6 000 | 6 000 | 6 000 | 6 000 | 3 000 | 30 000 | 2 | |
| Bookkeeper (50 %) | 3 000 | 6 000 | 6 000 | 6 000 | 6 000 | 3 000 | 30 000 | 2 | Bi-lingual+10 years experience |
| Consultant | | 3 000 | 3 000 | 3 000 | 3 000 | 3 000 | 15 000 | 1 | 300-500 USD/day |
| Subtotal | 28 800 | 60 600 | 60 600 | 60 600 | 60 600 | 31 800 | 303 000 | 20 | |
| Direct Cost | | | | | | | | | |
| Rent and utilities | 3 000 | 7 200 | 7 200 | 7 200 | 7 200 | 3 600 | 35 400 | 2 | |
| Communication | 1 000 | 2 400 | 2 400 | 2 400 | 2 400 | 1 000 | 11 600 | 1 | |
| Miscellaneous | 843 | 2 086 | 2 086 | 2 086 | 2 086 | 743 | 9 930 | 1 | |
| Audit | 1 000 | 1 000 | 1 000 | 1 000 | 1 000 | 1 000 | 6 000 | 0 | |
| Subtotal | 5 843 | 12 686 | 12 686 | 12 686 | 12 686 | 6 343 | 62 930 | 4 | |
| Program Activities | | | | | | | | | |
| 1.3 Curriculum/materials Development | 5 000 | 5 000 | 5 000 | 5 000 | | | 20 000 | 1 | |
| 1.4 Support to 5 country programs | 90 000 | 180 000 | 180 000 | 180 000 | 180 000 | 90 000 | 900 000 | 60 | Subgrant to each country is 30 000-40 000 USD/year |
| 1.5 Policy exchange/dialogue | 3 000 | 3 000 | 3 000 | 3 000 | 3 000 | 3 000 | 18 000 | 1 | |
| 1.6 Regional collaboration/Workshop | 5 000 | 16 000 | 16 000 | 16 000 | 16 000 | 13 000 | 82 000 | 5 | 1 workshop/year (15 participants) |
| 2.4 Research & studies | 5 000 | 10 000 | 10 000 | 10 000 | 15 000 | | 50 000 | 3 | |
| Monitoring & meetings | 4 500 | 7 000 | 7 000 | 7 000 | 7 000 | 3 000 | 35 500 | 2 | |
| Subtotal | 112 500 | 221 000 | 221 000 | 221 000 | 221 000 | 109 000 | 1 105 500 | 74 | |
| Administration (5 % except 1.4) | 2 857 | 5 714 | 5 714 | 5 714 | 5 714 | 2 857 | 28 572 | 2 | |
| Total US dollar | 297 143 | 594 286 | 594 286 | 594 286 | 594 286 | 297 143 | 1 500 002 | | |

Budget priorities:

1. School/communities REAL activities in all countries
2. Regional cooperation and exchange workshop
3. Research and studies to reduce risks and exposure to health and environments
4. Curriculum and materials development
5. Policy supports

7.2.3 Detailed budget for FAO RAP

| Budget breakdown component 3 – FAO RAP | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total | % of total budget |
|---|----------------|------------------|------------------|----------------|----------------|----------------|------------------|-------------------|
| Functional networks of programme partners established | 50 000 | 60 000 | 60 000 | 60 000 | 60 000 | 60 000 | 350 000 | 6 |
| Fortified FFS, TOT and Refresher Training curricula and training materials developed | 50 000 | 60 000 | 30 000 | 60 000 | 30 000 | 40 000 | 270 000 | 5 |
| Capacity of national programmes to train farmers in IPM and pesticide risk reduction developed/strengthened | 50 000 | 300 000 | 300 000 | 200 000 | 180 000 | 180 000 | 1 210 000 | 22 |
| Private sector engaged in enhancing availability of biological control agents and bio-pesticides | 25 000 | 50 000 | 50 000 | 50 000 | 50 000 | 50 000 | 275 000 | 5 |
| Farmers participated in FFS and Pesticide Risk Reduction Farmer Training | 205 000 | 465 000 | 465 000 | 500 000 | 500 000 | 500 000 | 2 635 000 | 48 |
| FFS quality standards set at national and regional level and staff trained for internal monitoring and evaluation | 50 000 | 60 000 | 50 000 | 50 000 | 50 000 | 40 000 | 300 000 | 5 |
| Regional, national and local government providing policy and funding support | 50 000 | 60 000 | 100 000 | 50 000 | 100 000 | 100 000 | 460 000 | 8 |
| Total US dollar | 480 000 | 1 055 000 | 1 055 000 | 970 000 | 970 000 | 970 000 | 5 500 000 | |

FAO Service charge of 13 % and staff time for management and reporting are proportionally included in the amounts for each activity group. Budget priorities:

The budget allocation for the FAO-IPM component will allow for up-scaling of pesticide risk reduction farmers training programmes and making optimal use of these funds for institutionalization and allocation of government funds for up-scaling of training efforts as to reach more farmers, men and women, young and old, nation-wide in each of the GMS countries. Priority funds allocation will also be focused on strengthened technical assistance, monitoring and evaluation of efforts for more effective and innovative training implementation through national IPM programmes. Finally, funds will be allocated to support strategic partnerships, including the private sector, to support testing and application of biological control agents to replace use of chemical pesticides in agriculture in the GMS.

This component employs a Chief Technical Advisor for 80 % of time at P5 level and a Programme Development Officer/Training Advisor (50-60 %) at P4 level for the full duration of the 5 years project extension. In addition, this component will support staff contracts for General Service (1 administrative (80 %) and 1 driver (50-60 %) in each of the member countries. The salary is in accordance with the established UN salary scales for Professional and General Service staff.

Description of budget lines above 30 000 USD/year:

Functional networks of programme partners established: This involves support for networking and joint planning activities at national and regional level, including staff and travels costs; stakeholder workshops; study tours, communication strategy development; etc.

Fortified FFS, TOT and Refresher Training curricula and training materials developed: This involves support for regional and national workshops and pilot training activities for development and pre-testing of innovative curriculum, including staff, consultant and travel costs, printing and publication costs.

Capacity of national programmes to train farmers in IPM and pesticide risk reduction developed/strengthened: This involved support for regional and national training of trainers, refresher courses, workshops, including Staff, consultant and travel costs, per diem at standard UN rates for workshop/TOT participants.

Private sector engaged in enhancing availability of biological control agents: Staff and travel costs for resource persons (FAO staff or consultants); Consultants to conduct specific tasks or studies. Support for workshop and meetings to facilitate dialogue and engagement between private and public sector partners.

Farmers participated in FFS and pesticide risk reduction farmer training activities: This involves support for farmer training activities in the format of season-long Farmers Field Schools and short-duration farmer training. Budget allocations for farmer training activities as per standard UN budget guidelines and as per established practices by National IPM-FFS Training Programmes operated through government systems.

FFS quality standards set and M&E systems established: This involves support for networking, meetings and workshops as well as travel support for FAO staff and consultants and for government staff in charge of monitoring and evaluation of farmer training activities. Travel allowances in line with UN payment standards and based on existing government travel allowance standards.

Government policy and financial support systems established: This involves support for networking, meetings and workshops as well as travel support for FAO staff and consultants. This also involves support for impact assessment for the purpose of informing policy processes and institutionalization of IPM and pesticide risk reduction capacity building efforts in existing and newly to be developed government systems.

7.2.4 Detailed budget for FAO HQ

| Budget breakdown component 4a – FAO HQ | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total | % of total budget |
|---|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|
| Strengthened pesticide legislation | 40 000 | 80 000 | 80 000 | 80 000 | 60 000 | - | 340 000 | 27 |
| Strengthened capacity to enforce pesticide legislation | 40 000 | 90 000 | 90 000 | 100 000 | 120 000 | 70 000 | 510 000 | 41 |
| Private sector engagement | 40 000 | 40 000 | 40 000 | 20 000 | - | - | 140 000 | 11 |
| Strengthening regional collaboration on pesticide regulatory issues | - | 30 000 | 30 000 | 40 000 | 60 000 | 50 000 | 210 000 | 17 |
| Specific surveys, studies, workshops | 5 000 | 10 000 | 10 000 | 10 000 | 10 000 | 5 000 | 50 000 | 4 |
| Total US dollar | 125 000 | 250 000 | 250 000 | 250 000 | 250 000 | 125 000 | 1 250 000 | |

Budget priorities:

During the course of Phase II, emphasis shifts from national-level capacity building to strengthening regional collaboration. The priority is to get proper legislation into place and to establish basic capacity for its enforcement. Regional aspects already play an important role in the design of legislation and capacity building. Once the basics are in place at national level, the focus on regional collaboration in implementation of the regulatory framework will be further reinforced.

Funding covers:

1. Staff to provide technical assistance (drafting of legislation; development of inspection schemes; facilitation of an increased role of the private sector; oversight of field activities; etc.);
2. Training (stakeholder meetings and workshops related to the formulation of pesticide legislation; training of inspectors; regional meetings);

3. Preparation, translation, printing and distribution of documents (legislative documents; inspection manuals; inspection checklists; information booklets for pesticide retailers);
4. Contributions to operational expenses for implementation of inspections for the initial rounds that are considered part of the development and pilot stage.

FAO projects are subject to a 13% service charge that was agreed by its governing bodies and that covers overall administrative costs of FAO. This is in addition to cost for actual management of the project component (including reporting and participation in steering group meetings, evaluation activities and responding to specific requests by the programme coordinator), for which a total of 15-20 staff days per year has been budgeted. FAO Service charge of 13 % and staff time for management and reporting are proportionally included in the amounts for each activity group. Regarding the regional activities on strengthening regulatory control of pesticides, APPPC has a small basic budget that is provided by APPPC member states. The project will augment this budget in support of activities that are in line with project objectives. Activities will be primarily based on priorities for collaboration set by the countries.

Description of budget lines above 30 000 USD/year:

Strengthening pesticide legislation: This involves combined technical/legal missions of FAO experts, including staff and travels costs; stakeholder workshops; translation costs; printing; etc.

Strengthening capacity to enforce pesticide legislation: This involves: training of inspectors (staff and travel costs for resource persons; travel and accommodation of trainees; preparation and printing of training materials and materials used during inspections; daily allowances (USD10 per day) for inspectors to cover transport costs and lunch during inspections after training; translation costs; monitoring and review (FAO technical expert time; Consultants; meetings/workshops). Other technical support and training. Study tours.

Private sector engagement: Staff and travel costs for technical FAO expertise; consultants; workshops/meetings; travel; translation; printing; etc.

Strengthening regional collaboration: Staff and travel costs for resource persons (FAO staff or consultants); travel and accommodation for participants; meeting room and meals; printing and other operating expenses; etc. Consultants to conduct specific tasks or studies.

This component only employs a coordinator/technical advisor for 40-50 % of time at P5 level. The salary is in accordance with the established UN salary scales.

7.2.5 Detailed budget for KemI

| Budget breakdown component 4b and 5, technical support and programme coordination– KemI | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Total | % of total budget |
|--|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|
| 1. Regional chemicals management forums | 70 000 | 140 000 | 140 000 | 140 000 | 140 000 | 70 000 | 700 000 | 18 |
| 2. Other regional activities on chemicals management (regional workshops and working groups, pilot projects) | 124 000 | 248 000 | 248 000 | 248 000 | 248 000 | 124 000 | 1 240 000 | 31 |
| 3. Activities related to involvement of new partner countries (Myanmar and Thailand) | 20 000 | 40 000 | | | | | 60 000 | 2 |
| 4. Activities related to pesticide management | 50 000 | 100 000 | 100 000 | 100 000 | 100 000 | 50 000 | 500 000 | 13 |
| 5. Programme coordination and reporting | 30 000 | 60 000 | 60 000 | 60 000 | 60 000 | 30 000 | 300 000 | 8 |
| 6. Review and evaluation | | 40 000 | 40 000 | 100 000 | 40 000 | 70 000 | 290 000 | 7 |
| 7. Information and communication | 10 000 | 20 000 | 20 000 | 20 000 | 20 000 | 10 000 | 100 000 | 3 |
| 8. General technical support to the programme | 60 000 | 155 000 | 190 000 | 155 000 | 120 000 | 70 000 | 750 000 | 19 |
| Total US dollar | 364 000 | 803 000 | 798 000 | 823 000 | 728 000 | 424 000 | 3 940 000 | |

General comments:

In many of the activities countries take part in the work by in-kind contributions. Officials take part to learn and to share knowledge using their own working time funded by their employer.

