



Food and Agriculture Organization  
of the United Nations



**THAI EDUCATION FOUNDATION**

# Regional Workshop on Institutionalization of Farmer Field Schools at the Local and National Level



Bangkok, Thailand  
May 23-27, 2016

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## Acknowledgments

This reports presents the main results the four-day regional workshop on “Institutionalization of FFS at the Local and National Level in Asia”, held in Bangkok, Thailand, from 23 to 27 May 2016. The event was organized jointly by the Thai Education Foundation (TEF) and the Food and Agricultural Organization (FAO) of the United Nations. The workshop was facilitated by various FAO officers, including Marjon Fredrix, Kevin Gallagher, Johannes Ketelaar, Abubakar AlmaLinda, Chuluunbaatar Delgermaa, and Alfredo Impiglia.

The report was prepared by Randy Arnst, and edited by Francesca Cofini and Delgermaa Chuluunbaatar, at FAO’s Research and Extension Unit, in Rome.

Organizers of the workshop would like to express their gratitude to all the participants. Without the inspiring debate, the passionate discussions and innovative insights of the experts who participated, this workshop would not have been success. We also like to acknowledge the country teams for their time and effort in preparing country profiles and posters. Organizers also recognize the note takers, their contribution was very valuable in capturing the discussions and enabled this report to be comprehensive. Finally, special thanks goes to the local organizing team from FAO and TEF who made sure all the logistics and smooth running of the workshop.

In Memory:

Dr. Iftikhar Ahmad, a founder of Farmer Field Schools in Pakistan and participant of this workshop, who passed away shortly after the event on 03 June 2016.



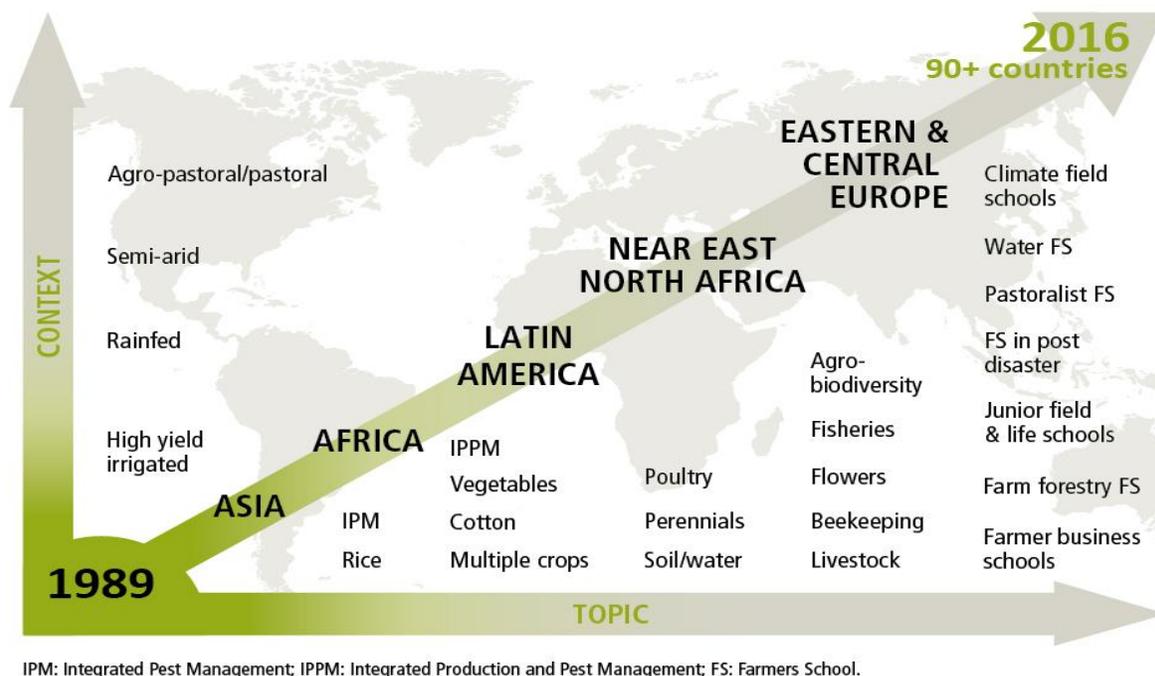
## List of abbreviations and acronyms

|         |                                                                |
|---------|----------------------------------------------------------------|
| ATSA    | Agriculture Technology Services Association                    |
| BPH     | Brown plant hopper                                             |
| CBO     | Community-based organization                                   |
| CDECf   | Community development and environmental conservation forum     |
| CPF     | Country Programme Framework                                    |
| FO      | Farmer organization                                            |
| FAO     | Food and Agricultural Organization                             |
| FFS     | Farmer field school                                            |
| ICERD   | Initiatives on community empowerment for rural development     |
| ICM     | Integrate crop management                                      |
| ICT     | Information and communication technologies                     |
| IFM     | Integrated farm management                                     |
| INGOs   | International non-government organizations                     |
| IPM     | Integrated Pest Management                                     |
| LGUs    | Local government units                                         |
| MVFFPEA | Myanmar Flowers and Fruits Producers and Exporters Association |
| NFE     | Non-formal education                                           |
| NGAs    | National government agencies                                   |
| NGOs    | Non-government organizations                                   |
| SMS     | Short message service                                          |
| SOFT    | Society of Facilitators and Trainers                           |
| TEF     | Thai Education Foundation                                      |
| TITAN   | Integrated pest management trainers association of Nepal       |
| TOT     | Trainer of trainers                                            |

## 1. Background

*'Institutionalization' is a sense of process through which new ideas and practices are introduced, accepted and used by individuals and organizations and become part of 'the norm'.  
Jonfa and Waters-Bayer, 2005*

The Farmer Field School (FFS) (Box 1) approach is aimed at empowerment of farmers through field-based experiential learning processes. It was first conceived and implemented 25 years ago in the rice paddies of Southeast Asia as a way of training farmers to apply the principles of Integrated Pest Management (IPM). This approach turned out to be very successful (Kenmore, 1991) and the following years witnessed a strong expansion of FFS activities: in crops other than rice, aspects of crop management other than IPM, livestock and, beyond the field, into aspects of processing and marketing.



Source: FAO, 2016

Notwithstanding this success, the adoption of FFS in national extension often remains problematic (Global FFS Review e-Forum, 2012) and FFS activities continue to be external project and/or programme driven. Tension between traditional top-down approaches and the new focus on farmer empowerment often weakens institutional support for FFS implementation that enters into partnerships with farmers to foster innovation, creativity and flexibility in dealing with agricultural systems. The essence of FFS –

empowerment of farmers to learn, understand, and make informed decisions – challenges conventional agricultural extension approaches, yet the creation of an enabling environment for institutional support – one that is conducive to transformative and people-centred approaches – is essential for expanding the effort, improving quality and strengthening impact and continuity.

Therefore, efforts to institutionalize FFS approaches to the national systems through various stakeholders have become necessary. Since Asia has the longest experience with FFS implementation, cross learning between countries on their experiences and lessons learnt about institutionalizing FFS at the national and/or local level is very essential to support countries in their efforts to make FFS last beyond project or program duration.

The four-day regional workshop on Institutionalization of FFS in Asia was organized jointly by the Thai Education Foundation (TEF) and the Food and Agricultural Organization (FAO) of the United Nations, on 23-27 May 2016 at the Sukosol Hotel in Bangkok, Thailand (workshop program available in Annex 3). As indicated in the evaluation form (Annex 7), this workshop was very much demanded by the countries in Asia.

## 2. The workshop

The purposes of this regional workshop were to:

- Share and learn from country experience and lessons learned on **institutionalization of FFS** at the local and national level;
- Develop action points for operationalizing **FAO's Guidance Document** on FFS at national and regional level; and
- Assess needs and interest for **regional FFS network** in Asia.

The workshop brought together a total of 42 participants, from which 35 represented 12 Asian countries, namely Bangladesh, Cambodia, China, India, Indonesia, the Lao PDR, Myanmar, Nepal, Pakistan, the Philippines, Thailand and Vietnam. Participants included farmers, FFS facilitators, researchers, extension service providers, academics, government officials, and field practitioners from public and private sectors, NGOs, FAO, and civil society organizations such as the Thai Education Foundation (full list of participants is available in Annex 2).

The workshop was designed in a participatory and interactive way, including facilitated group discussions, country team exercises, poster presentation, case study and plenary sessions.

Before the workshop in Bangkok the participants were asked to prepare country profiles (see Annex 4) and posters (annex 5) to show the current status of the FFS programs as well as milestones of institutionalization process in their countries. These experiences were presented during the meeting in the form of a poster session.

The workshop was organized according to the three main themes: FFS institutionalization experiences, FFS Guidance Document, and regional networking. This report is structured according to these themes and reflects the main results of the discussions.

Finally, on the fourth day the participants in attendance at the workshop developed and signed a resolution that calls for action by main stakeholders at local, national, regional and global level in joining efforts towards the institutionalization of FFS (a copy of the Resolution available in Annex 6). The final part of this report concludes with a brief discussion on the main messages from the 4 days.



### 3. Institutionalizing FFS

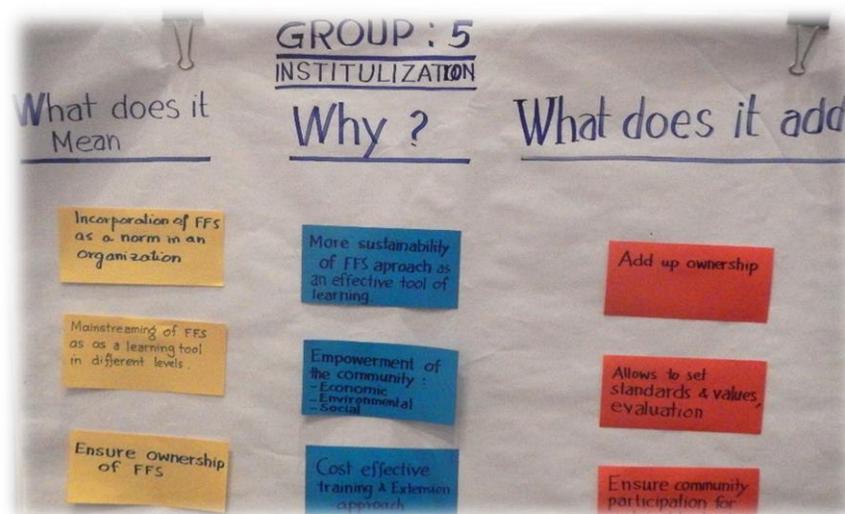
As highlighted in the previous part, the first objective of the workshop was to share and learn from country experience and lessons learned on institutionalization of FFS at the local and national level. Discussions on this objective were formed through group works, case study presentations, panel discussion highlighting stakeholder perspectives, and poster presentations elaborating on the country experiences.

#### 3.1 FFS experience in the region

##### 3.1.1 Main characteristics

What is institutionalization mean? The meaning of institutionalization is vary, very much related to context and culture. Despite its understanding which may vary at local level, the crucial importance of the institutionalization process was recognized as a common element for ensuring the sustainability and scaling up of FFS programs/initiatives. As such, the notion of institutionalization should be interpreted differently as one of sustainability as it entails internalizing changes within individual practices and organizations which eventually will become the norm. While institutionalization usually contribute to sustainability, it does not guarantee it.

The importance of FFS is more as a “*learning process*” rather than solely an extension mechanism. Thus, when it comes to institutionalization, it entails the institutionalization of a “*culture of learning*” and a commitment to farmer education. Institutionalization is a complex, not linear, and long-term process which requires changes in the system/process in which agricultural extension and education operates as well as changes in the mind sets of people who are involved in agriculture and farmer education. While support from policy makers are fundamentally important, institutionalization is not only related to policies, government and other extension providers, but it is also considered as an “*organic process*” taking place at local groups and communities. Issues of quality, in terms of norms, standards, trainers emerge as a very crucial element. Indeed, if at one hand it is difficult to clearly determine if or how FFS should be institutionalized. On the other hand, institutionalizing FFS would be important in order to assure good quality in scale.



