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Regional Programme: Towards a non-toxic environment in South-East Asia Phase II









Progress report 2015

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1 Acronyms and abbreviations

| Acronym | |
|---------|---|
| ABD | Agro-biodiversity |
| AEC | ASEAN Economic Community |
| APPPC | Asia & Pacific Plant Protection Commission |
| ASEAN | Association of Southeast Asian Nations |
| ATSA | The Agriculture Technology Services Association |
| BEA | Biodiversity based Ecological Agriculture |
| 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 for Classification and Labelling |
| 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 |
| IRRI | International Rice Research Institute |
| JICA | Japan International Cooperation Agency |
| Keml | 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 |
| NIAES | National Institute for Agro-Environmental Sciences |
| 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 |
| RRI | Regional Rice Initiative |
| 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 |
| SRI | System for Rice Intensification |
| TFA | The Field Alliance |
| ITA | THE FIELD AMAILE |

| TEF | Thai Education Foundation |
|--------|--|
| TPPA | Trans-Pacific Partnership Agreement |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WHO | World Health Organisation |

2 Executive summary

Phase 2 of the programme has now reached halfway into its implementation period and all partners are working intensively. Programme activities are running according to plan, sometimes even ahead of plan and a few target values set when developing the programme proposal have already been surpassed. New targets have been set for the remaining part of the programme.

TFA's REAL program continue to help alleviate poverty through income generation by training farmers on how to grow vegetables, create aquatic habitats in rice fields, raise aquatic species, insects, and small animals in order to provide supplementary income and establishment of saving

groups. Methods such as IPM, SRI, composting, bio-mats, and use of botanical pesticides also contributed to reduction of input cost (chemical fertilizers and pesticides) and increased yields for farmers in the program thereby increasing overall income. Farmers in Bag Giang were able to earn more than 10 times more from rice-fish farming compared to farmers growing rice only. In both Thailand and Vietnam, farmers were able to reduce their pesticide by 50 to 90 % compared to farmers who were not in the program. A true win win situation when income increases at the same time as health- and environment risks are reduced.



PAN AP and partners focused on principles of agroecology for capacity building. Trough trainings and workshops more than about 15,000 persons participated in mass actions, workshops, and trainings (more than 220,000 persons including activities funded by others).

Under FAO-supported National IPM/Pesticide Risk Reduction Programmes, some 6,000 (43 % female) additional farmers in the Mekong region, participated in 'fortified' Farmers Field Schools or focused 3-day Pesticide Risk Reduction trainings adding to a total of about 76,000 farmers trained since the start of the project. Member country governments, most notably in Cambodia, China, Lao PDR and Vietnam, have continued to invest in up-scaling of FAO-piloted IPM and PRR training for farmers. In 2015, government annual investments in IPM-FFS was about 19,000,000 USD.

The programme has, through regional collaboration and use of knowledge and experiences from primarily Vietnam, Cambodia and Thailand, supported the Ministry of Industry and Commerce of Lao PDR to draft the country's first chemicals law. The proposal has been submitted to the National Legislative Assembly and is expected to be endorsed during 2016.

With knowledge from the field in South-East Asia the programme could contribute with valuable information to the Fourth International Conference on Chemicals Management, ICCM 4, in Geneva in October 2015 and the adoption of a resolution on the phasing out of the highly hazardous pesticides (HHPs). These pesticides are still widely used in South-East Asia and continue to cause serious risks to human health and the environment.

Legislative impediments hampering effective enforcement of the pesticide regulation in Lao PDR have been resolved and drafting of new inspection manuals started during 2015. The new structure makes it possible to punish retailers violating the regulation. Finalization of the manuals, training of

inspectors and pilot inspections will be conducted during 2016. In addition, the programme supported Lao PDR in its preparations and issuance of a new regulation on pesticide labelling.

A regional workshop on using the new FAO Pesticide Registration Toolkit was held in Hanoi with participation from five countries. The toolkit aims to help countries strengthen the pesticide registration process, particularly the risk assessment part. This was the first workshop to introduce the new tool and it was received with much appreciation.



3 Background

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. Many countries lack the capacity to handle chemicals management issues and are in great need to develop institutions, legislation, knowledge and general awareness. As a response to this, the programme "Towards a Non-Toxic Environment in South-East Asia" was initiated in January 2007. A second phase of the programme was approved by Sida in 2013. The programme builds on a strong partnership with well-established organisations that together have many years of experience on dealing with chemicals management issues in the region. Implementing partners are the Swedish Chemicals Agency, the Food and Agriculture Organization of the United Nations (FAO), Pesticide Action Network Asia and the Pacific (PAN-AP) and the Field Alliance (TFA). The geographical scope of the Programme is South-East Asia and has a primary focus on the Mekong region countries. Partner countries are Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam. Regional activities under this programme sometimes involve other countries from the region, like Indonesia and the Philippines.

The programme's overall aim is to contribute to reduced health and environmental risks from chemicals and better management of agricultural, industrial and consumer chemicals.

4 Context analysis

Chemicals-related matters continue to gain attention and priority in the region. During 2015, ASEAN created a specific working group named ASEAN Working Group on Chemicals and Wastes (AWGCW). The objective of the working group on chemicals is to further strengthen regional coordination and cooperation in addressing chemicals-related issues under relevant multilateral environmental agreements such as Basel Convention, Rotterdam Convention, Stockholm Convention, and Minamata Convention, as well as internationally agreed-upon systems such as the Globally Harmonized System for Classification and Labelling of Chemicals (GHS). The working group will suggest priority

issues/actions, including GHS, which would be an important tool to identify chemical products on the market and take necessary actions to implement the MEAs and introduce other risk reduction measures. KemI has during the year established contact with the working group and had the opportunity to provide input to the terms of reference for the group.

All member countries in the regional collaboration on chemicals management continue to show great interest in the regional Forums and other activities that are organised within the programme. Since the beginning of the second phase of the programme representatives from neighbouring countries have been invited to take part in Forum meetings to share their experiences and further strengthen the regional collaboration. The interest to take part in the regional collaboration is always high and so far, Indonesia, the Philippines and DPR Korea (North Korea) have participated in Forum meetings. They have all expressed positive feedback about the Forum as being an important regional meeting place for exchange of information and networking.

The political situation in Thailand remained unchanged during 2015 with the military still in power. Some work within the government was put on hold and affected the budget contribution for TFA's programme activities in 2015. The political situation did, however, not hinder Thailand's possibility to join the regional collaboration on chemicals management and become permanent members of the Forum. Both Thailand and their neighbouring countries were happy to see the group of member countries being expanded. Thailand commitment to the regional collaboration on chemicals management was further emphasized when they agreed to host the 10th regional management forum in March 2016.

In Cambodia a large restructuring of the Ministry of Environment was launched and is still on-going. Some key contact persons were moved to new positions, resulting in delays in development of legislation etc.

New laws for CSOs have been adopted in Cambodia and are currently being developed in China. These laws cause a lot of concerns for CSOs in those countries since they have potential to impede their operations.

In Myanmar, the elections slowed down all work within the government. The interest to take part in the regional collaboration was however still strong, both in the area of pesticide management and IPM and in the area of general chemicals management.

The trade and production of hazardous pesticides has gradually shifted from Europe to Asia. China has become the world's largest producers of pesticides. Products include hazardous products like chlorpyrifos and paraquat. Some of the pesticides that are restricted in the US or Europe are still permitted for broad use in China and other GMS countries and continue to cause serious risks to human health and the environment. It should, however, be noted that China is taking important steps to gradually phase out use and production of some of the more hazardous pesticides; something that will affect all neighbouring countries.

Trade agreements and initiatives for economic integration, like the Trans-Pacific Partnership Agreement (TPPA) and ASEAN Economic Community (AEC), will have an influence on future trade of pesticides and other chemicals but it is still too early to see how and on what scale. Freer movement

of chemicals and other goods will require a greater degree of regional regulatory harmonization to not undermine the protection of human health and the environment.

Organic food production is slowly increasing with organic shops and markets being set up mainly in cities and small towns in the GMS countries. There is increased demand for food with less pesticides residues among consumers in South-East Asia and more awareness about organic and agroecological farming practices. The programme is supporting this trend by creating awareness and demand at consumer level as well as by providing farmers with knowledge and access to sustainable farming techniques, i.e. making it possible for farmers to produce biocontrol products themselves or purchase these from private sector. The programme is also actively working to link organic farmers to more rewarding local and international markets.

Public awareness has increased significantly through various social media and poster campaigns organized by partner organisations as well as by the launching of a regional study that tests children, farmers, and community members for pesticide residues in their blood. Preliminary results from this study have already caused study participants to reconsider their chemical exposure and request additional education regarding prevention and health impacts of pesticides. Partners also provide farmers with knowledge and access to sustainable farming techniques, i.e. making it possible for farmers to produce the requested products. Partners support linkages between organic farmers and markets and aim to develop this networking support further in the coming term.

PAN AP's partners in Cambodia (CEDAC) and Laos (SAEDA) have a specific focus on community based interventions, organic farming and marketing. In 2014, local farmers affiliated with CEDAC in Cambodia produced 400 metric tonnes of organic rice, while in 2015 the number doubled to 800. Via Cambodia Organic Farm Enterprise (COFE), the primary distributor for CEDAC organic rice, a farmer is guaranteed to earn a fixed sum per kilogram of rice and thereby a sustainable income. Meanwhile, wholesale inorganic rice prices fluctuates on the basis of regional competition, production and demand. In northern Laos more than 700 farmers are part of an Organic Farmers Association facilitated by SAEDA. On-going training, marketing and capacity building on organic farming techniques are also co-facilitated and supported by the district level government authorities. This will also be expended to other districts in collaboration with other aid agencies. PAN AP's partners in Vietnam and China are slowly building the capacity of their farmers to grow food without pesticides and are exploring future possibilities for organic certification and marketing.

Governments' interest in sustainable intensification of agricultural production is also increasing in the region. In addition to China and Vietnam, the governments of Cambodia and Lao PDR have started to invest in up-scaling of FAO-piloted IPM and PRR training for farmers.

5 Progress report

Cross-cutting issues

Gender issues

All partners pay continuous attention to gender equality and make sure that a gender perspective is included when designing learning materials, trainings, awareness raising activities etc. During 2015, partners finalized the questionnaire that will be used when interviewing women that have participated in trainings or other programs and currently practice successful application of learned ecological agriculture approaches. Possible areas for improvement will also be documented and will serve as valuable input for all programme partners in the continued work on integration of gender aspects. The stories from the ground will be collected and compiled in a report during the first half of 2016. Partners' intention is that this publication will raise public awareness of the presence and power of women in agriculture.

FAO farmer training programmes remain pro-active on gender issues and continue to recognise and address specific risks to women. Gender training is integrated in all FFS curricula (e.g. see inserted screen shot FAO Gender News Asia and Pacific- March 2016)). Gender disaggregated data are used for intervention planning and in particular, curriculum development. All sectors of the communities – including children in schools and out-of-school youth are engaged in the preparation of community action plans for pesticide risk reduction. The capacities and leadership of women are enhanced and new production techniques and technologies are introduced



especially to address the phenomenon of women - including the elderly - being left in villages to carry out agriculture-related work as men and the younger generation migrate to cities to engage in the service sector to earn.

Gender awareness and women's empowerment continue to be an important focus also for PAN AP and partners. Women farmers and workers are more vulnerable to the impact of pesticides due to their economic, political and biological factors and impacts of pesticides on women's health are part of PAN AP's awareness raising activities. PAN AP and partner groups have been focusing on women's participation and decision making in various processes, awareness raising activities, trainings, and especially on promoting agroecology (30 % to 60 % of women participating in 2015).

In Cambodia, 100 women were selected to be leaders in the National Farmers Forum that was organised by CEDAC. The main aim of the forum was to highlight the challenges of small scale women farmers in accessing agricultural resources like water. The forum also emphasised that women's participation is crucial in developing national agricultural policies. In joint a statement women famer's views, challenges and suggestions were compiled and sent to relevant government agencies, the National Assembly, development partners and CSOs.

In Vietnam, 15 women trained as part of the "Irene Fernandez" Women's Leadership Training, have reduced their pesticides and adopted agroecological practices. They have started to sell their pesticide free products in organic market in Hai Hau and Hanoi.

PAN AP's publication, "Breast Cancer, Pesticides & You!" with a focus on the impact of pesticides on women's health was translated into Vietnamese.

In 2015, 16 Days of Global Action campaign (Oct 1-16) brought together more than 200 partners and network groups in 20 countries in Asia, Pacific, Africa and Europe, and in turn, mobilized more than 25,000 around the globe. It was aimed at highlighting women's leadership and roles in food and agriculture and their assertion of rights against resource and land grabs and against social and gender inequality. PAN AP's partners in the Mekong countries focused on highlighting the impact of pesticides on women's health and called for support for agroecology. PAN AP contributed with an article to the UNEP published booklet on "Gender Heroes from grassroots to global action: collection of stories featuring gender perspectives on the management of hazardous chemicals and wastes". The stories of the Gender Heroes were shared at a side-event during the Conference of Parties to the Stockholm, Basel and Rotterdam Conventions, in May 2015. PAN AP highlighted the grassroots women leaders who struggle to bring up the issues of pesticide impacts on their communities, families and their children. One major focus was on Vietnam and the leadership of one woman who continued to highlight the problems of the impact of pesticides on her community and how she led the way to agroecology.

In 2015, TFA has taken significant strides towards gender equality and genderresponsive programming. First steps in the process involved the collection of genderdisaggregated data, particularly regarding farm/household decision-making (see below table). By understanding who is making decisions on behalf of the household/farm (men, women, or both) TFA and partners can better determine who will benefit most from trainings and target trainings to include these specific populations. The role of gender in agriculture varies significantly country by country based on a number of cultural and practical factors and is also in the process of constant evolution. With this in mind, it is important to maintain consistent gender-

| No. | Activities related agriculture | Man | Woman | Both |
|-----|--|-----|-------|------|
| 1 | Plough the field | 146 | 3 | 0 |
| 2 | Water management | 87 | 24 | 38 |
| 3 | Selection seed varieties for growing | 16 | 52 | 81 |
| 4 | Buy seed | 11 | 91 | 47 |
| 5 | Germinate and soak seed | 14 | 45 | 90 |
| 6 | Broadcast seed | 35 | 36 | 78 |
| | Monitor seed nursery (fertilizing and irrigation) | 67 | 5 | 77 |
| 8 | Monitor seed nursery (pests and disease) | 75 | 10 | 64 |
| 9 | Pulling seedling | 7 | 19 | 123 |
| 10 | Transplanting/planting | 18 | 25 | 106 |
| 11 | Plant protection (pests and diseases) | 78 | 5 | 66 |
| 12 | Decision making related use of chemical in farm | 46 | 25 | 78 |
| 13 | Buy pesticide from shop | 60 | 71 | 18 |
| 14 | Read pesticide label before use | 115 | 20 | 14 |
| 15 | Mix pesticide | 136 | 2 | 11 |
| 16 | Spray pesticide | 119 | 2 | 28 |
| 17 | Harvesting and threshing | 6 | 4 | 139 |
| 18 | Processing and sell product | 23 | 63 | 63 |
| 19 | Store and maintain agricultural equipment/material | 68 | 23 | 58 |
| 20 | Record income/expense in production | 11 | 136 | 2 |
| | | | | |

related data and not to over-generalize or otherwise misinterpret this information.

In Cambodia, collecting gender specific data has also resulted in valuable insights. In school programs, 52% of students were girls and 48% were boys, a nearly even amount. Because the school environment is a controlled environment, equality is more ensured and there are increased opportunities to present gender-related discussions among students and classroom decisions can be made collectively.

Female participation in trainings in Cambodia however is still lacking compared to the increases seen in other countries. In 2015, Training of Trainers on ABD and PIA showed about half the number of female participants in comparison to male participants. Regarding decision making, data collected in 2015 indicates that men make agriculture related decisions 60% of the time whereas women alone make decisions only 24% of the time and decisions are made together the remainder. In general, women make more decisions relating to farm and household finances (selecting and purchasing seeds and selling product) whereas men continue to perform more physical labour. See Table 6 for more information on women's roles regarding pesticides.

It may be deduced that if more women were empowered to attend trainings, they would also be more inclined to participate in important decision making processes such as what kind of pesticide to spray and how much. Also, even though they are often not spraying chemical pesticides themselves, they are often still directly or indirectly exposed to chemicals through the air or by the process of washing spray containers. Therefore, women should also be made aware of the dangers of chemical exposure and the specific impacts to women and children.

Also in Cambodia focus group discussions where organized with both men and women present on gender roles in agriculture. During these focus groups, participants discussed what needed to be improved upon regarding the role of men and women. ATSA also assisted three women's saving groups by coaching them on how to self-organize and also on basic accounting principles. Additional support by TFA and ATSA of Women's Savings Groups this term is as a response to a recently recognized need for assistance with financial planning and accounting in the communities we serve. During numerous site visits and interviews with members of Women's Union's, women reported that they were the ones responsible for handling household money, but lacked basic accounting education and often did not keep accurate records of costs and profits. This lack of knowledge prevented farmers generally from seeing whether their money was being spent or saved in an effective manner but also specifically did not allow them to recognize the savings that they were experiencing as a result of their conversion to sustainable farming methods. By empowering women with basic accounting knowledge, farmers can employ greater control over their personal expenses see first-hand the savings that sustainable farming methods can afford them, ultimately contributing to ensured programmatic sustainability into the future.

Women's Savings Groups in Cambodia made it their own prerogative to establish a group savings fund/community loan system. All members of the group made a minimum contribution to the fund and any community members can apply for loans from the group as they need. The group is self-managed by group members who elect a management committee and was recognized by local authority. Rules and procedures were developed to ensure transparent management of their savings and lending fund. They continue to contribute money to the group fund on a monthly basis and interest that they earn from lending to members is kept to increase group capital.

Given the small-scale nature of the fund, money is limited and loans are generally dispersed to support small projects such as building fences or buying supplies to start preserving vegetables from home gardens. Members of the Women's Savings Group are responsible for determining if the expressed need is valid, approving the loan, and determining a time frame that the individual or family has to pay back the loan. The establishment of this community-based loan system prevents

community members from seeking loans from large banks outside of the community, therefore encouraging community building and preventing people paying high interest rates to banks.

In addition, TFA and ATSA also provided support to women who grow vegetables at home on how to produce bio-pesticides and use compost in order to reduce their exposure to chemicals.

TFA's partner organization in Vietnam, ICERD, has maintained a close collaboration with communal Women's Unions over the past several years, supporting female participation in ABD, PRR, SRI, and IPM trainings. In 2015, 58 % of the farmers who attended the integrated Farming training (rice–fish) and Bac Giang province were women and in Yen Bai province 96 % of farmers who attended the training on Conservation and Utilization of Indigenous Vegetables/ Market Access were women. Furthermore, in 2015 it was documented that 116 people, 115 whom were women, maintained home vegetable gardens in Bac Giang and Quang Binh provinces after having attended past trainings on Home Vegetable Gardens in 2014. This data not only demonstrates high female participation in trainings, but also implies that women are interested in maintaining their participation by attending multiple trainings.

In October 2015, one of Keml's programme managers attended a gender training organised by Sida in order to further strengthen the programme's knowledge and capacity in integration of a gender perspective. The training provided theoretical knowledge as well as practical tips on how to include gender aspects.

Information about Sida's recently launched gender toolbox was communicated to all programme partners.

Poverty and human rights perspective

The fundamental purpose of the programme is to empower boys, girls, men and women to claim their human rights. By working with measures to reduce poverty, protect children, human health and the environment, people get increased opportunities to demand their rights. Working with governments and building institutional capacity increases the possibility that those who are obliged to respect, promote, protect and fulfill those rights takes this responsibility.

FAO farmer training programmes are designed to address the needs of smallholder farmers, female and male, young and old. These smallholder farmers are also the sector of the population with least access to resources, including training. The training programmes are designed to help these smallholder farmers gain knowledge and skills to improve agricultural production and livelihoods.

Through the practice of agro-ecology, farmers are showing that they have reduced costs due to pesticide and fertilizer reduction/elimination and better profits due to better prices for their products. Farmers in Vietnam and Cambodia are part of saving groups.