Budget details:

1. Regional Chemicals management forums are expected to be held two times a year. A forum will be held during three days with 45-50 participants. Budget for each forum is estimated to 70 000 USD (700/participant (30 000), conference cost to 20 000 and expert participation 20 000)
2. Other regional activities.
 - We estimate that we will have four pilot projects running annually (total 160 000 USD). One pilot project is estimated to cost 40 000 USD annually.
 - Besides the pilot projects we also plan to establish one or two specialized working groups (total 54 000 USD). For one working group two persons from each country plus two experts will meet two times per year. 1 000 USD/participant, 2000 USD meeting facilities, 10 000 USD expert participation, translation 5 000 USD (total 27 000 USD).

- to establish contacts and use other regional bodies to carry out joint activities, workshops, seminars, trainings, estimated cost per year is 34 0000 USD
- 3. To establish contact and full involvement of the new member countries we will arrange study visits and workshops in the countries
- 4. Harmonization of regulations and management of pesticides is ongoing in the region (total 100 000. Experts from Swedish Board of Agriculture (regional inspection training, developments of manuals 40 000 USD). Adapting international manuals to regional context 10 000 USD. Arrange study tour to Sweden (10 participants à 3 000 USD = 30 000 USD). To arrange regional workshops on specific topics such as new legislation, new policies 20 000 USD.
- 5. To arrange coordination group meetings (10 persons) two times a year and address cross cutting issues. Meeting cost 1000 USD/person (total 20 000 USD). Participation of experts in the areas gender/corruption/good governance: 10 000 USD. Preparing the annual report 10 000 USD.
- 6. The format and content will be developed in cooperation with Sida and partners.
- 7. See explanation in section 6.
- 8. Most of this component consist of placing a KemI expert in the region during two to three years 2014-2017, estimated cost 140 000 USD per year. Remaining funds is planned for increasing KemI experts' participation in activities.

7.3 Disbursement

Funds will be disbursed annually according to contracts between Sida and KemI as well as between KemI and partners of the programme.

1 Annex 1 - Key results from the on-going programme

During its first six years, the Programme has laid down a solid basis for its activities and implementation is well on its way. The key results are high-lighted below.

Key results – PAN-AP

Community Pesticide Action Monitoring (CPAM) has been initiated in China, Cambodia, Lao PDR and Vietnam. The monitoring results highlight the use of highly hazardous pesticides in these countries where farmers and workers are being frequently exposed. In Yunnan, the community monitoring provided information about pest outbreaks and pesticide use, which provided needed information to explore existing and to develop new alternatives to these pesticides. In Cambodia, over 40 key farmers have been trained as facilitators on ecological alternatives and CPAM. New partnerships have been initiated in Lao PDR (SAEDA), North Vietnam (CGFED) and South Vietnam (RCRD)- Research Centre for Rural Development, An Giang University who are now fully participating in the programme. Initial trainings on CPAM have been conducted in Lao PDR and Vietnam where various stakeholders including CSO's, government officials and farmers participated. A survey on the trade and use of illegal pesticides was undertaken in Cambodia and Lao PDR. The FAO Code was used as a standard to measure pesticide distribution and use practices. The initial results of this survey indicate that illegal hazardous pesticides cross through the porous borders from Thailand, China and Vietnam to Cambodia and Lao PDR.

Baseline studies on pesticide use have been completed, with case studies on pesticides use in North Vietnam (rice and tea production) and South Vietnam (rice production) followed by workshops to convey the results. In South Vietnam, RCRD now provides training on pesticide reduction methods to farmers. There has been an increased demand for safer alternatives as a result of the awareness raising activities. For example in Cambodia, 410 household farmers are planting vegetables without the use pesticide and have switched from monocropping to multicropping using ecological agriculture.

Public education and awareness: PEAC has involved officials from the government extension department in their pesticide reduction and educational exchanges between consumers and farming communities. CEDAC's public outreach through the media includes weekly radio shows, articles in newspapers and seminars have increased consumer demand for organic products. RCRD is organizing awareness and activities with students on the dangers of pesticide use which has resulted in a campaign to clean the rice fields of pesticide containers and packages that have been haphazardly disposed. There have been farmer exchanges involving partners from Yunnan, Lao PDR and Cambodia on organic System of Rice Intensification, which promotes non-chemical alternatives in the process. In addition, a few of PEAC study on farmers practices and pesticide use has been published in local journal such as the Guangxi Tropical Agriculture Journal and the Plant Protection Journal.

CEDAC has translated and distributed publications on Botanical Pesticides and a pictorial list of banned pesticides. CGFED and RCRD has translated CPAM tools and various publications in to Vietnamese, while SAEDA has translated posters on paraquat and endosulfan into Laotian language.

Meanwhile, PAN-AP has published technical information on monocrotophos, methamidophos, endosulfan, glufosinate-ammonium, methyl parathion and paraquat for wide distribution, particularly to government officials. Other publications include, "Breast Cancer: A wake up call" and the updated version of "Sowing Poisons Reaping Hunger" which highlights the risk of pesticides use on human health

and the environment. PEAC has translated "Breast Cancer: A wake up call" and key training and survey documents into Mandarin. PEAC has also influenced the government to support the additional printing of "Breast Cancer: A wake up call" and its distribution to all government extension offices in Yunnan.

Overall the network outreach has been strengthened.

In the last six years, through the work of partners, over 2200 farmers have been made aware of the health impacts of pesticides, the availability of highly hazardous pesticides as well as banned and restricted pesticides. In Cambodia, network of farmers promoting ecological agriculture is increasing. CGFED has expanded the network by involving other CSOs in the north of Vietnam. PEAC outreach includes students, university lecturers and other CSO's. PEAC has an interactive website that promotes ecological agriculture with 5,322,865 numbers of hits as of July 2012.

More than 8000 people have been involved in the "No Pesticide Use Day" Campaign, training, seminars and workshops on the risks of pesticides. Participants include a broad sector of segments of the public including government staff, the private sector, consumers; NGO's, farming communities, women and rural youth. A variety of media campaigning tools were used including newspaper articles, radio programmes, television programmes ,e-mails and new media such as Facebook and Twitter. Through the OISAT database, PAN-NA's database and PAN-AP's website, relevant documents have uploaded such as the list of highly hazardous pesticides, case studies on alternatives, information on international regulations and on the health and environmental effects of pesticide use.

Policy Research and Advocacy:

CEDAC participated in the initial discussions on the law of pesticides and fertilizer management with the Ministry of Agriculture, Forest and Fisheries. While, China's policy advocacy efforts have resulted in the Ministry of Agriculture announcement that paraquat liquid solutions will be stopped on July 1, 2014 and phase out and sales of paraquat liquid solutions will take place on July 1, 2016.

Community initiated monitoring by key farmers to monitor compliance to specific provisions in the International Code of Conduct on the Distribution and Use of Pesticides in Cambodia and China has been successfully carried out. Results of this monitoring have been shared with government officials at the local level. At the Asian level, The Handbook on Community Monitoring and International Advocacy was prepared, including the how to of monitoring of compliance with the specific provisions of the Code including farmer practices and retail stores. The survey questionnaires and background information from the handbook have been translated into Mandarin, Vietnamese and Khmer. The Asian monitoring efforts from CEDAC, PEAC, RCRD and CGFED along with 7 other organizations from Indonesia, Malaysia, India, Philippines, and Sri Lanka have been compiled into a report, "Communities in Peril": Asian regional report on Community monitoring of highly hazardous pesticides use". The Asian regional report documents the use of highly hazardous pesticide under conditions that present a high level of exposure including the lack of personal protective equipment, spillages while mixing, spraying and loading, and poor storage and disposal practices. The Asian report was launched in Bali in February 2010 in the joint meeting of the Rotterdam, Stockholm and Basel Conventions and received a good level of media coverage.

In addition, in a joint effort with PAN International, PAN-AP provided the expertise to other PAN regional centers in Latin America and Africa to undertake similar community monitoring. The results from Senegal, Mali, Tanzania, Argentina, Bolivia and the United States, were published in "Communities in

Peril: Global Report on health impacts of pesticide use in agriculture” and launched in Brussels in June, 2010. Both reports are available on the website.

The international policy advocacy campaign on three pesticides, i.e. endosulfan, paraquat and DDT together with other global networks has met with some success. PAN’s global campaign has contributed to a number of countries recently banning endosulfan. It is now banned in 74 countries. Endosulfan is now listed in the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention due to the intense work of PAN. PAN-AP has spearheaded this campaign by providing timely technical information on the hazards of endosulfan and its alternatives and actively participated in the technical committees. PAN-AP has also given a human face to the poisoned victims and has launched a campaign to support its ban. Its campaign to include paraquat in the Rotterdam Convention on Prior Informed Consent is an ongoing effort.

Interestingly, the results of the “Communities in Peril”: Asian regional report on Community monitoring of highly hazardous pesticides use” initiated an independent investigation by a Danish newspaper which printed a series of articles in Denmark which prompted United Plantations, a Danish company in Malaysia and Indonesia to stop the use of paraquat and monocrotophos in their plantations. At the international level, PAN-AP has been participating in SAICM and FAO meetings, and has advocated for more government commitments for more concerted actions on highly hazardous pesticides and for the promotion and support for safer alternatives particularly non chemical alternatives and ecological agriculture.

Key results - TFA

During phase I, the Field Alliance (TFA) has piloted and implemented its Rural Ecological Agriculture for Livelihood (REAL) project with support from the programme in Cambodia, China, Lao PDR, Vietnam and later included Thailand in 2011. The REAL program works with schools and agencies under the Ministries of Education with the aims to include information about the agro biodiversity for livelihood, pesticides impacts to health and environment, and ecological agriculture and/or IPM into the curriculum of rural schools and community education program. TFA provided technical supports and funding to CSO partners to pilot the REAL projects in their countries. TFA partners included the Agricultural Technology Service Association and Srer Khmer in Cambodia, PEAC in China, Non-Profit Association for Development and Environment (NALD) in Lao PDR, Thai Education Foundation (TEF) in Thailand, the Center for Rural Progress, Initiative for Community Empowerment (ICEVN) and the Center for Environment and Community Assets Development (CECAD) in Vietnam. TFA/TEF also provided technical supports to integrate the agro biodiversity and pesticides impact assessment to health and environment to the Davao schools and communities IPM program.

Major accomplishment included:

Curriculum Development: The curricula on Agro-Biodiversity Conservation and Utilization (ABD) and on Pesticides Impact Assessment to Health and Environment (PIA) were translated into Chinese, Khmer, Lao PDR, and Vietnamese for use in schools. Curriculum development workshops were held in Cambodia, Lao PDR and Philippines to refine and adapt the course material for local school systems and native languages. The curriculum is now being implemented in participated project schools and communities.

Capacity Building: The REAL project has trained over 150 teachers, officials and community members, on ABD and PIA in Cambodia, China, Lao PDR, Philippines and Vietnam. Approximately 2,500 students have participated in REAL activities. Data related to ABD and PIA in communities were documented and then presented to these communities, as well as to governmental and other agencies. Community ABD conservation activities were implemented in Cambodia, Lao PDR, Philippines and Thailand. Pesticides risk reduction projects were implemented in Lao PDR, Cambodia, Philippines and Vietnam. On-going monitoring support to schools and communities was provided by TFA partners. Students' monitoring of pesticides use in communities was conducted in China.

Educational Policies: In all participating countries, REAL projects involved local level education officials in REAL project planning, implementation and evaluation. National education officials from Philippines, Lao PDR and Vietnam participated in a REAL regional exchange workshop. As a result, REAL projects in Lao PDR and Vietnam received recognition under national education policies and received support for their implementation in school and community education systems.