### 3.1.2 Implementations of the institutionalization process

The exchange of country experiences showed that the process of institutionalization can take place at different levels from policy to farmer groups and community, and it has various entry points depending on the context. In addition, FFS and its institutionalization can happen through diverse stakeholders.

At local and community level the needs and demands of farmers and their community should be always considered as essential entry point for institutionalization. For FFS learning to be continued beyond the FFS project/program, it requires farmers taking ownership of the process and nourishing a “*culture of learning*” at the local level. For some, this process evolves naturally and becomes like a “*living organism*” as defined by some participant.

While institutionalization of FFS is very much part of the local groups, communities, and culture, it is crucial to bring this up at policy level in order to have institutional support to scale. The participants strongly believes that inclusion of FFS approach in policy documents is particularly important for funding purposes, e.g. in gaining financial support from governments. In the process of institutionalization,

support from policy makers is also fundamentally important to support FFS activities at the local level as well as transfer this process to scale. Policy supporting gender empowerment and the participation of women in FFS training and activities at local level is also required.

At the national level, the recognition of FFS as effective training and extension approach for farmers' and community empowerment at economic, environmental and social level (e.g. can help solving problem cohesively) have played a favorable role in promoting FFS and its institutionalization. The rationale behind the institutionalization of FFS is a need for sustainable learning and farmer education, also for next generation. Institutionalization appears to have a direct link with the efficient use of funds and resources as, among other things, it eases coordination among various program stakeholders and provides an innovative platform for engagement and collaboration among key stakeholders such as researchers, farmers, and academia.

Several factors contributed to the implementation of institutionalization process of FFS. Capacity development of facilitators, organization season-long training, the employment of farmer facilitators and ability to cover both technical and community aspects were all influential in quality and sustainability of FFS activities. Involving different stakeholders (e.g. private sector, research, FOs, NGOs), strengthening their capacity and creating an incentive also helped in the process of institutionalization.

Some of the rich experiences and reflections in the region highlighted as following:

Yunita Winarto (Indonesia) addressed the "missing ingredient" in many government FFS programs, or "project-based" FFSs. The goals were often quantitative (the number of FFSs, number of farmers trained, etc.) rather than the quality of the learning process. Conversely, some NGOs put more effort into preparation, such as strengthening local farmers' organizations and the selection and support of high-quality trainers. Such approaches require a longer-term perspective which fosters a culture of learning rather than a discrete training input.

Iftikhar Ahmad (Pakistan) spoke of "FFS learning systems" and the need for a solid, scientific basis for FFSs. He described the development of FFSs and the national program in Pakistan over the past 20 years, including the involvement of agricultural extension, universities and research bodies, as well as farmers' and trainers' organizations and networks. Dr. Ahmad also indicated that FFS institutionalization process should be linked to a national development objectives, partners, and other main challenges that lie ahead.

Jesse Binamira (Philippines) highlighted that the role of extension has shifted from change agent to knowledge facilitators; and from technology transfer to human resource development. This transition may play a favorable role in institutionalizing FFS. He also shared the timeline of the national IPM program since 1992, highlighting that it is self-funded at each of the national, provincial and community levels. Through this example, he stressed that FFS is a mean to achieve a certain objective, for example promotion of IPM in rice production. Therefore, in institutionalizing FFS at the national level, ways in which FFS can contribute to a particular government or organizational objective need to be considered.

Ngo Tien Dung (Vietnam) spoke about the progression of the national IPM program, which also began in 1992. There has been increasing financial support from the government, as well as diversification into

issues such as the system of rice intensification (SRI), rice-fish systems, and pesticide risk reduction. In the near future, the government plans to issues standards for FFSs, build both the quantity and quality of trainers, and diversify training content.

### 3.1.3 Key challenges and how to overcome them

Institutionalization of FFS programs entails a variety of challenges. Common points emerged from participants' discussions include:

*Instability:* Changes in organizations, management, policies, and people who are involved in and supportive of FFS pose challenges. It is common that government staff and FFS facilitators change jobs, and farmers migrate for seasonal work. These cause problems for the continuity of FFS activities at local and national level. While a commitment by policy makers is fundamental in institutionalizing FFS programs/principles at the national level, it also is extremely important to consider the involvement of other stakeholders such as NGOs, private sectors, and farmer organizations, in addition to government counterparts.

*Funding:* How to sustain FFS programs remains one of the biggest challenge in the efforts of institutionalization. FFS programs are often project driven and dependent of external funding. To overcome this, a shift towards innovative funding mechanisms including public-private partnership for FFS programs is desirable. Another way to support a sustainable funding for the institutionalization of FFS is to develop financing mechanisms where participants themselves contribute, but this is often hindered by farmers' lack of resources.

*Documentation:* Promoting FFS for institutional and financial support requires evidence of impact and cost-benefit of FFS in comparison with other approaches. However, systematic gathering of FFS results and its contribution to strategic objectives has been limited to do empirical evidence based advocacy. While is it a challenge to document FFS impact and contributions, it was realized as very crucial factor for institutionalization.

*Quality:* The success or the failure of FFS programs is largely influenced by the quality of the curriculum, training programs, and the quality of individuals in charge (e.g. facilitators). When scaling up programs, one of the main challenge is to maintain the quality in FFS programs and facilitators.

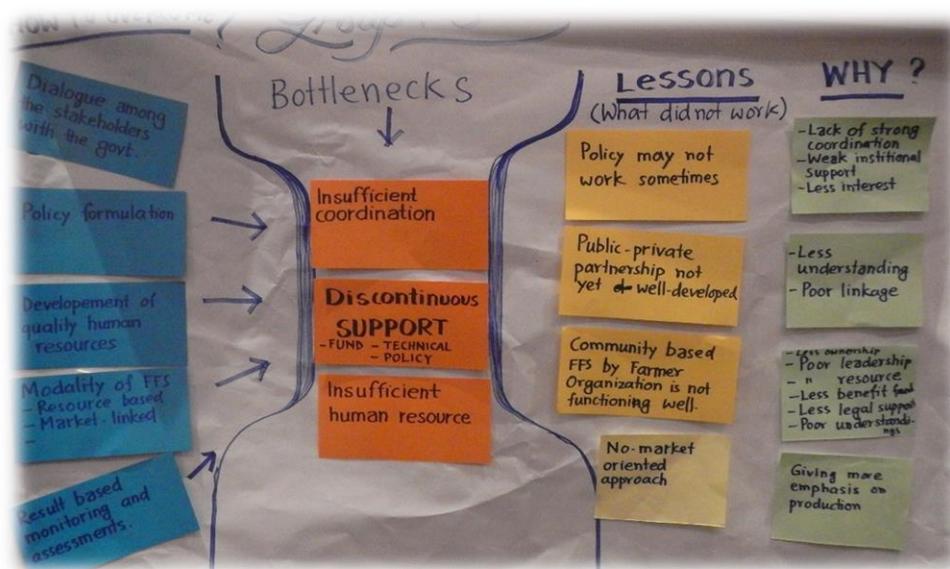
*Monitoring and evaluation:* Limited good monitoring and evaluation systems represent a big challenge. In particular, in order to institutionalize FFS programs it is important to have in place a participatory M&E system and a result based monitoring and assessment system, where the different dimensions of FFS (i.e. technical, educational, social and political dimensions) can be tracked and evaluated. Impact assessments and comparative studies for cost and benefit analysis can also contribute.

*Technical/technologies issues:* FFS groups continually challenged by a different technical and technological problems and access to right information and inputs.

For addressing the challenges above, several strategies can be combined, which include a strong political will and efforts from all relevant stakeholders. More efforts to have dialogue and build networks among key stakeholders, including the private sector, farmer organizations, NGOs, and the government are

needed at the local, national and international level. Also in terms of funding and sustainability, a budget allocation from national and local government would be instrumental. Evidence based advocacy and awareness raising is a crucial in addressing many challenges though documenting and showcasing impacts and effectiveness of FFS (through also field visits), organizing consultative meetings and workshop (including policy dialogue) with various actors.

Low quality of FFS curriculum and facilitators is strictly linked to limited capacities at different levels and to a lack of standards and norms as reference to quality. Various entry points to improve and ensure good quality of FFS include: capacity development, trainings of facilitators, ToTs, organizational development, leadership courses as well as developing criteria, monitoring quality indicators and setting a certification for FFS facilitators would improve the quality of FFS programs. Finally, in order to make curricula more relevant to farmers, curriculum development should be based on farmers' needs (e.g. improve market linkages).



### 3.1.4 Key insights from countries

A review of the country profiles (full compilation of country profiles available in Annex 4) and the case studies that participants were asked to prepare before meeting in Bangkok allowed to draw common features, success factors and priorities in the experiences on institutionalizing FFS.

The recognition of FFS within public discourses and national policies is a very important factor recognized in all experiences for the institutionalization of FFS programs. Aligning FFS approach with national initiatives and already existing policies also helps for securing sustainable source of funding. In Nepal, FFS is stated as the major extension approach for food security in the Agriculture Development Strategy and regular budget is allocated. In Philippines, FFS is included in national food production programs and it is also given a yearly budgetary allocation for its implementation. However, some national experiences show

also that regular budget allocation for FFS implementation does not always guarantee that main principles of FFS (e.g. non-negotiable principles) are strictly institutionalized.

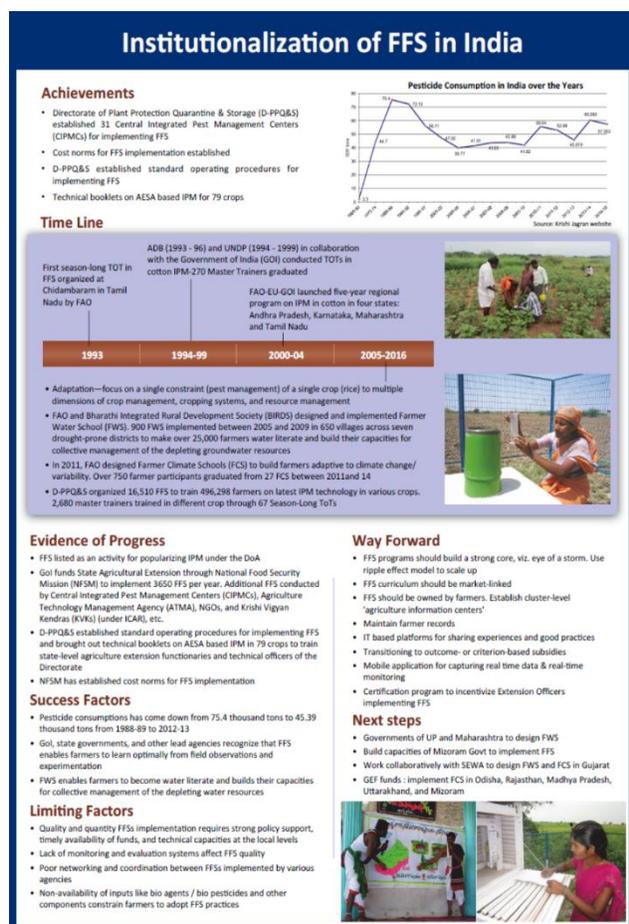
Integrating FFS principles and trainings in university curricula and agricultural programs is considered necessary for sustaining the quality of FFS and one of the main avenue for its institutionalization. However, some country cases show that this is not always happening, although regular government budget allocations and inclusion of FFS approach in the main agricultural and rural development policy.

One of the main success out of different country experiences is that FFS principles contributed to change of attitude and the behaviors of extension advisers from a technology transfer and demonstration focus towards a knowledge facilitation and learning purposes. This was shown particularly in the case of Philippines and China.

In some countries FFS is recognized by lead agencies and by civil society organizations (FOs, CBO, etc.) as a process enabling farmers in taking their own decision, developing their critical thinking and building farmers adaptive capacity. Thus, as contributing to bring about farmers' empowerment. See for example the case of India. This kind of appreciation would help FFS advocates in the shift from the dependence over donors' funds to be legitimate in competing for national funds, although changing government and priorities.