TFA's REAL program help alleviate poverty through income generation by training farmers on how to create aquatic habitats in rice fields and form vegetable growing and saving groups. In Lao PDR REAL programming also focused on raising aquatic species, insects, and small animals in order to provide

supplementary income. In Vietnam, REAL programs on rice-fish farming, bio mats, and growing and maintaining herb and vegetables garden helped to alleviate poverty for farmers by providing additional income. Methods such as IPM, SRI, composting, bio-mats, and use of botanical pesticides also contributed to reduction of input cost (chemical fertilizers and pesticides) and increased yields for farmers in the program thereby increasing overall income. In Thailand, farmers in Uttaradith province were able to reduce pesticide uses from 19,907 litres/ person/year to 1,529 litres/ person/ year (94 % reduction) and in Bac Giang, Vietnam, farmers in the program were able to reduce 52 % of pesticides in rice 64 % in vegetables and 79 % in sweet potato compared to farmers who were not in the program. In addition, farmers in Bag Giang were able to gain USD 7,930 profit from rice-fish farming compare to USD 634 from only rice production.

Another round of campaigning to "Protect our Children from Toxic Pesticides (POC)" was organised on 5th June 2015 for World Environmental Day, International Children's Day (November 20, 2015) and during the "No Pesticides Use Week" (December 3 to December 10, 2015). This year's theme was to focus on the impacts on pesticides on children's health and intelligence. Various campaign materials including the poster on the 20 PAN list of highly hazardous pesticides for children. Infographics and posters were produced in translated into local languages. The campaign was published in conventional media and new social media including Facebook and Twitter. PAN AP and partners hit social media with #PesticidesFreeWorld hashtag. This campaign gathered 40,000 impressions (viewers) on twitter and over 430 organizational sign-ons for the global petition of HHPs. There were also engagements from the Special Rapporteur on human rights and hazardous substances, Baskut Tunak, UNEP, and local government counsellors via Twitter.

In various parts of Asia Pacific, interactive and fun workshops for children were launched to create awareness on the impacts of pesticides and to give useful guidelines to protect children against pesticides in schools, homes and in public places. These workshops were held in collaboration with local schools and local government units and other civil society organisations. Children painted, drew cartoons and spoke about their vision of a world without poisons and pesticides.

PAN AP organized a Human Rights training workshop in September 2015. The workshop was attended by various PAN AP partners and focused on building their capacity to campaign using the human rights framework and the impact of pesticides. In the workshop, various conventions like Convention on the Rights to Children (CRD), the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and other rights like workers' rights and freedom of information rights were explored. The aim of this workshop was also further increase knowledge and document HR violations (in the context of pesticide use and impacts) using the CPAM mobile application.

TFA initiated a regional study on "Impact of Pesticides to Children and Farmers in High-risk Areas" to study the status of pesticide impacts and identify measures in order to minimize the exposure to children and communities. Participating schools periodically surveyed and monitor pesticides used in community. Children are aware of the negative impacts from pesticides thus better protecting themselves. In addition, presenting data to communities help generated interests to reduce the pesticides uses and risks. TEF organized a 2-day training for 8 officials of the Ministry of Health from Cambodia, Laos, Philippines, and Vietnam in December 2015. Data collection will be conducted in 2016.

FAO and ILO released in 2015 a facilitator's guide entitled "Protect Children from Pesticides". The aim of this tool is to raise awareness and knowledge at the community level about the risks and hazards of children's exposure to pesticides and how to prevent these. The tool, based on earlier FAO supported pesticides and health training in rural communities in Asia, has been very well received given its user-friendly and illustrative format. The ultimate goal is to reduce the use of hazardous chemicals in agriculture, whilst also preventing hazardous child labour. A Khmer translation is being considered partly with GCP/RAS/229/SWE resources.

The publication can be downloaded through e-link: http://www.fao.org/3/a-i4715e.pdf

Sustainability

In Lao PDR, FAO worked with a rural development project funded by International Fund for Agricultural Development (IFAD) and implemented by the Ministry of Agriculture and Forestry to develop capacity for pesticide risk reduction training and Farmers Field Schools in two northern Lao provinces (Oudomxay and Sayabouly). This project is now supporting the up-scaling of the pesticide risk reduction farmer training and FFSs work as to reach more farmers in the 9 target districts covered by this project. In Cambodia the IFAD-funded "*Project for Agriculture Development and Economic Empowerment*" (PADEE) has allocated \$14,000,000 for capacity building through FFS implemented by GDA-MAFF for the period 2013-2017. FAO is also actively supporting the integration of pesticide risk reduction activities in the curricula and the Farmers Field School activities supported in 3 pilot countries (Indonesia, Lao PDR and Philippines) within context of the FAO Regular Programme funded Regional Rice Initiative (RRI).

Technical assistance to strengthen regulatory control of pesticides is always designed in a manner that takes the existing institutional capacity and government budgets as a starting point. The pesticide registration toolkit, for instance, is specially designed to assist countries with limited human and financial resources to enhance risk assessment within their available expertise and means.

FAO continued to work with the Asia and Pacific Plant Protection Commission, most notably during its most recent Commission meeting held in Bali in September 2015, to ensure that member countries become aware of results and can benefit from lessons learned and technical advice available within the organization and its member countries based on pesticide risk reduction supported work under this Swedish funded Programme.

In order to secure a stable and sustainable financial situation, PAN AP and partners continue to search for various methods to fund raise. PAN AP has long-term plans to do individual fund raising and explores online learning platforms on this subject.

PAN AP's local partners are developing systems aiming at creating sustainable value chains for organic agricultural products. CEDAC in Cambodia has been working with farmers to get organic agriculture certification for better prices for the produce, organising self-groups, set-up rice mills and organic shops to advance sustainability. Similarly, SAEDA in Laos is exploring and learning from the example of CEDAC and GreenNet, Thailand to explore long-term sustainability. Similar activities are taking place in Vietnam and Yunnan province in China.

TFA continues to seek opportunities to integrate REAL program activities into governmental and other non-governmental programs for continuation and expansion. The majority of schools that have adopted the REAL curriculum continue to train new students each year, meaning that school programs are sustainable.

During 2015, KemI have had continuous dialogue with the ASEAN working group on Chemicals and Waste (former working group on multilateral environment agreements, MEAs) to explore possibilities for closer cooperation and make sure that they are aware of the work that is supported by Sweden within the regional programme. KemI was invited to provide input to the Terms of Reference for the new working group, which was a good opportunity to make suggestions based on the experiences from the regional collaboration on chemicals management.

Anti-corruption

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 their very low salaries. Development of inspection manuals with clear guidance to the inspectors makes the enforcement process more transparent and ensures that all inspectors follow the same methodology. Inspection protocols that are filled in by the inspector and then signed by both the inspector and the retailer make sure that it is possible to keep track of the inspections that are performed.

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, Keml, 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.

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 International Code of Conduct Pesticides Management 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.

During the 9th regional chemicals management forum a specific presentation on good governance, transparency and anti-corruption was held by a representative from the Department for International Development (DFID) in Vietnam. The presentation was followed by group discussions where the participants identified areas/reasons for corruption in the chemicals sector. Group discussions revealed that unclear regulations that open up for interpretations are a major risk for corruption in the chemicals sector. This issue was followed up and discussed during the workshop on development of legislation that was organised by KemI and Ministry of Industry and Commerce of Laos PDR later in 2015.

Communication/information

During 2015, programme partners developed an updated information brochure about the programme and its implementing partners. The brochure was printed and distributed among partners for use at various meetings etc. to spread information on the programme and its implementing organisations. The brochure is also available in electronic format at Keml's website, (http://www.kemi.se/global/broschyrer/towards-a-non-toxic-southeast-asia.pdf).



The FAO Asia Regional IPM/Pesticide Risk Reduction Programme continues to share information through the programme's existing website (http://www.vegetableipmasia.org). During 2015, some 8 news releases were published on a variety of different activities supported by the Swedish funded project. Also, four case studies were developed documenting the results of pesticide risk reduction activities. In addition, the programme started to communicate with a broader audience using the online social networking service Twitter.

FAO uses the electronic network of pesticide registration authorities that was established after a regional meeting on highly hazardous pesticides in 2014 to disseminate information of regional or

international importance, such as new technical guidelines prepared in support of the International Code of Conduct on Pesticide Management.

After the workshop on communication and media tools in 2014, PAN AP and partners have been using social media such as Facebook and Twitter to regularly update information on the impacts of pesticides during campaigns. As a result, in 2015, the Protect Our Children from Toxic Pesticides campaign received 40,000 impressions on Twitter. PAN AP is also developing a mobile application for surveys on pesticide use and effects, CPAM, to facilitate reporting of results as well as. PAN AP launched a new website in May 2013 and it is continuously being enhanced for better and easier usability.

PEAC was invited by the Yunnan Provincial Science and Technology Bureau to publish information on pesticides risks and relevant regulations at Xiang Yun Country, Wen Shan County, Er Yuan County and other local community centres and also to help maintain the Bureau's website. PEAC's collaboration with the Provincial Science and Technology Bureau has provided an opportunity to provide information on pesticides, particularly their studies on paraquat and chlorpyrifos, to the Bureau directly; and to other government officials as well as to the public through the Bureau's website. Several publications and posters have been translated to Vietnamese, Mandarin and Laos.

Results and risk management

The programme is continuously adjusting activities in relation to the current situation and need in the member countries and in the region.

One factor that that has become a threat to achievement of results is the continued unfavorable exchange rate between SEK and USD. The exchange rate is considerably lower (approximately 15 %) than the one that was used when the programme document was developed. Partners have, so far, been able to cope with the reduced amount of funds by using remaining funds from previous years (due to delayed start of activities in Myanmar etc.). Budgeting and programme planning is further hampered by the uncertainty regarding the amount of funds that will actually be available from Sida/the embassy in Bangkok (due to the current refugee crisis in Europe and its effects on the budget for development cooperation). Reduced payments during 2016 will be managed by use of remaining funds but if the situation continues it will have major impacts on the possibility to achieve the programme's objectives.

Drought in Thailand halted rice planting during the previous season and the conditions are expected to further deteriorate. As a consequence, TFA have adjusted farmers training curriculum and timing for Thailand.

The farmer training curricula continues to evolve to strengthen the resiliency of farming communities to address risks brought about by the changing environment and climatic conditions, not only in addressing pest and pesticide-related problems. Where necessary, other livelihood options are explored as part of community action to address the challenges brought about by the changing environmental conditions.

The programme is continuously adjusting activities in relation to the current situation in the member countries and in the region. The situation in the region, particularly the lack of enabling environment for CSOs to operate, is still worrisome. The situation in Cambodia is worsening with the new law on CSOs and China is formulating new laws for CSOS that would potentially restrict CSO operations. CEDAC, Cambodia and PEAC, China are monitoring the situation and alert if there are problems.

For more details on risk levels and implemented risk mitigation measures during 2015, see risk matrix in Annex 1.

Private sector collaboration

The FAO Asia Regional IPM/Pesticide Risk Reduction Programme continued to facilitate access to biological control agents produced by private sector partners (e.g., protein baits for *Bactrocera* fruit fly IPM from Vietnam to Laos) and link IPM farmers' groups to more rewarding value chains (e.g., export of organic chilli from Cambodia to Thailand).

The REAL program continues to assist farmers' in linking with local and regional market. In Hanoi, TFA has facilitated the connection between farmers and seven supermarkets in Hanoi, Vietnam, solidifying a dependable market. CSO in Thailand is working with the national chemical management committee, comprised of public and private entities, to develop strategies and plans on chemical management.

Until mid-2015, PAN AP was a member of the Round-table on sustainable Palm Oil (RSPO), a multi-stakeholder process that involved the palm oil industry, retailers, agrochemical companies, CSOs and labour groups working to ensure sustainable palm oil. PAN AP was involved in this process particularly developing criteria for sustainable palm oil production but unfortunately the criteria was not fully implemented and the whole process was not only very slow but there were no real outcomes that were significant. As a result, PAN AP pulled out of RSPO. PAN AP continue to monitor paraquat and other pesticides use in the oil palm plantations and the labour, land grabbing and migrant worker's issues together with other CSOs and report concerns to the RSPO secretariat.

In a joint effort, PAN AP's partners in Vietnam, SRD and CGFED organized an "organic dialogue" linking 70 business owners, scientist, civil society organizations (CSOs) and famers to explore new

innovations, expand and promote organic markets in Vietnam. The event was widely covered in the news. Two organic product markets in Ciputra Hanoi and a local specialty market in Royal City, Hanoi were organized to link farmers from SRD and CGFED's project sites. In partnership with Tam Dat, Uncle Tom and Mr. Clean enterprises, pesticide free and organic agricultural products like meat, eggs from chickens raised by organic feed, rice, forest honey and fish sauce without preservatives were sold in the markets.



KemI will invite speakers from industry to the 10th regional chemicals management forum to share their good practices connected to chemicals in products, the focus area of the Forum.

Highlighted regional activities

2015 was a year full of events and activities on regional level for all implementing partners.

The FAO-IPM component provided programme development support and technical assistance for delivery of FAO's Regular Programme funded Regional Rice Initiative in 3 pilot countries (Indonesia, Lao PDR and Philippines). Various regional workshops were organized during 2015 within the context of this Initiative. It is a common practice to carry out evaluation at the end of every regional meeting and evaluation results are used to improve the design of next such workshops. Workshops are evaluated based on what went well, what needs improvement and how to improve the areas identified.

The FAO-IPM component worked with the Asia and Pacific Plant Protection Commission and the Chinese Government to organize a Regional Workshop on IPM case studies for sustainable crop production intensification. The workshop helped convene key IPM counterparts from all over the Asia Pacific region to share experiences and present success case studies. The FAO-IPM component supported the participation of key counterparts from GMS countries including Cambodia, China, Laos, Myanmar, Thailand and Viet Nam in the 29th Session of the Asia Pacific Plant Protection Commission (APPPC) held in Bali, Indonesia. The Progress Report of the Standing Committee on IPM highlighted efforts that have strengthened regional and in-country information sharing and capacity building during the 2014-15 biennium on regional initiatives on spread prevention and management of invasive agricultural crop pest and diseases, promotion of IPM and reduction in risks related to distribution and use of pesticides in agriculture.

The FAO-IPM component helped convene a mini-workshop on Farmers Field School as part of a Regional Workshop on Agroecology for Food Security and Nutrition held in Bangkok in November 2015. The regional programme supported participation in this workshop by key IPM government counterpart staff from 3 GMS countries. Both PAN AP and TFA participated in the workshop discussions and delivered presentations on the work within the Swedish funded programme.

The Regional Workshop report can be downloaded through this e-link: http://www.fao.org/documents/card/en/c/d78652f2-a578-44aa-bba7-bed305e76790/

The conclusions and policy advice coming out of this workshop were summarized in an Information Note shared with all Agricultural Ministers present at the most recent Asia and Pacific Regional Conference convened by FAO in Putrajaya, Malaysia in March 2016. For an e-link to the APRC Agroecoloy Information Note: http://www.fao.org/about/meetings/regional-conferences/aprc33/documents/en/

The FAO Component on Regulatory Control organised a regional workshop in Hanoi to train pesticide registrars on using the new FAO Toolkit on Pesticide Registration. This toolkit enables registrars to strengthen the pesticide risk assessment part of the registration process. The workshop

demonstrated that particularly countries with little capacity that currently are doing minimal risk assessment could actually notch up their risk assessment with very limited means. The Toolkit provides easy guidance on how to use registration data from countries with a more thorough and detailed registration process and interpret these against the local use context. Feedback from the participants at the training will be used to further develop and adapt the toolkit to countries' needs. After this initial training at regional level, the project will support further training at national level in the region. A first national training is planned for Myanmar in early 2016 that will involve the entire pesticide registration board.

In June, KemI in collaboration with Vietnam Chemicals Agency organised the 9th regional chemicals management forum in Vung Tau, Vietnam. Main focus was pesticide management and representatives from all implementing partners and their local partners in Vietnam attended the meeting and gave presentations on their work in the region. TFA was able to solicit interest from the participating Ministry of Health to join the REAL forum in Thailand. Evaluation of the Forum showed that the participants were very satisfied with the topics, discussions and network that have been created. About 85 % of the participants expressed that the topics have very high or high relevance for their work and that the knowledge that they have gained have very high or high usefulness.

PAN AP is helping to improve skills and capacity of its partners and staff with the latest information as well as on advocacy and campaigning on the impact of pesticides and organised a workshop on understanding the human rights framework and instruments and how this could be used this in the work. There has been challenges in using such human rights instruments in the Mekong countries. PAN AP tried to create better understanding of work on pesticide reduction/elimination that may have implications on violations of human rights particularly if there are existing links between government and agrochemical companies. The workshop was attended by PAN AP partners from 17 organizations in 12 countries in the region. A total of 31 activists and campaigners working on pesticides, corporate accountability and land grabbing issues participated in the four-day training. Key outcomes of this workshop include a two-year plan for campaigns and monitoring of pesticide impacts using the CPAM mobile application.

In order to facilitate an exchange with CEDAC, Cambodia, to study their capacity building of farmers on agroecology, their marketing and sustainability strategies, PAN AP organized a visit for our partners from six countries including China, Laos, Vietnam and Philippines as well as Sri Lanka and Malaysia. The purpose of the exchange was to learn from CEDAC's experience on ecological agriculture, community interventions marketing and exporting of organic rice. Participants visited CEDAC's rice mills, organic shops and ten farmers who were practicing agroecology (including a collective of 8 women farmers), community leaders who are part of the CEDAC's community saving's group and rice mills cooperatives. They also meet CEDAC's trainers whom demonstrated methods of making fertilizers to increase soil fertility and outlined their strategies for working with farming communities.

The REAL program review and planning workshop was organized during April 20 -22, 2015 for partners from Cambodia, Laos, Vietnam, Thailand and including representatives from FAO and Kemi. The objectives were to review the 2014 REAL Program progress and exchange innovations, update

partners on the integration of the gender equality perspective, and review private sector involvement and related policies and to refine country plans.

The 2015 REAL Forum and Ecological Agriculture Curriculum Workshop was organized by the Thai Education Foundation and co-hosted by the Office of the Non Formal and Informal Education during November 20 -21, 2015. Participants from each country included teachers, CSO, representatives from the Ministries of Education and Health from Cambodia, Laos, Philippines, Vietnam, students and teachers from 8 provinces in Thailand, as well as expert speakers from FAO, Kemi, UNDP, private sectors, and the community. This venue provided an opportunity for participants to see the REAL program progress, witness innovations from farmer leaders, networks promoting the marketing of organic vegetables, individuals and organizations currently monitoring pesticide residues in fruits and vegetables, and receive updated information on the impacts of pesticides to health and the environment via studies and presentations given by the Ministry of Natural Resources and Environment.

The regional study "Impacts of Pesticides to School Children and Farmers in High-risk Areas" was initiated upon request by the interested representatives from the Ministry of Health in Cambodia, Laos, Philippines and Vietnam. A two-day workshop was organized on December 23-24, 2015 in Chiang Mai by Thai Education Foundation and co-hosted by the Food and Drug Administration of Thailand with cooperation from the Research and Training Institution under the Ministry of Natural Resource and Environment and Chiang Mai University.

The proposed one-year study will involve a multi-part process including:

- 1) Training of medical technicians to administer the cholinesterase screening test through finger blood tests using reactive paper designed for organophosphate and carbamate pesticides.
- 2) Follow-up with high risk participants including detailed laboratory blood and urine analyses.
- 3) Reporting and dissemination of results and study analysis to local and national governmental agencies and general public.

Programme Objective

Since some of the target values, set at the launch of the second phase of the programme, have already been surpassed partners have set new targets for 2018. These new target values are included in the below tables and the old target values have been left as a reference.

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

The programme as a whole continues to achieve expected results and has been able to adjust to changing conditions. The different components and the different characters of the implementing partners complement each other well and, at present, no major changes of programme design or focus are therefore suggested. Chemicals management continues to be a prioritized issue in the region. Some major events in the area of chemicals management have been illustrated in a small timeline below.

Major achievements during 2015

- Ministry of Industry and Commerce of Lao PDR finalized the country's first chemicals law with support from neighbouring countries and Keml and submitted it to the National Legislative Assembly for endorsement.
- The number of farmers in the region that are implementing pesticide management according to IPM continue to grow due to efforts by FAO, PAN AP, TFA and their partners. Continued work on domestication of various plants, animals and insects bring additional income to poor farmers.
- With knowledge from the field in South-East Asia the programme could contribute with valuable information to the Fourth International Conference on Chemicals Management, ICCM 4, in Geneva in October 2015 and the adoption of a resolution on the phasing out of the highly hazardous pesticides (HHPs) on a global level
- Improved pesticide risk assessment capabilities among pesticide registrars in the member countries following a regional workshop on the new FAO Pesticide Registration Toolkit.