Regional Workshops: Four regional workshops were organized for TFA's partners in 2007, 2008, 2010 and 2012 for training, exchange, reviewing and planning. Participants for the REAL regional workshops included partner CSOs, concerned governmental officials and policy makers. TFA also organized a study visit to the REAL program in Chiangmai, Thailand in 2011 for policy makers from Vietnam and Beijing, China.

Dissemination and Networking: Awareness of pesticide risks among public was raised through student presentations during the field days, forum or campaigns. Various materials were produced and disseminated, including media through a Television program in Lao PDR. TEF presented the community based pesticides risks reduction and the FAO regional pesticides risks reduction at the national SAICM workshop organized by the Pollution Control Department under SAICM supports during May 2012. As a result, the Pollution Control Department joined the REAL Regional Workshop and exhibition at the NFE National IPM forum as well as participating in the pesticides impact assessment training conducted by TEF.

The implementation of REAL project in phase I, the program has generated much interests and created opportunities for its expansion. It has proven an effective channel for pesticide risk reduction education at schools and in communities.

Key results - FAO Regional Office for Asia and the Pacific

The FAO Regional Office for Asia and the Pacific coordinates the implementation of the IPM field programme. The GCP/RAS/229/SWE project started with an inception stage that involved programme planning by national counterparts in each country. The work on field-level pesticide risk reduction was able to build on existing FAO Regional and National IPM programmes in the Greater Mekong Sub-region right from inception of the project GCP/RAS/229/SWE. The FAO and government counterpart training networks in Cambodia, China, Lao PDR and Vietnam were all in place to carry out community education activities as planned. Furthermore, as the field training networks were mostly well versed with the IPM technical content, participatory planning processes and adult learning methodologies, the FAO IPM

Component could focus on the important and urgently needed work to strengthen attention for pesticide risk reduction in the training curriculum.

The main roles of the IPM Field programme include (i) enhancing reform of government policy on pest management towards integrated approaches, (ii) building capacity in national and decentralized governments to implement such reform and achieve a broad and sustainable impact on poor smallholder farmers (men and women, young and old) through IPM training, (iii) enabling innovations, concept and curriculum development and training quality assurance, (iv) coordinating and facilitating regional exchange. Further the IPM Field Programme provides the mechanisms for overall coordination of Programme components related to pesticide risk reduction, both at the regional and national level.

A summary of results for Phase I:

Pesticide Risk Reduction/IPM training results: Capacity of relevant government agencies (extension services, crop protection services) and non-governmental development partners to conduct IPM field programmes was strengthened in all 4 GMS partner countries. New curricula and training materials were developed with a focus on fortification of IPM-FFS with pesticide risk reduction learning modules. By June 2012 some 280 government extension workers had participated in Pesticide Risk Reduction Training of Trainers courses and 43,705 farmers had participated in 'fortified' Farmers Field Schools supported by FAO with project resources in the Greater Mekong Sub-region. During this period, thousands of additional farmers benefited from participation in local government and/or other donor funded FFS programmes that were implemented with FAO technical and coordination support. Such support for pesticide risk reduction work at local and national levels is manifested by various recent policy and pesticide regulation initiatives, as well as concrete financial support from national and local governments for up-scaling of IPM and pesticide risk reduction training, most notably in China PR and Vietnam. IPM has been integrated in the Vietnam government's safe vegetable programme and local governments at provincial level are now the major funding sources for FFS training on IPM and pesticide risk reduction. For each FAO-supported FFS, about 5 to 30 FFS are paid for from government funds depending on individual provincial development plans and budget allocations. An increasing trend in allocation of funding for FFS has been observed in provinces all over the country. In China, the national government pro-actively supported up-scaling of IPM-FFS training to 800 counties nation-wide with an investment of RMB 800 million.

Impact assessment: Studies for impact assessment on community education for pesticide risk reduction were implemented during the 2007-2011 period. This work was carried out by external evaluators, recruited from local universities and research organizations in Cambodia and Vietnam under the technical supervision of impact assessment experts at Kasetsart University in Bangkok, Thailand. These studies will be published during 2nd half of 2012 and utilized for advocacy and local policy development as to generate local government support for further up-scaling of pesticide risk reduction training.

Climate change, sustainable crop intensification and new invasive pests: In these times of climate change and global warming, training curriculum content will have to be continuously updated as to deal with capacity building for climate change adaptation and management of newly emerging invasive pest and disease problems faced by smallholder farmers. The World Bank acknowledged the innovative FFS climate change adaptation curriculum development and pilot training work supported by FAO-IPM during a recently held consultation in Bangkok. During the 2007-2012 period, the FAO-IPM programme was frequently called upon for technical advice with regards to prevention and management of a range of

agricultural production and crop protection constraints with a regional character. Most notably, FAO provided advice and support for sustainable intensification of crop production and containment of spread and in-situ management of invasive pest species (e.g. coconut hispid beetle, Rice Brown Plant Hoppers and associated viral diseases and Cassava Pink Mealybug).

Regional collaboration and exchange: Regional partnerships were strengthened for implementation of pesticide risk reduction efforts. The annual FAO-IPM meetings, which included Programme partner and stakeholder participation, provided a key platform for exchange, planning and regional collaboration. Various newly developed training curricula and materials were posted on the FAO-IPM website and regular news releases kept partners and interested stakeholder informed.

Key results - FAO HQ, Pesticides Risk Reduction Group

New pesticide legislation has been issued in Cambodia and Lao PDR and a new Law is under development in Vietnam. The project provided extensive support in the form of: analysis of the overall legal framework; drafting of new legislation; stakeholder consultation (Lao PDR); translation and publishing of new legislation; awareness raising about new legislation (Lao PDR). The assistance was provided with close involvement of the FAO Legal Development Service.

Efforts to strengthen enforcement of pesticide legislation have focused on establishing and operationalizing inspection schemes. A regional workshop was organised for heads of departments to exchange information and experience among countries on licensing and inspection of pesticide retailers. Training materials, inspection manuals and information booklets have been prepared, translated and distributed. Pilot inspection schemes have been implemented in selected provinces in Cambodia and Lao PDR. Scaling-up started in Lao PDR. So far, about 80 inspectors have been trained. Over 400 pesticide retailers received in-the-shop training and an information booklet.

Other activities related to enforcement have included:

- quality control of pesticides in Lao PDR, where the project arranged for testing of samples in Hanoi;
- assistance to the development of a national plan for a coordinated approach to pesticide residue testing in Lao PDR. This plan is under implementation and the project has supported some of the training of analysts
- assistance to JICA, which established a laboratory for quality control in Cambodia, on enhancing the sustainability of the laboratory.

A foundation has been laid for stronger regional collaboration on pesticide regulatory issues: The programme supported meetings of the standing-committees on IPM and Pesticide Management of the Asian & Pacific Plant Protection Commission (APPPC). These committees drew up priorities that were adopted by the APPPC. Over the next years, the programme aims to support the implementation of some of these activities.

Key results - Kemi

Five regional chemicals management forums have laid the foundation for cooperation between the countries. The working group for the forum is established. The group have regular meetings to plan the chemicals management forums and play an important role in inviting relevant experts and participants. The members also facilitate everyday contacts between the countries. Key ministries and government agencies in Lao PDR, Cambodia and Vietnam are involved and pilot projects are on going in the three countries.

The cooperation has facilitated knowledge and experience to the development of new chemicals legislation in Cambodia and Vietnam and a new hazardous chemicals strategy in Lao PDR. More specific issues, like the need to reduce the use of mercury, has been addressed by presenting alternatives to small scale gold mining with mercury as well as the of mercury in low energy lamps and dental amalgam.

The implementation of the globally harmonized system for classification and labelling (GHS) has been supported by experts from the program.

2 Annex 2 - Programme response to key recommendations of the mid-term evaluation

Key general recommendations

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|---|---|--|
| 1.1 | The general assessment is that the programme has produced outputs and outcomes that to a high extent meet the expectations according to the revised Logical Framework Approach (LFA). The prognosis for the programme reaching the targets for outcomes and objectives within the programme period is good. | Agree | The prognosis for the programme reaching the targets for outcomes and objectives within the program period remains good |
| 1.2 | There is clear scope for more added value through closer cooperation between the programme partners and their partners in turn at all levels. | Agree, but need to emphasize the distinct different roles of partners and the political complexity of closer collaboration, which requires careful maneuvering. The project has made important progress in those areas that are within reach and will continue to develop such cooperation. | PAN AP: At the national level, this collaboration has provided the effective links to government officials and departments which have lead to CSO participation in policy discussions and to comment on policies as well as to collaborate on the ground in project implementation. For example, PAN AP partners in Cambodia have been asked to participate and comment on a new legislation on pesticides. In Laos, the survey on illegal pesticides involved government officials as team members in the implementation of the survey questionnaire. Communities in Vietnam who had participated in the pesticide survey and had become concerned about their health requested the local group to talk to relevant government departments to implement IPM training in their area. Due to this regional collaboration, PAN AP was successful in its request to the Department of Agriculture to undertake an IPM training for these communities. At the regional and international level, the regional collaboration has provided a good working relationship that has advanced joint policy work. For example, during the review of the International Code of |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|---|--|--|
| | | | <p>Conduct on the Distribution and Use of Pesticides, PAN AP worked in tandem with the other KEMI partners in the project to improve the provisions in the Code including the definition of the highly hazardous pesticides. In addition, our policy advocacy at the meetings of the Stockholm and Rotterdam Conventions has been more effective due to the synergy with KEMI and others in this programme and this strategy of cooperation has been successful for example, in achieving the inclusion of endosulfan in the Stockholm and Rotterdam Convention.</p> <p>At the regional level, TFA was able to obtain knowledge and information for program development, implementation issues, and cooperation to convey the information to all partners.</p> |
| 1.3 | <p>There have been some implementation problems; however, the programme partners have been able to address these on both the regional and the national level and also on the field level. These problems have mainly been related to the implementation of activities at the farmer field schools and on provincial/national level when it comes to collaboration between Governments and Civil Society Organizations (CSOs). Naturally, it takes time for such collaboration to evolve. However, the programme has done some ground-breaking work in fostering closer collaboration between government and CSO implementers.</p> | <p>Agree. As mentioned above, Government-CSO relationships are complex and the project partners have made some groundbreaking progress. This also includes the successful forging of closer collaboration between Ministries of Agriculture and Education.</p> | <p>PAN AP: Government-CSO relationships</p> <ol style="list-style-type: none"> 1. At national and local levels, government officials are invited to participate in CSO and community organized activities. 2. CSO's are also invited as technical persons in policy dialogues for example in China and Cambodia. In China, PEAC played a key role in the ban of paraquat liquid solutions and in Cambodia; CEDAC was invited to comment on the law on pesticides and fertilizer management. <p>TFA partners in Lao PDR and Vietnam collaborate with the FAO IPM program to attend the IPM training.</p> |
| 1.4 | <p>The programme partners have implemented adequate monitoring and evaluation systems at all levels. The reporting is reliable. The reporting processes are transparent and there</p> | <p>Agree. One of the reasons financial management is quite complicated in certain parts of the Programme relates to the cross-cutting objective of good governance and eliminating abuse.</p> | <p>In the next phase partners will consider simplified procedures for financial management.</p> |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|---|--|
| | is adequate accountability mechanisms implemented. The financial management is quite complicated with detailed budgets and processes that are time consuming and could be simplified. | | |
| 1.5 | The technical options and training methods are up to date with today's development approaches. The programme and its design are relevant for addressing present and future priorities and needs. The established relationships with external institutions have been functional and beneficial for the programme. | Agree. The programme continues to evolve the technical options and training methods, its design and external relationships. | The programme continues to evolve the technical options and training methods, its design and external relationships. |