There is a common acknowledgment of the fact that good quality training programs produce competent trainers, while it is a big challenge to keep quality of programs when scaling up. Capacity development with a focus on the culture of learning rather than training on inputs is considered an important determinant of success. Both quality and quantity of FFS implementation require strong policy support, timely availability of funds, and capacities at local levels, including technical and functional skills (e.g. facilitation skills, capacities in promoting farmers enthusiasm). See for example the case of India.

The importance of the establishment of a common standardized M&E system both at national and local level and the availability of indicators to assess the quality of FFS activities and programs is found in almost all country experiences. In Cambodia for example, M&E exercises including baseline, midterm and post surveys are periodically undertaken to assess the impact of FFS intervention. Several tools are also used



in the countries for monitoring quality of FFS like the FFS diary in Lao People's Democratic Republic, and the FFS quality matrix in Indonesia.

One of the priorities for institutionalization of FFS shared by many countries is the regular update of training materials and FFS curriculum to reflect emerging needs and current issues (e.g. climate change and climate smart agriculture) as well as diversify and adaptation to local context. Within this context the adaptation of FFS to other areas beyond IPM, like disaster risk reduction, resource management and socio cultural dimensions of community have been considered both a success and a priority for the future. Improving market linkages has been identified also as an important area for the way forward. See for example the cases from India and Indonesia.

The establishment of national informal and formal network/community of FFS practitioners have been considered as another important priority, like for example in the case of Myanmar where the organization of a national workshop with key stakeholders will have the purpose of promoting recognition of FFS as effective approach for farmers empowerment and to create a common understanding among key stakeholders.

Poor networking and a lack of coordination at different levels are often mentioned as the main challenges in the process of institutionalization. Better coordination between local government and community (FFS groups) and the other stakeholders would allow to prepare a bottom up plan, creating platforms for farmers to integrate their learning with other community development programs, and also make FFS systems more respondent to farmers' needs and demands.

For example, in Philippines, a strong coordination and collaboration effort among the pillars of agricultural development namely National Government Agencies (NGAs), Non-Government Organizations (NGOs) and the Local Government Units (LGUs) and strengthened partnership with the LGUs at the provincial and municipal level through regular consultations, lie at the heart of the strategy to institutionalization. In China, the Ministry of Agriculture set up a professional team from different institutions to support FFS and develop FFS training manuals and guidelines and this has been considered one of the main factor of success.

Countries also shared the need to documenting success stories and disseminating results in a more systematic fashion.

### 3.2 Institutionalize FFS: stakeholder's perspectives

The institutionalization process is a long-term process which is not exclusively related to government and it does not always occur in a formalized way. It includes institutional and collaborative arrangements in public-private partnership, education institutes, NGOs, FOs, and at community level. For example, it is found that at local community level FFS can be better institutionalized as a learning process.

Experts from different sectors, including private sector, facilitators, government, farmers, etc. gather together to discuss the issue of institutionalization in terms of enablers, effective strategies, and key

success factors to institutionalize FFSs. The results of this discussion brought insights that look at institutionalization from diverse angles.

Sandar Myo, Secretary, International relations of the Myanmar Flowers and Fruits Producers and Exporters Association (MVFFPEA), shared experiences about the implementation of FFS by the private sector and the difficulties in asking fees to farmers. However, the company has been able to work with farmers' production groups. Some were using pesticide to control fruit flies, but IPM methods were introduced that managed the problem more efficiently.

Binod Saha, Assistant FAO Representative Nepal, presented IPM activities in Nepal that started in the 1990s to control brown plant hopper (BPH). Initially, the program consisted mainly of conducting FFSs, with little follow-up. However, the program has subsequently broadened to including marketing and other crop management issues.

Jam Khalid, Senior Vice President, SOFT Pakistan, presented the experience of SOFT - Society of Facilitators and Trainers (SOFT) that is the FFS facilitators' groups in Pakistan with most facilitators being farmers. SOFT works to enhance FFS quality through coordination and the sharing of information and practices. It forms one side of a triangle along with the government and FAO. SOFT Network facilitates its network member organizations also in marketing innovative products like natural honey, squashes, jams, flour, cloths, handicraft, seed, nursery plants etc., in capacity development, in developing linkages with the different service providers, government counterpart, donors and implementers.

Ngin Chhay, Director of Rice Department and Deputy Director of National IPM Programme, Cambodia, as representative from the government, emphasized the need for a clear conceptual framework for pesticide reduction, sustainable production, and increasing farmers' income. Capacity development and competent trainers within a strong network were also mentioned as requirements for institutionalization. The need to demonstrate clear and visible impacts was clearly highlighted as means also for gaining policy support.

Joharipin, Farmer Leader of Aliansi Petani Indonesia on behalf of Asian Farmers Association, in representing farmers' voice, stressed that FFS must be based on local conditions and needs, and focused on the importance of investing in developing the capacities of farmer trainers, who by being farmer themselves, are more aware of those needs. He also emphasized farmer studies and field research as important components in supporting farmers.



### 3.3 Innovative practices from the “Innovation hour”

The workshop represented an opportunity for participants to bring into discussion fresh and innovative practices:

Kevin Gallagher, Deputy FAO representative Mongolia, presented a self-financed experience of FFSs, where farmers use seed funding to both organize a FFS and grow crops, resulting in income to pay for continuing activities.

Marut Jatiket, Director of Thai Education Foundation, Thailand, shared about school IPM as an innovative way to both improve students’ learning experience and draw younger people back into agriculture. Also, FFSs conducted through NFE programs tend to focus more on the learning process, generate awareness and concern than simply to provide technical answers.

Dilli Ram Sharma, Programme Director and National IPM Programme Coordinator, Ministry of Agriculture, Nepal, described the involvement of Farmer Facilitators as resource persons to conduct Plant Clinics in which local farmers can bring technical problems for discussion and possible solution.

Sashi Adhikari, President of the IPM Trainers Association, Nepal, spoke about TITAN, the IPM Trainers Association of Nepal, and their work in supporting farmers. See <http://naf.org.np/index.php?option=cms&id=21>

Konda Reddy, FAO Consultant, India, shared his experience with participatory climate monitoring, in which farmers gather and monitor weather data in order to develop plans for adapting crops and cropping patterns.

Mrityunjoy Roy, Deputy Project Director of AGEP, Department of Agricultural Extension, Bangladesh, described the evolution of IPM to include integrate crop management (ICM) and also integrated farm management (IFM), which addressed all aspects of production, including market linkages.

Jam Khalid, Senior Vice President, Society of Facilitators and Trainers (SOFT), Pakistan, spoke about the effort of 'Smallholders Asia' to create a platform through which farmers can sell, buy or exchange produce and agricultural inputs, as well as to rent land, agricultural machinery or services.

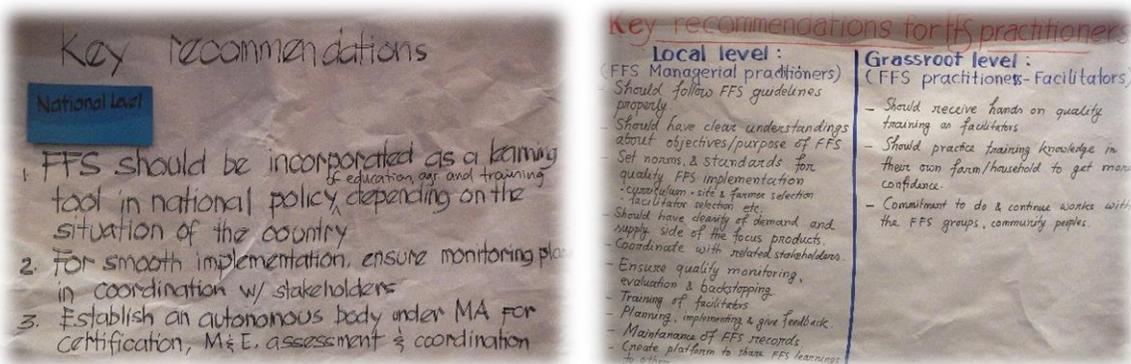
### 3.4 Key recommendations

Key recommendations on the institutionalization of FFS were discussed and formulated. All stakeholders, including governments, FAO, farmer facilitators, FFS practitioners, NGOs, have a role to play in implementing them. Results shared in brief plenary presentations comprise:

- The FFS approach is intended as a learning process beyond being considered solely an extension mechanism. Institutionalizing this culture of learning process requires a thorough understanding of the local context and shared demand among groups, communities as well as by the government.
- FFS approach as a learning tool should be incorporated into relevant national policies. Policy support is needed for human resource development with FFS (e.g. CPF) as well as for funding.
- Raise awareness among key stakeholders including policy makers is essential to take them on board for better institutional support to FFS activities.
- Document evidences and field results for evidence-based advocacy also to international and regional donors is crucial.
- Establish autonomous bodies for developing norms and standards in coordination with various stakeholders for quality FFS implementation (curriculum, site and farmer selection, facilitator selection, etc.), as well as certification and monitoring.
- Ensure higher quality training, both in FFSs and TOTs, and training opportunities beyond initial FFS activities, including farmer congresses; and enhance human resource development related to training of agriculture extension personnel on FFS approach, including principles, purposes, etc.. Outstanding facilitators should be recognized both at national and local level.
- Set up institutional arrangements for better networking and coordination among various stakeholders, including government departments (internal coordination on quality issues), NGOs, farmer's organizations, alumni networks, etc.. Networks should be set up at various levels (e.g. country level through Alumni Association Network; regional level, possibly facilitated by FAO).
- Strengthen and create linkages between FFS activities, local communities, markets and other stakeholders such as research institutes, local government bodies and dealers.

During implementation of FFS:

- Follow FFS guidelines properly and ensure that objectives and purposes of FFS are clear
- Ensure coordination and create/strengthen linkages with relevant stakeholders (e.g. develop linkages with local market)
- Ensure quality M&E (including FFS records)
- Ensure quality training to facilitators and backstopping
- Create platform to show FFS's learning to others.



Another major outcome of the workshop was the development of a *Resolution* that calls main stakeholders, at local, national, regional and global level in joining efforts towards the institutionalization of FFS. Participants collectively developed the resolution during the final session of the workshop. After discussion and revision, the Resolution was accepted and signed by all participants. Below the transcript: (full resolution and participants signatures are found in Annex 6)<sup>1</sup>:

*“We, the participants of this workshop representing regional countries urge FAO that it should take the lead in institutionalization of FFS learning system at local, national, regional, and global levels and setting up the FFS support centers at appropriate levels.*

*We urge our respective governments to approach FAO for its continuous support in the institutionalization.*

*We urge all other stakeholders at local, national, regional and global levels including private sector, NGOs, INGOs, farmer’s network and development partners to join hands in institutionalization of FFS”.*

<sup>1</sup> The participants from 12 member countries presented the resolution to the FAO’s Assistant Director General of Asia and Pacific Region, Ms. Khundavi at a seminar which was held at the FAO RAP office to share information on FFS programs in the Asian region, to highlight how FFSs are being used in different regional Initiatives, and to launch the FFS Guidance Document, on May 28, 2016.

## 4. Operationalizing FAO's Guidance Document on FFS at national and regional level

The FAO's guidance document was released just prior to the workshop in April, 2016, and can be found at <http://www.fao.org/3/a-i5296e.pdf>. The document is based on the results from the Global FFS Review, conducted by FAO in 2012 and on the discussion forum which gathered more than 100 participants from all over the world. The document provides a common reference for FFS program development, by offering a general framework for setting up strong, solid and sustainable programs to be adapted and revised in future by FFS communities of practice at country, regional or sub-regional level, in a participatory and inclusive process (FAO, 2016).



Country teams drew down their proposed key action points on how to operationalize and use the FFS Guidance Document. The common threads among country teams are as follows:

- Sharing the document with relevant government agencies, universities, other organizations, and FAO offices. In some countries, a letter would be needed from FAO to officially present it to government.
- Translating the document (in full or in part) into local languages, with possible financial assistance from FAO.
- Workshops and other means to disseminate the document's contents, and get feedback about it for future adaptation.
- Use the document to improve FFS programs, particularly curricula and monitoring mechanisms.

The document is considered by FAO to be a 'living document' and feedback from this workshop and from its implementation in the field over the coming months will contribute to any future revisions.