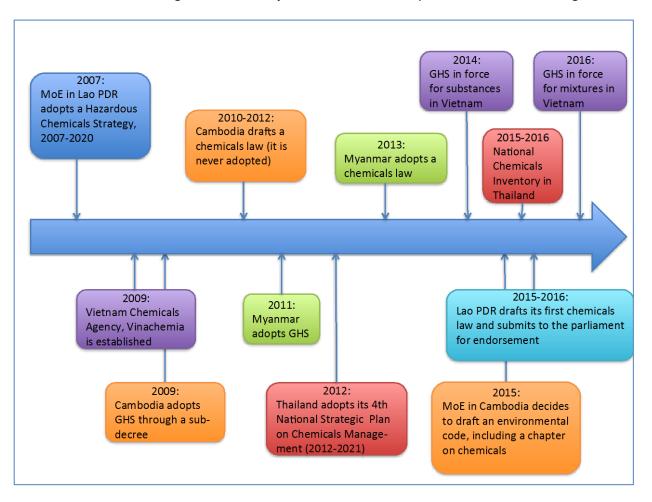
○ = According to plan, ○ = Small deviations compared to plan, ○ = Not according to plan

| Programme objective (med-term objective) | | | | | | | | | |
|---|--|----------------------------|--|-----------|----------------------------|--|--|--|--|
| Efficient pesticide risks reduction and chemicals management within and among partner countries by strengthening capacity and regional collaboration. | | | | | | | | | |
| Indicators | Indicators Baseline Target (2018) Results up to 2015 Assessment Comments | | | | | | | | |
| | | | | of status | | | | | |
| 1. Number of cases where field data | 2 cases | Approximately 3 more cases | 5 additional cases. | \odot | Also the Philippines have | | | | |
| from programme areas have been | | | | | preparatory plans of | | | | |
| fed into national and international | | | Result from 2015: | | feeding data into national | | | | |
| processes related to chemicals | | | 1 case of Community based pesticide monitoring | | processes. | | | | |
| management. | | | was conducted in North Vietnam by PANAP's | | | | | | |

Programme objective (med-term objective) Efficient pesticide risks reduction and chemicals management within and among partner countries by strengthening capacity and regional collaboration. **Indicators** Baseline Target (2018) Results up to 2015 Assessment Comments of status partner CGFED and shared with relevant authorities. 1 case on chlorpyrifos use was documented by PANAP's partner PEAC in Yunnan and shared with relevant authorities. Experiences on pesticides use from the programme contributed to the adoption to a resolution on phase out of HHPs at the ICCM4 meeting. 2. Number of farmers in the region Approximately Approximately 100 % increase Total: Approximately 17,300 additional IPM GMS governments and \odot farmers (40 % increase) have reduced pesticide use implementing pesticide 44 000 national and local levels and made increased use of biological control. management according to IPM. farmers continue to provide good facilitation and buy-in Result from 2015: Approximately another 5,300 support for up scaling of farmers have reduced pesticide use and made farmer training programmes on IPM and increased use of biological control. pesticide risk reduction. 3. Examples of chemicals No available Approximately 20 examples of 7 examples in total Even though the number of management measures taken in baseline chemicals management chemicals management Results from 2015: measures is slightly lower partner countries measures Development of new inspection manuals in than planned, partners are Lao PDR including procedures to punish confident that the number violators of the regulation. will pick up during the remaining years of the Submission of the country's first draft programme. There is a chemicals law to the National Legislative general increase in Assembly of Lao PDR. awareness and priority of Cambodia developed a national action plan for chemicals management implementation of the Rotterdam convention issues in the region. and submitted import responses for 33

| Programme objective (med-term objective) | | | | | | | | |
|---|-----------------------|--|--|----------------------|----------|--|--|--|
| Efficient pesticide risks reduction and chemicals management within and among partner countries by strengthening capacity and regional collaboration. | | | | | | | | |
| Indicators | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments | | | |
| | | | substances listed under the convention Adoption of a new regulation on pesticide labelling in Lao PDR. | | | | | |
| 4. Level of regional cooperation on pesticide risk reduction and chemicals management | No available baseline | Approximately 10 examples of regional cooperation on pesticide risk reduction and chemicals management | 5 examples in total. Results from 2015: Sharing of experiences and exchange visits between Vietnam, Thailand and Lao PDR during the development of the chemicals law in Lao PDR. Regional sharing of experiences and presentation of success case studies on sustainable crop production and intensification in order to strengthen implementation of IPM | © | | | | |

Below is a timeline including some of the major events in the development of chemicals management in the region.



Immediate objective 1

Reduced risks associated with pesticide use and enhanced use of alternatives through increased awareness and enhanced capacity in farming communities, schools and institutions and among consumers in partner counties.

TFA has seen successful in increasing awareness and building capacity among individual farmers and groups regarding pesticide risk reduction. Challenges this term included worsening/evolving environmental conditions, specifically drought. In Thailand, Lao PDR, and Cambodia, the effects of drought have been great for farmers, restricting their ability to grow crops, particularly rice. This reduction in output has led to a subsequent reduction in income and increased financial struggles for families and communities. Additionally, it has been deduced that this reduction in outputs/income has unfortunately also led to an increased use in pesticides some areas in an effort to ensure the profitability of remaining crops. Continued educational programming and multi-level support and engagement will be needed to provide farmers with a greater sense of financial security therefore empowering them to continue their explorations of alternative, agroecological practices.

Documenting the impact of pesticides by PAN AP's partner groups, with the involvement of local communities, provided impetus to some community members to move towards pesticide reduction with the aim of organic production (agroecological production). Exchange programmes within the countries to share and see what other farmers are doing to improve crop production and at the same time reduce use of pesticides proved to be an efficient way to spread knowledge. In addition the "No Pesticide Use Week" provided information to communities and governments to start programmes of pesticide reduction towards organic production and this has made it possible for farmers (mainly women) to be trained on organic vegetable and rice production and to sell these products in the local markets – augmenting their income and improving their nutrition. Although the initiative is small and involves 700 families, with 30 families marketing their products in the local market, it shows that there is demand and that this is possible. The challenge is to increase production and increase consumer support. Mainstreaming of organic production has, however, started in all the GMS countries and consumer education and awareness is a part of the strategy to get more consumers to buy organics.

Even though documentation of the impact of pesticides has been provided to provincial and national government officials it has been observed that authorities are reluctant to ban pesticides without more evidence of direct harm as well as alternatives to these pesticides. PAN AP's partner in China, PEAC, has surmounted this issue by developing focused documentation of particular pesticides, such as endosulfan, paraquat and chlorpyrifos, using local documentation together with science at the international level into reports that are fed to key people in the government. This has resulted in PEAC being invited to meetings organised by Ministry of Agriculture at the national level and contributing to the ban of endosulfan and severe restriction of paraquat in China. As China is now one of the leading producers of pesticides in the world producing highly hazardous pesticides like chlorpyrifos and paraquat, the work of PEAC (one of the few groups working on the pesticide issue) becomes doubly important to provide information about the dangers of pesticides and using their documentation to influence government policy on pesticides.

Major achievements during 2015

- PAN AP and partners focused on principles of agroecology for capacity building. Through trainings and workshops more than 15,000 persons participated in mass actions, workshops, and trainings.
- Approximately 3,500 farmers have benefit from PAN AP's trainings and interventions and 350 new farmers have been trained in agroecological methods
- Through TFA's REAL programme approximately 6,000 students, 250 teachers and 3,300 farmers have increased their awareness and capacity in pesticide risk reduction practices.
- After the workshop on communication and media tools in 2014, PAN AP and partners have been using social media such as Facebook and Twitter to regularly update information on the impacts of pesticides during campaigns and to reach out to a broader audience As a result, the Protect Our Children from Toxic Pesticides campaign received 40,000 impressions on Twitter and partners from 10 countries participated in the campaign.

Immediate objective 1 (short-term outcome)

Reduced risks associated with pesticide use and enhanced use of alternatives through increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers in partner counties.

| to distance | Deseller | T+ (2040) | December with 2015 | A | Camanana |
|---|--------------------------------|---|--|------------|--|
| Indicators: | Baseline | Target (2018) | Results up to 2015 | Assessment | Comments |
| | | | | of status | |
| 1.1. Various measures taken by target communities and partner organizations to create | Approximately 8,000 persons in | New target value: Approximately another | Total: Another 42,750 persons (66 % of new target value) | \odot | After seven years of partnership with partners |
| awareness and reduce pesticide use | target | 65,000 persons | new target value) | | like PEAC and CEDAC, |
| | communities | | Result from 2015: | | programmes & processes |
| | and partner | | PANAP- about 15,000 persons | | like CPAM and trainings on |
| | organizations | (Previous target value: | participated in mass actions, | | agroecology has further |
| | | Approximately another 7,500 | workshops, and trainings (about | | Institutionalised into their |
| | | persons) | 220,000 persons including counterpart | | overall programmes. |
| | | | funding) | | Partners now report based |
| | | | | | on activities that include |
| | | | TFA: | | counterpart donors, thus |
| | | | 21 Campaigns/ exhibitions organized | | an increase in reporting of |
| | | | by schools and 19 Field days organized | | numbers for pesticides |
| | | | with 1750 participants (1107 female) | | related activities. |
| | | | participated. | | |
| | | | | | |
| | | | One national policy workshop and on- | | |
| | | | going consultation meetings with | | |

Immediate objective 1 (short-term outcome)

Reduced risks associated with pesticide use and enhanced use of alternatives through increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers in partner counties.

| Indicators: | Baseline | Target (2018) | Results up to 2015 | Assessment | Comments |
|---|--|---|---|------------|---|
| | | | policy levels in 5 countries | of status | |
| 1.2. The number of farmers, women, youth and other sectors participating in schemes to apply alternative and ecological practices | Approximately 4,000 persons | New target value: Approximately another 35,000 persons (Previous target value: Approximately 100 % increase, i.e. another 4,000 persons) | Total: Approximately another 27,300 persons (78 % of new target value) Results from 2015: PAN-AP: Approximately 3,500 farmers have benefit from trainings and interventions and 350 new farmers have been trained in agroecological methods (approximately 200,000 farmers have benefit from trainings and interventions and 850 new farmers have been trained in agroecological methods including counterpart funding). TFA: Approximately 6,000 students (3,185 female and 250 teachers (139 female) and 3,300 farmers (2,228 female) participated in the REAL program. | | After seven years of partnership with partners like PEAC and CEDAC, programmes & processes like CPAM and trainings on agroecology has further Institutionalised into their overall programmes. Partners now report based on activities that include counterpart donors, thus an increase in reporting of numbers for pesticides related activities. |
| 1.3. Media and internet coverage on pesticide issues | PAN AP website generated 10,953,956 hits | Approximately another 10 000 000 hits | Total: 7,788,780 hits (78 % of target value) Results from 2015: 4,220,900 hits | | |
| | 431 Likes on Facebook | Approximately another 1 000 likes on Facebook | Total: likes 1,615 likes Result from 2015: | © | |

Immediate objective 1 (short-term outcome)

Reduced risks associated with pesticide use and enhanced use of alternatives through increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers in partner counties.

| Indicators: | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments |
|-------------|--|--|--|----------------------|----------|
| | REAL project | At least 4 REAL project | Another 459 likes PAN AP's twitter has 363 followers. Now 677 followers Total: 3 REAL projects televised. | (6) | |
| | televised 3 times | televised | Results from 2015: None. | © | |
| | Approximately 600 viewers on school projects at YouTube | At least 4 articles/papers published At least 4000 hits on website and Facebook | Total: 3 articles/papers published (75 % of target value) Results from 2015: "Using Sustainable Program Models to Support ASEAN Farmers" by Marut Jatiket and Alexandra Perkinson presented at Social and Sustainability Sciences in the ASEAN Community: A Regional Research Symposium and Academic Policy Dialogue, Chulalong Korn University, Bangkok, Thailand, August, 2015. Full paper is scheduled for publishing in 2016. "How Chiangmai's Past Could Change It's Education Future" published http://www.chiangmaicitylife.com/citylife-articles/learning-lanna/ | (i) | |

Immediate objective 1 (short-term outcome)

Reduced risks associated with pesticide use and enhanced use of alternatives through increased awareness and enhanced capacity in farming communities, schools, institutions and among consumers in partner counties.

| Indicators: | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments |
|---------------------------------------|--------------------------|---|--|----------------------|----------|
| | | | Facebooks developed for Cambodia, Thailand and The Field Alliance | | |
| 1.4 The quality of training programs. | No baseline available. | Refined curriculum utilized in target schools, adult/farmer education programme and college. | Total: Curricula refined in four countries with the focuses on gender and poverty issues. | <u> </u> | |
| | No baseline available | At least 25 in-countries meetings/trainings and 4 regional meetings/training/exchange workshops | Total: 34 in-countries meetings/trainings (136 % of target value) and 3 regional collaboration workshops (75 % of target value). | : | |
| | | | Results from 2015: One regional planning workshop and one regional forum and curriculum workshop were organized in Thailand. | | |

Immediate objective 2

Enhanced international, national, and local advocacy on sustainable pest management/agriculture

In terms of enhanced international, national, and local advocacy Thai Education Foundation is now an official member of the committee of CSOs to develop national chemical management strategic plans. TFA's partner in Vietnam, ICERD, utilizes periodic meetings with policy makers from Ministry of Education and Health to solicit policy supports for creating awareness on pesticides and agrobiodiversity.

At the international level, PAN AP has been working to create strong awareness and actions on HHPs and to advance agroecological solutions. This was successful with the collaboration with many actors including other international networks such as IPEN and IUF. PAN AP contributed with documentation on the impact of pesticides and successful cases of agroecological solutions implemented by thousands of farmers as way to replace highly hazardous pesticides. And importantly, because of this project PAN AP and FAO were able to link up and finally work together in getting a resolution on HHPs in ICCM4. In the meeting of Conference on Parties of Rotterdam, Basel and

Stockholm Convention, the industry represented by Crop life and Syngenta have been working hard to ensure that paraquat is not listed in the Rotterdam Convention, sometimes going as far as to put pressure on governments to not to support its listing. This backfired when two countries spoke very firmly about such practice and went on record that such practice should not be allowed in such international meetings. As a result PAN AP is focusing on work on paraquat in the Mekong countries and other Asian countries, whose governments objected to the listing of paraquat in the Rotterdam Convention. The Joint Meeting on Pesticide Management is another mechanism that provides the opportunity to present documentation of the problems of pesticides and the agroecological solutions to countries around the world. PAN AP has been represented in this meeting last year to present the successful implementation of agroecology in the region including the documentation in this project.

Major achievements during 2015

- PAN AP collaborated with FAO and contributed to the resolution on phase out of HHPs at the ICCM 4 meeting.
- TFA has produced/contributed to a number of publications designed to attract international attention on issues relating to management and reduced use of chemicals in agriculture.

| Immediate objective 2 (short-ter | Immediate objective 2 (short-term outcome) | | | | | | | | |
|---|---|--|--|----------------------|----------|--|--|--|--|
| Enhanced international, national, and local advocacy on sustainable pest management/agriculture | | | | | | | | | |
| Indicators: | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments | | | | |
| 2.1 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 2 regional exchanges 5 national campaigns on highly hazardous pesticides | Total: 4 additional workshops /national seminars 2 regional exchanges 7 national campaigns on highly hazardous pesticides Results from 2015: 3 provincial level workshops organised with participation including government officials in Laos. One regional exchange has been held in Cambodia on BEA practices with 19 participants. National seminars on HHPs have been held in China, Philippines, Laos and Vietnam. | © | | | | | |
| | 2 Provincial and 1 National | Approximately 5 additional national forum/campaigns | Total: 3 additional national forum/campaigns held in the region | (i) | | | | | |

Immediate objective 2 (short-term outcome) Enhanced international, national, and local advocacy on sustainable pest management/agriculture Indicators: Target (2018) Results up to 2015 Baseline Assessment Comments of status forum held in held in the region the region Results from 2015: Campaigns were organized on 5th June for World Environmental Day, International Children's Day (November 20) and No pesticide use week (Dec 3 to Dec 10) and were held in 5 countries (Vietnam, Laos, Cambodia, Philippines, and China). 21 Campaigns/ exhibitions organized by schools and 19 Field days organized with 1750 participants (1107 female) participated. One national policy workshop and on-going consultation meetings with policy levels in 5 countries. 2.2 Examples of cases when Report adherence of the on 4 communes Total: \odot with about 30 the FAO Code of Conduct documentation of pesticide Documentation of pesticide problems in 17 communities (42,5 of target value). poisonings and other incidents communities completed and published and have been utilized for advocacy at participated and 2000 copies distributed and Around 2200 copies of Report adherence of the on the FAO Code of Conduct downloaded/distributed all levels. 1000 copies of downloaded and Asian Regional documentation of pesticide (110 % of target value). problems in 40 communities report on available Results from 2015: documentation More than 3 communes have already undertaken of pesticide problems the documentation of pesticide poisonings and other incidents in Vietnam, China and Cambodia. distributed Approximately 1,326 downloads of the Asian Regional Report from the PAN AP website On-going CPAM efforts have resulted in the

Immediate objective 2 (short-term outcome) Enhanced international, national, and local advocacy on sustainable pest management/agriculture Indicators: Target (2018) Baseline Results up to 2015 Assessment Comments of status Philippines in the creation of citizens' movement to ban Aerial spraying in Mindanao, Philippines. Community pesticides Community Total: Pesticide impact assessment data used in 34 \odot pesticides additional communities and 3 times at national level. impacts assessment data utilized in approximately 50 impacts additional communities and at Results from 2015: assessment data used in 20 least 5 times at the national The pesticides data collected were presented and communities level the national workshops 3 times and resulted in REAL project was proposed to be one of the national flagship project under the national chemical management plan in Thailand. The data was also presented at various regional workshop and meetings. 2.3 The degree of participation of No baseline Participation in meetings of Total: Participation in all relevant meetings \odot CSOs in formulating policy making available Stockholm, Rotterdam connected to the Stockholm and Rotterdam and legislative measures at all Conventions, SAICM, FAO, etc. conventions, SAICM and FAO JMPM. levels (including 2 interventions on Around 18 interventions on pesticide issues. pesticide issues). Results from 2015: PAN AP participated in all relevant meetings connected to the Stockholm and Rotterdam conventions, SAICM and FAO JMPM. Thai Education Foundation is one of the committee from CSOs to develop national chemical management strategic plans. ICERD utilize periodic meetings with policy makers from Ministry of Education and Health to solicit

| Immediate objective 2 (short-term outcome) | | | | | | | | | |
|---|----------|---------------|--|------------|----------|--|--|--|--|
| Enhanced international, national, and local advocacy on sustainable pest management/agriculture | | | | | | | | | |
| Indicators: | Baseline | Target (2018) | Results up to 2015 | Assessment | Comments | | | | |
| | | | | of status | | | | | |
| | | | policy supports for creating awareness on pesticides | | | | | | |
| | | | and agrobiodiversity. | | | | | | |

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.

Managed by the FAO Regional Office for Asia and Pacific, the IPM component continued its support for strengthening the capacity for innovation and scaling up of training for IPM and pesticide risk reduction in 4 Programme member countries (Cambodia, China, Lao PDR and Vietnam). Planning and strategy development with key government counterparts in Myanmar started up in 2015. The IPM component also helped develop and deliver FAO's flagship Regional Rice Initiative in the 3 pilot countries of Indonesia, Lao PDR and Philippines. This Initiative is focused on assisting countries develop policies and promote good practices for the *sustainable* intensification of rice production through Save and Grow-based Farmers Field School training interventions.

Good implementation progress was made under this objective during 2015. All member countries continued to strengthen and innovate their national IPM/pesticide risk reduction programmes with no major implementation challenges experienced.

Major achievements during 2015

- Some 5,859 (43 % female) additional farmers in the Mekong region, participated in 'fortified' Farmers Field Schools or focused 3-day Pesticide Risk Reduction trainings addition to a total of 76,343 farmers trained during the life time of the project.
- Member country governments, most notably in Cambodia, China, Lao PDR and Vietnam, have continued to invest in up-scaling of FAO-piloted IPM and PRR training for farmers.
- Development of a draft Farmers Field School guidance document intended to support the design, implementation and management of Farmers Field School programmes in various FAO quarters and associated development partners/finance institutions.
- The Thailand Ministry of Agriculture and Cooperatives received a major FAO award (Saoumi Award 2014-15) for its pioneering biological control and technical assistance provided at regional level for spread prevention and management of the cassava pink mealybug in the Greater Mekong Subregion. The IPM component of

FAO contributed to the successful implementation of FAO Technical Cooperation Project, which supported the regional exchange of experience and facilitated access to parasitoids for biological control of this invasive cassava pest.