Specific Recommendations: Short term

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|---|--|--|
| 2.1 | It is recommended to ascertain systems for impact assessments where possible within existing budgets, as well as compatible reporting systems, to clearly assess results against which the strategic work towards a non-toxic environment can be continued within the governments | Partially agree, the program already host some systems for impact assessment and a reporting system. The present format was agreed with Sida. Upon request of Sida, future reporting can be more substantial and more closely aligned to the log frame. | Results of inspections of pesticide retail shops are starting to provide valuable data on impact. An in-depth, rigorous and multiple year impact assessment on IPM and pesticide risk reduction training work in Cambodia and Vietnam has been completed and will become available in printed format by early 2013. |
| 2.2 | It is recommended to further develop the Regional Chemical Management Forums aiming at making them an instrument where contentious political aspects concerning the use of pesticides can be discussed on the countries' own conditions | Partially agree, presently the program works with the APPPC network to share relevant experiences and support implementation of APPPC work plans. The regional Chemicals Management Forum can become another instrument. This will be considered in the general question of which permanent regional body(ies) can take on a permanent responsibility for these issues | APPPC organised a workshop in November 2012 to further assess potential for harmonization of relevant aspects of pesticide regulatory control and to enhance such harmonization. |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|---|---|---|
| 2.3 | It is recommended to continue promoting a more detailed system for training of farmers to ensure a system where farmers and other pesticide customers can make sure the pesticide substance they use contains as low toxicity as possible and still is effective. PRR should be more emphasized in training of farmers rather than IPM with more training dealing with “alternative methods instead of safe use of pesticides”. | The recommendation is not clear and seems to contradict itself. IPM is about alternative pest management methods instead of safe use of pesticides. The current FFS combine both IPM and proper selection and use of pesticides. The availability of low-toxicity products is partly a regulatory issue and partly a supply-chain/farmer demand issue. The project aims to tackle both. | In Lao PDR, a number of high risk pesticides have been removed from the list of permitted pesticides. In Vietnam, a study is being undertaken to assess potential for non-chemical pest control agents and how availability of such products can be enhanced with private sector involvement. |
| 2.4 | It is recommended to continue to build capacity for enforcement of pesticide legislation through inspection in a manner that sets achievable targets | Agree. Such continuation is envisaged into the next phase. | Scaling up of inspections to national has actually started in Lao PDR. It starts with a simple list of key requirements that can be expanded over-time. |
| 2.5 | It is recommended to facilitate possibilities for governments to constitute by-laws to the pesticide regulation that will get into force when the pesticide regulation that is now in the process towards a legal agreement and that will ensure possibilities to control illegal import of banned pesticides | Agree, the new or revised pesticides legislation will require governments to revise or draft new secondary legislation/recommendations. The programme continues to offer support in this area. | Support is offered directly to governments, and indirectly through APPPC workshops. |
| 2.6 | It is recommended to initiate discussions on an organisational structure/solution that might serve as the foundation for the programme during a later phase. Such discussions should be more formalized during the phase beyond 2013 | Agree, the issue will be on the agenda for the steering group and at the forthcoming Regional Chemicals Management Forum in Vietnam. | During the new phase, the issue will be on the agenda for the Coordination group and at the regional working group for the Regional Chemicals Management Forum. |
| 2.7 | Instruments to measure cost-effectiveness should be introduced | Partially agree, this has to be discussed with Sida to define what type of measures this could be. It also has to be considered in the light of already existing methods and impact assessments and additional costs involved. | Discussions are ongoing with Sida. |
| 2.8 | The impact assessments carried out should also look at the programme’s impact on reducing costs related to health, | Partially agree. This is already being done extensively for pesticides. Environmental Impact Quotient of changes in pesticide use is an element of most of the | The broad approach to impact assessment has continued. |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|--|---|
| | environment, etc., rather than only economic return on production, in order to confirm cost-effectiveness of the programme. | impact studies conducted under this programme. The same applies to participatory monitoring of health effects at farmer and community level. Consolidation or expansion of this work and its budgetary implications has to be discussed in the steering group and also with Sida (see 1.7). The Steering Group will also look into making better use of existing data in this respect. | |
| 2.9 | At the national level coordination and cooperation between Governments, CSOs, research communities, universities and private sector need to be strengthened when it comes to pesticide policy's formulation and implementation, and institutional networking | Partially agree, just like 1.7 and 1.8 this is something that the implementing partners would like to see, but is often complicated in practice. The programme has and will continue to encourage and when appropriate facilitate this type of coordination/cooperation. | The programme has and will continue to encourage and when appropriate facilitate this type of coordination/cooperation. |
| 2.10 | In some cases, the priorities of the government and the priorities of the farmers are not identical. The programme design and implementation needs to be reviewed in order to address the gap between the government and farmers' priorities in the context of Programme implementation. | Partially agree, this is often the case and the program has and will continue to facilitate contacts and cooperation between the government and farmers in a manner that is guided by the programme objectives. | The program has and will continue to facilitate contacts and cooperation between the government and farmers in a manner that is guided by the programme objectives. |

Specific recommendations: Short/Long term

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|---|---|
| 3.1 | Due to a complex programme structure the evaluation of the programme concerning economic benefits are complicated. Therefore, there is a need for more assessments of impacts on reducing costs related to health, environment, etc., rather than only economic return on production, in order to confirm cost-effectiveness of the programme. | See 1.7 and 1.8 | TFA's REAL program integrate the on-going surveillances of pesticides impacts to health and environment as well as tracking status of various species found in the farmland. The information is being used periodically by community and the programs for monitoring and planning. Discussions are ongoing with Sida |
| 3.2 | The programme needs to begin looking | Partially agree. Distinction needs to be made between | The program continues to develop the regional |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|---|---|
| | seriously into the issue of who will continue to host and support inter-country coordination and networking activities. This could be one of the regional institutions mentioned in the report or another solution, such as a rotating steering committee, the attachment of this activity to some other oCSOing related initiative in the sub-region. While some interaction exists, e.g., on regional exchange through the APPPC, a full-scale host institution for coordination of future PRR and chemicals management activities has not been agreed upon. Once this is decided, work should begin right away on transferring regional coordination activities to the selected institution/system. | <p>the work on pesticide management and the work on industrial chemicals. There is definitely a need to start the process of identifying a regional platform to take responsibility for chemical safety issues related to industrial chemicals.. We need to discuss the role and number of tasks for such an institution(s).</p> <p>Regarding pesticide risk reduction, it needs to be noted that the current partners were already collaborating with each other before the project started and there is little doubt they will continue to collaborate after the project ends. The network is the platform, which is further reinforced by the development of close collaboration with the APPPC Secretariat. The project has enabled a further development of such collaboration among partners.</p> <p>Further it should be noted that FAO has a primary international mandate on pesticide management and cannot transfer coordination of its work to a third party institution as suggested in the recommendation. APPPC is different because its Secretariat is provided by FAO.</p> | platform(s) for future activities. |
| 3.3 | Apart from IPM long-season training, it is recommended that the programme should review and adapt new training methodologies with short term trainings with more emphasize on pesticide risk reduction and identifying target groups of training in addition of farmers including local leaders and distributors of pesticides | <p>See 1.3 Current work on enforcement of pesticide legislation already includes training of pesticide distributors. There also already is a range of innovative initiatives on raising awareness of community leaders and the development of community action plans.</p> <p>Various shorter-duration training models are developed in various countries to focus on promotion of -and skills development for- pesticide risk reduction among various stakeholders in rural communities.</p> | <p>In-the-shop education of pesticide retailers has been an integral part of the first rounds of inspections. A special information booklet for retailers has been developed and is provided and explained during the first inspection.</p> <p>TFA has been developing short term trainings on pesticides impact assessment to health and environment which were adapted by various agencies as well as the agro biodiversity conservation works.</p> |
| 3.4 | It is recommended that the programme should take an active interest in ensuring that the different partners involved in the four components of the programme work as much | Partially agree, this is already done but cooperation and coordination can be further enhanced. See also (new 1.2 and 1.3) | Developing the programme proposal collectively has created a better understanding of the context, strategy and plan of action of each of the partners and is a good basis of cooperation. The annual meetings of the |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|---|---|
| | as possible in close coordination with each other, to avoid duplication and encourage synergies. | | <p>steering group has not only been a venue for sharing plan of actions and learning from the implementation but also served as a platform for constructive evaluation, identifying areas of cooperation and brainstorming improvements of each of the components.</p> <p>Coordination between partners already occurred both during the program committee meetings, partner annual meetings and at the national workshops.</p> |
| 3.5 | The programme should seek to get involved more widely in each country (and regionally) with the most important entities which could contribute to this work, in particular ministries and other government entities with an interest in the programme objectives and outcomes. This involvement has the potential to smooth the path for programme adoption by government, and to develop supportive synergies with a wider range of partners. | Partially agree, just like in 1.7, 1.8 and 1.9 its tempting to get more stakeholders involved. Chemicals safety is per se a cross cutting issue and more stakeholders should be involved. The program started with key ministries, CSOs and other relevant institutions and inclusion of additional stakeholders (e.g. health, environment and customs) should be carefully considered. It should be noted that main impediments to closer collaboration among stakeholders are often within the Governments and between Governments and CSOs, not within the Programme. The Programme continues to facilitate such broadening whenever possible. | <p>TFA and partners have already secure interests and supports from counterpart governments in Lao, Thailand and Vietnam</p> <p>The Programme continues to facilitate such broadening whenever possible.</p> |
| 3.6 | The programme stakeholders, and especially the implementing personnel, need to take the concept of “Exit Strategy” as a permanent action, not a circumscribed exercise for the end of the programme. The programme must already be strongly focused on the ‘exit strategy:’ i.e., moving everything more and more fully in governments’ and civil societies’ hands (respectively as appropriate). | Partially agree, we agree that everyone should bear in mind how new methods, systems, institutions and legislation can be used and implemented on a permanent basis without the external support of the program. Partners have in their mind that the work should be handed over to the local partners but we need to put the ideas on paper and set up targets. It will be part of developing the application for the next phase. | <p>Inspection schemes are set up in a manner that they can continue with a minimum of human and financial resources.</p> <p>PAN AP and its partners initiate fundraising efforts and are committed to continue the work when the project ends.</p> <p>TFA and partners will continue to solicit supports both from counterpart government and other donors.</p> |

Specific recommendations: Long Term

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|---|---|---|
| 4.1 | It is recommended to ensure that the countries recognize full ownership over the programme and are fully committed towards its full implementation | Agree, but it is also recognized that this is sometimes more complex than it may seem. | PAN AP: Yes, full ownership of country project by local CSOs. There is a consultation process prior to developing the proposal. Annual partners meetings to evaluate and agree on overall strategies and yearly plan of actions. TFA's partners committed to the ownership of the REAL program, even before this program in some countries, and are working towards institutionalize the program with government counterparts. |
| 4.2 | It is recommended to initiate negotiations concerning an organizational structure for the programme; a structure based at regional level and where the Regional Chemical Management Forums might be a foundation for cooperation, towards which the programme partners would contribute | Agree, see also 2.2. | Preparations continue. |
| 4.3 | It is recommended that the programme in cooperation with APPPC should promote regional harmonization on policy, pesticide/chemical laws and regulations and harmonization of pesticide registration | This is already being done for pesticides, through APPPC. For the past years, specific support for this purpose came mainly from another FAO project that has now ended. The Programme has offered APPPC to enable continuation of its work on harmonization. It should be noted however, that under the current budget funding possibilities for such activities are very limited. APPPC is not the right entity for work on laws that encompass industrial chemicals. | APPPC organised a regional workshop on harmonization of regulations in November 2012. There was some minor funding from the project. Follow-up with more substantial financial assistance of the project is envisaged. |
| 4.4 | As point of departure the programme should take the already established visions for the participating countries for example the Institutional Vision for MARD 2020 in Vietnam | Agree, where countries have strategies or visions in the area of the program these should be emphasized in the project design. If a vision is weak (e.g. on industrial chemicals) the goal can be to help revise the vision. Kemi strongly believes the project is taking the right approach by facilitating internal discussion among ministries on chemicals management to help identify priorities and relevant and feasible targets. | Regarding pest and pesticide management, FAO routinely provides inputs to national planning documents, such as 5 year plans or strategies for agriculture or rural development. |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|---|---|
| 4.5 | Regarding enforcement of pesticide legislation, assistance should be provided to make it more feasible for those regulated to meet the legal requirements. For instance, in order to require that all pesticide labels are in the local language, one may need to focus on the supply chain. At the national level it should be considered to include explore and develop a stick and carrot approach to enhance adherence component on addressing the problems related to of pesticide companies to regulatory requirements | Agree, this will be a key focus area for the pesticide policy work during the next phase. | An initial meeting with importers of pesticides was held in Lao PDR to discuss labels. |
| 4.6 | The ultimate goal of the programme should be based on the principle of full ownership for the regional and national partners to sustain the achievements with adequate own human and financial resources | Agree. It should be acknowledged, however, that national CSOs generally do not get funding from Government and remain dependent on donor funding. Likewise, the priorities and programmes of government departments in some of the project countries remain heavily dependent on donor funding. The Programme will continue to enhance sustainability against this background. | See 4.1 |
| 4.7 | A clear exit strategy should be built in the programme | Agree, partners will consider this when developing the new program phase. | Exit strategies are part of the development of the new phase. |
| 4.8 | On the regional level it should be considered to include a component to monitor and influence the pesticide companies/industry to implement international standards on industry responsibilities including the full implementation of the FAO International Code of Conduct on the Distribution and Use of Pesticides, and the recently adopted UN Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework." | Partially agree, In theory this should be a natural effect of good enforcement. In practice implementation by industry is still weak. The program can consider adding components directed to industry or to include industry representatives in some activities. Engagement of pesticide companies at the international level already is a major focus of work of both PAN and FAO. The Steering Group will consider to what extent engagement can be stepped up within the framework of this Programme. Possibilities are also being explored to more actively engage the pesticide industry at national | Initial steps have been taken towards positive engagement of companies that provide non-chemical alternatives for hazardous pesticides. PAN AP: Has been using the FAO Code to monitor pesticide companies/industry's compliance. More specific monitoring using human rights instruments for Phase II. Management of the disposals of pesticides containers have been implemented in Cambodia and Vietnam by |