## 5. Regional FFS network in Asia

The main objective of this session was to assess the needs for and interests in a regional FFS network and participants also explored the way forward. All participants agreed on the fact that a well-functioning regional FFS network would enhance FFS support in the Asia region. The establishment of a FFS network would assist in the following key areas:

- Enhance the capacities within the region.
- Mobilize financial resources for FFS in the region.
- Facilitate the sharing of information, methods, approaches, materials and technical information, etc., thereby enhancing cross learning in the region.
- Assist in raising the visibility of FFS work and therefore policy support within various countries.
- Harmonize standards, improve monitoring systems and enhance the quality of field programs.
- Create a common understanding on good quality of FFS.
- Create a platform for information and knowledge sharing on FFS and sustainable networking.

While the need for a well-functioning FFS network in the region was recognized and stressed, participants were also introduced to existing networking mechanisms in the region:

- The Regional Vegetable IPM Programme, was presented by Alma Linda Abubakar. The Programme has a website [www.vegetableipmasia.org/](http://www.vegetableipmasia.org/) as well as pages on Facebook and Twitter.
- The Field Alliance, presented by Alexandra Parkinson, was established in 2000. It is a network of organizations, comprising Indonesia (Field), Nepal (Titan), Cambodia (Atsa), Myanmar (Swissaid), Laos (CDECF), Vietnam (ICERD), Philippines (Ag. Ext. Office) and Thailand (TEF).
- Marjon Fredrix from FAO shared the already existing FFS networks, that mostly informal exist in Southern, Eastern and West/Central Africa, North Africa and the Near East, Latin America and the Caribbean, and Asia. Alfredo Impiglia also from FAO presented about a workshop held in Tunisia last year to kick start a North Africa and Near East FFS network. FAO website on FFS launched shortly after the workshop is available: <http://www.fao.org/farmer-field-schools/en/>

Participants explored the potential communication tools for networks:

- ICTs are commonly used in the Asia region for extension purposes. E.g. Cellphones and SMSs and group messaging like WhatsApp are widely used to monitor and exchange information about market prices.
- The use of ICTs varies among countries due to local context and legislation. E.g. Line is very popular in Thailand and Laos, while WhatsApp is more used in Indonesia. Facebook in Nepal allows to share crop problems and have diagnoses and also in Thailand it is used for marketing purposes, while in China its use is not allowed by the government.
- Facebook is the most used social media platform for network communication

Additional areas expressed by participants considered the way forwards, that is to say how to make network start functioning and be sustainable in the future. They are:

- A regional committee or committees could be established, with one or two meetings a year rotating among different countries. Clear communication channels would benefit the exchange
- FAO needs to take the lead, especially in the initial phase, in establishing such a network given FAO's role in FFS program development in the region and their technical expertise on FFS. However, FAO participants indicated that to be able to do so requests must come from government.
- The use of existing networks, such as Field Alliance, need to be explored.



## 6. Conclusions

The workshop brought together 35 participants from the Asia region and took on board different perspectives from key experts on FFS. It reflected on country experiences and lessons learned at local and national level, developed action points for operationalizing FAO's Guidance Document on FFS at national level and emphasized the needs for a regional FFS network in Asia.

Institutionalization is a complex, non-linear process requiring change, and consequently requires a longer-term perspective. It requires changes not only in the system, but also in the mindsets of people who are involved in farmer education and extension. While institutionalization usually contributes to sustainability of FFS learning process, it does not always guarantee it. Institutionalization of FFS should be intended in the broader sense than adoption by government agencies. It should be seen as institutionalizing FFS learning process and a commitment to farmer education at different levels by different stakeholders: including farmer groups, communities and national institutions.

Major aspects of institutionalization that are needed at national level include the scaling up/out of the experiential learning process for farmer education, a committed policy support and a serious resource mobilization in terms of human resources, technology, funds, etc. The urgency for extension reform/transformation, conducive to experiential adult learning process such as FFS was raised. Yet, the needs for development of standards, and the establishment of common standardized M&E system both at national and local level and the availability of indicators to assess the quality of FFS activities were identified.

At local level instead, particular issues raised included discussion around FFS as a “living organism” and the need to embed a “culture of learning”. Also, in order to get policy support more evidences of impact need to be gathered. The issue of quality of the learning process was widely deliberated. Quality is intended in terms of capabilities and skill sets for facilitators, beyond the technical issues, including facilitation skills for example. FFS learning system should be flexible enough to adapt and diversify according to diverse needs/demands of farmers and contexts. However, linkage between local and national level institutionalization were not discussed sufficiently.

The review of the major action points for the FFS Guidance Document included informing the FAO representation in various countries about the document, translating it into local languages, and workshops and other activities to disseminate its contents. The FFS Guidance Document could serve to improve FFS programs at many levels, from policy support to curricula development, and should be considered as a living document which invites engagement, comment and feedback from field implementers for further improvement and update.

Although a number of networking platforms already exist; ranging from formal to informal and in-person versus internet-based modalities, the expressed need for a more formal regional network dedicated to FFS was reiterated, and FAO was suggested to host it.

The objectives of the regional networking on FFS includes to raise awareness, create a common understanding about FFS, share information and practices, and to enhance the capacities of FFS programs in the region. However, the design and major functions of such a network need further elaboration.

The recognition of the value that networking at the regional level delivers, built the fundamentals also for the Resolution which was drafted and signed during the workshop by a majority of participants.

## References

FAO. 2016. FARMER FIELD SCHOOL GUIDANCE DOCUMENT Planning for quality programmes. FAO, Rome. Available at: <http://www.fao.org/3/a-i5296e.pdf>

Chuluunbaatar D. and Yoo J. 2015. A shift in global perspective. Institutionalizing Farmer Field School. FAO, Rome. Available at: [www.fao.org/3/a-i5113e.pdf](http://www.fao.org/3/a-i5113e.pdf)

## Web resources

FAO farmer field schools (available at <http://www.fao.org/farmer-field-schools>)

FIELD Indonesia (available at <http://field-indonesia.or.id/en/field-school/>)

IPM Trainers Association Nepal (available at <http://naf.org.np/index.php?option=cms&id=21>)

Regional vegetable IPM program (available at [www.vegetableipmasia.org/](http://www.vegetableipmasia.org/))

Society of facilitators and trainers in Pakistan (available at <http://www.softpakistan.org/index.php/en/>)

## Annex 1: Concept Note

### ***Regional Workshop on Institutionalization of Farmer Field Schools at the Local and National Level***

May 23-28, 2016

#### **Background:**

*'Institutionalization' is a sense of process through which new ideas and practices are introduced, accepted and used by individuals and organizations and become part of 'the norm' (Jonfa and Waters-Bayer, 2005).*

The increasing world population poses a need for production of more food. According to estimations of the Food and Agriculture Organization of the United Nations (FAO), food crop production must grow by 60 percent by 2050 (FAO, 2012a). At the same time, possibilities for expanding crop land by reclamation are becoming more and more limited, which means that agriculture must further intensify. The population that is most hard-pressed to meet this challenge is that of small-scale farmers, as they struggle to feed their families and make agricultural production a more profitable enterprise. Efforts to achieve this are hampered by lack of effectively functioning agricultural extension services. In a survey by the Inter-Academy Council (2005), 24 African countries listed strengthening extension as one of the top priorities for a poverty reduction strategy. However, contradictions within agricultural extension systems complicate these efforts. Broadly speaking, there are two conflicting approaches:

- designing standardized technology packages which maximize yields, to be delivered to farmers in a top-down fashion; or
- entering into partnerships with farmers to foster innovation, creativity and flexibility in dealing with agricultural systems.

The Farmer Field School (FFS) strategy is aimed at empowerment of farmers through field-based experiential learning processes. It was first conceived and implemented 25 years ago in the rice paddies of Southeast Asia as a way of training farmers to apply the principles of Integrated Pest Management (IPM) in dealing with outbreaks of the brown plant hopper in rice. This approach turned out to be very successful (Kenmore, 1991) and the following years witnessed a strong expansion of FFS activities: in crops other than rice, aspects of crop management other than IPM and, beyond the field, into aspects of processing and marketing.

Notwithstanding this success, the adoption of FFS in national extension often remains problematic (Global FFS Review e-Forum, 2012). Tension between traditional top-down approaches and the new focus on farmer empowerment often weakens institutional support for FFS implementation. Moreover, changes in advisory services are often impeded by a lack of partnership between different actors, limited expertise at the national level, and an absence of political will to promote new approaches (Sulaiman and Hall, 2002). Altogether, the potential for success of the FFS approach appears strongly influenced by a sense of ownership by the parties involved. As farmers take ownership of their innovations and decisions on the farm, local and national governments take ownership of their extension systems on the policy level by creating an environment in which FFS programs and networks can succeed.

The essence of FFS – empowerment of farmers to learn, understand, and make informed decisions – challenges conventional agricultural extension approaches, yet the creation of an enabling environment for institutional support – one that is conducive to transformative and people-centered approaches – is essential for expanding the effort, improving quality and strengthening impact and continuity. Therefore, efforts to institutionalize FFS approaches to the national systems through various stakeholders have become necessary. In addition, cross learning between countries and regions on their experiences and

lessons learnt about institutionalizing FFS at the national and/or local level is very essential to assist countries in their efforts to make FFS last beyond project or programme duration.

The purpose of the regional workshop is to share and learn from country experiences and lessons learnt on institutionalization of FFS at the local and national level, discuss and develop guide and recommendations on the institutionalization of FFS (revise chapter of the FAO's Guidance Document on FFS), exchange and learn across countries and regions through networking.

**Procedure:**

This regional workshop on Institutionalization of FFS in Asia is organized jointly by the Thai education Foundation (TEF) and Food and Agricultural Organization (FAO) of the United Nations. Participants who have experience on the institutionalization of FFS approach will be invited from 10 member countries of Asia to share and learn their experiences. The regional workshop will be organized in Bangkok, Thailand during 23-28 May 2016. The program will consist of 3 days meeting plus a one-day field visit to FFS program at the local level and national level.

**Objective:**

The purpose of regional workshop is to

1. Share and learn from country experience and lesson learnt on institutionalization of FFS at the local and national level.
2. Develop guidelines and recommendations on the institutionalization of FFS in relation to the concerned chapter in FAO's Guidance Document on FFS
3. Assess needs and interests for a regional FFS network in Asia.

**EVENT DETAILS**

*Date:* May 23-28, 2016

*Location:* Hotel to be confirmed in, Bangkok, Thailand

*Methodologies:* The workshop will be highly participatory and participants are expected to participate and contribute to the discussions and exercises actively. Various participatory approaches will be used, including participatory approaches, group work, talk shows, etc.

Please note! The workshop will be in English only.

***Role of the participants:*****Pre-workshop:**

- Filling the preliminary study to determine the status and needs of the participating countries
- Prepare a country presentation on their experience in institutionalization of FFS.