Immediate objective 3 (short-term outcome)

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.

| Indicators | Baseline | Target (2018) | Results up to 2015 | Assessment | Comments |
|---------------------------------|------------------|----------------------------|--|------------|------------------------------|
| | | | | of status | |
| 3.1 IPM/Pesticide risk | Quality training | Quality training materials | Total: 4 countries | \odot | The FFS Guidance |
| reduction training materials of | materials | and national FFS standards | | | document will be released |
| international standards | developed in 4 | developed in 6 partner | Results from 2015: | | by FAO during early 2016. |
| adapted to local needs | and national FFS | countries | Curriculum development and design of structured learning | | |
| produced | standards in 2 | | exercises for IPM in new crops and for new invasive pest | | The pesticide risk reduction |
| | partner | | species continued in all four countries - Cambodia, China | | field training guide and |
| | countries | | PR, Laos and Vietnam. | | farmer workbook will |
| | | | | | discussed with trainers |
| | | | In Lao PDR, the pesticide risk reduction training manual and | | during a workshop to be |
| | | | farmers workbook was revised and pilot tested in farmer | | held in early 2016. Further |
| | | | training on pesticide risk reduction in northern Lao | | revisions to be considered |
| | | | provinces. | | based on workshop |
| | | | In Vietnam, leaflets and posters were printed and | | conclusions. |
| | | | distributed to disseminate information on pesticide risks | | |
| | | | and guidelines for mass production and application of the | | |
| | | | biological control agent Metarhizium anisopliae and | | |
| | | | practices under the System of Rice Intensification that | | |
| | | | promotes sustainable intensification of rice production. | | |
| | | | Participatory monitoring and evaluation system for IPM FFS | | |
| | | | programme, with a focus on monitoring implementation of | | |
| | | | pesticide risk reduction learning activities, have been set up | | |
| | | | in all four GMS countries. Efforts to strengthen these | | |
| | | | systems on-going. | | |
| | | | , , , , | | |
| | | | The FAO-IPM component facilitated the organization of the | | |
| | | | workshop on the FFS Guidance Document in May 2015. | | |

| Indicators | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments |
|---|---|---|---|----------------------|--|
| | | | The aim of the document is to guide FFS implementation actors globally in most relevant aspects of program development and set-up, to ensure good quality and sustainability of FFS approach and programmes, including those on IPM and pesticide risk reduction | | |
| 3.2 Number of (and gender-disaggregated data) 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 | Total increase: Trainers: 519 % (1,556 additional) Farmers: 74 % (32,343 additional) Results from 2015: Capacity to conduct IPM and PRR farmer training through organization of Training of Trainers and Refresher TOT courses expanded in all 4 GMS countries. A total of about 119 (23% female) IPM Trainers from Government and Farmer Trainers are actively involved in the conduct of IPM-PRR farmer training. Some 5,859 (43 % female) additional farmers in the Mekong region, participated in 'fortified' Farmers Field Schools or focused 3-day Pesticide Risk Reduction trainings | © | The % increase of trainers does not include the subsidence resulting from promotion, transfer to other jobs, retirement, etc. that would be at the rate of 40% per year. |
| 3.3 Level of institutional knowledge on IPM. 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 | Annual Regional Meeting held for Programme Evaluation and Planning | 5 Annual Regional Meetings held for Programme Evaluation and Planning & IPM technical subject matters | Total: 3 regional meetings (60 % of target value). Results from 2015: The project supported the participation of key counterparts from GMS countries including Cambodia, China, Laos, Myanmar, Thailand and Viet Nam in the 29 th Session of the Asia Pacific Plant Protection Commission (APPPC) held in Bali, Indonesia from 6-12 September 2015 | © | |

| Indicators | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments |
|--|---|---|--|----------------------|--|
| more relevant, innovative and effective training programmes with a focus on pesticide risk reduction | | | The APPPC/FAO Workshop on IPM Case Studies for Sustainable Crop Production Intensification, jointly organized by the Government of P.R. China and the APPPC Standing Committee on IPM was held in Beijing, China from 19-22 May 2015. A total of 40 participants from 13 countries in Asia attended representing agriculture ministries and related institutions involved in the implementation of IPM programmes in their countries. | | |
| | Number of website hits: 71 782 hits to date on FAO Asia IPM website: www.vegetablei pmasia.org | Approximately 150 000 hits on FAO Asia IPM website: www.vegetableipmasia.or g | Total: The regional IPM programme website is regularly updated and used widely and frequently, with some 111,620 hits (74 % of target value) as of December 2015. | © | |
| 3.4 The degree of institutionalization of IPM in the partner countries | Preliminary state of institutionalizati on 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 | Total: Advanced state of institutionalization and buy-in in 2 partner countries. Both China and Vietnam have institutionalized IPM policies and capacity building programmes, financed by national and local governments. Preliminary stage of institutionalization in 1 country. In Lao PDR, the government is allocating IFAD funds for upscaling of pesticide risk reduction farmer training in 9 districts in 2 northern Lao provinces within context of the Soum Son Seun Jai rural development project. Results from 2015: On 2 June 2015, the Government of Vietnam issued | © | The Vietnam and Cambodia Longer-Term Impact Assessment reports will be completed in the 1st quarter of 2016. Consolidated results from the studies will provide evidence for continued investments and for broadening government (local and national) policy support for IPM/pesticide risk reduction. |

| Indicators | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments |
|---|--|---|---|----------------------|----------|
| | | | Directive 2027/QD-BNN-BVTV on strengthening and scaling up of Integrated Pest Management (IPM) in crop production (2015-2020). The Directive enjoins local governments to invest in training of farmers on IPM in Farmer Field Schools. The report on the longer-term impact assessment in Vietnam was completed in October 2015. The data collection for the longer-term impact assessment in Cambodia was delayed due to the prolonged drought. | | |
| | Government investments in IPM-FFS programme 15 Million US\$ on annual basis | Approximately 100 % increase of government annual investments in IPM-FFS | Total: Approximately 26 % increase (approximate total of 19,000,000 USD) Results from 2015: Most notably the governments of Vietnam and China continue to make considerable investment of own budgets into support for IPM-FFS and Pesticide Risk Reduction training. In Vietnam, for example, while the project provided only about 20,000 USD for field activities for the period 2015, local governments in 8 provinces have continued financial support of about 82,000 USD for farmer training in FFS. The same trend continued into 2015 and is reported for other provinces as well all over the country. The Laos Government has invested approximately 1 Million US\$ in IFAD grant. | | |
| 3.5 The level of use of IPM and biological control options by farming communities | Approximately 44 000 IPM farmers trained to date have reduced pesticide use | Approximately 90 000 IPM farmers trained to date have reduced pesticide use (50 %) and 90 % of trained farmers have made increased use of | Total of 76,343 farmers (85 % of target value). 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 provided under the project. | © | |

| Indicators | Baseline | Target (2018) | Results up to 2015 | Assessment of status | Comments |
|------------|-------------------|--------------------------|--|----------------------|----------|
| | (50 %) and 90 % | biological control | Results from 2015: | | |
| | of trained | | Some 5,859 (43 % female) additional farmers participated | | |
| | farmers have | | in 'fortified' Farmers Field Schools or focused 3-day | | |
| | made increased | | Pesticide Risk Reduction trainings. | | |
| | use of biological | | | | |
| | control | | Various initiatives ongoing, linking to private sector action, | | |
| | | | including for access to novel biological control products | | |
| | | | (e.g. Metarhizium anisopliae for Brown Plant Hoppers, lures | | |
| | | | and protein baits for Bactrocera IPM, Trichoderma for soil- | | |
| | | | borne diseases) and for linking farmers to more rewarding | | |
| | | | value chains/markets (e.g. export oriented chili production | | |
| | | | in Cambodia). | | |
| | 40 % of trained | Approximately 90 % of | Approximately 75 % of trained farmers have stopped use of | \odot | |
| | farmers have | trained farmers have | WHO Class I pesticides | | |
| | stopped use of | stopped use of WHO Class | | | |
| | WHO Class I | I pesticides. | | | |
| | pesticides | | | | |
| | | Revised target value in | | | |
| | | 2015; previously 70 %. | | | |

Immediate objective 4

Strengthened regulatory framework for the control of pesticides in selected partner countries

The programme focuses on strengthening pesticide legislation and capacity building for its enforcement. Since the start of the project, pesticide legislation has been revised in Cambodia, Lao PDR and Vietnam. The Programme makes use of rolling work plans that are adjusted each year to the new situation. This enables a step-by-step approach that directly addresses newly arisen impediments, and also captures newly arising opportunities.

An example is the inspection work in Lao PDR. After establishment of a national inspection scheme and three rounds of nation-wide inspections it was found that the legal mandate for inspectors to punish pesticide retailers who continue to violate the pesticide legislation was not sufficiently clear and led to non-action. During 2015, a process was implemented to patch-up this problem. This involved a national legal consultant and a national technical consultant who worked under guidance and supervision of FAO\HQ and Keml, and national consultative meetings among relevant government departments. The result is an agreement on a new enforcement mechanism that is laid down in a new manual. The discussion also led to a conclusion by the Government that it is time to upgrade the National Pesticide Regulation (under the Ministry of Agriculture and Forestry) into a Prime Minister Decree, which would enhance inter-ministerial cooperation.

Major achievements during 2015

- Legislative impediments hampering effective enforcement of the pesticide regulation in Lao PDR have been resolved and new manuals for inspection and punishment in case of violations have been developed.
- New Guidelines on labelling of pesticides have been issued in Lao PDR.
- Cambodia submitted import responses for the 33 pesticides and severely hazardous pesticide formulations listed in Annex III to the Rotterdam Convention.
- Regional training in use of the FAO Pesticide Registration Toolkit has been provided and is expected to help elevate risk assessment during registration.

| Programme objective 4 (med-term objective) | | | | | | | | | |
|--|-------------|------------------|---|-----------|--|--|--|--|--|
| Strengthened regulatory framework for the control of pesticides in selected partner countries. | | | | | | | | | |
| Indicators Baseline Target (2018) Results up to 2015 Assessment | | | | | | | | | |
| | | | | of status | | | | | |
| 4.1 The number of legislative | 2 countries | 4 countries have | Total: 3 countries (Cambodia, Lao PDR and Vietnam) have a new | \odot | | | | | |
| instruments that have been | adopted new | new primary | primary legal instrument. | | | | | | |
| updated or newly introduced. | | | | | | | | | |
| | instruments | | Results from 2015: | | | | | | |

Programme objective 4 (med-term objective) Strengthened regulatory framework for the control of pesticides in selected partner countries. **Indicators** Baseline Target (2018) Results up to 2015 Assessment of status Work has started to upgrade the primary instrument for the control of pesticides of LAO PDR from a Regulation to a Prime Minister Decree. Lao PDR also issued new regulations on pesticide labelling. Assistance was given to Vietnam in harmonizing training materials for farmers related to pest and pesticide management and related legal requirements. 4.2 The number of inspectors Pilot completed Inspection Total: Inspection schemes established and scaled up in 1 country, The fixing of legal gaps trained and the number of and initial scaling schemes Lao PDR and piloted in two Provinces in Cambodia. related to inspection in Lao established and has been a slow process, inspections conducted with up in Lao PDR formulated scaled up in 3 Results from 2015: but at the same time a recommendations (made countries In Lao, the mandate of inspectors has been clarified and hurdles that useful learning process for prevented enforcement have been resolved. New manuals have public/presented to decision the government. It has makers). been developed for inspectors and for special enforcement teams to meant, however, that enable punishment of pesticide retailers who continue to violate the inspections have been regulation. Piloting of the new enforcement mechanism will start in interrupted for a 2016. considerable period. On the positive side, it led to a In Cambodia, DAL has issued new regulations for inspection, but is decision to further improve still working on guidelines, forms and other documents needed to the pesticide legislation. implement the new regulations. Training of inspectors will resume when these documents are available. In Cambodia, changes in DAL leadership have Myanmar expressed interest in project assistance to strengthen further delayed the inspection of pesticide retailers, but work has not yet started due to finalising of documents delays caused by the political transition process that is taking place. needed to continue the inspections. 4.3 Percentage of pesticide No baseline Main distributors With project assistance, Lao developed and issued new Regulations \odot labels in local language available in two countries on pesticide labelling and an associated information booklet for have labels in pesticide importers and distributors.

Cambodia reported that based on ground work done during Phase I

local language on

| Programme objective 4 (med-term objective) | | | | | | | | | |
|--|---|----------------|---|-----------|--|--|--|--|--|
| Strengthened regulatory framework for the control of pesticides in selected partner countries. | | | | | | | | | |
| Indicators | Indicators Baseline Target (2018) Results up to 2015 Assessment | | | | | | | | |
| | | | | of status | | | | | |
| | | their products | the percentage of pesticides with Khmer labels has started to | | | | | | |
| | | | increase steadily. | | | | | | |

Immediate objective 5

Strengthened chemicals management capacity within authorities, industries and among relevant CSOs in the partner countries

Since the interest and participation in programme activities remains very high and participants are satisfied with topics etc., Keml sees no need for major changes of the structure and design of activities. Steps to address the big differences in capacity for chemicals management in the participating countries was made during 2015. The interest in capacity building within the area of chemicals management was explored at meetings between Keml and representatives from key ministries in Lao PDR and Cambodia, respectively. Both countries expressed that a general raise of knowledge would be very beneficial for the countries and Keml is in the process of developing a suitable programme and timing for the training during 2016. Due to the elections in Myanmar in 2015, similar meeting with counterparts in Myanmar was postponed and will be explored as soon as the situation allows it. It has become clear that availability of information from various programme activities (presentations, reports etc.) is limited since there is no common site where the information can be found and participants at different meetings/trainings do not share information with other concerned staff. As a first step to resolve this issue, Keml has started discussion with the communication secretariat in order to make more information available at the Keml website.

Major achievements during 2015

- Regional collaboration and experiences from Thailand, Vietnam and Cambodia supported Lao PDR in its drafting of the country's first chemicals law.
- Thailand became formal member of the regional collaboration and contributed with valuable experiences from their on-going reform of the country's system for chemicals management. Thailand further emphasized their engagement in the collaboration by agreeing to host the 10th regional chemicals management forum.
- An informal contact to the ASEAN secretariat and the working group for chemicals and waste (AWGCW) was established and Keml provided input to the terms of reference for the group, based on experiences from the regional collaboration supported by Sweden.

| Programme objective 5 (med-term objective) | | | | | | | | | |
|--|------------------------------|---|--|-----------|--|--|--|--|--|
| Strengthened chemicals management capacity within authorities, industries and among relevant CSOs in the partner countries | | | | | | | | | |
| Indicators Baseline Target (2018) Results up to 2015 Assessment Comments | | | | | | | | | |
| | | | | of status | | | | | |
| 5.1 Number of staff participating in programme activities on chemicals management | Approximately 165 persons | Approximately 80 % increase in the number of participants | Total increase of 71 % in the number of participants (118 participants). | \odot | | | | | |
| | | | Result from 2015: 33 new participants (41 % women) took part in Forum 9. | | | | | | |

| 5.2 Share of participants (men/women) who states that the activities have been useful or very useful to their work. | No baseline available | A majority of the participants consider the programme activities to be very useful in their work on chemicals management. | Total: Evaluation of Forum 7, 8 and 9 show that more than 90 % of the participants find the topics relevant or highly relevant. More than 85 % find the knowledge and network useful or very useful (mean score from 3 evaluations is 4.3 of 5). Result from 2015: Evaluation of Forum 9 showed that more than 85 % of the participants find the topics relevant or highly relevant and the knowledge and network useful or very useful. | |
|---|--------------------------|---|--|--|
| 5.3 Number 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 measures taken at different institutions in partner countries | Total number of examples: 22 Results from 2015: All member countries show great interest in participation in programme activities. Vietnam hosted the 9th Regional chemicals Management Forum. Submission of the first draft chemicals law in Lao PDR to the National Legislative Assembly for endorsement. Use of the regional network during the development of the chemicals law in Laos (close discussion with Vietnam and Thailand, including study visits) After numerous discussions with Vietnam they changed their position on listing of asbestos | |

| | chrysotile under the Rotterdam |
|--|--|
| | · · · · · · · · · · · · · · · · · · · |
| | convention and at CoP7 they did |
| | no longer oppose to listing of the |
| | substance. |
| | Thailand is preparing for |
| | ratification of the Minamata |
| | convention on global phase out of |
| | mercury. |
| | Thailand initiated "Thailand |
| | existing chemicals inventory". |
| | Covering all chemicals use in the |
| | country. |
| | Development of secondary |
| | legislation on chemicals |
| | management in Myanmar |
| | Cambodia and Lao PDR expressed |
| | · · · · · · · · · · · · · · · · · · · |
| | an interest in training in chemicals |
| | management for government staff |
| | Thailand agreed to host the 10 th |
| | regional chemicals management |
| | forum. |
| | Cambodia developed a national |
| | action plan for implementation of |
| | the Rotterdam convention. |

6 Organisation and administration

Collaboration with other projects and organisations

From 24th to 26th November 2015, over 150 participants representing governments, civil society, academia and private sector gathered in Bangkok for the regional meeting on Agroecology in Asia and the Pacific organized by FAO. The meeting and its recommendations were important milestones to advance agroecology – practice, science and the movement in Asia. The collaboration between FAO IPM programme and PAN AP was initiated by FAO IPM programme which organised a side-event to bring actual practices and programmes on the ground on agroecology and brought participants from governments into the meeting which contributed to the strong recommendations of the meeting.

In addition, PAN AP has been active in the Treaty Alliance group that was set up to respond to the UN Human Rights Council's resolution on setting up a Working Group to elaborate on a legally binding instrument on Trans National Cooperations and other businesses. The treaty alliance is an informal network of CSOs, academicians and others working towards a strong Treaty on TNCs.

Representatives from PAN AP and KemI participated in the annual meeting of the Regional Enforcement Network (REN) organized by UNEP. PAN AP gave a presentation on survey of illegal pesticide trade in Asia and KemI introduced the Forum on Regional Chemicals Management to the participants.

PAN AP attended a workshop was organized by United Nations Research Institute on Crime and Justice (UNICRI) entitled "Supply chain security and controlling the trade in illegal, counterfeit and substandard pesticides" that was held on 1-2 October 2015 at the United Nations campus in Turin, Italy. PAN AP's presentation highlighted the illegal pesticide survey done in Laos and Cambodia as well as the importance of regional cooperation in controlling illegal pesticides, as many of the pesticides could be highly hazardous to farmers, consumers and the environment

Throughout the project there has been strong interaction between the project and FAO's international normative work on pesticide management. Field experiences from the project have directly fed into FAO HQ processes to develop technical guidelines in support of the International Code of Conduct on Pesticide Management and the FAO-led work on Highly Hazardous Pesticides in the context of SAICM and ICCM4. Likewise, the project countries are among the first to benefit from new international initiatives, guidelines or tools aimed at strengthening regulatory control, such as the new FAO pesticide Registration Toolkit.

The fact that Keml's programme manager in Bangkok shares office with the Stockholm Environment Institute (SEI) has led to contacts with interesting actors through informal seminars and meetings at SEI. Since SEI work in areas closely connected/linked to work within the regional programme (eg. climate change adaptation initiatives) the deputy director of the Asia Center was invited to give a presentation on the work of SEI to all partners during their coordination group meeting in May 2015.

FAO has been in dialogue with the Swedish-funded Gender Transformative and Responsible Agribusiness Investments in South East Asia (GRAISEA) Programme implemented by Oxfam. In June

2016, FAO participated in the workshop "Sustainable Rice: Building Regional Learning and Collaboration" organized by GRAISEA. The workshop aimed at sharing learning and a greater understanding of some of the challenges and potential solutions for adopting sustainable rice at scale. Regional sustainable rice production initiatives were mapped and agreement on next steps for collective strategic engagement on SR with public and private sectors were identified.

FAO participated in the 5th Plenary Meeting and General Assembly of the UNEP-IRRI led Sustainable Rice Platform. The Sustainable Rice Platform (SRP) is a multi-stakeholder partnership to promote resource efficiency and sustainability both on-farm and throughout the rice value chain. SRP was co-convened by the United Nations Environmental Programme (UNEP) and the International Rice Research Institute in December 2011, and works in collaboration with partners in the public and private sectors as well as the NGO community. FAO is a dialogue partner of the SRP.

FAO was requested by the Japan National Institute for Agro-Environmental Sciences (NIAES) to deliver a presentation on the Regional Rice Initiative at the 2015 symposium of the Monsoon Asia Agro-Environmental Research Consortium (MARCO). The focus of the work of MARCO is on compatibility of agricultural production and biodiversity conservation in Asian countries.