| Point | Recommendations | Programme response | Present status (November 2012) |
|-------|--|--|---|
| | | level. | local communities. |
| 4.9 | On the regional level it should be considered to include a component on how to address the distribution of illegal pesticides | Partially agree, many of the existing components and activities are already addressing the problem of illegal pesticides. Still, it could be considered to have additional activities that specifically focused on illegal trade, for example through a regional notification scheme for substandard pesticides. This is one of the activities the programme has proposed to support within APPPC context. | Included on the list of activities proposed to APPPC. PAN AP's partners have documented the trade of illegal pesticides in three countries. PAN AP plans to campaign on the issue of illegal pesticides in Phase II. |
| 4.10 | It should be considered to include a component on policies and strategies for disposal of pesticides and the disposal process. | Partially agree, Important work has been initiated regarding disposal of empty containers at farm and commune level, which can be further developed and mainstreamed. Disposal of stocks of obsolete pesticides would fall outside the scope of this Programme as it would require extensive funding at a level that is not available under this project. The project coordinates with a GEF funded pesticide disposal programme in Vietnam. | PAN AP: The monitoring report produced recently highlights the problems of disposal and extensive awareness raising activities have been undertaken on this issue. |
| 4.11 | Dependent on the situation in the country it should be considered to invite representatives of relevant organizations in Myanmar to relevant regional activities, and consequently to include Myanmar in the field activities if appropriate partners can be identified. | Agree, but it would require additional funding. | Initial scoping mission to Myanmar have resulted in the identification of potential partners and stakeholders for implementation of several of the programme's components in this country in future. The FAO-IPM implemented component is already providing technical support to an innovative export-oriented mango IPM value chain initiative in Southern Shan State. |

3 Annex 3 - Overall LFA matrix for the programme

Cross-cutting issues, such as gender aspects, the rights perspective, anti-corruption and good governance, are always integrated in the work to achieve the below objectives. All implementing partners acknowledge the importance of taking such aspects into account and undertake to work actively with these issues. The objectives do not include references to cross-cutting issues. There are however indicators at all levels ensuring that the cross-cutting issues are continuously monitored and evaluated.

3.1 Overall LFA matrix for the programme presenting indicators, sources of verification and assumptions

| | Responsibility | Intervention logic | Objectively verifiable indicators | Sources of verification (SoV) | Important assumptions |
|---|----------------|--|--|---|---|
| Overall objective (impact level) | All partners | <p>The programme contributes to</p> <ul style="list-style-type: none"> • Better management and more sustainable use of agricultural, industrial and consumer chemicals • Reduced risks from chemicals to human health and the environment • More sustainable intensification of agricultural production and improved resilience to climate change | There are several measures taken in the region with regard to chemicals management. The programme partners will do their utmost to measure results in a long-term perspective. However, due to the fact that the programme is covering six countries and a very large number of stakeholders, and the fact that there are some other initiatives going on in the field of chemical management in the region, the possibilities to measure the impact of our programme is somewhat limited. | | |
| Programme objective (med-term outcome) | All partners | Strengthened capacity and regional collaboration for efficient pesticide risk reduction and chemicals management within and among partner countries. | <p>a. Examples of cases where field data from programme areas have been fed into national and international processes related to chemicals management</p> <p>b. Number of farmers in the</p> | <p>a: Report from convention meetings e.g. POP</p> <p>b+c: Annual program progress reports, monitoring.</p> | Governments and stakeholder in the program countries take an active interest in the programme and set aside financial and human resources for |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Sources of verification (SoV) | Important assumptions |
|---|----------------|--|--|---|--|
| | | | <p>region implementing pesticide management according to IPM.</p> <p>c. Examples of chemicals management measures taken in partner countries</p> <p>d. Examples of regional cooperation on pesticide risk reduction and chemicals management</p> | <p>b,c, + d: Assessments and evaluation reports in each country.</p> <p>c: National legislation</p> | <p>implementation of sustainable measures, such as legislative enforcement measures.</p> |
| Immediate objective 1 (short-term outcome) | PAN-AP and TFA | Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives | <p>a. Various measures taken by target communities and partner organizations to create awareness and reduce pesticide use</p> <p>b. The number of farmers, women, youth and other sectors participating in schemes to apply alternative and ecological practices</p> <p>c. The quality of media mileage and analysis on pesticide issues</p> <p>d. The quality of training programs.</p> | <p>a: Community data and plans and Interviews and surveys</p> <p>b: Reports and documents from PAN-AP and TFA</p> <p>c: Analysis/media coverage, studies</p> <p>d: Measures taken by farmers participating in the training programs and interviews with the target groups, especially the number of women participants.</p> | <p>Communities are interested and actively involved in programme activities.</p> |
| Immediate objective 2 (short-term outcome) | PAN-AP and TFA | Enhanced international, national, and local advocacy on sustainable pest management/agriculture | <p>a. Examples of advocacy measures taken by partner organisations in the region.</p> <p>b. Examples of cases when documentation of pesticide</p> | <p>a: Data collection, data analysis and gender analysis made by partner organisations.</p> <p>b: Health care data and</p> | <p>Relevant decision-makers will attend the seminars and meetings.</p> |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Sources of verification (SoV) | Important assumptions |
|---|----------------|--|---|--|--|
| | | | <p>poisonings and other incidents have been utilized for advocacy at all levels.</p> <p>c. The degree of participation of CSOs in formulating policy making and legislative measures at all levels</p> | <p>gender based data from health clinics in the programme areas</p> <p>c: Notification reports to Rotterdam Secretariat and national authorities</p> | |
| Immediate objective 3 (short-term outcome) | FAO RAP | 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. | <p>a. The quality of IPM/pesticide risk reduction training materials and national FFS standards developed and the degree of implementation/utilization of the training materials and standards in partner countries</p> <p>b. The number of (and gender-disaggregated data) on IPM trained extension workers and farmers in partner countries</p> <p>c. The quality of cooperation and sharing of experiences in the regional networks of programme partners established on national and regional level as to ensure implementation of more relevant, innovative and effective training programmes with a focus on pesticide risk reduction</p> | <p>a: Assessments of country FFS standards and training materials and their usage.</p> <p>b: Monitoring and evaluation of trainings & data bases on # trainers & farmers trained</p> <p>c: Monitoring network activities, reports and interviews with participants from partner countries, government and NGO counterparts.</p> <p>d: Documentation on local and national policies developed in support of IPM, inventories of funding support from government, donors and other development</p> | <p>National and local government continue to make available staff for the implementation of IPM/Pesticide risk reduction farmer training</p> <p>International and national attention to food safety, trade facilitation and sustainable crop production intensification will continue to motivate governments to promote and invest in IPM and pesticide risk reduction initiatives.</p> |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Sources of verification (SoV) | Important assumptions |
|---|-----------------|--|---|---|---|
| | | | <ul style="list-style-type: none"> d. The degree of institutionalization of IPM in the partner countries e. The level of use of IPM and biological control options by farming communities | <ul style="list-style-type: none"> organizations e: Survey and impact assessment reports | |
| Immediate objective 4 (short-term outcome) | FAO HQ and Keml | Strengthened regulatory framework for the control of pesticides in selected partner countries. | <ul style="list-style-type: none"> a. The number of legislative instruments that have been updated or newly introduced. b. The number of inspectors trained and the number of inspections conducted. c. Percentage of pesticide labels in local language. | <ul style="list-style-type: none"> a: Text of new legal instruments to control the use of pesticides. b: Inspection records from each country, and lists of participants in inspector training. c: Reports of regional meetings. d: Field surveys in each country | National and local governments continue to make staff available for the activities concerned. |
| Immediate objective 5 (short-term outcome) | Keml | Strengthened chemicals management capacity within authorities, industries and among relevant CSOs in the partner countries | <ul style="list-style-type: none"> a. Number of staff trained and participating in programme activities on chemicals management. b. Participant's opinion of enabling activities and the degree of usefulness of programme activities on chemicals management for participants/relevant ministries. c. Examples of chemicals management measures | <ul style="list-style-type: none"> a: List of participants and level of participation in enabling activities on chemical management (divided by gender). b: Evaluations from enabling activities (workshops, seminars, advisory service, webpage). c: Monitoring, reports, | National and local governments continue to make available staff for the programme's enabling activities |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Sources of verification (SoV) | Important assumptions |
|-------------------|----------------|---|---|---|-----------------------|
| | | | (highlighting measures for protection of vulnerable groups) taken at different institutions in partner countries. | interviews with staff at institutions and industries. | |
| Activities | | For information on activities, please consult the plan of operation in the program for each of the five components. | For outputs, please consult the five separate matrix for each component on outputs and activity level | | |