**During workshop:**

- Presentation of their country experience
- Active participation

**Post-workshop:**

- Review and comment on the report if necessary

## Annex 2: Participants

### Bangladesh

- Mr. Mrityunjoy Roy, Deputy Project Director, Integrated Farm Management Component (IFMC), AGEP Project, Department of Agriculture Extension
- Mr. Md. Taifiquil Alam, Regional IFMC Coordinator (RIC), Integrated Farm Management Component, Department of Agriculture Extension

### Cambodia

- Mr. Ngin Chhay, Director of Rice Department & Deputy Director of National IPM Programme, General Directorate of Agriculture, Ministry of Agriculture, Fisheries & Forestry
- Ms. Pan So Davy, Executive Director, Agriculture Technology Services Association (ATSA)

### China

- Mr. Shi Shangbai, Professor in Charge of Rural Development and Farmer Education, Chinese Social Science Academy
- Ms. Qiao Yan, Senior Agronomist, Plant Protection Station of Beijing City
- Mr. Xie Yiling, Senior Agronomist, Provincial Plant Protection Station of Guangxi Zhuang Autonomous Region

### India

- Mr. Konda Reddy, Consultant, FAO India

### Indonesia

- Mr. Abdul Gafar, Pest Management Expert, Food Crop & Horticulture Protection Center, South Sulawesi
- Mr. Widyastama Cahyana, Executive Director, Field Indonesia
- Ms. Yunita Winarto, Professor, Department of Anthropology, Faculty of Social & Political Sciences University of Indonesia
- Mr. Joharipin, Farmer Leader, Aliansi Petani Indonesia (API), on behalf of Asian Farmers Association

### Lao PDR

- Mr. Bounsy Nanthaphone, Deputy Head of Multilateral Cooperation Section & Deputy Director of SSSJ programme, Department of Planning & Cooperation, Ministry of Agriculture & Forestry
- Mr. Chanthalath Pongmala, Assistant FAO Representative - Programme, FAO Representation

### Myanmar

- Ms. Sandar Myo, Secretary, International Relations, Myanmar Vegetables Flowers & Fruits Producers & Exporters Association (MVFFPEA)

### Nepal

- Mr. Binod Saha, Assistant FAO Representative - Programme, FAO Representation
- Mr. Dilli Ram Sharma, Programme Director & National IPM Programme Coordinator, Plant Protection Directorate, Department of Agriculture, Ministry of Agriculture Development
- Ms. Sashi Adhikari, President, The IPM Trainers Association Nepal (TITAN)

### Pakistan

- Ms. Tahira Yasmin, Programme Leader, National IPM Programme, Department of Plant & Environmental Protection, National Agricultural Research Centre, PARC
- Mr. Jam Khalid, Senior Vice President, Society of Facilitators and Trainers (SOFT),

- Mr. Iftikhar Ahmad, Advisor- Programme, FAO Representation
- Mr. Munawar Raza Kazmi, Country Manager, Australian Centre for International Agricultural Research

**Philippines**

- Dr. Jesse Binamira, Save & Grow FFS Programme Coordinator, Department of Agriculture
- Ms. Ofelia Sanchez, Training Specialist, Agricultural Training Institute XI
- Mr. Jimmy Abarabar, Trainer, Agricultural Training Institute-Regional Training Center, Isabela

**Thailand**

- Mr. Lakchai Meenakanit, Former Director, Biological Control & Farmer Field School Promotion Institute. Representing the Plant Protection Promotion, Soil & Fertilizer Management Division, Department of Agricultural Extension, Ministry of Agriculture & Cooperatives
- Ms. Khanitha Pongpreecha, Subject Matter Specialist, Plant Protection Promotion, Soil & Fertilizer Management Division, Department of Agricultural Extension, Ministry of Agriculture & Cooperatives
- Mr. Ars Ponhet, Director, Sa Kaeo Vocational Training & Development Centre for Thai People, Office of The Non-Formal & Informal Education
- Ms. Sutisa Choonharaungdej, Educator, Operation Promotion Division (OPD), Office of The Non-Formal & Informal Education
- Mr. Marut Jatiket, Director, Thai Education Foundation

**Vietnam**

- Mr. Ngo Tien Dung, Member, Center of Initiatives on Community Empowerment & Rural Development(ICERD)
- Mr. Nguyen Duy Hong, Director, Hanoi Plant Protection Sub-Department

**Food and Agriculture Organisation**

- Ms. Marjon Fredrix, Agricultural Officer, AGPM, FAO Rome
- Ms. Delgermaa Chuluunbaatar, Agricultural Extension Officer, AGDR, FAO Rome
- Mr. Austin Stankus, Aquaponics Expert, FAO Rome
- Mr. Kevin Gallagher, Deputy FAO Representative, FAO Mongolia
- Mr. Jan Willem Ketelaar, Chief Technical Advisor, FAO Asia IPM/Pesticide Risk Reduction Programme
- Ms. Alma Linda Abubakar, Programme Development Officer, FAO Asia IPM/Pesticide Risk Reduction Programme
- Mr. Alfredo Impiglia, Regional Coordinator for FFS Programmes, FAO Regional Office for the Near East & North Africa
- Ms. Nattakarn Sahavacharin, Programme Assistant, FAO Asia IPM/Pesticide Risk Reduction Programme

**Thai Education Foundation**

- Ms. Parika Maneeprem, Support Staff
- Ms. Alexandra Perkinson, Information Officer
- Mr. Randall Arnst, Consultant

## Annex 3: Programme

| DAY 1 – May 24, Tuesday   |                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.30-9.00                 | Registration                                                                                                                                                                                                | Registration                                                                                                                                                                                                                              |
| 9.00-9:45                 | Opening Session                                                                                                                                                                                             | Welcome Remarks (15 min): <ul style="list-style-type: none"> <li>• Opening remarks</li> <li>• Workshop objective</li> <li>• Short overview of the agenda</li> <li>• Introduction to the organizing team</li> </ul>                        |
|                           |                                                                                                                                                                                                             | Participant self-introduction (30 min)                                                                                                                                                                                                    |
| 9.45-10.30                | I. Institutionalization of FFS experiences in the region<br><i>Objective 1: Share and learn from country experience and lessons learned on institutionalization of FFS at the local and national level.</i> | General discussions (setting a common ground): <ul style="list-style-type: none"> <li>• What does institutionalization mean to you?</li> <li>• Why institutionalize?</li> <li>• What is the value of institutionalization?</li> </ul>     |
| 10.30-10.45               | TEA BREAK                                                                                                                                                                                                   |                                                                                                                                                                                                                                           |
| 10.45-12.30               | II. Institutionalization of FFS country experiences<br><i>Objective 1: Share and learn from country experience and lessons learned on institutionalization of FFS at the local and national level.</i>      | Sharing and exchanging country stories: <ul style="list-style-type: none"> <li>• Via posters, photo essays, timelines, other forms of exhibition (Bus Stop/world café format)</li> </ul>                                                  |
| 12.30-13.30               | LUNCH BREAK                                                                                                                                                                                                 | Group photo                                                                                                                                                                                                                               |
| 13:30-15:15               | II. Institutionalization of FFS country experiences                                                                                                                                                         | Sharing and exchanging country stories: <ul style="list-style-type: none"> <li>• Via posters, photo essays, timelines, other forms of exhibition (Bus Stop/world café format)</li> <li>• 3 Selected 'case study' presentations</li> </ul> |
| 15.15-15.45               | TEA BREAK                                                                                                                                                                                                   |                                                                                                                                                                                                                                           |
| 15:45-17:00               | I. Institutionalization of FFS experiences in the region<br><i>Objective 1: Share and learn from country experience and lessons learned on institutionalization of FFS at the local and national level.</i> | Brain storming discussions with focus on: <ul style="list-style-type: none"> <li>• What worked?</li> <li>• What are the entry points for institutionalization?</li> <li>• Why &amp; How?</li> </ul>                                       |
| 18:00                     | Welcome dinner by ONFIE                                                                                                                                                                                     | All participants are welcome                                                                                                                                                                                                              |
| DAY 2 – May 25, Wednesday |                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |

|                                 |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.00-9.00                       | III. Institutionalization of FFS<br>Summarizing and Distilling<br><i>Objective 1: Share and learn from country experience and lessons learned on institutionalization of FFS at the local and national level.</i> | Fine-tuning the 'country profile' – country team (gap-filling, get details, clarifications on the country profile)<br>Based on the pre-workshop assignment for country teams to fine-tune their profiles                                                                    |
| 9:00-9:30                       |                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Summary review of day 1 &amp; highlights</li> <li>• Reflection</li> </ul>                                                                                                                                                          |
| 9.30-10.15                      |                                                                                                                                                                                                                   | Panel discussion focuses on enablers, effective strategies, key success factors to institutionalize FFS.                                                                                                                                                                    |
| 10.15-10.30                     | TEA BREAK                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                             |
| 10.30-12:30                     | III. Institutionalization of FFS ...continuation                                                                                                                                                                  | Discussion on the key issues on institutionalization <ul style="list-style-type: none"> <li>• What are the key challenges and bottlenecks around institutionalizing FFS?</li> <li>• How to overcome them?</li> <li>• What did not work (lessons)</li> <li>• Why?</li> </ul> |
| 12.30-13.30                     | LUNCH BREAK                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                             |
| 13:30-15:00                     | III. Institutionalization of FFS ...continuation                                                                                                                                                                  | Important considerations for Institutionalizing FFS <ul style="list-style-type: none"> <li>• Key recommendations (to whom?)</li> <li>• What is missed? What we have not said or discussed</li> </ul> What is in the parking lot?                                            |
| 15:00-15:30                     | TEA BREAK                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                             |
| 15:30-17:00                     | IV. Guidance Document on FFS<br>Operationalization<br><br><i>Objective 2: Develop action points for operationalizing FAO's Guidance Document on FFS at national and regional level.</i>                           | Presentation of the Guidance Document <ul style="list-style-type: none"> <li>• Why Guidance Doc is important</li> <li>• Some background on the process</li> <li>• What is it about</li> </ul> Operationalization of Guidance Document                                       |
| <b>DAY 3 – May 26, Thursday</b> |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                             |
| 8:30-9:00                       | Re-Cap of Day 2                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Summary review of day 2 &amp; highlights</li> <li>• Reflection by others</li> </ul>                                                                                                                                                |
| 9:00–10:30                      | IV. Guidance Document on FFS<br>Operationalization ...continuation                                                                                                                                                | Country action points for use/operationalization of the Guidance Document - How can you use it? <ul style="list-style-type: none"> <li>• Country team</li> </ul>                                                                                                            |
| 10:30-11:00                     | TEA BREAK                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                             |

|                               |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:00-12:30                   | V. FFS Network in Asia<br>Objective 3: Assess needs and interest for regional FFS network in Asia.        | Global FFS network activities (short presentation by FAO)<br><ul style="list-style-type: none"> <li>• Update on global FFS Network activities</li> <li>• Update on other regional networks</li> </ul> Discussion on Asia FFS network<br><ul style="list-style-type: none"> <li>• Current status – how people currently working</li> <li>• Key challenges – how to overcome &amp; strengthen the network</li> <li>• Potential role (for what, why and how)?</li> </ul> |
| 12.30-13:30                   | LUNCH BREAK                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 13:30-15:30                   | V. FFS Network in Asia<br><i>Objective 3: Assess needs and interest for regional FFS network in Asia.</i> | Discussion on Asia FFS network (continued)<br><ul style="list-style-type: none"> <li>• How would you like to work together (operational mechanism)?</li> <li>• What would be most useful topic/issue to work together as a network?</li> </ul> Tentative plan/roadmap for the network (next 6-12 months)?                                                                                                                                                             |
| 15:30-15:45                   | TEA BREAK                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 15.45-16:30                   | IV/V. Guidance Document & Regional Network<br>Objective 2 and 3.                                          | To be determined from the previous discussions                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 16.30-17.00                   | II. Institutionalization of FFS country experiences                                                       | Re-cap on the 'country profile' - updates                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>DAY 4 – May 27, Friday</b> |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 8:00–10:00                    | VI. Wrap up and feedback                                                                                  | <ul style="list-style-type: none"> <li>• Feedback on the workshop process and content</li> <li>• Discussion on what is next</li> <li>• What is in the parking lot?</li> <li>• Closing remarks</li> </ul>                                                                                                                                                                                                                                                              |
| 10:00-10:30                   | TEA BREAK                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 10:30–13:30                   | II. Institutionalization of FFS country experiences                                                       | Finalization and collection of country profiles                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                               | IV. Guidance Document on FFS launch at RAP                                                                | A group goes to FAO RAP for a seminar and launching of the GD.                                                                                                                                                                                                                                                                                                                                                                                                        |
| 13:30-14:30                   | LUNCH BREAK                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>END OF THE WORKSHOP</b>    |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Annex 4: Country Profiles

### **COUNTRY PROFILE: Bangladesh**

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*Prepared by: Mrityunjoy Roy, Deputy Project Director, Integrated Farm Management Component (IFMC), DAE, Dhaka, Bangladesh.*

#### **Background and history**

Bangladesh has own a remarkable experience in FFS implementation. Since 1981 Concept IPM introduced through FAO's Inter-Country IPM programme with FFS training in rice from 1990 onwards. FFS diversification (e.g. vegetables, cotton, fruits, fisheries, livestock, poultry etc.) and up scaling from 1996 onwards with support from FAO, UNDP, DANIDA, ADB, CARE etc. During last 25 years, over 50 batches of season long TOT courses were conducted and developed more than 1400 Departmental Trainers from DAE, 2000 (7% female) Farmer Trainers and 2150 Farmer Facilitators (23% female). Since 1990, about 24 projects have been implemented approximately 44,000 FFSs throughout the country by which **±12,75,000** (10-50% female) farmers received full season practical training. Main crops of FFS are rice, vegetables (eggplant, cauliflower, cabbage, cucurbits, beans and potato), cotton, fruits (mango, litchi, guava, banana and papaya), livestock and fisheries.