Internal collaboration/coordination

All programme partners met in May 2015 in order to follow up the annual meeting with Sida/the embassy and plan activities for the rest of the year. Minutes from the meeting are available.

TFA have met with FAO regularly regarding program related issues and has provided technical support to FAO programs in Lao PDR and elsewhere upon request.

Keml's programme coordinator was present in Bangkok also during 2015 and continued to join partners on various activities and meetings in order to get a deeper insight into each partners work and to facilitate deepened cooperation and synergies.

TFA assisted KemI in valuable linkages with governmental agencies in Thailand. This made it possible for KemI to initiate a fruitful dialogue on chemicals management with government agencies in Thailand and learn more about the most recent member country in the regional collaboration on chemicals management.

The 9th Regional Chemicals management Forum, where all partners participated, provided a good platform for establishment of new contacts between partners and government ministries. The Forum meeting are usually attended by participants from a broad range of ministries in the member countries (ministry of health, industry, environment, agriculture etc), which is less common at regional meetings connected to pesticides. TFA received a lot of positive attention for their work on pesticides and school children and established contacts with ministries of health in Thailand's neighbour countries that showed an interest in taking part in the program development.

Bi-annual meetings with Sida/the Embassy

All programme partners and representatives from Sida/the Embassy in Bangkok met in May to discuss progress during 2014 and other important issues. In November, Sida/the Embassy in Bangkok and Keml (representing all programme partners) met to discuss the up-coming mid-term review, the planned review of the programme's LFA, the financial situation (due to the current refugee crisis in Europe), and work plans for 2016. Minutes from these meeting are available.

Other meetings

All partners participated in the Swedish Embassy's annual workshop: "Partners in Rights", 27-28 May 2015 in Bangkok. The workshop focused on how partnerships and innovative relationships between civil society, businesses and government can contribute to more equitable, socially and environmentally sustainable development. This topic was of particular interest to PAN AP as they have a project on corporate accountability, so a better understanding of UN Guideline on human rights and business and the new Treaty on elaborating of a legally binding instrument on TNCs and other business was useful. It was a good step to better understanding of the various multi stakeholders and their motivations.

TFA and partner organizations periodically met with governmental counterparts to review and plan for program development and expansion. TFA also participated in the inauguration meeting of Mekong Extension Learning Alliance (MELA) organized by Helvetas Laos in August 2015 and in the IPM Congress in Davao del Norte in October 2015. During this site visit, TFA representatives also observed teacher trainings and pilot lesson plans for the Organic Agriculture curriculum for schools in Davao del Norte.

In March 2014, there was a seminar by IFOAM Asia on the topic of Organic Agriculture in the Mountain Eco-system in Asia, held in Thimphu, Bhutan. In this seminar, H.E., Mr. Ashey Dorji, Minister of Agriculture and Forests, gave a talk in which he mentioned as follows;

"The Bhutan Government has decided to attain 100% organic in their agriculture, and sent all the remaining pesticides including DDT to Switzerland to be destroyed, but there is still huge amount of herbicide use in Bhutan mainly in the rice cultivation".

In response to this, PAN Japan on behalf of PAN AP visited Bhutan in 2015 with a Japanese organic trainer/farmer to conduct an initial survey of herbicide use in Bhutan with the invitation of the Minister of Agriculture and Forests of Bhutan. Study revealed a high reliance on the herbicide, butachlor in rice fields. PAN Japan along with the Civil Institute of Rice Research in Tochigi Prefecture, have agreed to start an international cooperation with the MOAF of Bhutan to develop organic rice cultivation without any use of herbicides. A proposal on organic methods was also sent to the Ministry. The cooperation also includes future training and capacity building for Bhutanese government officials in organic method of rice cultivation.

Apart from the bi-annual meetings between the Embassy/Sida and programme partners, the programme manager from Keml and the contact person for the programme at the Embassy of Sweden in Bangkok have continued to meet regularly to discuss current issues.

7 Budget follow-up

| Overall budget and follow-up year 2015 Objective | Organisation | Remaining balance from 2014 (local currency) | Budget according to agreement (SEK) | Proposed budget for 2015 (SEK) | Transferred by Keml (SEK) | Received by partners (in local currency) | Exchange rate | Total budget, incl remaining balance from previos year (local currency) | Expenditure 2015 (local currency) | Expenditure 2015 (SEK) | Percentage of total expenditure | Balance (local currency) | Balance (SEK) | Comments |
|--|--------------------------------------|---|--|--------------------------------------|------------------------------|---|------------------|---|---|---------------------------|---------------------------------------|--------------------------------|------------------|--|
| Increased awareness and enhanced capacity in farming communities, schools, institutions and | PAN AP | | 2 012 500 | 2 012 500 | | | | | 959 219 MYR | 2 071 779 | 72 | | | |
| among consumers within partner countries to reduce the risk associated with pesticide use and | TFA | | 1 925 000 | 1 683 794 | | | | | 10 616 471 THB | 2 589 443 | 89 | | | |
| 2 Enhanced international, national and local advocacy | PAN AP | | 787 500 | 787 500 | | | | | 377 907 MYR | 816 227 | 28 | | | |
| on sustainable pest management/agriculture | TFA | | 175 000 | 442 253 | | | | | 1 317 943 THB | 321 457 | 11 | | | |
| | Total PAN AP | 40 061 MYR | 2 800 000 | 2 800 000 | 2 800 000 | 1 296 380 MYR | 2,160 | 1 336 441 MYR | 1 337 126 MYR | 2 888 006 | | -685 MYR | -1 480 | |
| Transfer by PAN AP to partner organisation | Work related to objective | 1 | | 1 171 114 | | | | | 430 856 MYR | 930 589 | | | | |
| | Work related to objective | | | 107 933 | | | | | | 0 | | | | |
| | | 5 570 104 THB | 2 100 000 | 2 126 047 | 2 100 000 | 8 609 800 THB | 0,244 | 14 179 904 THB | 11 934 414 THB | 2 910 900 | | 2 245 490 THB | 547 693 | |
| Transfer by TFA to partner organisation | Work related to objective | | | 1 171 114 107 933 | | | | | 5 146 108 THB | 1 255 178 | | | | |
| Strengthened capacity to innovate and scale-up Integrated Pest Management (IPM) and pesticide risk reduction training for sustainable intensification of crop production in partner | Work related to objective FAO RAP | 2 | 7 385 000 | 7 385 000 | | | | | 573 918 THB 836 961 USD | 139 983 6 916 520 | 86 | | | Spending Myanmar delayed until 2016 |
| 4 Strengthened regulatory framework for the control of pesticides in selected partner countries. | FAO HQ | | 1 750 000 | 2 632 000 | | | | | 137 632 USD | 1 137 370 | 14 | | | Spending expected to pick up in 2016 |
| | Total FAO | 192 061 USD | 9 135 000 | 10 017 000 | 9 135 000 | 1 105 417 USD | 8,264 | 1 297 478 USD | 974 593 USD | 8 053 890 | | 322 885 USD | 2 668 273 | |
| 4 Strengthened regulatory framework for the control of pesticides in selected partner countries. | Keml | | 700 000 | 770 000 | | | | | | 354 829 | 10 | | | |
| 5 Strengthened capacity for chemicals management within authorities, industries and among relevant CSOs in the partner countries. | | | 2 716 000 | 2 681 000 | | | | | | 2 038 358 | 60 | | | |
| General technical support to the programme | | | 1 330 000 | 1 295 000 | | | | | | 0 | 0 | | | See detailed explanation below. |
| Overall programme coordination (including review, evaluation, reporting and communication) | | | 840 000 | 840 000 | | | | | | 995 663 | 29 | | | |
| | Total Kemi | | 5 586 000 | 5 586 000 | | | | 5 586 000 | | 3 388 850 | | | 2 197 150 | |
| | TOTAL | | 19 621 000 | 20 529 047 | 14 035 000 | | | 22 399 823 | | 17 241 646 | | | 3 214 487 | See explanation |

Comments to the overall budget follow up:

TFA: The increased expenditure for objective 1 is due to the following reasons:

- More budget requested by partners
- More participants attended the regional forum and curriculum workshop.
- Additional regional training workshop on blood test protocal was requested by the Ministry of Health of Thailand for the regional studies on pesticides impacts to
- health.

FAO: FAO spent about 75 % of the available funds for 2015. This is due to a number of factors that include:

- Delays in spending under the policy component due to uncertain situations in Cambodia (reorganisation of the main counter-part institution) and Myanmar (polictical changes). Activities under the Policy Component are picking-up in 2016 and are envisaged to use the balance of 2015 in addition to the 2016 and 2017 budget
- Delays in initiating the IPM work in Myanmar due to the changing political situation. This work will start in 2016 and is anticipated to contribute to use of the 2015 balance in addition to the 2016 budget
- Overall redistribution of funds over the remaining project period to accommodate changes in exchange rate.

KemI: When the budget was developed in 2013, KemI included a budget for general technical support. This budget was intended to cover costs for external consultants and possible additional costs connected to stationing of personnel in the region. In 2015, no external consultants were hired and to better reflect the costs connected to implementation of objective 4 and 5 and programme coordination, all costs have been divided between these items (in accordance with KemI's internal reporting system).

Remaining balance: Since Keml invoices Sida for actual costs, the remaining balance is not available to the programme unless Keml sends a specific request to Sida to transfer funds from one year to the next. Remaining funds from Keml is therefore not included in the total balance.

| Detailed budget and follow up year 2015 Organisation | Type of cost | Proposed budget for 2015 (SEK) | Percentage of total budget | Expenditure 2015 (local currecy) | Expenditure 2015 (SEK) | Percentage of total expenditure | Comments |
|--|------------------|--------------------------------------|----------------------------|-------------------------------------|---------------------------|---------------------------------|--|
| Pesticide Action Network Asia Pacific (PAN AP) | Salaries | 436 100 | 16 | 300 116 MYR | 648 208 | 22 | |
| | Travel expenses | 366 800 | 13 | 105 725 MYR | 228 352 | 8 | |
| | Other costs | 1 997 100 | 71 | 931 285 MYR | 2 011 446 | 70 | |
| Total PAN AP | | 2 800 000 | | 1 337 126 MYR | 2 888 006 | | |
| The Field Alliance (TFA) | Salaries | 831 422 | 39 | 1 985 141 THB | 484 192 | 17 | See detailed explanation below. |
| | Travel expenses | 109 523 | 5 | 66 217 THB | 16 151 | 1 | |
| | Other costs | 1 185 100 | 56 | 9 883 056 THB | 2 410 557 | 83 | |
| Total TFA | | 2 126 045 | | 11 934 414 THB | 2 910 900 | | |
| FAO Regional Office Asia Pacific (FAO RAP) | Salaries | 2 016 000 | 27 | 306 982 USD | 2 536 853 | 37 | Staff time 2014 partly charged in 2015 |
| | Travel expenses | 350 000 | 5 | 44 507 USD | 367 799 | 5 | |
| | Other costs | 5 019 000 | 68 | 485 472 USD | 4 011 868 | 58 | Picking up in 2016 |
| Total FAO RAP | | 7 385 000 | | 836 961 USD | 6 916 520 | | |
| FAO Headquarters (FAO HQ) | Salaries | 770 000 | 29 | 104 729 USD | 865 465 | 76 | |
| | Travel expenses | 357 000 | 14 | 12 333 USD | 101 918 | 9 | |
| | Other costs | 1 505 000 | 57 | 20 570 USD | 169 987 | 15 | Limited use of external consultants during 2015. |
| Total FAO HQ | | 2 632 000 | | 137 632 USD | 1 137 370 | | |
| Swedish Chemicals Agency (KemI) | Salaries | 4 305 000 | 77 | | 1 705 279 | 50 | See detailed explanation below |
| | Travel expenses | 714 000 | 13 | | 225 437 | 7 | |
| | Other costs | 567 000 | 10 | | 1 458 134 | 43 | |
| Total Keml | | 5 586 000 | | | 3 388 850 | | |
| Total | Salaries: | 8 358 522 | 41 | | 6 239 997 | 36 | |
| | Travel expenses: | 1 897 323 | 9 | | 939 657 | 5 | |
| | Other costs | 10 273 200 | 50 | | 10 061 992 | 58 | |
| | Total: | 20 529 045 | | | 17 241 646 | | |

Comments to the detailed budget follow-up:

TFA: The differences in budget and expenditures for salaries, travel expenses and other costs is due to an incorrect inclusion of costs for salaries and travel costs for local partners organisations in the budget for 2015. Expenditures for salaries and travelling only include costs within TFA, all expenditures for local partners are included in "other costs".

FAO: During 2015, technical support to programme countries on pesticide management was mainly provided by FAO HQ. External consultants were only used to a limited extent, which explains the small expenditure for "other costs" during 2015.

Keml: During the first half of 2015, one of Keml's programme managers temporarily acted as head of unit. As a consequence, the expenditure for salaries decreased significantly and it also reduced spending's for travels. The reason behind the increased expenditure for "Other costs" is due to a miscalculation of costs connected to Keml staff in Bangkok.

8 Proposals for future work

General

The programme will continue to roll out and expand programme activities in order to reach an increasing number of beneficiaries.

In addition to the continuation of expanding the REAL program into more schools and communities, TFA will initiate regional studies on the "Impacts of Pesticides to School Children and Communities in High-risk Areas." The primary aim of this study to disseminate the results to the public in order to formulate local and national measures and reduce pesticide exposures to schools and communities.

PAN AP and partners will continue to create awareness on the impacts of pesticides and human health. Mobile applications for community based pesticides action monitoring (CPAM) will be piloted and implemented next year. Work on documenting the impact of paraquat and chlorpyrifos on health and the environment will continue and we are exploring the use of a kit to test blood and water for paraquat, which will be piloted in the Philippines. If it works well this method will be introduced in other countries. The Protect the Children from Toxic Pesticides Campaign will continue to create awareness of the impact of pesticides on children's health and intelligence with a exploration of buffer zones as a possible strategic focus in some countries.

Keml's programme manager who is currently stationed in Bangkok will return to Sweden by the end of 2016. Keml will make a thorough assessment of the experiences from the stationing and summarize the conclusions in a short report. The value of having Keml staff in the region was also discussed during the self-assessment that partners made in February 2016. Conclusions from this discussion will also be included in the report. The report will mainly be for internal use at Keml as input to possible future stationing of personnel abroad but it will also be shared with Sida/the embassy. To make the absence less noticeable during the remainder of the programme period Keml will consider new ways of working, such as travelling to the region for longer time periods than usually in order to have time to visit several places/activities, meet with partners and the embassy.

During December 2015-February 2016, Sida's environment helpdesk made a review of the programme's results framework and indicators in order to help partners to improve reporting of progress and risk management measures.

The assignment consisted of the following tasks:

- Improve results reporting on outcome level and qualitative indicators
- Identify appropriate indicators for capacity development on institutional and individual level
- Suggest improvements on gender mainstreaming and gender indicators.
- Suggest improvements on reporting of risk management

Programme partners' overall view of the findings and recommendations from the helpdesk was positive and the recommendations will be implemented during 2016.

Gender issues

In order to further advance the programme's gender responsiveness, partners will finalize a gender case study during 2016. The launch of this case study has been somewhat delayed and only the development of questionnaires etc. was finalized during 2015. All partners are now working intensively with data gathering. The study will document stories of women in the communities on how they have been influenced by trainings, projects or initiatives of pesticide risk reduction and on ecological agriculture. The stories will be about the situation and issues that women face and the differences in the impact of pesticides/chemicals on their health and well-being, both physical and mental, compared to men. It will also include the promotion of equality between women and men, girls and boys in the area of pesticide risk reduction and promotion of ecological agriculture and opportunities for women to participate equally in decision-making. Possible areas for improvement in design of trainings, curricula etc. will also be documented.

Poverty and human rights perspective

Partners will continue and expand the work connected to protection of children. PAN AP is currently working on a campaign focusing on establishment of buffer zones around schools to protect children from exposure from pesticides sprayed in the surrounding fields. PAN AP is also exploring monitoring tools (mobile application) and campaigns on the impacts of pesticides on children using the Child Rights Framework.

Sustainability

PAN AP and TFA's REAL program will work with youth groups to try to get these young people to remain in agriculture or get them to return to farming occupation to fill the gap that is expected to be created by the ageing farmer community.

KemI will continue its dialogues with the ASEAN working group for chemicals and waste. A meeting with the chair of the working group (a representative from the Pollution Control Department in Thailand) will be arranged during 2016 in order to discuss how the programme can best support Thailand and the working group. Based on the information KemI will draft a concept paper on how future collaboration between ASEAN and KemI could be arranged.

In order to secure a stable and sustainable financial situation, PAN AP and partners will continue to search for various methods to fund raise. PAN AP has long-term plans to do individual fund raising and explores online learning platforms on this subject.

PAN AP will further explore online portals and e-databases so that information, publications, reports and documentation could be stored on online so that more people can access them. We are also planning to launch a portal on agroecology that will be linked with field learning sites or agroecological farms, projects or training centres that would provide trainings and sharing of their innovations, ideas and practices.

FAO will continue to advocate for increased government budget allocations in support of farmers training on IPM and Pesticide Risk Reduction through Farmers Field School-based educational approaches.

Anti-corruption

As a follow up to the discussion on corruption during the 9th regional chemicals management forum, where unclear legislation which open up for to different interpretations was identified as a major risk of corruption in the area of chemicals management, Keml will continue to provide guidance on how to develop legislation that avoids these pitfalls.

In order to further strengthen the control of the finances within the programme, KemI has developed new internal guidelines for assessment of audit reports and budget follow ups from partner organisations. Additional support from the KemI's economy unit will be provided to the programme managers. KemI will also be more involved in the choice of auditor.

KemI, TFA and PAN AP will take part in the workshop on fraud and bribery that will be organised by the embassy of Sweden during 2016.

Communication

A lot of information is available from the Forum meetings organised by Keml. Forum reports and presentations are made available to all member countries but a major constraint is that the participants don't share knowledge from the Forums with their colleagues and that different people come to the meetings. As a first step towards broader sharing of this information, Keml will make more documents from the Forums available on their official web site, www.kemi.se.

TFA is now finalizing a collected case-study publication that highlights examples of best practices in sustainable agriculture and agroecology. The primary aim of this publication is to communicate the current progress that has been made towards a toxic-free environment in South-east Asia, allow for cross-country exchange of knowledge and experience, and to attract policy-level and financial support for future expansion. This publication will be available in both print and digital form. This publication was originally produced in English language to ensure the widest accessibility, but selected sections will also be made available in the native language of partner countries.

TFA will maintain active communication through the digital channels of Facebook and the LINE application. Following the 2015 Regional Workshop, slide presentations were also shared for program participants and the general public via SlideShare. TFA is currently in the process of updating their website to include written and visual recorded material from programs, meetings, and workshop proceedings to facilitate increased and improved communication among partners as well as exchange among the international community in support of agroecology.

After consultations with a media consultant, PAN AP is planning to come up with a redesigned website that is mobile friendly and with a more optimized search engine. The site will enhance social engagement, sharing and brand interaction, which can lead to increases in our online advocacy. This will also assist PAN AP in the outreach to a younger and more diverse audience.

Partners are currently discussing ways to spread the gender stories in short versions through social media in order to increase the number of readers.

Results and risk management

Since the annual disbursement of funds during the remainder of the programme period is still uncertain, partners will develop clear strategies for how to handle reduced budgets and include these in next year's work plan.

Private sector collaboration

During 2015, representatives from FAO and Keml made a study visit to a facility for destruction of hazardous pesticides and pesticide containers in southern Vietnam. The system for collection and destruction has been put in place in collaboration by one of the main suppliers of pesticides and the provincial government. Since this model, with costs for collection and destruction taken by industry, is very much in line with international guidelines, the programme will try to support continued operation/establishment of such systems in the member countries.

FAO, PAN AP, TFA and their local partners will continue link IPM farmers' groups to more rewarding value chains, such as local and regional organic markets, export of organic chilli from Cambodia to Thailand etc.

Programme partners have recently assigned TFA as lead organization concerning collaboration with the private sector. During 2016 partners will continue to explore valuable links with the private sector

FAO plans to write short case studies on successful collaboration with the private sector to share with partners and Sida.

KemI will explore possibilities for a joint activity with Open Trade Gate, a part of the Swedish Board of Commerce providing one-stop information for exporters in developing countries who wish to sell their products in Sweden and/or EU.