3.2 Overall LFA matrix for the programme presenting indicators, baselines and targets

| | Responsibility | Intervention logic | Objectively verifiable indicators | Baselines | Target (2018) |
|---|----------------|--|--|------------------------------|---|
| Programme objective (med-term outcome) | All partners | Strengthened capacity and regional collaboration for efficient pesticide risk reduction and chemicals management within and among partner countries. | a. Examples of cases where field data from programme areas have been fed into national and international processes related to chemicals management | 2 cases | Approximately 3 more cases |
| | | | b. Number of farmers in the region implementing pesticide management according to IPM. | Approximately 44 000 farmers | Approximately 100 % increase |
| | | | c. Examples of chemicals management measures taken in partner countries | No available baseline | Approximately 20 examples of chemicals management measures |
| | | | d. Examples of regional cooperation on pesticide risk reduction and chemicals management | No available baseline | Approximately 10 examples of regional cooperation on pesticide risk reduction and |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Baselines | Target (2018) |
|---|---|--|---|--|--|
| Immediate objective 1 (short-term outcome) | PAN-AP and TFA | Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives | a. Various measures taken by target communities and partner organizations to create awareness and reduce pesticide use | Approximately 8000 persons in target communities and partner organizations | chemicals management Approximately another 7 500 persons |
| | | | b. The number of farmers, women, youth and other sectors participating in schemes to apply alternative and ecological practices | Approximately 4 000 persons | Approximately 100 % increase |
| | | | c. Media and internet coverage on pesticide issues | PAN AP website generated 10,953,956 hits | Approximately another 10,000,000 hits |
| | | | | 431 Likes on Facebook | 1,000 likes on Facebook |
| | | | | REAL project televised 3 times | At least 4 REAL project televised |
| | | | d. The quality of training programs. | Approximately 600 viewers on school projects at Youtube | At least 4 articles/papers published At least 4000 hits on website and Facebook |
| | | | | No baseline available. | Refined curriculum utilized in target schools, adult/farmer education programme and college. |
| No baseline available | At least 25 in-countries meetings/trainings and 4 regional meetings/training/exchange workshops | | | | |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Baselines | Target (2018) |
|--|----------------|---|--|---|---|
| Immediate objective 2 (short-term outcome) | PAN-AP and TFA | Enhanced international, national, and local advocacy on sustainable pest management/agriculture | a. Examples of advocacy measures taken by partner organisations in the region. | 15 workshops /national seminars and national campaigns on highly hazardous pesticides initiated | Approximately 5 additional workshops /national seminars and 2 regional exchanges and 5 national campaigns on highly hazardous pesticides |
| | | | | 2 Provincial and 1 National forum held in the region | Approximately 5 additional national forum/campaigns held in the region |
| | | | b. Examples of cases when documentation of pesticide poisonings and other incidents have been utilized for advocacy at all levels. | 4 communes with about 30 communities participated and 1000 copies of Asian Regional report on documentation of pesticide problems distributed | Report adherence of the on the FAO Code of Conduct completed and published and 2000 copies distributed and downloaded and documentation of pesticide problems in 40 communities available |
| | | | | Community pesticides impacts assessment data used in 20 communities | Community pesticides impacts assessment data utilized in approximately 50 additional communities and at least 5 times at the national level |
| | | c. The degree of participation of CSOs in formulating policy making and legislative measures at all levels | No baseline available | Participation in meetings of Stockholm, Rotterdam Conventions, SAICM, FAO, etc. (including 2 interventions on pesticide issues). | |
| Immediate objective 3 (short-term) | FAO RAP | Strengthened capacity to innovate and scale-up Integrated Pest Management (IPM) and pesticide risk reduction training for sustainable | a. The quality of IPM/pesticide risk reduction training materials | Quality training materials developed in 4 and national FFS standards in 2 | Quality training materials and national FFS standards developed in 6 partner |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Baselines | Target (2018) |
|--|--|--|--|---|---|
| outcome) | | intensification of crop production in partner countries. | and national FFS standards developed and the degree of implementation/utilization of the training materials and standards in partner countries | partner countries | countries |
| | | | b. The number of (and gender-disaggregated data) on IPM trained extension workers and farmers in partner countries | Approximately 300 government extension workers and farmer trainers and 44 000 farmers | Approximately 100 % increase of the number of trained IPM extension workers, farmer trainers and farmers |
| | | | c. The quality of cooperation and sharing of experiences in the regional networks of programme partners established on national and regional level as to ensure implementation of more relevant, innovative and effective training programmes with a focus on pesticide risk reduction | Annual Regional Meeting held for Programme Evaluation and Planning | 5 Annual Regional Meetings held for Programme Evaluation and Planning & IPM technical subject matters |
| | | | | Number of website hits: 71 782 hits to date on FAO Asia IPM website: www.vegetableipmasia.org | Approximately 150 000 hits on FAO Asia IPM website: www.vegetableipmasia.org |
| | | | d. The degree of institutionalization of IPM in the partner countries | Preliminary state of institutionalization of IPM and local buy-in in 2 partner countries | Advanced state of institutionalization and buy-in in at least 2 partner countries and preliminary stage of institutionalization in 2 additional partner countries |
| Government investments in IPM-FFS programme 15 | Approximately 100 % increase of government | | | | |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Baselines | Target (2018) |
|--|-----------------|--|--|--|---|
| | | | e. The level of use of IPM and biological control options by farming communities | Million US\$ on annual basis Approximately 44 000 IPM farmers trained to date have reduced pesticide use (50 %) and 90 % of trained farmers have made increased use of biological control | annual investments in IPM-FFS Approximately 90 000 IPM farmers trained to date have reduced pesticide use (50 %) and 90 % of trained farmers have made increased use of biological control |
| | | | | 40 % of trained farmers have stopped use of WHO Class I pesticides | Approximately 70 % of trained farmers have stopped use of WHO Class I pesticides |
| Immediate objective 4 (short-term outcome) | FAO HQ and Keml | Strengthened regulatory framework for the control of pesticides in selected partner countries. | a. The number of legislative instruments that have been updated or newly introduced. | 2 countries adopted new primary instruments | 4 countries have new primary instruments |
| | | | b. The number of inspectors trained and the number of inspections conducted. | Pilot completed and initial scaling up in Lao PDR | Inspection schemes established and scaled up in 3 countries |
| | | | c. Percentage of pesticide labels in local language | No baseline available | Main distributors in two countries have labels in local language on their products |
| Immediate objective 5 (short-term outcome) | Keml | Strengthened chemicals management capacity within authorities, industries and among relevant CSOs in the partner countries | a. Number of staff trained and participating in programme activities on chemicals management. | Approximately 90 persons | Approximately 80 % increase in the number of participants |
| | | | b. Participant's opinion of enabling activities and the degree of usefulness of programme activities on chemicals management for | No baseline available | A majority of the participants consider the programme activities to be very useful in their work on chemicals management. |

| | Responsibility | Intervention logic | Objectively verifiable indicators | Baselines | Target (2018) |
|--|----------------|--------------------|--|-----------------------|--|
| | | | participants/relevant ministries. | | |
| | | | c. Examples of chemicals management measures (highlighting measures for protection of vulnerable groups) taken at different institutions in partner countries. | No baseline available | Approximately 50 examples of chemicals management taken at different institutions in partner countries |

4 Annex 4 - LFA matrix on activity and output level

Cross-cutting issues, such as gender aspects, the rights perspective, anti-corruption and good governance, are always integrated in the work to achieve the below objectives. All implementing partners acknowledge the importance of taking such aspects into account and undertake to work actively with these issues. Overall objectives do not include references to cross-cutting issues. There are however indicators ensuring that the cross-cutting issues are monitored and evaluated.

| Immediate objective 1: Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives | | | | | | |
|--|--|----------------|---|--|---|---|
| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
| 1.1 | Community Pesticide Action Monitoring (CPAM) undertaken, and results available in partner countries and for advocacy | PAN-AP | <ul style="list-style-type: none"> Publicize and distribute CPAM modules (translated into local languages) Capacity building of facilitators and communities Publicize and distribute information on Illegal Pesticides and results of CPAM monitoring. Implement CPAM activities in existing and new countries Undertake monitoring and surveys and report on pesticide use situation to stakeholders and policy-makers Undertake media and policy advocacy training | <ul style="list-style-type: none"> Number of facilitators at the community level with 30 % of women facilitators CPAM action plans developed and activities initiated by communities. Number of farmers and communities that reduce their pesticide use and/or promote safer alternatives Number of hits on website and number of reports widely distributed | <ul style="list-style-type: none"> CPAM modules including translated modules and reports from partners. Reports of distribution of the findings. Action plans and annual reports. Partner's reports and analytics. Partner's reports on CPAM activities and new project sites. | <ul style="list-style-type: none"> Communities take interest in the topic and measures |
| 1.2 | Raised awareness of broad sector of farmers, women, consumers, | PAN-AP | <ul style="list-style-type: none"> Campaign on Highly Hazardous Pesticides (focused on the | <ul style="list-style-type: none"> Number of CSOs, farmers, women, | <ul style="list-style-type: none"> Participant list and in activities and | <ul style="list-style-type: none"> Outreached sectors are |

**Immediate objective 1:
Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|--|--|--|
| | youth, students, policy-makers and others regarding pesticide risk reduction with special emphasis on pesticide use reduction and alternatives to pesticides | | <p>most widely used and most hazardous in Asia)</p> <ul style="list-style-type: none"> • Compile and Publicize best practises on pesticide use reduction and alternatives. • Organise events during the annual “No Pesticide Use Week” • Produce and distribute information materials and translate relevant materials into local languages. • Use of conventional and new media platforms to promote and create awareness. • Organise exchange programmes involving partners and farmers on alternatives and ecological agriculture | <p>consumers, youth, policy makers and other sectors outreached.</p> <ul style="list-style-type: none"> • Use of online training programmes and information • Number of women, farmers and community leaders involved in exchange programmes | <p>organizations action plans.</p> <ul style="list-style-type: none"> • Reports from partners. • Number of hits and analytics • Testimonies from women, farmers, leaders and CSOs | <p>receptive to information on the dangers of pesticides and safer alternatives</p> |
| 1.3 | Pesticides Impact Assessment and Agro Bio Diversity surveys and innovations integrated as on-going school/ communities’ curricula and activities | TFA | <ul style="list-style-type: none"> • Develop, refine and implement curriculum and materials related to ecological agriculture, reduction of risks of pesticides to health and environment, gender and livelihood for schools, communities, colleges and institutions | <ul style="list-style-type: none"> • Curriculum are integrated and/or used in schools, colleges, Non Formal Education and institutions • Curriculum/ Materials development | <ul style="list-style-type: none"> • Various curriculum | <ul style="list-style-type: none"> • National curriculum policies allow for integration of environmental, agriculture and livelihood content. |
| 1.4 | At least 1000 school and/or college | TFA | <ul style="list-style-type: none"> • Rural Ecological Agriculture for | <ul style="list-style-type: none"> • Reduction of | <ul style="list-style-type: none"> • School/community | <ul style="list-style-type: none"> • Impacts from |

**Immediate objective 1:
Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---|----------------|--|--|--|--|
| | students 50 teachers and 500 communities' members engaged in REAL project/activities | | <p>Livelihood (REAL) projects and activities implement by communities, schools, colleges and Non Formal Education and institution program</p> <ul style="list-style-type: none"> Disseminate REAL experiences, data and materials through exhibitions, forum, meetings, workshops, media and partners' programmes | <ul style="list-style-type: none"> negative impacts to health and environment in farming communities Increase numbers of ecological agriculture practices in the communities Highly hazardous pesticides uses reduced Articles, papers, studies present and disseminated | <p>data</p> <ul style="list-style-type: none"> Countries reports Community action plans Articles, papers, studies Communities and consumers' perceptions | <p>changes of policy and staff normally occurred at all levels.</p> |
| 1.5 | National and local educational policy supports the implementation of REAL activities in schools, colleges and institutions. | TFA | <ul style="list-style-type: none"> National and local educational policies supporting REAL activities identified and disseminate to participating schools, colleges and institutions Solicit funding supports for programme activities from government, institutions and donors | <ul style="list-style-type: none"> Supporting national and local policies Supports received from government, institutions and donors | <ul style="list-style-type: none"> National Educational policies from each countries Records of policy level participation in REAL activities Proposals and budget received | <ul style="list-style-type: none"> National Educational Policies promote active learning on the environmental, agricultural, livelihood issues and/or Education for Sustainable Development (ESD) Capacity of government |

Immediate objective 1:
Increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers within partner countries to reduce the risk associated with pesticide use and enhanced use of alternatives

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---|----------------|--|---|--|--|
| | | | | | | funding and/or interests of donors. |
| 1.6 | Enhanced regional exchange, capacity and collaboration within and among partner countries | TFA | <ul style="list-style-type: none"> Develop and strengthen capacity of partners and programs through regional trainings, meetings, monitoring and networking | <ul style="list-style-type: none"> Partners and programs implementing REAL activities in participating countries | <ul style="list-style-type: none"> Annual plans and progress reports Workshop, meeting records | <ul style="list-style-type: none"> No frequent changes of staff/ capacity built |

Immediate objective 2:
Enhanced international, national, and local advocacy on sustainable pest management/agriculture