Initially the FFSs were supported by several donors. Approximately 13 donors and GOB funded in Bangladesh for FFS implementation. Government has increased participation gradually, included FFS approach in National Agricultural Policy (NAP) as group approach, and in Strategic plans and approved FFS based National IPM policy (2002). Presently government is funding 100% (2.2 million US \$) for FFS implementation by one national project. Department of Agricultural Extension (DAE) is now implementing the biggest project among the previous all the FFS based projects and 20000 FFSs will be implemented on Integrated Farm Management (IFM) by June 2018through which ±1 million Farmers will be trained (at least 50% female). GOB has been funding 25% of project budget (13.8 million US \$) with DANIDA.

#### **FFS Implementing agencies**

Department of Agricultural Extension (DAE), Bangladesh Agricultural Research Institute (BARI), Bangladesh Agricultural Research Council (BARC), Bangladesh Agricultural University (BAU), Cotton Development Board (CDB), Bangladesh Water Development Board (BWDB), CARE Bangladesh.

#### **Partners and donors**

Government of Bangladesh (Present), FAO, UNDP, DANIDA (Present), European Union (EU), USAID (Present), DIFID, Asian Development Bank, International Fund for Agricultural Development, CARE, UKaid, Norwegian Embassy, Australian Aid, Royal Netherland Government etc..

#### **Present status of FFS institutionalization**

Since 1990 Bangladesh has gradually proceed on Integrated Pest Management (IPM) FFSs, Integrated Crop Management (ICM) FFS and finally into Integrated Farm Management (IFM) FFS approach. Now FFS approach is an integral part of national agricultural system. Ministry of Agriculture approved the National IPM Policy in 2002 and made the strategies for its implementation throughout the country. Government is focusing to produce safe food for the community as well as for exporting. GOB has taken a comprehensive initiative through several FFS based projects to build up practical capacity of the growers, especially for rice and vegetables production. GOB is allocating fund for FFS implementation in Annual Development Programme in a regular fashion. Presently 5 projects are implementing FFSs in which GOB is also contributing fund (25-100%) and implementing FFS by national, regional and local level staff with

sufficient logistic support. IPM topic is included in agriculture diploma and university level curricula in several education institutes and universities, but not FFS approach. GOB has been using FFS approach extension of other agricultural components such as poultry, livestock, fisheries, climate change issues, high value crops etc.

In local level, institutionalization has been articulating among the farming community by developing capacity of individual farmer as Farmer Trainer or Facilitator of FFSs. Now IFMC is conducting FFSs fully by the season long trained Farmer Facilitators. They are practicing the lesson learnt from FFS in their own farm and with the community also providing extension services. Women empowerment is one of the most important considerations for developing family institution. The FFS is now considered by the government and various civil society organizations as an effective vehicle for extension and farmer education. FFS is now institutionalized by forming Farmer Organization (FO). Approximately 21000 farmers' organizations formed, 7000 FOs are still active.

### **Lessons learned**

Department of Agricultural Extension (DAE), in the sense that it is operating FFSs through the normal structures of the department and its regular staff. Most of the FFS and related field activities are implemented by regular DAE staff through upazilas (sub-district) down to the village level. Each upazila (sub-district) office has a FFS team of 4 members. The GOB funds in the budget are used for paying salaries and allowances of GOB staff and officers.

The FFS is now considered by the government and various civil society organizations (CBO, FO, CIG, VBO etc.) as an effective vehicle for extension and farmer education. This approach is being practiced by various institutions.

It is found that, FFS approach can be implemented in any field of farm production.

FFS has become an 'eye opener' for the FFS participating women, empower them and help them to develop their families as functional institution.

Bangladesh has, at this moment, only limited involvement of NGOs in FFS activities compared to other countries in the region.

Awareness created among the various stakeholders about FFS and a national platform formed to act on government policies.

## **COUNTRY PROFILE: Cambodia**

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### **Background**

The Cambodia IPM Programme was initiated in 1993 by the Ministry of Agriculture, Forestry and Fisheries (MAFF) and has been operating in all major agricultural production provinces in close cooperation with concerned national and provincial institutions, local and international organizations and research institutions. The overall goal of the Programme is to improve food security and safety by enhancing the sustainability and economic efficiency of intensified crop production systems through the promotion of IPM knowledge and skills at the farm level with the aims: (1) to reduce the dependence of farmers on agricultural chemicals, especially pesticides; (2) to develop the capacity of agricultural trainers and extension workers in providing appropriate service to farmers, and; (3) to educate farmers on agricultural technologies by enhancing their knowledge of field ecology and of developing skills in managing crops effectively. The Programme has adapted the approach of "learning by doing" using the FFS model based on the principles of non-formal adult education, with emphasis on a discovery learning approach. This approach allows farmers to participate in a season-long training covering one full crop cycle with intensive field practice to discover the dynamic relationship between plants, pests, natural enemies, nutrients, soil, water and other components in the crop ecosystem and together make decisions about crop management. Cambodia has adopted the four IPM principles: (1) grow a healthy crop, (2) observe the fields regularly, (3) conserve natural enemies and (4) enable farmers to become experts. Thus, the coupling of IPM and FFS helps farmers to achieve sustainable livelihoods by using efficient, profitable and ecologically-sound agricultural production techniques in several crops in addition to rice.

### **Achievements**

From 1993 until the end of 2015, the National IPM Programme trained 245,757 farmers (120,872 women) through FFSs. The driving forces toward institutionalizing FFS in Cambodia are the improvement of farmers' technical knowledge, understanding the roles of ecosystem services in the field, and enhancing their analytical and decision making skills in environmentally friendly crop management practices that lead to sustainable production. Regardless of how many components of the integrated system farmers adopt, they can benefit independently from each component based on the individual farm situation management empowerment and other social impacts. The evidence overwhelmingly points to significant increases in yield, income, cost-effective production, reduction in ecological disruption, increases in biodiversity, reductions in toxic pesticide residues in food crops and a range of social impacts related to empowerment of farmers, self-confidence and independence. The critical point is that up to present there are no alternatives to the FFS approach as an effective and participatory training methodology for IPM on a wide scale.

### **Progress**

The major steps and milestones of FFS uptake and integration in agricultural systems in Cambodia started with the successful pilots of rice IPM then and expanded to other crops and sectors. The IPM-FFS concept and practices were piloted in rice where there were a lot of problems faced by farmers, especially the issues related to indiscriminate use of pesticides. Technical documents and training materials were produced, human resources including master trainers were developed and farmers were educated through FFS with technical and financial support from FAO, IDRC and IRRI. The successful cases were shown and disseminated to policy makers, extension workers and other farmers through field days, exchange visits and dissemination workshops. Building on the successful program on rice, the Programme expanded the FFS to other crops such as vegetables, mung bean, water melon, corn, chili and cassava. Beyond that the Programme pioneered Farmer Life School and FFS for students in primary and secondary schools. This

great achievements have attracted the support from the Cambodian government in terms of policy and capital investment, and funding support from many international and local organizations.

### **Evidence of progress**

In 1998, MAFF officially declared Integrated Pest and Crop Management (IPCM) as one of the country's key crop production strategies with the aim of making IPM the standard approach to crop management in Cambodia. Then in 2002, MAFF issued a Ministerial Proclamation on the establishment of "The National IPM Programme" to facilitate and coordinate all IPM activities in Cambodia irrespective of crops and donors. The law on the management of pesticides and fertilizers was established in 2012 and a list of banned pesticides was also created. Training materials, curriculum and field guide exercises for running FFS were produced and made available to relevant stakeholders. The FFS approach has been used by many projects/programs under funding support by many organizations for farmer educations in different crops. In 2011, MAFF started to make funding available for FFS activities through its annual allocation from the government. Recently, MAFF has included FFS in the national agricultural extension policy and it is considered as one of the effective means for farmer education and the dissemination of appropriate technologies and best practices to farmers.

### **Successes and challenges**

The key factors contributing to the success of the IPM-FFS program in Cambodia are: (1) well-developed structure and network at national and provincial levels equipped good leadership and management skills, (2) active promotion of the activities, results and impacts of FFS among relevant stakeholders, (3) good quality training to produce competent trainers, and (4) significant support from government, local authorities and development partners. Along with these successful achievements, many challenges remain such as (1) aggressive pesticide promotion to convince farmers to apply more chemical pesticides, (2) lack of competent and experienced trainers to scale up FFS training activities, (3) limited financial support from development partners, and (4) a common M&E system and indicators to evaluate the quality of FFS is not in place yet.

### **Monitoring quality of FFS**

At the national level, the team from the National IPM Programme is responsible for monitoring the quality and providing technical backstopping, whereas at subnational levels provincial coordinators (PC) are in charge of M&E work. PCs are required to fill in the monitoring form while visiting FFS. District trainers and farmer facilitators are also required to fill in self-evaluation forms while conducting FFSs. All completed forms are sent to the National IPM Programme after completing FFS for review. The National IPM Team is undertaking regular field visits to the FFS sites to identify the weakness and provide technical advices. At the end of each season, evaluation meetings are organized in each province to evaluate the results, discuss problems encountered and issue recommendation for improvement. National evaluation and planning workshops are organized annually to consolidate the outcomes and share lesson learnt among provinces. Baseline, midterm and post surveys are conducted to assess the impact of FFS interventions.

### **Priorities for FFS institutionalization**

Since the FFS concept and approach have been incorporated in the national agricultural extension policy, it is important to integrate it in every institution and organization who are providing farmer trainings. In the short term, it is required to update the curriculum and training materials to reflect emerging needs and issues, for example to include climate change and smart agriculture content. In the medium and long-term, it is required to mainstream FFS into the donor-funded projects/programs in the farmer education and extensions sections. At the same time, encouragement to the government is needed to allocate more funding for FFS activities. More importantly, FFS budgets needs to be integrated into commune council annual plans through decentralized policies and systems.

## **COUNTRY PROFILE: China**

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### **Achievements**

#### *Current situation of FFS establishment*

From 2009-2015, 598 master trainers trained in 9 sessions of TOT by MOA. Totally, 12800 FFS established in government system. Additionally, by different international NGO or organizations, more than 500 FFS has been conducted in different fields.

#### *Success of FFS*

Through FFS norms, more than 300 counties generated 250,000 leading farmer household. In agriculture, technology dissemination and impact more than 5 million farmers in adoption of new technologies. The team of agriculture extension technician changed their extension methods, gradually changed their attitude and behavior. FFS has become the major modules of agriculture extension.

#### *Overall quality improved remarkably*

Farmers' ability to discover, analyze, and resolve problems improved. The accuracy rate of identification of pests and diseases increased from 35% to 61%. The allocation of pesticide accuracy increased from 50% to 82.5%. Usage of pesticides on facility vegetables within a growing season reduced 3~10 times. Farmers' net income per 667m<sup>2</sup> increased 500-1500yuan.

#### *Village agricultural techniques extension team*

Farmer participated in the FFS training, and then held the first FFS launched by farmer and 40 farmers from other villages attend the full training. Excellent students were invited by farmers of other districts even other provinces to teach agriculture technology. A group of village IPM plant protection officer have been cultivated.

#### *Established a set of standardized criterion*

Farmer field school construction guide and Farmers' demand survey, two books were issued to provide reference standard to establish FFS.

### **Progress (How did we get there)**

May, 1988, in Hunan province, the first TOT organized for rice IPM, then cotton and vegetable IPM followed.

From 2005, NGO and international organizations adopted FFS as farmer education and rural poverty alleviation, and environment conservation.

Relying on the Beijing innovation consortium of modern agricultural industry technology system, 216 FFS were established from 2010-2015

### **Evidence of Progress**

FFS covered all counties of China and becomes the mainstream of agriculture extension and make technology deliverable.