Annex 1: Risk matrix

| Ri | sks | Initial Estimated Risk Value* | Risk during year 2015 | Risk mitigation measures taken during 2015 | Comments | | | | | | |
|----|---|----------------------------------|--------------------------|--|---|--|--|--|--|--|--|
| Sh | Short-term objective 1 and 2 (implemented by PAN AP and TFA): | | | | | | | | | | |
| 1 | General backlash | Medium-High | Stable | TFA: On-going monitoring and communication. PAN AP: Careful planning, strategizing and continuous dialogue with various stakeholders to create awareness and come to general consensus. PAN AP continues to work with partners closely and provides support for ongoing campaigns to highlight such backlash, put pressure on government bodies to stop such backlash. | PAN AP: Dr Romeo Quijano in the Philippines has been slapped with complaint of unprofessional before the Professional Regulatory Commission (PRC) for the report entitle the "Poisoned Lives" that exposes the extensive pesticide poisoning in LADECO banana plantations. | | | | | | |
| 2 | People turnover, brain drain (internal and external) | Medium | Stable | TFA: On-going capacity building for new staff and counterpart government. PAN AP: Has regular capacity building among staff to increase skills and motivation. Build capacity of new staff in our partner organisations. Identify others who may provide ongoing support for these new staff. Use of organizational media to advertise jobs. | TFA: Selection of new and younger participants in training. PAN AP: Partner, CGFED in Vietnam had a change in their staffing and so we are working with the ex-Executive Director to provide support to the project. | | | | | | |
| 3 | Policy Change | Medium | Raised | TFA: Monitoring of government policies on public and private sectors economic development strategies and impacts to small-scale farmers in the region. PAN AP: Continuous dialogue with stakeholders and have regular strategic plans that are cognizant about such changes. PAN AP is concerned about the new law on CSOs that is being drafted in China and Cambodia. | PAN AP: We are also monitoring the new regional trade agreements such as Transpacific Partnership Agreements and the ASEAN Economic Community to see if there is going to be an impact on the work we are doing and provide information about this to our partners in the region. | | | | | | |

| Risks | | Initial Estimated Risk Value* | Risk during year 2015 | Risk mitigation measures taken during 2015 | Comments |
|-------|--|----------------------------------|--------------------------|---|--|
| | | | | We will work with partners to support their actions if any. | |
| 4 | Funding uncertainties | Medium-High | Stable | TFA: Continued seeking contributions from other sources. PAN AP: Explore new fundraising strategies and use of online platforms for learning and information exchange. | PANAP has been fundraising continuously for our projects. We are also trying to build our base for individual fundraising as of this year. |
| 5 | Aggressive corporate campaigns | Medium | Raised | TFA: Increase in awareness-raising activities on the benefits of ecological agriculture to health and environment and increase role in chemical management efforts. PAN AP: Use of social media and blogs to highlight corporate campaigns. Increased documentations to highlight corporate violations. | |
| Sh | ort-term objective 3 (i | mplemented by FAO | RAP): | | |
| 1 | Brain drain | Medium | Stable | Provision of refresher training and training of new and young government staff so that the pool of available trainers can be tapped by government to implement farmer training. | |
| 2 | Aggressive marketing strategies of pesticide companies | Medium | Stable | Strengthening the curriculum on pesticide risk reduction and providing access to alternatives to chemicals such as biological control | |
| 3 | Limited access to additional donor resources to ensure maximization of implementation capacities | Low | Stable | FAO to continue stressing the importance of IPM and Pesticide Risk Reduction farmer training and investments in policy dialogues with senior government officials. This led for example to IFAD funded investments in up-scaling of the pesticide risk reduction field training work in 2 northern Lao provinces as part of | |

| Risks | | Initial Estimated Risk Value* | Risk during year 2015 | Risk mitigation measures taken during 2015 | Comments | | |
|--|--|----------------------------------|--------------------------|---|---|--|--|
| 4 | Low interest from Ministry of Agriculture in project participation (Myanmar) | Medium | Lower | an MAF implemented rural development project (SSSJ) FAO started up strategy planning for project implementation with the MoAI and the Plant Protection Department in particular. Whereas there are some delays experienced in project implementation due to ongoing political transition at national level, the government remains keen to work with FAO to implement the project with activities scheduled to start in 2016. | The Myanmar government have shown great interest to participate in the regional program. | | |
| 5 | or program stakeholder collaboration (China) | Low | Stable | Continue to engage civil society organizations in dialogue with governments | | | |
| Sh | ort-term objective 4 (ii | mplemented by FAO | HQ and KemI): | | | | |
| 1 | Change of key staff within Ministry | Low | Higher | Be patient and make efforts to brief new staff. Hiring of retired staff back as consultant has ensured continuity in Lao. | Staff changes in Lao, Cambodia and Myanmar affected progress in 2015. Major changes are foreseen for Vietnam in 2016. | | |
| 2 | Countries do not ask FAO assistance for formulation of regulations | Low | Stable | Provide guidelines and other guidance materials and continue to engage in discussion. Offer review of drafts. | In some instances, language barriers have been an inhibiting factor to requesting support. | | |
| 3 | Abuse in inspections | Low | Stable | Address this in manuals for inspectors and in drafting pesticide legislation. | | | |
| 4 | Other external risks beyond the control of the project | Low | Stable | Availability of FAO HQ staff has diminished and this led to an increased role of KemI/Bangkok, which is actually a positive development now that emphasis is shifting from drafting legislation to inspection and enforcement. | | | |
| Short-term objective 5 (implemented by Keml) | | | | | | | |

| Risks | | Initial Estimated Risk Value* | Risk during year 2015 | Risk mitigation measures taken during 2015 | Comments |
|-------|--|----------------------------------|--------------------------|---|---|
| 1 | Brain drain | Low | Stable | Made sure that there are always two persons involved in the programme to reduce vulnerability | |
| 2 | Lack of resources within partner countries (time and funds) | Medium | Stable | Continue to arrange activities that respond to the countries' needs and interest | The interest in participation in activities organised within the programme remains very high. |
| 3 | Lack of political will | Low | Stable | Continued dialogue with relevant ministries. Increased efforts to raise the importance of chemicals management within ASEAN | The elections and change of government structure in Myanmar might affect priorities. |
| 4 | Conflicts between or within partner countries | Low | Stable | Continuous monitoring of the political situation and preparedness to adjust to changing situations. Presence of Keml in the region facilitates this kind of scanning. | |
| 5 | Suboptimal donor coordination. | Low | Stable | Networking and dialogue with other actors working in the same area in order to avoid duplication of work and promote synergies. | |
| 6 | Difficult to identify and reach relevant and committed stakeholders | Low | Stable | Continuous dialogue with identified key stakeholders and preparedness to meet new stakeholders, if found relevant. | The elections and change of government structure in Myanmar might affect the present system and responsibilities for chemicals control. |

^{*}Risk value 1-8: Low. Risk value 9-17: Medium, Risk value 18-25: High

Annex 2: Detailed narrative reports

Programme objective

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

With knowledge from the field in South-East Asia the programme could contribute with valuable information to the Fourth International Conference on Chemicals Management, ICCM 4, in Geneva in October 2015 and the adoption of a resolution on the phasing out of the highly hazardous pesticides (HHPs). These pesticides are still widely used in South-East Asia and continue to cause serious risks to human health and the environment. PAN released the book Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology during ICCM4 The book features examples of successful large-scale farming done using ecological principles, and describes the benefits to farmers in terms of increased yields and profits, and improved health and food security, and climate change adaption which was widely distributed to various government officials.

The number of farmers in the region that are implementing pesticide management according to IPM continue to grow due to efforts by FAO, TFA, PAN AP and their local partners. Member country governments, most notably in Cambodia, China, Lao PDR and Vietnam, have continued to invest in up-scaling of FAO-piloted IPM and PRR training for farmers. In 2015, government annual investments in IPM-FFS were about 19,000,000 USD. Continued work on domestication of various plants, animals and insects bring additional income to poor farmers.

Pesticide regulatory authorities in the member countries were strengthened in the pesticide registration process, notably the risk assessment part, through a regional workshop on use of the recently developed FAO pesticide registration toolkit. Participating regulators found the workshop and toolkit very useful as it helped them to see what actually can be done to strengthen risk assessment without significant additional means.

The programme has supported the development of new manuals for pesticide inspector and for special enforcement teams to enable punishment of pesticide retailers who continue to violate the regulation. Piloting of the new enforcement mechanism will start in 2016, which will then be followed by nation-wide training of provincial inspectors.

The FAO-IPM component worked with the Asia and Pacific Plant Protection Commission and the Chinese Government to organize a Regional Workshop on IPM case studies for sustainable crop production intensification. The workshop helped convene key IPM counterparts from all over the Asia Pacific region to share experiences and present success case studies. The FAO-IPM component supported the participation of key counterparts from GMS countries including Cambodia, China, Laos, Myanmar, Thailand and Viet Nam in the 29th Session of the Asia Pacific Plant Protection Commission (APPPC) held in Bali, Indonesia.

In 2015, regional collaboration and information sharing supported the Ministry of Industry and Commerce in Lao PDR during their process of drafting the first chemicals law for the country. Keml

provided written comments on several occasions during the year and two experts from Keml participated in a meeting between Vietnam Chemicals Agency and representatives from the committee responsible for drafting the law. In December, a regional workshop on development of legislation was organised in Vientiane. Around 20 experts from various ministries in Lao PDR together with experts in chemicals management and legislation from Cambodia, Myanmar, Thailand, Sweden and Vietnam shared experiences from their processes of developing new legislation. The draft chemicals law has been submitted to the Lao National Legislative Assembly and is expected to be endorsed during 2016.

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

Narrative report PAN AP

In 2015, PAN AP and partners continued the Highly Hazardous Pesticides (HHP) Campaign with the focus on children in 10 Asian countries. More than 10,000 famers, women, youth, government representatives and consumers participated in workshops, campaigns, radio shows, rallies and monitoring efforts by our partners in China (PEAC), Vietnam (SRD, RCRD and CGFED), Lao PDR (SAEDA), Cambodia (CEDAC) and Philippines (PAN Philippines). Our policy work focused on the progressive ban of HHPs and with a focus on agroecology at the international level particularly in the Strategic Approach to International Chemicals Management (SAICM) with a resolution on HHPs with agroecology as a priority. Carbofuran and carbosulfan advanced to the next level under the Rotterdam Convention but we are still working to get paraquat on to the list. At the national level, PAN AP's partners worked to achieve local and national bans of specific pesticides.

Protecting children against toxic pesticides campaign

Another round of campaigning to "Protect our Children from Toxic Pesticides (POC)" was organised on 5th June 2015 for World Environmental Day, International Children's Day (November 20, 2015) and during the "No Pesticides Use Week" (December 3 to December 10, 2015). This year's theme was to focus on the impacts on pesticides on children's health and intelligence. Various campaign materials including the poster on the 20 PAN list of highly hazardous pesticides for children. Infographics and posters were produced in translated into local languages. The campaign was published in conventional media and new social media including Facebook and Twitter. PAN AP and partners hit social media with #PesticidesFreeWorld hashtag. This campaign gathered 40,000 impressions (viewers) on twitter and over 430 organizational sign-ons for the global petition of HHPs. There were also engagements from the Special Rapporteur on human rights and hazardous substances, Baskut Tunak, UNEP, and local government counsellors via Twitter.

In various parts of Asia Pacific, interactive and fun workshops for children were launched to create awareness on the impacts of pesticides and to give useful guidelines to protect children against pesticides in schools, homes and in public places. These workshops were held in collaboration with local schools and local government units and other civil society organisations. Children painted, drew cartoons and spoke about their vision of a world without poisons and pesticides.





Awareness workshop with children on the impacts of pesticides on their health and solutions to grow food without poisons.

More than 15,500 famers, women, youth, government representatives and consumers participated in workshops, campaigns, radio shows and monitoring efforts by our partners in China (PEAC), Vietnam (SRD, RCRD & CGFED), Lao PRD (SAEDA), Cambodia (CEDAC) and Philippines (PAN Philippines).

The main website recorded 86,138 downloads, 307,364 visits and 1,004,446 page views. PAN AP's information list serve had 411 individual contacts and 6 e-groups while the media list has 378 individual contacts and 10 e-groups. Besides the main list serve, several mailing lists, with a large number of contacts, support specific campaigns. Social media outreach continued to expand. On Twitter, the number of followers jumped by over 90 percent. On Facebook, there were 30 per cent more "Likes".



Various campaign materials that were produced during the Protect Our Children from Toxic Pesticides Campaign and the 16 Days of Global Action for women

China, Yunnan

Our partner in China, PEAC, organized 7 trainings in 4 villages (Hei Nigou village, Tu Dong Qing village, Heier village, Changning County and Xihu village villages) involving 370 farmers (women: male: children=189:150:31) on the impacts of pesticide to health human health with a focus on children.

PEAC was also invited to attend three large-scale week long national publicity campaigns organized by the Yunnan Government to highlight the impacts of pesticides in Ning Lang County of Lijiang City

in the north of Yunnan Province, Kunming City in the center of Yunnan Province and Ma Li Po County of Wenshan City in the east of Yunnan Province including 3 local communities (Bai Yun community service center, Xiao Long Community Service Center and Xin Ying community service center in Kunming). Over 5800 copies of publicity materials were distributed and over 5000 farmers and consumers attended the activities.



CPAM monitoring has been conducted in two project sites, Tu Dong Qing village and Hei Er village. In 2014, initial results showed high reliance on pesticides to grow vegetables in Tu Dong Village. Thus, PEAC recommended that farmers grow buckwheat as an alternative as it requires less chemical inputs. After regular trainings, 6 active farmers agreed to explore in 1-3mu field per family as a demonstration. After the harvest, PEAC collected 1 kg buckwheat samples for pesticide residues. According to the report, samples from Tu Dong Qing has meet the Green Food Standards and more plans are being made to grow buckwheat. The demo sites for buckwheat was visited by 21 consumers as part of an exchange visit.

At Hei Er village, over 120 (60 new) households joined in eco-sticky-rice production. After interviewing 22 households growing rice, PEAC were pleased to find that farmers have reduced their use of pesticides and have meet the Green Food Standard.



A cooking class with consumers on methods of cooking sticky rice grown within the community.

Over 400 farmers were interviewed on the use of Chlorpyrifos in 15 villages in Yunnan. Chlorpyrifos is an organophosate that is highly hazardous and has been linked to long term impacts on children's neural development. According to the CPAM results, chlorpyrifos is not widely used by farmers (only 10 %). 30 households had mixed chlorpyrifos with phoxim and DDVP for pest control in the past which resulted in phytotoxicity and resulting crops loss and income. This probably explains the low

percentage of chlorpyrifos use. The monitoring of the sales of Chlorpyrifos were conducted in Kunming Prefecture and Puer Prefecture. Around 90 stores selling agricultural chemicals including pesticides, fertilizers were interviewed about the sales of Chlorpyrifos, market trends and key manufacturers. 46 brands of chlorpyrifos were found in 29 stores. The results showed that sales staff were not aware of the impacts of chlorpyrifos and the safety measures needed for use.

PEAC surveyed 95 farmers in Xi Hu village of Da Li city that are growing a variety of crops. Main pests found, types of chemicals used, application methods and methods of sales and purchase were recorded. After the study, the results of the survey was shared with representatives from Er Yuan County (wetland protection bureau, agriculture bureau, environmental protection bureau, forestry bureau, and government), government of You Suo Twon ,and village committee and farmers of Xi Hu village. Future plans on the next steps will be discussed in 2016.



Learning workshops aimed at children. Topics included the impacts of pesticides and ways to grow their own food.

As part of the Protect Our Children from Toxic Pesticides Campaign, 100 consumers and farmers took part in workshops and exchange visits. PEAC also produced and distributed over 6000 materials including 30 types of posters and 13 flyers during the campaign.

At the same time, PEAC received the invitation of Yunnan Provincial Science and Technology Museum to co-produce 10 posters related to food safety, pesticide residues, eco-alternatives and organic agriculture to be widely published. 680 articles on pesticide risks to human health and the environment were updated to the website for public education. PEAC was invited by the Yunnan People Radio and TV Broadcast Bureau News Channel to take part in a live dialogue on ecological agriculture.





Learning materials and posters on the impacts of pesticides have been translated to Mandarin and are distributed online and during workshops.

On PEAC's learning internet site, 6weidu Environmental and Health Website, over 680 reports on pesticide issues were updated to the website (www.6weidu.com). PEAC provided public access to information on chlorpyrifos, including its health risk, environment risks, acute and chronic poisoning cases and symptoms and international regulation which has, so far, received 4018 page visits. In 2015, there have been 1,214,125 hits received on the site. Since 2013, it has been around 3,430,927 hits on PEAC's site.

Since, PEAC and many CSO are not allowed to use SMS services in China, PEAC shared information on pesticides use and impacts on Wechat. Wechat is the most popular social network in China with over 800 million users since the end of 2011. As of 2015, PEAC's WeChat has 75,000 visitors.

Cambodia

PAN AP's partner CEDAC in Cambodia organized trainings on alternative pest management methods for over 600 (292 women) participants from 20 villages in Takeo, Prey Veng and Kampong Cham province. The trainings were on the impacts of pesticides on human health and the environment as well as ecological alternatives like rice seed production, composting, and home gardening. More than 30 participants (15 women) were part of a consumer to farmer exchange visit to Pong Ror commune, Rorlea Ba' ear district, Kampong Chhnang province. Participants included key farmers, CEDAC staff and consumers.

Through CEDAC's interventions, around 200,000 farmers are participating in ongoing trainings, savings and credit groups, while taking part in exchange visits both within Cambodia and abroad. As of 2015, now more than 1900 farmers do not use pesticides and chemical fertilizer in 8 provinces (Takeo, Kampong Speu, Kampong Chhnang, Kampot, Prey Veng, Kratie, Siem Reap and Battamabng). Around 500 new farmers are practicing biodiversity based ecological agriculture (BEA) and more than 1,000 key farmers continue to document the impacts of pesticides and give technical support on agroecology to their surrounding communities. Two key farmer meetings with 10 key farmers (2 women) and project staff were organized at CEDAC office, Phnom Penh in order to improve the quality of monitoring on the pesticide impact and activities of pesticide issues.





Trainings for farmers on ecological agricultural practices in Cambodia

Over 40 live radio talk shows on new innovations adopted by farmers, ecological agriculture, impacts of pesticide on human health and environment, food safety, organic agriculture, community development and organic marketing were shared and discussed in the weekly radio show of Radio Sarika FM 106.5 MHz station.

A Facebook page entitled "Pesticide and Cambodia" was launched in September 9, 2014 and has 1,579 likes on this page. CEDAC collaborated with GIZ and produced one short video of Bio- Control Agents as alternatives to commonly used chemical- based agricultural inputs. CEDAC had distributed the video file to farmers and other relevant partners.

CEDAC organized the No Pesticide Use Week (NPUW) Campaign from 3 to 10 December, 2015. The main activities were mass media campaigns through radio talk show and social media, and directly with the community.

CEDAC monitored the pesticides used various villages in Por Ampil commune. Pesticides found included chlorpyrifos, glyphosate, lamda-cyhalothrin and cypermethrin, which have been linked to harmful effects on growing children. Children have been reported to be poisoned by pesticides during schooling hours in Po Ampil Primary School, which is surrounded by farms. Workshops were held at Po Ampil primary school, Takeo province to highlight the impacts of pesticides that were found in the school. 69 persons (30 women) participated in this event including farmers, students, teacher and local authorities. New plans are on the way to engage the community on agroecology practices to protect the children.

North Vietnam

CGFED in partnership with Hai Hau's Women Union organized CPAM based on the FAO/WHO International Conduct of Conduct on Pesticide Management. The training for 30 key farmers from 10 communes in Hai Hau district was organised in the end of May 2015. After the training, key farmers have collected more than 300 questionnaires from farmers and retailers in 10 communes and 6 cases of poisoning have been recorded. The results were shared in a dialogue workshop that was attended by 45 delegates from the Plant Protection Department (PPD). PPD appreciated the

workshop and the information shared. Case studies on organic agriculture and worm composting were also shared as alternatives to pesticides.

Sustainable Rural Development (SRD) has trained over 30 persons on a CPAM monitoring based on the FAO/WHO International Conduct of Conduct on Pesticide Management in Cao Xa Commune, Lam Thao District and Phu Tho Province. 60 training courses on agroecology techniques had been implemented in 10 provinces (Phu Tho, Thai Nguyen, Hoa Binh, Yen Bai, Lao Cai, Son La, Thanh Hoa, Nghe An, Nam Dinh and Long An) for 400 extension officers and 900 farmers. These techniques include vermiculture, closed-loop agriculture models, composting and chicken raising that assist in overcoming poverty. 10 farmers exchange visits has been organised for famers and by other farmers practicing agroecology. With SRD trainings and intervention in 2015, more than 3000 farmers do not use pesticides in their farms in SRD's project sites.