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---|----------------|--|---|--|---|
| 2.1 | Contribution to strengthening the implementation of the Code of Conduct on the Distribution and Use of Pesticides and SAICM as a standard for pesticide use and distribution. | PAN-AP | <ul style="list-style-type: none"> Support the inclusion of the FAO decision of the progressive ban on highly hazardous pesticides into SAICM Global Plan of Action (GPA) Documentation of the alternatives to HHPs in Asia. Monitoring the implementation of the FAO Code by government and industry in Asian region and Publicize it. | <ul style="list-style-type: none"> Number of policy briefs developed and distributed Documents and materials made widely available Reports on FAO Code monitoring and alternatives widely distributed. | <ul style="list-style-type: none"> Report of ICCM4 Other available reports | FAO Council decision on progressive ban on highly hazardous pesticides is upheld and implemented. |
| 2.2 | Contribution to the effective implementation of the Rotterdam | PAN-AP | <ul style="list-style-type: none"> Support the inclusion of paraquat in the Rotterdam | <ul style="list-style-type: none"> Number of documents on | | |

**Immediate objective 2:
Enhanced international, national, and local advocacy on sustainable pest management/agriculture**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|---|--|---|
| | and Stockholm Convention (Governments more aware of field level impacts of pesticides in Asia under consideration for inclusion in the Rotterdam and Stockholm Convention) | | <p>Convention</p> <ul style="list-style-type: none"> • Support the documentation for the nomination of chlopyrifos in the Stockholm Convention. • Provide POPRC and PIC CRC the necessary documentation on pesticide poisoning in Asia. • Learning exchanges with CSOs and communities on the conventions in targeted countries in South East Asia. • Document alternatives to endosulfan to help speed up phase out. | <p>pesticide poisoning in Asia distributed to POPRC and PIC CRC 2</p> <ul style="list-style-type: none"> • Documentation and distribution of poisoning incidents in targeted countries. • Number of women, CSO's and community leaders involved in the learning changes | | |
| 2.3 | Examples of contribution to the development of improved corporate responsibility and accountability | PAN-AP | <ul style="list-style-type: none"> • Assess the human rights implications of specific cases of impact of pesticide use in communities for example, paraquat poisoning. • Undertake an assessment of claims of green production by industry stakeholders and publicize the results. | <ul style="list-style-type: none"> • Assessment report available for action. Clear follow-up strategy developed. • Number of assessment reports distributed • Number of media reports | <ul style="list-style-type: none"> • Available reports • Available media mileage | Human rights agencies, policy makers and public continue to support campaigns on making corporations accountable. |
| 2.4 | Examples of reduction of pesticides exposure to schools | TFA | <ul style="list-style-type: none"> • Conduct a studies on impact of pesticides exposure to schools and children • Findings present to local and national meeting, workshop and forums | <ul style="list-style-type: none"> • Measures to prevent pesticides exposure to schools at the local and national level | <ul style="list-style-type: none"> • Studies paper • Dissemination and meeting records | <ul style="list-style-type: none"> • Interests from partner agencies at all levels |

**Immediate objective 2:
Enhanced international, national, and local advocacy on sustainable pest management/agriculture**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|--|--|---|
| 2.5 | Data of pesticides uses and incidental reports being used for planning/action from community to national level | TFA | <ul style="list-style-type: none"> Conduct a joint action Research on incidents reporting system from community to policy with concerned local and national agencies | <ul style="list-style-type: none"> Model of incidents reporting system from community to policy | <ul style="list-style-type: none"> Incidents cases and data available at the local and national level | <ul style="list-style-type: none"> No inconsistency of national policy and commitments |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---|----------------|---|---|--|---|
| 3.1 | Functional networks of programme partners established on national and regional level as to ensure planning and implementation of innovative and effective training programmes, with a focus on pesticide risk reduction | FAO RAP | <ul style="list-style-type: none"> Establish new (Myanmar) – and strengthen existing (other GMS countries)- functional linkages with counterparts and various project stakeholders (research institutions, private enterprises, traders and agricultural suppliers, farmer and other non government organizations) Hold regular meetings among project stakeholders at local, national and regional levels (e.g. Annual FAO Regional IPM Programme meeting, National Coordination | <ul style="list-style-type: none"> Examples of regular communication meetings/networking among a diversified set of project partners on local, national and regional level Availability and use of baseline survey reports and country strategy papers. The use of the FAO-IPM website: www.vegetableipmasia.org | <ul style="list-style-type: none"> Meeting notes/reports published Web site Counters | Governments, CSO partners and private sector commit to joint sharing of experiences and programme planning. |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|--|--|--|
| | | | <p>meetings, etc.)</p> <ul style="list-style-type: none"> Conduct baseline surveys (Myanmar) and develop new (Myanmar)/update existing (other GMS countries) country strategy papers to prioritize curriculum development and training interventions for period July 2013-June 2018 | | | |
| 3.2 | Fortified FFS, TOT and Refresher Training curricula and training materials developed with focus on pesticide risk reduction, including IPM for new invasive pest/diseases, crops and climate change adaptation | FAO RAP | <ul style="list-style-type: none"> Conduct regional, and followed by national, Curriculum Development workshops for Pesticide Risk Reduction Develop new (Myanmar) and continue to fortify existing curricula with regards to IPM/pesticide risk reduction training and sustainable crop production intensification Initiate new (Myanmar) and strengthen curriculum development efforts for awareness raising of pesticide alternatives Undertake action research activities involving agricultural universities and | <ul style="list-style-type: none"> Examples of fortified pesticide risk reduction curricula is available and widely used by facilitators and farmers (both men and women) in all of the participating GMS countries Diversity and quality of training materials available and utilized | <ul style="list-style-type: none"> Progress reports from each country, including list of training materials developed Training materials (including ecological guides for new crops, e.g. fruits and curriculum guidelines for climate change FFS) available in English and various local languages, and distributed to local trainers and farmers | As climate warming will bring about marked changes in agricultural pest distribution patterns, national governments would be tasked to assist rural communities to adapt and manage these new problems with minimal use of pesticides. |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|--|--|--|---|
| | | | <p>private sector in developing IPM for rice, fruits and vegetables and other crops subject to heavy pesticide abuse</p> <ul style="list-style-type: none"> Action research & curriculum development focusing on development of local risk mitigation/adaptation strategies to prepare communities for prevention of spread and management of newly emerging pest/disease problems related to climate change. | | | |
| 3.3 | Capacity of national programmes to train farmers in IPM and pesticide risk reduction developed (Myanmar) and strengthened and increased by at least 500 additional trainers in Greater Mekong Sub-region (GMS) | FAO RAP | <ul style="list-style-type: none"> Conduct 18 Training of Trainers courses (3 courses * 6 GMS countries), making use of revised and new modules for IPM/pesticide risk reduction Conduct 30 Refresher Courses (5 courses* 6 GMS countries) integrating new modules on IPM and pesticide risk reduction, including risk mitigation/adaptation strategies for dealing with | <ul style="list-style-type: none"> Level of engagement from trainers to train farmers | <ul style="list-style-type: none"> Some 500 additional IPM trainers (male and female) involved in implementation of farmer education activities throughout the GMS region | Governments will make available staff for participation in training and will allow their staff to implement farmer training thereafter. |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---|--------------------|---|---|--|---|
| | | | new pest/disease resulting from climate change. | | | |
| 3.4 | Private sector engaged in enhancing availability of biological control agents and bio-pesticides | FAO RAP and FAO HQ | <ul style="list-style-type: none"> Develop and implement a line of activities to collaborate with private sector to enhance availability of bio-control agents Document case studies on private sector involvement in provision of novel seeds and biological control options for sharing good practice experience with other countries | <ul style="list-style-type: none"> Availability of biological control agents and bio-pesticides from private sector partners | <ul style="list-style-type: none"> Case studies on private sector involvement developed and shared at local, national and regional levels | Private sector with orientation to ecosystem approach to pest management will support the programme |
| 3.5 | At least 30,000 additional farmers (men and women, young and old) participated in FFS and Pesticide Risk Reduction Farmer Training in the GMS region and at least 50 % of trained farmers involved in community learning activities and implementation of community action plans for pesticide risk reduction. Thousands more farmers in at least three GMS countries will have indirectly benefited from FAO technical support for National IPM programmes through participation | FAO RAP | <ul style="list-style-type: none"> Conduct 720 IPM Farmer Field Schools (120 FFS * 6 countries) Conduct 300 short Pesticide Risk Reduction Farmer Training courses Community mobilization, formulation and implementation of 300 community action plans for pesticide risk reduction Facilitate post-FFS community learning activities (sustainable crop intensification, bio-control | <ul style="list-style-type: none"> Level of use of alternative pest management among farmers trained Community actions taken for pesticide risk reduction | <p>Surveys showing:</p> <ul style="list-style-type: none"> a reduction of Class I by at least 40% among FFS trained farmers. IPM\FFS trained farmers at least halved pesticide use. at least 90% of trained farmers increase use of alternative pest management approaches, | Farmers are interested to learn about IPM and pesticide risk reduction |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---|----------------|---|--|---|-------------|
| | in FFS supported under national government/other donor funded initiative. | | testing, disease management, marketing, etc.) | | including soft products) <ul style="list-style-type: none"> Documentation on Community Action Plans for Pesticide Risk Reduction | |
| 3.6 | FFS quality standards set at national and regional level benchmarked on Global FFS Guidelines Implementation of FFS standards initiated in all GMS countries and staff trained for internal monitoring and evaluation system for training quality control. | FAO RAP | <ul style="list-style-type: none"> Develop new and innovate/strengthen existing participatory monitoring and evaluation system for IPM-FFS/Pesticide Risk Reduction training programmes Conduct regional and national training and workshops on monitoring and evaluation FFS standards setting benchmarked on Global FFS Guidelines Monitoring and evaluation of implementation of Community Action Plans for pesticide risk reduction and identification of additional training/intervention needs Design, conduct and document impact assessment study among IPM-FFS graduates, with particular focus on pesticide | <ul style="list-style-type: none"> Examples of information on activity implementation is continuously available and used for strengthening quality of field training Status of implementation of standards assessed. Quality standards for FFS and TOT issued by relevant national and private sector authorities | <ul style="list-style-type: none"> Study material produced and reports documenting Community Pesticide Risk Reduction Action Plans. Assessments Studies of standards | |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|---|--|-------------|
| | | | risk reduction. | | | |
| 3.7 | Regional, national and local government providing policy and funding support for IPM and Pesticide Risk Reduction training | FAO RAP | <ul style="list-style-type: none"> • Implement pilot activities to demonstrate beneficial role of IPM-FFS in government programmes on safe vegetables and GAP • Develop model Pesticide Risk Reduction communities for up scaling by governments in most partner countries • Develop 'Save and Grow' case studies to demonstrate good practices of sustainable intensification of crop production in most partner countries • Popularize the impacts of IPM-FFS and pesticide risk reduction training through TV, newspaper and radio broadcasts • Hold policy workshops with high-level government officials, disseminating the achievements of the impact of IPM-FFS on pesticide risk reduction to policy makers in at least 5 GMS countries • Support work plans under the APPPC Standing | <ul style="list-style-type: none"> • Examples of news/video clips developed on IPM/PRR and disseminated • Impact Assessment reports available and utilized to strengthen training interventions • Examples of government policies and action plans that reflect need for pesticide risk reduction and recognize the positive impact of IPM-FFS programmes • By June 2018, governments and private sector partners have taken concrete steps towards supporting pesticide risk reduction efforts, including integration of IPM and the FFS | <ul style="list-style-type: none"> • National and local government/communit plans and policies • Impact assessment studies • Newspaper, press releases and promotion materials (video/tv/radio clips) | |

**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.**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---------|----------------|-------------------------|---|-------------------------|-------------|
| | | | Committee | in national programmes on Safe Vegetables and GAP in at least 4 GMS countries | | |

**Immediate objective 4:
Strengthened regulatory framework for the control of pesticides in selected partner countries**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|---|---|--|
| 4.1 | Pesticide legislation strengthened in Cambodia, Lao PDR, Myanmar and Vietnam. | FAO HQ | <ul style="list-style-type: none"> Following the adoption of new primary legal instruments during Phase I, respond to requests for assistance to the formulation of secondary regulations (5y). Review the pesticide legislation of Myanmar, followed by assistance to reform such legislation if required and requested (5y). Other assistance as opportunities arise (e.g. related to registration) (5y) | <ul style="list-style-type: none"> New regulations drafted with input from the project. | <ul style="list-style-type: none"> Text of regulations | <ul style="list-style-type: none"> Requests for assistance will be made. |
| 4.2 | Inspection of pesticide importers, distributors and retailers scaled up to national level in Cambodia and Lao. | FAO HQ | <ul style="list-style-type: none"> Training of provincial inspectors and provision of further guidance on implementation of inspection schemes in | <ul style="list-style-type: none"> Number of inspectors trained. Number of inspections conducted. | <ul style="list-style-type: none"> Inspection reports | <ul style="list-style-type: none"> Cambodia adopts regulation on inspection, which is |