### **Success Factors/Challenge/Lessons (What really worked?)**

Government strongly support in financial and policy aspect.

Technical support. MOA set up professional team from different institutions to support FFS, implement, such as organized TOT, develop different FFS manual and guidelines, establish demonstration FFS, work out indicators of FFS M&E.

The experience from long term implementation of FFS and TOT support from FAO and other organizations.

### **Monitoring Quality of FFS**

Establish a set of FFS evaluation indicators to conduct FFS quality assessment. It has been well conducted in FAO, NGO and Beijing government support FFS programs, but part of FFS quality has not been evaluated,

in context of the criteria.

**Priorities for FFS Institutionalization**

Institutionalization of FFS network establishment.

Establish FFS network national wide. There are no linkage between different sectors, without unique standards, norms, and common resources. As FFS platform used by different department organizations and for different purposes.

## COUNTRY PROFILE: India

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### Achievements

- Directorate of Plant Protection Quarantine & Storage (D-PPQ&S) has established 31 Central Integrated Pest Management Centers (CIPMCs) across the country for implementing FFS.
- The National Food Security Mission (NFSM) has established cost norms for implementation of FFS.
- D-PPQ&S established standard operating procedures for implementing FFS, and prepared technical booklets on Agro Ecosystem Analysis (AESA) based Integrated Pest Management (IPM) in 79 crops.

### Timeline

**1993:** First season-long Training of Trainers (TOT) in IPM-FFS in Rice organized at Chidambaram in Tamil Nadu with the technical and financial support of FAO Inter-country programme for Rice IPM in SE Asia to improve capacity of extension workers in IPM.

**1994 – 1999:** The Asian Development Bank (ADB) (1993 - 96) and United Nations Development Program (UNDP) (1994 - 1999) conducted TOTs in collaboration with the Government of India (GOI) and produced about 270 master trainers in cotton IPM.

**2000 – 2004:** FAO in partnership with the European Union (EU) and GOI implemented a five-year regional program (2000-2004) on IPM in cotton in four states: Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu.

#### **2005 – 2016:**

- Waves of adaptations in FFSs occurred from a focus on a single constraint (pest management) of a single crop (rice) to the multiple dimensions of crop management, cropping systems, resource management, and socio-cultural dimensions of community life.
- In 2005, FAO piloted an adaptation of FFS to groundwater management in partnership with Bharathi Integrated Rural Development Society (BIRDS)—Farmer Water School (FWS). 900 FWS were implemented between 2005 and 2009 in 650 villages across seven drought-prone districts (two in Telangana and five in AP) to make over 25,000 farmers water literate and build their capacities for collective management of the depleting groundwater resources.
- In 2011, FAO designed Farmer Climate Schools (FCS) in 143 villages of these 7 districts to build farmers adaptive to climate change/variability. Over 750 farmer participants graduated from 27 FCS between 2011 and 14.
- The Directorate of Plant Protection Quarantine & Storage (D-PPQ&S), under Department of Agriculture, Cooperation & Farmers Welfare (DAC & FW) organized 16,510 FFS to train 496,298 farmers on latest IPM technologies in various crops. 2,680 master trainers were trained in different crops through 67 Season-Long Training Programs.

### Evidence of Progress:

- FFS is listed as an activity for popularizing IPM under the DAC & FW.
- GoI funds State Agricultural Extension Authorities through NFSM to implement 3650 FFS per year. Additional FFS are conducted by Central Integrated Pest Management Centers (CIPMCs), Agriculture Technology Management Agency (ATMA), NGOs, and Krishi Vigyan Kendras (KVKs), etc.
- D-PPQ&S established standard operating procedures for implementing FFS and brought out technical booklets on IPM in 79 crops in collaboration with National Institute of Plant Health Management

(NIPHM) and National Center for Integrated Pest Management (NCIPM) to train state-level agriculture extension functionaries and technical officers of the Directorate.

- CIPMCs periodically organize Training of Trainers (ToTs) programs to train agriculture, horticulture, and extension functionaries.
- NFSM has established cost norms for implementation of FFS on rice, wheat, and pulses.

**Success Factors:**

- Pesticide (Technical Grade) consumptions has come down from 75.4 thousand tons to 45.39 thousand tons from 1990-91 to 2009-10.
- GoI, state governments, and other lead agencies recognize that FFS enables farmers to learn optimally from field observations and experimentation.
- FWS is recognized by several state governments as an effective tool to build farmers' capacities for collective management of the depleting water resources.
- MoEF&CC acknowledges the effectiveness of FCS in building farmers adaptive capacity to climate change/variability.

**Limiting Factors:**

- Quality and quantity of FFSs implementation requires strong policy support, timely availability of funds, and technical capacities at the local levels. Else, initial successes gained through the pilot projects will remain isolated instances.
- Non-availability of inputs like bio agents / bio pesticides and other components constrain farmers from continuing practices learned in FFS. On the other hand, pesticide industry is very powerful, influential and omnipresent.
- Lack of monitoring and evaluation systems affect FFS quality and thereby farmer interest and participation.
- Poor networking and coordination between FFS implemented by various agencies.
- Lack of public and private partnership and sharing of funds to support institutionalization of FFSs.
- Failure to plan post-FFS activities and creating platforms for farmers to integrate their learning with other community development programs.
- Assuming that governments will upscale successful models and sustain them is a myth. Change in Governments often lead to changes in priorities, taking the wind out of FFS movement.

**Way Forward**

- FFS programs should build a strong core, viz. eye of a storm, at the local level. Scaling up strategies should be based on this strong core using a ripple effect model. The FFS 'eye' should be nurtured and sustained through various support mechanisms. Else, the situation will be back to normal after the FFS program ends.
- Food safety should be the focus: health and safety of the farmer and consumer, environment safety, biodiversity, and improved access to markets.
- FFS curriculum should be location specific and market-linked.

- FFS should be owned by farmers. Farmer Producer Organizations (FPOs) can be encouraged to establish cluster-level 'agriculture information centers' to pool agriculture equipment, output aggregation, input sourcing, promote farmer-to-farmer exchanges, and document success stories.
- Transitioning to outcome- or criterion-based subsidies to promote on-farm level sustainable agriculture practices
- Maintain farmer records to help them document conventional vs improved practices, crop economics, and improved soil health
- Create IT based platforms for farmers to produce and share short videos on good practices
- Mobile application for capturing geo-referenced and real time data for precise monitoring—pest outbreaks, FFS implementation, etc.
- Establish certification programs to incentivize Extension Officers implementing FFS

### **Next steps**

- Design FWS to build the capacities of individual farmers and Water User Associations (WUAs) to implement water distribution and sharing arrangements that maximize productivity and ensure equitable water distribution under UPWSRP-II project. It is anticipated that 9,200 FWS will be implemented to reach 277,000 by 2020.
- FFS on mandarin orange and pineapple in Mizoram
- Respond to request from Govt of Maharashtra to integrate FWS into ongoing programs and initiatives, such as Jalyukt Shivar and Pani Foundation.
- Work collaboratively with SEWA for designing FWS and FCS in Gujarat
- Design and implement FCS in Odisha, Rajasthan, Madhya Pradesh, Uttarakhand, and Mizoram as part of the GEF initiative—'Achieving transformational change in policy and practice for sustainable agriculture and allied sectors in India' (ATCPPSAI).
- Coordinate with National Institute of Rural Development & Panchayat Raj, Ministry of Rural Development to engage women Self Help Groups for setting up village-level enterprises for production of bio-control agents and bio pesticides.
- Provide FAO Technical support to further strengthen the ongoing FFS activities carried out by the Central, State Governments, NGOs and other agencies and provide refresher training to staff associated with FFS activities.

## COUNTRY PROFILE: Indonesia

*This country profile on FFS Institutionalization in Indonesia does not represent the national data. It only provides some cases from the Government of South Sulawesi and from NGO FIELD Indonesia Foundation.*

### Achievements

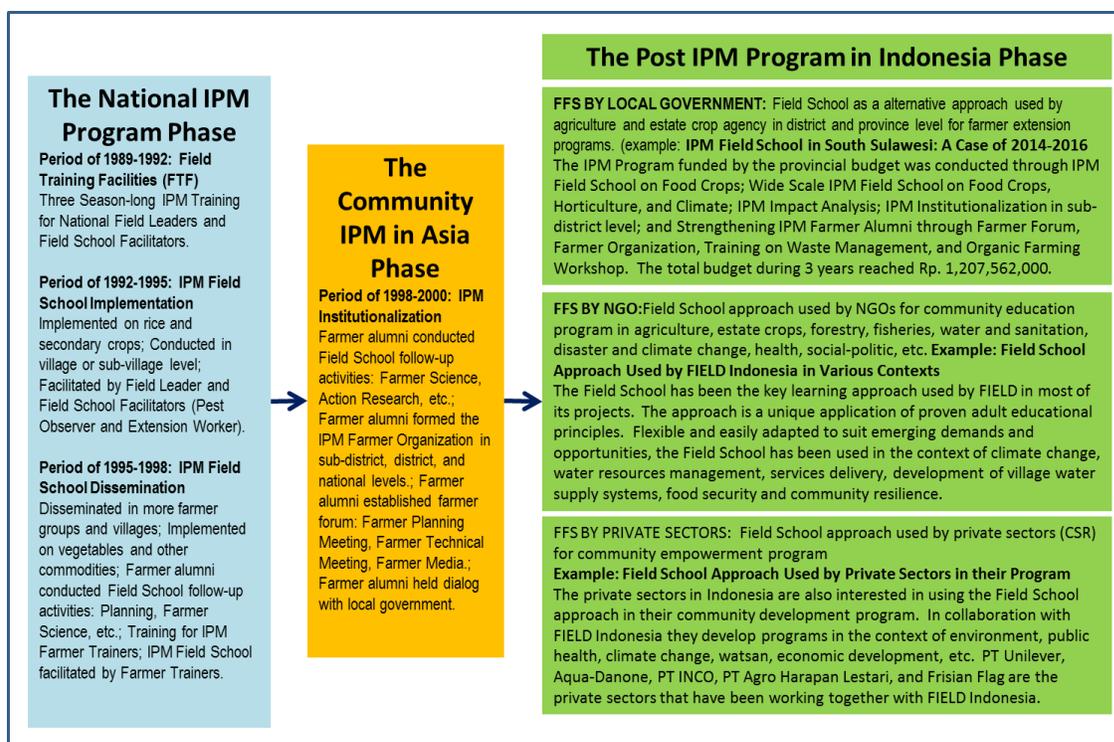
Until currently, there are 4 “big accomplishment” toward institutionalizing FFS in Indonesia:

1. **IPM FFS Decentralized:** IPM FFS becomes program of local government, included in the development budget of most of Provincial and District Government of ex National IPM Program sites.
2. **Field School approach adapted for various context of program:** many government, NGO and also private sector adapted the Field School approach for program on various contexts such as agriculture, estate crop, forestry/conservation, disaster risk reduction, climate change adaptation, water and sanitation.
3. **Farmer Trainers available and ready to take role in various Field School program in villages:** The trained and experienced Farmer Trainers take role as Field School facilitator, pest observer, resource person, or community organizer, and work as “front-line” in various Field School program in the field, both run by local government, NGO or private sector.
4. **Field School Alumni gain roles in the local development process:** with the establishment of farmer organizations in village level, district level to national level (such as: IPPHTI/Indonesia IPM Farmer Association; P3MTBPI/Farmer Trainer and Community Association on Disaster Risk Reduction and Climate Change Adaptation of Padang Pariaman, West Sumatera; JEMARIS/Community Network on Water and Sanitation, Pasuruan, East Java; PPO Sumbar/Organic Farmer Association of West Sumatera; FPO/ Organic Farmer Forum in Pangkep, Barru and Bulukumba of South Sulawesi; etc), the FFS Alumni groups in villages gained an important role in the local government’s development programs, i.e: in the Bioagents development and utilization program; organic agriculture development program, water and sanitation program, etc.