Linking Farmers to Markets in North Vietnam

In a joint effort, PAN AP's partners in Vietnam, SRD and CGFED organized an "organic dialogue" linking 70 business owners, scientist, civil society organizations (CSOs) and famers to explore new innovations, expand and promote organic markets in Vietnam. The event was widely covered in the news. Two organic product markets in Ciputra Hanoi and a local specialty market in Royal City, Hanoi were organized to link farmers from SRD and CGFED's project sites. In partnership with Tam Dat, Uncle Tom and Mr. Clean enterprises, pesticide free and organic agricultural products like meat, eggs from chickens raised by organic feed, rice, forest honey and fish sauce without preservatives were sold in the markets.

45 women from Hai Hau who have been trained (over the past two years) in ecological methods participated and shared their farming methods in organic markets in Hanoi. More than 3000 people attended. At the district level, 2 farmer's markets were organized in Hai Hau commune and information on ecological farming was shared with 1000 people.



Participants from the "Organic Dialogue" in North Vietnam, share future strategies on organic marketing

South Vietnam

RCRD carried out three studies on traditional floating rice and microbial fertilizer in Thanh Binh and Cho Moi district in Tri Ton district which resulted in published papers and awareness raising on key findings. The studies helped farmers identify floating rice varieties that are high yielding, climate and saline resistant for conservation and growing. The studies also looked at better methods to increase soil fertility by reducing farmer's dependence on pesticides and chemical based fertilizers to save cost.

RCRD also shared their findings during the "Floating rice harvesting festival day" in Vinh Phuoc Commune, which was attended by 180 participants (65 women). The event was also covered by local media/journalist including the Saigon Times, Agriculture Newspaper and An Giang radio and television station. 15 students of An Giang University were trained to do CPAM monitoring on 100 rice farmers in An Giang (88 men and 35 women).





Farmers are sowing, demonstrating and studying various types of high yielding floating rice varieties

RCRD also published two books entitled "floating rice cultivation" and the second book entitled "Inventory of pinnacle shape of floating rice" in which 500 copies were distributed. RCRD new website that highlighted studies on the floating rice model has garnered 19,929 hits. In 2015, more than 230 farmers are growing floating rice and about 71 new farmers have been trained on methods of growing floating rice. The rice model has been expanded to Cho Moi district and Thanh Binh district, An Giang province and five types of floating rice varieties has been given to farmers to develop and research upon. The rice varieties have also been sent to Department of Science and Technology of An Giang province for storing and conservation in 2015.

More than 80 teachers, extension officers and children participated in workshops during the Protect Our Children campaign.

Lao PDR

In 2015, SEADA outreached to about 1,500 famers during various events and workshops and 25 new farmers were trained on agroecological methods. Three training of trainer (TOT) workshops on methods to monitor health impacts of pesticides use was conducted for government officers in Bokeo province, Vientiane province and Oudomxay province. The workshops were attended by 105

participants (24 women). Partners consist of government officers from PAFO, DAFO, DONRE, provincial health department, provincial natural resources and environment and Lao Women's Union. During the workshop, Laos regulation on pesticides control and FAO/WHO Code of Conduct on Pesticide Management was distributed. The participants also practiced conducting CPAM surveys on pesticide retails and famers during their field visit.



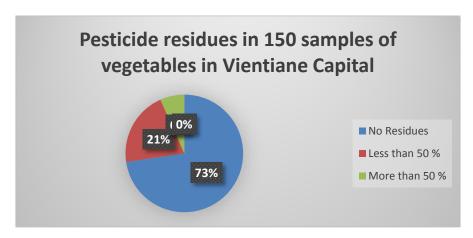




Picture 1 (from the left): Training on identifying pesticide labels, Picture 2: Workshop on trainer the trainer and Picture 3: A field visit to a pesticide shop to test CPAM surveys.

A workshop on monitoring pesticides residues with a simple pesticides test kits were conducted in 3 districts in Oudomxay with 10 government officers (1 woman) from the District Office of Natural Resources and Environment, District Agriculture and Forestry Office, District public health office and Section of Agriculture Extension/PAFO. The test kit can detect presence of organophosphates, organochlorines and carbamates. Initial studies showed that out of the eight rice samples, 7 samples had pesticides residues and 3 of the samples had high levels of pesticides. The test kits provide a simple method of detecting the presence of a limited number of pesticides residue but since it does not show the type of pesticides nor detects all pesticides most commonly used on vegetables, more comprehensive studies should be done in the future.

A similar study on pesticide residues using the test kit was done on 150 vegetable samples by government officers and various local partners of SAEDA. 40 production sites/areas from 12 communities of 3 districts of Vientiane Capital were selected for sampling. Initial testing results were the following:



As part of the study in Vientiane Capital, 15 farmers (11 women) and pesticide retailers were interviewed. Based on the interviews it became evident that a majority of them were not aware of

the impacts of pesticide on human health, were not familiar with Lao PDR's pesticide regulation and some also mentioned that illegal pesticides were easy to purchase.

During the World Environment Day and No Pesticide Use Week more than 500 teachers, students and consumers attended SAEDA's exhibition booth. Over 800 posters on highly hazardous pesticides, sustainable techniques of rice and vegetables production, copies of illegal pesticides trafficking survey in the Mekong region, a case study on the negative impacts of chemical use for pests and weed control together with information on the Rotterdam and Stockholm Convention have been distributed to consumers, farmers and government departments.

Philippines

PAN Philippines, together with its local partner organizations, have successfully conducted trainings, seminars, community meetings and other public awareness activities during the project period of 2015. Numerous topics were covered, such as:

- Health and Environment Connection
- Regional situation on environment
- History of pesticides use
- Health and environmental hazards of pesticides, especially aerial spraying
- Highly hazardous pesticides
- Community pesticide action monitoring (CPAM)
- Pesticide Quick Response and Surveillance Team (PQRST) concept,
- Sustainable agriculture and Biodiversity-based ecological Agriculture.

Around 50 additional communities have used the CPAM impact assessment for about 5 times at the national level. About 40 new farmers are practicing bio-diversity based ecological method after receiving training from PAN Philippines partners.

Over 2000 information, education and communication materials, such as comic books, flyers, posters and other printed materials were distributed and downloaded by participants and to the general public during mass actions and campaigns. Case findings and community pesticide action monitoring surveys were done in at least two communities and partial results are being collated. Lobbying at the local and national levels were also done, including presentations in local legislative assembly meetings. As a result, one provincial legislator filed a resolution to ban aerial spraying of pesticides in South Cotabato province.





Mass action to ban aerial spraying and during the Protect Our Children Campaign in the Philippines.

In 2015, PAN Philippines and partners organized several mass actions including participation in people's caravan on people's rights, Earth day celebrations, an anti-aerial spray mass action and campaigning for the protect our children campaign which were attended by 10,000 farmers, community members, students and other civil society organizations.

Narrative report TFA

During 2015, TFA's REAL program consistently expanded the program to cover a total of 87 schools and 67 farming communities in 4 countries (Thailand, Lao PDR, Cambodia and Vietnam). A total of 10,199 students, teachers and farmers participated in REAL program activities in 2015 (see Table 1: Summary of Target Groups 2015 for details). PIA & ABD orientation workshop were organized during November 2-6, 2015 in Tuanggyi, Southern Shan State of Myanmar through collaboration with Swissaid and involved 23 participants (7 females) from 6 local NGOs. Participants were expected to collect baseline data on pesticides use to report in the review and planning workshop schedule in 2016.

Table 1: Summary of Target Groups 2015

| Country | Teacl | | Stu | dents | | mers | | otal | Total | Total Commun- |
|----------|-------|-----|-------|-------|-------|-------|--------|-------|---------|------------------|
| | Total | F | Total | F | Total | F | Total | F | schools | ities |
| Thailand | 50 | 40 | 998 | 475 | 430 | 266 | 1,478 | 781 | 27 | 20 |
| Lao PDR | 91 | 53 | 2,430 | 1,351 | 540 | 385 | 3,061 | 1,789 | 27 | 25 |
| Vietnam | 26 | 12 | 1,124 | 632 | 2,048 | 1,577 | 3,198 | 2,221 | 15 | 7 |
| Cambodia | 82 | 34 | 1,404 | 727 | 215 | - | 2,462 | 761 | 18 | 15 |
| Total | 249 | 139 | 5,956 | 3,185 | 3,323 | 2,228 | 10,199 | 5,552 | 87 | 67 |

F = Female

Pesticides Impact Assessment (PIA) is one of the activities integrated into the program that aims to assess the impacts of pesticides to health and environment. PIA trains farmers and students to periodically monitor the agricultural environment in order to track changes resulting from pesticides used in the target areas. In 2015, all partners conducted PIA activities. The studies revealed that farmers in Laos used the most pesticides of all the countries in the survey (7583 litres/person/year). Results showed that a majority of farmers continue to use large amount of pesticides also in Cambodia (3761 litres/person/year) and Thailand (4725 litres/person/year). The drastic increase in the use of pesticides among Laos farmers most probably stemmed from aggressive commercialization of farming (maize, banana and cassava) and contract farming from neighbouring countries. The survey showed that Vietnamese farmers still used the least pesticides (719 litres/person/year) but considering the small farming area per household, the intensity of pesticides used per hectare is similar to Cambodia and/or Thailand. See Table 2 for more details.

Table 2: Amount of Pesticides Used (litres of diluted pesticides) in 2015 (New sites)

| Table 2: Amount of Pesticides Used (litres of diluted pesticides) in 2015 (New Sites) | | | | | | | | | |
|--|---|---|-----------------------------|---------------------------------------|---------------------------------------|--|--|--|--|
| Crops | Total number of Farmers | Total Agriculture Area (Hectares) | Total use (Litres/ year) | Average use per hectare (Litres/year) | Average use per person (Litres/ year) | | | | |
| Thailand (Uttaradit, Pathur | Thailand (Uttaradit, Pathum Thani and Sakon Nakhon) | | | | | | | | |
| Rice, Corn, Sugarcane, Cassava, Calendula, Soybean, Chilli, Mango, Rubber tree, Bamboo, Orange, Zucchini, Lentils, Cucumber | 296 | 1,269 | 1,398,494 | 1,102 | 4,725 | | | | |
| Lao PDR (Kham district and | Xiengkhuang) | | | | | | | | |
| Maize, Cabbage, Chinese mustard, Garlic | 445 | 146 | 3,374,400 | 23,112 | 7,583 | | | | |
| Vietnam (Bac Giang, Yen Ba | ai and Lao Cai) | | | | | | | | |
| Rice , Vegetable, Cabbage, Potato, Kohlrabi, Sweet potato | 390 | 111 | 280,440 | 2,526 | 719 | | | | |
| Cambodia (Battambang) | | | | | | | | | |
| Rice,Cabbage,Yard long bean,Chilli | 215 | 328 | 808,684 | 2,466 | 3,761 | | | | |

Banned pesticides were found during the 2015 surveys in Cambodia (2 substances), Thailand (3 substances) and Lao PDR (1 substance). Although a small number of farmers still used banned pesticides, except rodenticide in Cambodia, the survey showed that many Lao farmers (281) continue to use the banned Paraquat, typically mixing it with other pesticides. While banned pesticides were not observed to be on display in shops in Thailand, Paraquat was available in most shops in Lao PDR and Cambodia. Thus enforcement of pesticide retailers in Lao PDR and Cambodia still needs improvement. There were no banned pesticides found in target areas in Vietnam. See more details in Table 3.

Table 3: List of Banned Pesticides Found 2015 Surveys.

| Country | Common name Type | | Chemical | Toxic | Total farmer |
|----------|------------------|-------------|----------|-------|--------------|
| Country | | | Family | Level | Used |
| | Methomyl | Insecticide | С | Ib | 1 |
| Thailand | Dicrotophos | Insecticide | OP | Ib | 1 |
| | Endosulfan | Insecticide | OC | П | 2 |
| Lao PDR | Paraquat | Herbicide | BP | П | 281 |
| Vietnam | - | - | ı | - | - |
| Cambodia | Parathion-methyl | Insecticide | OP | la | 7 |
| Camboula | Zinc Phosphide | Rodenticide | | Ib | 25 |

TFA's surveys show that a small number of farmers (5-6%) are still using WHO Class Ib pesticides in Cambodia and Thailand, while the majority of farmers in partner countries are using class II, III and IV pesticides. There were a few unknown pesticides without proper information on the label found in Thailand. On average, farmers mixed 2 kinds of pesticides during each spray session to save labor costs and to increase the potency. However, nearly half (49%) of Vietnamese farmers mixed 4 or more kinds of pesticides during each spraying compared to only 10% of farmers in Cambodia demonstrating this behavior. The impacts and long-term effects of these behaviors on health (so called cocktail effects) are currently unknown, hence TFA has initiated further studies on children and farmers in high risks areas to identify responsive measures at the local and national levels and reduce overall exposure (see Table 5 for more details).

Table 4: Toxic Levels of Chemicals that farmers used

| Country | Toxic level | | | | | | | | |
|----------|-------------|----|-----|-----|-----|-------|--|--|--|
| Country | la | Ib | II | III | IV | Other | | | |
| Thailand | - | 6% | 24% | 23% | 32% | 15% | | | |
| Lao PDR | - | 0 | 66% | 0 | 34% | 0 | | | |
| Vietnam | - | 0 | 43% | 43% | 14% | 0 | | | |
| Cambodia | - | 5% | 25% | 70% | 0 | 0 | | | |

Table 5: Mixing of Pesticides

| Country | Mixing of Pesticides During Each Spray Session | | | | | | | |
|----------|--|----------------|----------------|----------------|-----|--|--|--|
| Country | 2 kinds/ types | 3 kinds/ types | 4 kinds/ types | 5 kinds/ types | 5+ | | | |
| Thailand | 98% | 0 | 0 | 2% | 0 | | | |
| Lao PDR | 23% | NA | NA | NA | NA | | | |
| Vietnam | 4% | 42% | 39% | 7% | 8% | | | |
| Cambodia | 50% | 20% | 10% | 5% | 15% | | | |

With regards to the role of women in dealing with pesticides, TFA's studies showed that a high percentage of female Vietnamese farmers were engaged in decision making (41 %). This was divided into: buying (59 %); reading labels (50 %); mixing (39 %) and spraying pesticides (37 %). Most men were employed outside of the agricultural community and only about half came back to handle pesticide-related tasks. In Laos PDR, 74 % of female farmers bought pesticides from shops, but did not engage in other tasks. This was similar in Cambodia. See more details in Table 6. In all countries, the majority of females farmers interviewed did not participate in the REAL program activities. Since it was determined that women in fact often make decisions regarding pesticide use, it is important for TFA and partners to boost the participation of female farmers in REAL trainings. TFA is examining the possibilities of doing so by re-evaluating the duration, location, and timing of programs to better suit participation by female farmers and possibly their children.

Table 6: Female roles with regards to pesticides

| Country | Decide and select pesticides to use | Buy pesticides from shops | Read label when prepare for spraying | Mix/ dilute chemicals in spray session | Spray pesticides in the fields | Number of interviewed farmers |
|----------|-------------------------------------|---------------------------------|---|---|---|-------------------------------|
| Thailand | 16% | 17% | 15% | 5% | 11% | 142 |
| Lao PDR | 0% | 74% | 0% | 0% | 0% | 39 |
| Vietnam | 41% | 59% | 50% | 39% | 37% | 180 |
| Cambodia | 17% | 33% | 0% | 0% | 0% | n/a |

With regards to pesticide impact to the environment, the majority of farmers reported spraying near water sources and communities. Storage of pesticides was determined to be safe for most farmers as well as disposal of empty containers in designated waste containers. However, where there was no designated waste containers or buyers for the containers, most farmers would leave the containers in the fields or near water sources. Some farmers reported burying the containers in the field or burning the containers. These practices are unsafe to water sources, children, animals and natural food sources. See Table 7 for more details.

| Country | Table 7: Disposal of Pesticides Containers | | | | | | | | |
|----------|--|-----------------------|--------------------------------|------------------------------------|----------------|----------------------|------|--|--|
| | Buried in the rice field | Under the big tree | Sell to mobile collector | Litter near the water source | Over the fence | In the rice field | Burn | | |
| Thailand | 11% | 20% | 38% | 2% | 2% | 12% | 15% | | |
| Vietnam | 21% | 11% | 4% | 19% | 11% | 20% | 7% | | |
| Cambodia | 15% | 35% | 10% | 45% | 48% | 49% | 8% | | |

Based on these results, there is a need to review and develop responsive materials on positive behaviors in handling pesticides and proper cleaning of equipment and disposal of pesticide containers for farming communities and at the national, policy level in the upcoming years.

Data on pesticide impacts to health and environment were used at the community level to develop action plans for the reduction of pesticides used in all target areas. The information was also used to advise local and national governments on the development of strategic plans and support in Thailand and Vietnam to disseminate via various meetings and workshops at the regional level.

Below are country highlight connected to objective 1:

Cambodia:

The Agriculture Technology Services Association (ATSA) has expanded REAL programming to an additional 9 schools and one college in Battambang province and an additional 9 schools in Kampong Chahang province with a total of 1,404 students (727 females).

The main action plans implemented during the reporting period are reflected below:

- Build pesticide waste disposal tanks for farmers for the disposal of empty pesticide containers
- Produce botanical pesticides and compost in school and communities
- Grow vegetables in school and community gardens
- Build habitats in rice fields for aquatic organisms to survive during period of erratic rain fall or drought
- Train farmers on hazardous pesticides and alternative pest control methods
- Exchange visit organized for 29 teachers and farmers (8 females) from Kampong Chhanang and Battambang to ATSA's sites
- 9 Field Days organized by school and communities to disseminate the results and develop more action plans
- 3 Pesticide campaigns organized by schools and communities
- 4 saving women's saving groups will be established
- ATSA's Facebook page created and maintained

Lao PDR

The Community Development and Environment Conservation Foundation (EDECF) continued to expand REAL programs to an additional 10 schools and 10 communities in Kham District of Xiengkhuang province by request from the provincial educational office. The program currently covers a total of 27 schools and 25 communities from Xaythany district, Vientiane, Gnomalat district of Khammoune and Kham district of XiengKhuang, serving 3,061 (1,404 females) students, teachers and farmer participants.

EDECF has been emphasizing the sustainable conservation and utilization of Agrobiodiversity (ABD) for food security, income, and promotion of traditional/herbal medicine- considered to be the most important aspects for poor rural communities in Laos. Lao PDR is arguably the country with richest biodiversity in this region with an average of 500 plants and 500 animals species combined in 8 habitats recorded from the 3 target sites. Community ABD conservation plans contained rules and regulations to maintain and utilize various selected species such as bamboo, local catfish, rattan, frog, etc. Various income-generating activities were promoted for eight poor villages, including weaving, raising pigs and rearing crickets and goats. School vegetables gardens were also promoted to help children learn how to grow vegetables at home for food and income. Some schools can earn between 350 – 600 USD per crop. These crops are used for school lunches when possible or distributed among students to take back to their families.

Recently, TFA and its local partner in Lao PDR have noticed that commercial farmers have been using high amounts of pesticides. According to the 2015 pesticides survey data in Kham district of Xiengkhuang, farmers are using an average amount of 8,951 litres of diluted pesticides/person/year compared to trained farmers in Xaythany district using 104 litres of diluted pesticides/person/year. In addition, the survey showed that farmers are often mixing more than 2 kinds of pesticides with paraquat (banned in Lao PDR) in the 200 litre tank using high pressure pumps situated near water sources, sometimes with help from women and children nearby. These unsafe practices are spreading rapidly in many areas along the borders where contract farming, exporting products and

importing of pesticides are common, including intensive vegetables farming areas near the capital of Vientiane. ECDEF training interventions included training on IPM, botanical pesticides, composts and liquid bio-fertilizers to help farmers reduce the use of pesticides. EDECF also collaborated with the Ministry of Health to participate in regional study on pesticide impact to children and farmers in high-risk areas.

Philippines

TFA's partner schools in Davao De Norte requested supports from TFA to help improve their pilot curriculum on organic agriculture to integrate more field based activities as is done in the REAL program. As a result, TFA provide some funding to response to the request and included Philippines as part of the regional studies on pesticides impact to children and farmer in the risk areas.