**Immediate objective 4:
Strengthened regulatory framework for the control of pesticides in selected partner countries**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|-----------------|--|--|---|--|
| | | | <ul style="list-style-type: none"> Cambodia and Lao PDR (y 1-2) Monitoring, evaluation and subsequent further adjustment of inspections schemes in Cambodia and Lao PDR (5y). | <ul style="list-style-type: none"> Inspection reports available from all provincial capitals in Lao and Cambodia. | | <ul style="list-style-type: none"> needed before the work can start. |
| 4.3 | Private sector engaged in addressing specific bottlenecks in pest and pesticide management | FAO HQ | <ul style="list-style-type: none"> Engage pesticide importers and distributors in increasing the percentage of products with pesticide labels in local language. | <ul style="list-style-type: none"> Coverage of labels in local language increased from 5-10% to at least 30-50% | <ul style="list-style-type: none"> Data from distributors, inspections and monitoring. | |
| 4.4 | Strengthened regional collaboration on pesticide regulatory issues. | FAO HQ and Kemi | <ul style="list-style-type: none"> Support to APPPC in the implementation of the regional programme of its Standing Committee on pesticide management, with emphasis on harmonization of regulatory requirements and phasing out highly toxic products. | <ul style="list-style-type: none"> Examples of support to APPPC | <ul style="list-style-type: none"> APPPC reports | <ul style="list-style-type: none"> APPPC members willing to take on agreed tasks. |

**Immediate objective 5:
Strengthened Capacity for Chemicals Management within authorities and industries and among relevant CSOs in the partner countries**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|--|--|--|--|
| 5.1 | Established network for collaboration and information sharing between partner countries. | Kemi | <ul style="list-style-type: none"> Conduct regional Chemicals Management Forums Establish regional working groups and conduct regional | <ul style="list-style-type: none"> Examples of regional collaboration. Quality of the established networks | <ul style="list-style-type: none"> Evaluations from chemicals management forums | <ul style="list-style-type: none"> Countries continue to send relevant delegates to chemicals |

**Immediate objective 5:
Strengthened Capacity for Chemicals Management within authorities and industries and among relevant CSOs in the partner countries**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|---|--|--|---|
| | | | workshops, case studies and/or study tours on key subjects selected by the Forum <ul style="list-style-type: none"> Facilitate exchange of information. | for exchange of experiences/information | <ul style="list-style-type: none"> Interviews | management forums |
| 5.2 | Increased knowledge regarding the latest chemicals management issues (including specific risks to vulnerable groups) among participants at chemicals management forums and workshops | Keml | <ul style="list-style-type: none"> Conduct regional Chemicals Management Forums Conduct regional workshops, case studies and/or study tours on key subjects selected by the Forum | <ul style="list-style-type: none"> Opinions from participants at chemicals management forums and workshops Examples on decisions made by relevant government institutions reflecting increased awareness on sound chemicals management (highlighting measures for protection of vulnerable groups) | <ul style="list-style-type: none"> Evaluations from chemicals management forums and workshops Governments' decisions, regulations, policies, strategies. | Countries continue to send relevant delegates to chemicals management forums and workshops |
| 5.3 | Examples of implementation measures taken on GHS and other international chemicals conventions in the partner countries | Keml | <ul style="list-style-type: none"> Conduct regional workshops, case studies on GHS and other international conventions | <ul style="list-style-type: none"> Examples of implementation of conventions/agreements in national legislation | <ul style="list-style-type: none"> National regulations | Countries willing to participate in workshops and to conduct case studies for implementation of GHS and other international chemicals conventions |
| 5.4 | Increased knowledge about | Keml | <ul style="list-style-type: none"> Conduct awareness raising | <ul style="list-style-type: none"> Examples on | <ul style="list-style-type: none"> Governments' | Countries continue |

**Immediate objective 5:
Strengthened Capacity for Chemicals Management within authorities and industries and among relevant CSOs in the partner countries**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|--|----------------|--|--|--|---|
| | chemicals in products (including specific risks to vulnerable groups) among participants at chemical management forums and workshops and strengthened regulation of hazardous chemicals in products in partner countries | | activities concerning regulations on chemicals in products | decisions made by relevant government institutions reflecting increased awareness on hazardous chemicals in products (highlighting measures for protection of vulnerable groups) | decisions, regulations, policies, strategies on chemicals management. | to send relevant delegates to chemicals management forums and workshops |
| 5.5 | An example of organization/mechanism created for possibility of continuous regional cooperation on chemicals management established. | Keml | <ul style="list-style-type: none"> Initiate a process to create a permanent organization/mechanism for continuous regional cooperation on chemicals management | <ul style="list-style-type: none"> MoU or similar document for regional cooperation on chemicals management agreed among partner countries. | <ul style="list-style-type: none"> Forum reports Content of MoU | There is an interest for continuous regional cooperation among partner countries |
| 5.6 | Relevant partners and stakeholders in Myanmar identified. Areas for support identified and work plan agreed. | Keml | <ul style="list-style-type: none"> Research on available information and contacts. Fact finding missions and networking. Preparation of a country plan. | <ul style="list-style-type: none"> Country plan developed. | <ul style="list-style-type: none"> Country plan | Myanmar officials/decision-makers are interested in participation in the programme. |
| 5.7 | Tools developed for efficient enforcement of regulations on industrial and consumer chemicals in the partner countries | Keml | <ul style="list-style-type: none"> Conduct inventory of present capacity for inspections Develop methods and guidelines for inspections Conduct regional workshops on inspection activities | <ul style="list-style-type: none"> Inspection capacity mapped Quality of the methods and guidelines developed Examples of inspection activities where the developed | <ul style="list-style-type: none"> Inventory Tools/methods for inspections Follow-up of examples from countries | Inventories are possible to make in each country |

**Immediate objective 5:
Strengthened Capacity for Chemicals Management within authorities and industries and among relevant CSOs in the partner countries**

| No. | Outputs | Responsibility | (Indicative) activities | Indicators | Sources of verification | Assumptions |
|-----|---------|----------------|-------------------------|----------------|-------------------------|-------------|
| | | | | tools are used | | |

5 Annex 5 - Risk management matrix

| Risks | Probability (1-5) | Consequence (1-5) | Risk Value (1-25) | Risk management/mitigation | |
|--|--|-------------------|-------------------|----------------------------|--|
| Short-term (immediate) objective 1 and 2: | | | | | |
| 1 | General backlash | 4 | 3-5 | 12-20 | <p>Immediate response to crisis:</p> <ul style="list-style-type: none"> • Legal support • Media and publicity • Direct community assistance • International support • Financial support to potential victims • Using the UN HR mechanisms <p>Responding to long-term needs:</p> <ul style="list-style-type: none"> • Community livelihood projects and financial sustainability • Medical assistance • Building resilience • Psychological support |
| 2 | People turnover, brain drain (internal and external) | 4 | 2-4 | 8-16 | <p>Internal:</p> <ul style="list-style-type: none"> • Develop a bigger pool of resource persons • Continuous head hunting • Social contract • Building skills and better incentives • Good working environment <p>External:</p> <ul style="list-style-type: none"> • Collaboration with interested parties • Develop a bigger pool of partners/resource persons/institutional and community links • MoU |
| 3 | Policy Change | 3 | 3 | 9 | <ul style="list-style-type: none"> • More and wider Advocacy – lobbying at legislative level, HR groups at national level • Lobby at international levels – SAICM, HR committees |
| 4 | Funding uncertainties | 4 | 3-5 | 12-20 | <ul style="list-style-type: none"> • Improved access to other resources at all levels – explore local |

| Risks | | Probability (1-5) | Consequence (1-5) | Risk Value (1-25) | Risk management/mitigation |
|--|--|-------------------|-------------------|-------------------|--|
| | | | | | <ul style="list-style-type: none"> contribution, individual donations, new donors, Build community resilience – livelihood projects, organising, building a pool of volunteers Improve cost effectiveness of implementation to achieve project objectives – advocacy for local government to take ownership and involve other actors and partners |
| 5 | Aggressive corporate campaigns | 4 | 2-4 | 8-16 | <ul style="list-style-type: none"> Education campaigns Document their practices and publicise it Advocacy campaigns – legislative Strengthen existing regulations Publicize existing and new corporate accountability mechanisms |
| Short-term (immediate) objective 3: | | | | | |
| 1 | Brain drain | 3 | 3 | 9 | <ul style="list-style-type: none"> Standardize incentive cost norms and continue training new people Issue contracts to secure participation of trained staff in project |
| 2 | Aggressive marketing strategies of pesticide companies | 4 | 4 | 16 | <ul style="list-style-type: none"> Facilitate promotion and access to alternatives to chemicals for pest management |
| 3 | Limited access to additional donor resources to ensure maximization of implementation capacities | 2 | 3 | 6 | <ul style="list-style-type: none"> Active mobilization of resources Outreach on cost-recovery basis |
| 4 | Low interest from Ministry of Agriculture in project participation (Myanmar) | 3 | 4 | 12 | <ul style="list-style-type: none"> Work with different stakeholders |
| 5 | Low potential for programme stakeholder collaboration (China) | 4 | 2 | 8 | <ul style="list-style-type: none"> Continue to bring stakeholders together at regional for exchange and trust-building |
| Short-term (immediate) objective 4: | | | | | |
| 1 | Change of key staff within Ministry (notably Lao) | 2 | 4 | 8 | <ul style="list-style-type: none"> Maintain dialogue with department, anticipate changes, advocate continuity, encourage succession planning. If needed, re-train |
| 2 | Countries do not ask FAO | 2 | 2 | 4 | <ul style="list-style-type: none"> This risk is anticipated for one country, but there will be |

| Risks | Probability (1-5) | Consequence (1-5) | Risk Value (1-25) | Risk management/mitigation |
|---|-------------------|-------------------|-------------------|---|
| assistance for formulation of regulations | | | | different ways to provide inputs that will be used. There still will be new regulations but they may be less good. |
| 3 Abuse in inspections | 2 | 2 | 4 | <ul style="list-style-type: none"> Limited risk to the programme, but necessary to manage as much as we can to uphold good governance Establishment of a mechanism of double checking by CSO partners |
| 4 External risks beyond the control of the project <ul style="list-style-type: none"> Conflicting interests - corruption Staff changes Mandate changes | | | | <ul style="list-style-type: none"> Need to monitor risk and anticipate and accommodate change. |
| Short-term (immediate) objective 5: | | | | |
| 1 Brain drain | 2 | 3 | 6 | <ul style="list-style-type: none"> Train more staff. Training of trainers (ToT). Develop introduction manual. |
| 2 Lack of resources within partner countries (time and funds) | 3 | 3 | 9 | <ul style="list-style-type: none"> Simplify the work. Use existing knowledge and experiences. |
| 3 Lack of political will | 2 | 3 | 6 | <ul style="list-style-type: none"> The main objective of the program is to get political interest and commitment regarding chemicals management. Use scheduled high level fora to develop the agenda (e.g. SAICM and ASEAN regional meetings) Invite key countries in the region. Participatory approach. |
| 4 Conflicts between or within partner countries | 2 | 3 | 6 | <ul style="list-style-type: none"> Follow the development. |
| 5 Suboptimal donor coordination. | 2 | 2 | 4 | <ul style="list-style-type: none"> Keep updated about on-going activities within the area of chemicals and other relevant sectors. |
| 6 Difficult to identify and reach relevant and committed stakeholders | 2 | 3 | 6 | <ul style="list-style-type: none"> Invite observers to the Forum Make information about the programme available |