Thailand:

Thai Education Foundation (TEF) continued to work with 27 schools in Chachoengsao and Chiang Mai provinces with approximately 1,050 (500 females) students and teachers participating in the program in 2015. School vegetables garden and rice planting were implemented in most schools. Bio-cleaning products were made in many schools for cleaning dishes and floors. Some schools in Chiang Mai began testing pesticide residue in school lunches and collaborated with the local health center to periodically test vegetables in local markets. TEF continued to provide on-going technical support to the IPM program under the Department of the Non Formal and Continuing Education. During 2015, TEF provided trainers to support 20 FFS's with 430 farmers (266 females) in Uttaradith, Pratumtani, Mukdaharn and Chiang Mai provinces under support by the NFE budget.

TEF/TFA organized the Regional REAL Exchange Forum and Curriculum Workshop during November 2015 for over 500 students, teachers, farmers and participants from governmental, international organizations, and private sectors from Cambodia, Laos, Philippines, Thailand and Vietnam.

Vietnam

The Initiatives on Community Empowerment and Rural Development (ICERD) expanded the REAL program to new 6 communes in Lao Cai, Ninh Binh and Yen Bai provinces. The program currently covers 13 communities and 15 schools with 1,150 (644 females) students and teachers and 2,048 (1,577 females) farmers participated in the REAL program. ICERD works closely with the Plant Protection Department to provide technical support to schools and farmers which included IPM, SRI, compost, bio-mats, rice-fish farming, home vegetable and herbal garden. Thirteen commune working groups were established. Each working group of 3-5 persons is comprised of a leader, representatives from plant protection department, women unions and teachers. Farmers in the program were able to reduce pesticides uses up to 50 % in rice, 64 % in vegetables and 79 % in sweet potato compare to conventional farmers in the same area. In addition, rice-fish and aquatic farmers were able to gain \$1,500 – 7,900 in income compared to \$600 – 1,100 income just from rice planting alone. ICERD promoted income-generating activities on indigenous vegetables and herb gardens for the 115 female farmers (99 %). Farmers grew 13 – 19 plants and gained additional income of \$2,800 – 6,800

 Enhanced international, national and local advocacy on sustainable pest management/agriculture

Narrative report PAN AP

Strategic Approach to International Chemicals Management (SAICM)

Preparations for the Fourth International Conference on Chemicals Management (ICCM4) started two years ago, with PAN AP taking the lead for PAN International. PAN participated in all the regional conferences with strong contribution on making sure that Highly Hazardous Pesticides (HHPs) become recognised as an "issue of concern". PAN AP wrote and spoke to delegates going to ICCM4 prior to the Conference. ICCM 4 in Geneva recognized highly hazardous pesticides (HHPs) as an "issue of concern" and the Conference supported concerted action to address HHPs and welcomed a strategy to address them that has been developed by UNEP, FAO and WHO. ICCM4 placed significant emphasis on the need to promote agroecological alternatives instead of replacing HHPs with other chemical pesticides.

Throughout the week, PAN released materials in support of its campaign for a global phase-out of HHPs. Nearly 120 concerned professors, toxicologists, epidemiologists and physicians from 24 countries supported a letter that was delivered to Mr Achim Steiner, Executive Director of UNEP, Dr José Graziano da Silva, FAO Director-General of FAO, and Dr Margaret Chan, Director-General of WHO. The letter called on government leaders to halt production and use of highly hazardous pesticides "to protect our children and the succeeding generations from an impending toxic tragedy".

PAN released its new book "Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology". The book features examples of successful large-scale farming done using ecological principles, and describes the benefits to farmers in terms of increased yields and profits, as well as improved health and food security, and climate change adaption. PAN urges those who are phasing out HHPs to help their farmers replace them with agroecological practices not other chemical pesticides.

PAN released its consolidated list of banned pesticides. Drawing on official data sources from 98 countries, the list shows that already 316 currently used pesticides have been phased out by 1 or more countries, demonstrating that countries can do it if they have the will.

FAO/WHO Joint Meeting on Pesticide Management(JMPM), Nanjing, October 12-16th, 2012.

In the JPMP, PAN AP supported the FAO positions to retain phase-out as the first order of action in dealing with HHPs and to have a needs assessment for HHPs instead of a benefits assessment to retain non-chemical approaches as the first priority in replacing HHPs.

PAN AP also highlighted a report back on the discussion regarding, the Ad Hoc Monitoring Report on Bayer and Syngenta in Punjab that serious impacts on pesticides.

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

PAN AP actively participated in the Chemical Review Committee (CRC) on achieving an agreement on the notifications of final regulatory action on certain highly hazardous pesticides. After the conference, a decision guidance document (DGD) will be prepared for carbofuran and carbosulfan and these pesticides will be up for the PIC procedure. The committee adopted the DCG of HHP tribution and forwarded it to the Conference of the Parties (COP) for its consideration.

11th Meeting of the Persistent Organic Pollutants Review Committee (POPRC-11) to the Stockholm Convention on Persistent Organic Pollutants (POPs)

PAN AP, as part of PAN International, participated in the POPRC 11, and advocated for the listing of the HHP dicofol. However, the listing was blocked by India and will be reviewed at the next committee meeting.

PAN AP attended two workshop to highlight the issue of highly hazardous illegal pesticides based on the studies done in India, Vietnam, Laos and Cambodia. The first workshop was organized by United Nations Research Institute on Crime and Justice (UNICRI) entitled "Supply chain security and controlling the trade in illegal, counterfeit and substandard pesticides" that was held on 1-2 October 2015 at the United Nations campus in Turin, Italy. While the second workshop was entitled The Fourth Workshop of Regional Enforcement Network for Chemicals and Waste that was held on 25-26 November 2015 in Bangkok, Thailand organized by UNEP Asia Pacific. Government officials from various departments as well custom officers attended both meetings. PAN AP's presentation highlighted the importance of regional cooperation in controlling illegal pesticides, as many of the pesticides could be highly hazardous to farmers, consumers and the environment.

Local Partner from Cambodia, CEDAC

CEDAC continued their local advocacy work by presenting the results of CPAM and the alternatives of pesticides during the seminar on the development of "National Strategic Plan 2013-2015" for the Stockholm Convention on Persistent Organic Pollutants organized by Ministry of Environment (MOE).

CEDAC's good practices on bio-control agents were shared to MAFF and other stakeholder in the National workshop on Use and Trade of Bio-control agents organized by GIZ at Battambang and Siem Reap. Along with the NGO Forum of Cambodia, CEDAC is currently reviewing the National Food Safety law on pesticides and will draft a recommendation in 2016.

CEDAC organized a National Farmers Forum with an aim to promote women's right to participate in agricultural policies and have access to resources (like water) for agriculture. Farmers from five regions across Cambodia attended the Forum. During the forum, 100 women leaders were selected out of 780 women. The participants released a critical joint statement to sub-national authorities on the challenges women face to access resources to agriculture as well possible future solution and strategies. Inputs and recommendations from the forum contributed by farmers from the five regions will be widely shared to relevant government agencies, National Assembly, development partners and CSOs to find the possible solutions to support the small landholder farmers.

Local Partners in China

PEAC conducted a research report on non-point pollution of agriculture, which was shared with local governments as reference for enhancing management. The workshop was organized by PEAC, in collaboration local Forestry Bureau, to share findings and discuss about future next steps. The workshop was attended by leaders from the Department of Environment Protection, Department of Agriculture in Da Li city.

PEAC's comprehensive report on chlorpyrifos, including its use, farmers' risk awareness and poisoning cases, were collected and shared with the officials from the Ministry of Agriculture as reference for future policies. Also, PEAC attended a workshops organized by World Health Organization and the Stockholm and Basel Conventions Regional Centre on sound management of DDT and shared experiences for policy advocacy.

Local Partners in Lao PDR

Three workshops on Train the Trainer on CPAM monitoring was conducted in various provinces in Lao PDR, which has resulted in national plans for pesticides monitoring in 2016 by PAN AP's local partner SAEDA. On-going effort of SAEDA's intervention in Xien Khuang province in northern Laos have resulted in support of the local District Agriculture and Forestry Office (DAFO). DAFO has given a free venue for farmers to sell organic products.

Local Partners in Philippines

PAN Philippines and local partners, lobbied at the local and national levels were also done in the Philippines, including presentations in local legislative assembly meetings on the impacts of aerial spraying. As a result, one provincial legislator filed a resolution to ban aerial spraying of pesticides in South Cotabato province.

Narrative report TFA

TFA initiated a regional study on "Impact of Pesticides to Children and Farmers in High-risk Areas" to study the status of pesticide impacts and identify measures in order to minimize the exposure to children and communities. TEF organized a 2-day training for 8 officials of the Ministry of Health from Cambodia, Laos, Philippines, and Vietnam in December 2015. Data collection will be conducted in 2016.

ICERD, TFA's partner in Vietnam, is working closely with the Ministry of Education to create awareness of the importance of the Agrobiodiveristy and pesticide impacts to health and the environment. As a result, ICERD has developed field guides on community awareness-raising as well as on agrobiodiversity for teaching students and adults in the Continuing Learning Center (CLC). 8000 copies were distributed to CLCs by the Department of the Continuing Education under the Ministry of Education. The field guide on agrobiodiversity was also shared on their website. Currently, there are 11,000 CLCs nationwide with over 200,000 students regularly attending classes at the district CLCs and over 18 million students and farmers engaged in commune CLCs' activities.

TEF has also been working closely with the Food and Drug Administration as a committee member in developing the national chemical strategic plan (2016 – 2018). As a result, TEF pesticides reduction

program was adopted as one of the six flagship projects in the national plan which will enable TEF to play a major role and seek joint collaboration and supports among governmental and CSOs and private sectors implementing similar programs. TEF is currently drafting the report on the status of pesticides reduction program to be distributed at the national chemical management forum and to the general public in 2016.

TFA and partners are currently compiling case studies of successful REAL program interventions for publishing and dissemination to policy makers and donors in collaboration with PAN AP and FAO.

 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.

Narrative report FAO RAP

Cambodia

In Cambodia, work focused on providing support to follow up and post-FFS activities. A total of 39 post-FFSs in vegetables were completed (involving 769 farmers, 412 women) and 25 post-FFSs in rice (involving 470 rice farmers, 252 women). In line with the development of self-help groups, during the dry season 2015 (January-June2015), 71 Farmers' Clubs implemented IPM/PRR activities on vegetables and rice crops in nine target provinces involving 1117 farmers (569 women). The members of the 71 active Clubs continued to contribute to their saving funds. As of December 2015, the Clubs had a total savings in the amount of 577,245,548 Riel (approximately US\$ 144,311.00). Nine IPM Trainers' meetings¹ were conducted. During these meetings, all 72 IPM Trainers (18 women) reported on progress of implementation and evaluated the results of field activities.





China

In China, pesticide risk reduction capacity building activities started up in 19 counties in Hainan Province. Some 600 farmers participated in 3-day Pesticide Risk Reduction Farmer Training events organized during the period March-August 2015. This was followed by the implementation of a Refresher Training of Trainers course, which was held in Sanya in November 2015. Work plans were formulated for implementation of Farmers Field School based IPM training to be implemented in Hainan during 2016.

Lao PDR

In Lao PDR, some 34 pesticide risk reduction farmer training activities were up-scaled in 9 districts in 2 northern Lao provinces (Oudomxay and Sayabouly) within context of IFAD funded and MAF implemented rural development project. The FAO-IPM component in joint action with a FAO global trust fund project (GCP/GLO/508/IFA) provided technical support for capacity building of key district government staff and selected farmers trainers for up-scaling of the pesticide risk reduction and IPM-FFS training. A full season Training of Trainers for FFS capacity building was implemented in

¹ Kampot: 11/03/2015, Kampong Cham: 14/03/2015, Prey Veng: 14/03/2015, Kandal:06/03/2015, Battambang: 27/02/2015, Svay Rieng: 13/02/2015, Kampong Chhnang:10/03/2015, Takeo: 16/03/2015, and Siem Reap:12/03/2015

Hongsa, Sayabouly during the May-July 2015 period. This was followed by implementation of Farmers Field Schools in 6 districts in which over 300 farmers participated. A 2nd TOT for FFS capacity building is scheduled to be held in Oudomxay in early 2016. Selected capacity building on pesticide risk reduction farmer training activities also continued in other provinces earlier covered. An Evaluation workshop for the PRR-FT work implemented during the period 2010-15 is scheduled to be held in early 2016. Revised training manuals and a draft workbook for farmers will then also be discussed and subsequently field tested during PRR-FT activities programmed for implementation in 2016. A Training of Trainers for PRR-FT capacity building for the Southern Lao provinces is also scheduled to be held in Savannakhet during early 2016.

Myanmar

In Myanmar, based on a March 2015 planning exercise with relevant government partners (MOAI/PPD and MFVPEA), work plans were formulated for the development of capacity for IPM and pesticide risk reduction training. The plans foresee focused IPM development and training interventions among vegetable (cabbage) and fruit (mango, pomelo, dragon fruit) farmers organized in 6 MFVPEA commodity association clusters in 3 states (Mon, Mandalay, Southern Shan). Work has not yet started due to delays caused by the political transition process that is taking place. Plans will have to re-checked/updated based on the latest government priorities based on discussions with relevant stakeholders partners in early 2016.

Vietnam

In Vietnam, the National IPM/Pesticide Risk Reduction Programme under a Letter of Agreement (LOA) between FAO Vietnam and the Northern Regional Plant Protection Center, PPD-MARD supported the start-up of activities under Community Education Programmes on Pesticide Risk Reduction and Good Agricultural Practices/VietGAP in Yen Bai and Ninh Binh provinces in Summer Season 2015. Under the same LoA, farmer field research and training on mass production and application of *Metarhizium anisopliae* for rice brown plant hopper management also commenced. A range of advocacy and training activities involving various stakeholders - including local leaders, pesticide sellers, representatives from public health sector and social organizations and farmers — were carried out. The activities are designed to strengthen community ownership in planning, managing and implementing pesticide risk reduction activities including the application of alternatives to chemical pesticides such as *Metarhizium anisopliae*. Provincial governments continued to pay for farmer training in Farmer Field Schools in support of the national programme on agriculture and new rural development.





Strengthened regulatory framework for the control of pesticides in selected partner countries.

Narrative report FAO HQ

A **regional** workshop on use of the FAO pesticide registration toolkit was held in Hanoi. It aimed to help regulatory authorities strengthen the pesticide registration process, notably the risk assessment part. Participating regulators found the workshop and toolkit very useful as it helped them to see what actually can be done to strengthen risk assessment without significant additional means.







In **Lao PDR**, the mandate of inspectors has been clarified and legislative hurdles that prevented enforcement have been resolved. New manuals have been developed for inspectors and for special enforcement teams to enable punishment of pesticide retailers who continue to violate the regulation. Piloting of the new enforcement mechanism will start in 2016, which will then be followed by nation-wide training of provincial inspectors. New guidelines on pesticide labelling have been developed and issued, as well as accompanying practical guidance for pesticide importers and distributors. A decision has been taken to upgrade the current pesticide regulation into a Prime Minister Decree that would cover all pesticides and enhance inter-ministerial collaboration. Work on drafting the PM Decree has started.

In **Cambodia**, DAL has issued new regulations for inspection, but is still working on guidelines, forms and other documents needed to implement the new regulations. Training of inspectors will resume when these documents are available. DAL reported that, based on ground work done during Phase I, the percentage of pesticides with Khmer labels has started to increase steadily. Following a national workshop on implementation of the Rotterdam Convention in 2014, Cambodia in 2015 submitted import responses for 33 pesticides and severely hazardous pesticide formulations listed in Annex III to the Rotterdam Convention.

A workplan for assistance to **Myanmar** was drawn up, but implementation was delayed because of the political transition process taking place in the country and the change of the Director at the Plant protection Division. Myanmar participated in the above-mentioned regional workshop on the FAO Pesticide Registration Toolkit. They found the workshop very useful and requested a national workshop to train the entire pesticide registration board. This national workshop is being planned for early 2016.

Vietnam was given assistance in harmonizing training materials for farmers related to pesticide management. Previously, two very different curricula were used by the department responsible for IPM and the department responsible for pesticide management. These are now being integrated into one uniform set of training modules that put pesticide management in the context of IPM. Vietnam also participated in the above-mentioned workshop on use of the FAO Pesticide Registration Toolkit.

Project information and experiences fed back into FAO's international normative work on pesticide management and its lead in developing the SAICM/ICCM4 initiative on Highly Hazardous Pesticides. The latter involved preparation of a SAICM Strategy to address HHPs and the drafting of a ICCM4 resolution to recognize HHPs as an issue of concern and to call for concerted international action to address HHPs based on the Strategy.

Narrative report Swedish Chemicals Agency

During 2015, Keml gradually got more involved in activities connected to enforcement and participated in various meetings with government counterparts in Lao PDR and Cambodia together with FAO HQ. Keml took over the responsibility for drafting new manuals for inspectors in Lao PDR and worked in close cooperation with representatives from the Department of Agriculture.

• Strengthened chemicals management capacity within authorities, industries and among relevant CSOs in the partner countries.

Narrative report Swedish Chemicals Agency

In February, a meeting with the Forum working group was organised in order to decide on topics and date for the 9th Regional Chemicals Management Forum and plan other activities within the regional collaboration. Two participants from each country participated and for the first time Thailand was present as a formal member. Participants also gave short updates on recent development in the area of chemicals management in their respective countries.

From June 29 to July 1, Keml, in collaboration with the Vietnam Chemicals Agency, organised the 9th regional chemicals management forum in Vung Tau, Vietnam. A total of 63 participants (41 % women) from Cambodia, Lao PDR, Myanmar, DPR Korea (North Korea), Philippines, Thailand and Vietnam, together with invited speakers from Malaysia, Thailand, Vietnam and Sweden, took part in the 3-day workshop. Main focus of the 9th Forum was pesticide management and representatives from all implementing partners (Keml, FAO, PAN AP, TFA and local partners in Vietnam) attended the meeting and presented their work in the region. In addition, a session on waste management was held with presentations from a representative from the Swedish Environment Protection Agency and Tieng Giang Regional Crop Protection Center in Vietnam who has collaborated with pesticide industry in a project where pesticide containers are collected and properly disposed. The Regional Enforcement Network for chemicals and waste (REN) was presented by a representative from United Nations Environment Programme (UNEP) Regional Office for Asia and the Pacific. A representative from the Department for International Development (DFID) in Vietnam made a presentation on good governance, transparency and anti-corruption. The presentation was followed by group discussions where the participants identified areas/reasons for corruption in the chemicals sector. Group discussions revealed that unclear regulations that open up for interpretations are a major risk for corruption in the chemicals sector. Evaluation of the Forum showed that the participants were very satisfied with the topics, discussions and network that have been created. About 85 % of the participants expressed that the topics have very high or high relevance for their work and that the knowledge that they have gained have very high or high usefulness.



During 2015, Keml has been giving continuous support to Ministry of Industry and Commerce in Lao PDR during their process of drafting the first chemicals law for the country. Written comments have

been provided on several occasions during the year and two experts from KemI participated in a meeting between Vietnam Chemicals Agency and representatives from the committee responsible for drafting the law. In December, a regional workshop on development of legislation was organised in Vientiane. Around 20 experts from various ministries in Lao PDR together with experts in chemicals management and legislation from Cambodia, Myanmar, Thailand, Sweden and Vietnam shared experiences from their processes from development of legislation.

During 2015, KemI have had continuous dialogue with the ASEAN working group on Chemicals and Waste (former working group on multilateral environment agreements, MEAs) to explore possibilities for closer cooperation and make sure that they are aware of the work that is supported by Sweden within the regional programme. KemI was invited to provide input to the Terms of Reference for the new working group, which was a good opportunity to make suggestions based on the experiences from the regional collaboration on chemicals management.

In 2015, KemI met representatives from various ministries responsible for chemicals management in Cambodia and Lao PDR in order to discuss areas for possible additional support from KemI. Apart from support to development of legislation, general capacity building on chemicals management within the government was raised as a prioritized issue. KemI is currently developing a 3-day program and the training will be carried out in Lao PDR and Cambodia during 2016. Due to the changing political situation in Myanmar, a similar meeting to discuss needs and priorities was postponed. The same training could, however, be organized in Myanmar if they express a similar interest.

In 2015, KemI coordinated the drafting and finalizing of the new information brochure on the programme.

In January one of Keml's programme managers took part in a RBM workshop connected to the development of a project proposal in the area of research. Keml provided input from the regional programme and raised needs within the programme that could possibly be met by results from this planned network. Keml has previously supported the development of the project proposal, both financially and with expert advice, within the framework of the regional programme.