### Progress (How did we get here?)

Below is the progress of FFS program in Indonesia:

### Evidence of progress



Below are some evidences of the progress toward institutionalization of FFS in Indonesia (from South Sulawesi Province's case):

- **Funding**

The IPM Program funded by the provincial budget was conducted through IPM Field School on Food Crops; Wide Scale IPM Field School on Food Crops, Horticulture, and Climate; IPM Impact Analysis; IPM Institutionalization in sub-district level; and Strengthening IPM Farmer Alumni through Farmer Forum, Farmer Organization, Training on Waste Management, and Organic Farming Workshop. The total budget during 3 years reached Rp. 1,207,562,000.

- **Training Curricula**

In South Sulawesi province, the Field School methodology has been utilized by Extension Workers in doing agricultural extension work, especially by those who used to be involved in IPM FFS. In some school, some "local content subjects" utilizes Field School methodology

### **Success Factors/Challenge/Lessons (What really worked?)**

Based on our experience, the key for success in FFS institutionalization are:

- **Planning:** a good development plan with a clear direction (with the right locations – right commodity to work with – and enough budget) is very important to be prepared by local government, with coordination with community (FFS alumni groups), local NGO and other stakeholders.
- **Government Support:** Support from government is very important in form of budget support and policy support.
- **Field School Facilitator:** Preparing and maintaining quality Field School Facilitators is very important. The FFS Facilitators should master the "facilitating skill" and capable in promoting farmers' enthusiasm
- **Enthusiasm of FFS Alumni Farmers:** The FFS Alumni Farmers play a big role in organizing and build dynamics in the village community.

Efforts conducted to deal with those key factors are:

- Build a good coordination between local Government and community (FFS groups) and stakeholders, to prepare a bottom-up plan
- Improvement of the TOT for FFS Facilitators (Farmer Trainers).

### **Monitoring quality of FFS**

During the National IPM Program for monitoring the quality of the FFS, we did a field monitoring using the "FFS Quality Matrix" as a tool to check the quality. Until currently, the field monitoring is often done. If FFS is institutionalized, the quality of FFSs should be ensured and monitored by those who contribute and understand about the Field School (both Government, FFS Alumni Organization, NGO and stakeholders who concern to FFS)

### **Priorities for FFS Institutionalization**

For strengthening the FFS institutionalization, the priorities in Indonesia are:

- **National Priority:** To develop the implementation of Wide-scale IPM (implementation of the IPM basic principles in the wide scale through FFS approach)
- **South Sulawesi province Priority:** Develop "IPM Sub-District" (a network of IPM villages in sub-district level), with activities: FFS, Farmer Science, FFS Alumni Forum for Planning and Technical Sharing. Currently this has been initiated in 5 sub-districts and will be scaled up long-term annual program.

## **COUNTRY PROFILE: Lao People's Democratic Republic**

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### **Achievements**

#### *National level*

- Since the introduction of the FFS approaches through IPM-based programs, more than 300 people from District Agricultural Offices and model farmers in thirteen provinces have been trained as FFS facilitators;
- Until 2016, over 25,000 Lao farmers (including 4,199 women) in 849 villages have participated in season-long FFS;
- An informal national network/community of FFS practitioners has been established and actively shares information and knowledge through smart-phone applications.

#### *Local level*

- The FFS approach is well-recognized and supported by the rural communities and local government units;
- Trained FFS facilitators initiate and facilitate FFS in their own professional setting and environment.

#### *Policy level*

The Agriculture Development Strategy to 2025 and Vision to 2030 (ADS 2025) states that by 2020, the Government shall improve and develop a national extension network including through the existing 272 agriculture extension service centers. They will become “schools for farmers” and play a crucial role for demonstration, provision of trainings and transfer of agriculture knowledge, animal breeding and fishery techniques to farmers and entrepreneurs. The ADS 2025 also states that these technical extension and service centers or “farmer’s school” shall be used to upgrade farmers’ technical capacity in terms commercial agriculture production too. The Department of Agricultural Extension and Cooperatives (DAEC) is developing its Strategy 2025. As yet, the concept and principles of FFS as developed and promoted by FAO are not reflected at the national policy level, despite the substantial awareness and involvement from Government agencies and development partners in the community-based format and approach.

### **Progress**

The FFS concept and activities were first introduced in Lao PDR in 1996, when Lao PDR joined the FAO Regional IPM Programme and began rice-based IPM FFS training. The programme expanded to vegetable FFS training in 1999 and fruit crop FFS training in 2007. A range of different curriculums for FFS-based interventions on various technical subjects have been developed and successfully validated.

Over the last decade, almost 24,000 of Lao farmers (including 3,418 women) in 8 major agricultural provinces have benefitted from participation in rice and vegetable FFS. Farmers’ improved knowledge, skills and practice can be attributed to the participatory and discovery-based learning processes employed in FFS.

The proliferation of agricultural concessions and the associated contract farming businesses have led to increase in pesticide use in Lao agriculture in recent years. The Lao National IPM Programme has started to implement awareness-raising activities aimed at pesticide risk reduction (PRR) in rural communities. Apart from gaining access to follow up IPM training, farmers in these 3-day PRR FFS also learn about better handling, storage and disposal of agro-chemicals. The most recent manifestation of FFS has focused on nutrition-sensitive agricultural approaches at community level.

### **Evidence of progress**

With the assistance from FAO, the Lao National IPM Programme has implemented training of trainers and farmer IPM training, using the innovative and effective FFS approach. Thousands of Lao rice and vegetable farmers have sustainably reduced inputs of agro-chemicals, obtained higher yields, better and safer nutrition, and higher profits.

The FFS approach has also been adopted by local governments and NGOs (e.g. those involved in promotion of Good Agricultural Practices, Organic Agriculture Production and Plant Genetic Resource Management, and Nutrition-Sensitive Agriculture).

In recognition of the success and the importance of the FFS approach, the Lao Government is considering integration of the concept in its agricultural extension strategy (2025). Various development partners (including IFAD, GEF-UNDP, EU, and Sweden) are supporting and investing in FFS-based extension and training interventions as part of ongoing and future rural development projects and programs.

### **Success Factors / Challenge / Lessons (What really worked?)**

In comparison to traditional extension approached, the FFS approach is quite efficient in terms of facilitating adoption of new knowledge and skills, adaptation, and innovation by farmers.

The interaction between technicians from the public sector and farmers in FFSs is valuable and creates trust.

A constraint remains the long duration of TOT and FFS-based trainings making it costly and time-consuming.

FFS still mainly rely on funding from development partners with only limited government support.

### **Monitoring quality of FFS**

Newly-established FFS interventions are usually technically backstopped by FAO together with staff from central government level. In addition, representatives of the Provincial and District Agricultural and Forestry Offices monitor and evaluate the FFS usually twice in each season. An FFS diary is used as a tool for trainer self-evaluation as well as keeping records during FFS implementation.

### **Priorities for FFS Institutionalization**

*Short term (in the next 2-3 years):*

- Incorporate FFS approaches into the Government's Agricultural Extension Strategy and actively promote the approach to senior policymakers at national and provincial level;
- Provide training for the new generation of public sector extension workers / technicians;
- Obtain results/impact assessment on FFS interventions and disseminate the results;
- Document success stories and actively promote FFS approaches;
- Develop and pilot test shorter FFS Training-of-Trainer modalities.

*Long-term (5-10 years):*

- Establish more formal FFS practitioners' networks, including at national level (e.g. DAEC);
- Include FFS in formal curricula at agricultural Colleges.

## COUNTRY PROFILE: Myanmar

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### Background

The term “FFS” is well known among development practitioners, agriculture-based INGOs, NGOs and Ministry of Agriculture in Myanmar. Both Government and Non-Government organizations first started to use FFS in 2000-2001. Plant Protection Department and Agriculture extension staff employed FFS in 3 states and regions with aiming for IPM at rice farms. At the same time, Metta Development Foundation first launched FFS in Kachin State and Shan State with aiming at improving basic food security for sustainable upland rice cultivation in upland area in particular area affected by civil war and severe food insecurity.

### Achievements

FFS is well-known approach among Agri and Food Security based INGOs, NGOs, CSOs and Department of Agriculture in Myanmar.

- Since 2001 to 2016, FFS has been scaled up from two states to all states and region (across Myanmar). Currently, it is estimated that FFS is running in more than 3000 villages across country by different organizations.
- There was only a few FFS Facilitators in 2000, and now it has trained up to minimum ~ 1200 FFS facilitators from multi ethnic farmers.
- Ministry of Agriculture in particular Plant Protection Department together with Agriculture Extension Department, FFSs have been running since 2000 until 2012 and 4757 farmers were graduated through 118 FFS. In together with FAO projects, ministry of agriculture involved in running another 168 FFSs covering 10,370 farmers. It was assumed that a certain number of extension staff from Ministry of Agriculture has been trained as FFS Facilitators and or resources person.

After 15 years of FFS implementation in Myanmar, there is sound awareness of FFS in Agriculture Policy makers either in Ministry of Agriculture and or senators/parliament. However, there is no specific policy regarding FFS and not yet put in agenda of public budget allocation to support FFS. It has not been yet developed “Quality standards for FFS program design, implementation and evaluation set.

Although there is no formal network, an informal network especially alumni of FFS Facilitators from Metta and Development agencies has existed and can be strengthened into formal FFS Facilitators network.

Donor agencies in Myanmar are still interested in “FFS Approach” in food production. Most of FFS projects are still relying on donor funding. Some organization like Metta is fully aware of sustainability and thus now introducing ‘Social Enterprise Modality’ to farmers groups to link with produces and markets.

From private sector, one Mango Producer Group under Myanmar Fruit, Flower and Vegetable Producer and Exporter Association has initiated FFS approach to control area wide fruit fly management in Southern Shan State in 2012 with the support from FAO APRO. Now, leaders of growers are thinking to apply FFS approach in other crop like Melon production to address the problem of area wide pest control. The grower groups are attempting to get quality fruits to respond to market’s requirements. It is also potential to launch FFS approach into private sectors.

### Progress (How did we get there?)

Many of FFS Schools are successful especially in upland area. Due to political situation and limited extension services mainly in upland area of Myanmar, where ethnic minority live in, and upland and subsistence farmers have been limited access to agriculture services. Farmers have been relying on indigenous knowledge on production of rice and other crops. When FFS was first started in 2000, it was

very news to farmers and it made strong attraction to farmers. Farmer Field School is a matter of decision making. In several field days sessions, farmer acknowledged that FFS can provide them an opportunity to study basic science and solutions/suitable intervention to address their pressing problems. With direct demand from farmers, Metta and few INGOs such as World Concern and WHH have extended FFS approach in designing of several projects” community development projects, food security and sustainable agriculture project, and rural development project whenever relevant. Government departments use FFS approach since 2001 and to date mainly for rice, pea and vegetables at plant protection department. FAO Myanmar together with Ministry of Agriculture is also applying FFS approach in its projects. In early stages, it was only implemented in upland area mainly Kachin and Shan State. After cyclone Nargis in 2008, many humanitarian organizations worked for recovery and rehabilitation projects and they applied FFS as one of the effective tools in Ayawaddy and low land rice. Then, Donor agencies become more and more interested in. After 2010, it has been dramatically spread FFS approach into several INGOs and NGOs across Myanmar.

**2001:** \*\*Initiated FFS by Metta Development Foundation in 2 States (Upland rice and Vegi); \*\*\* Initiated by DoA in 3 State and Regions (Rice)

**2003:** \*\* Expand by Metta and some INGOs, local NGOs mainly in upland area of Myanmar and upland rice and vegetables production; \*\*\* DoA expand to 2 more states (Rice and pea)

**2007:** \*\* Promotion of awareness through Metta and network of FSWG; \*\*Increased interest from donor agencies and development project implementation agencies; \*\*\*DoA expand to 4 States and Regions (Rice, Pea, winter Crops)

**2009:** \*\*\*Widely used FFS as effective approach in Cyclone NArgis recovery projects by INGOs/NGOs; \*\* Some of FFS Facilitators of early batch become project leaders of INGOs/NGOs and use FFS in programming

\*\*\* Increased interest of donor agencies

\*\*\* DoA expand to 11 States and Regions (Rice, Pea and Horticulture)

**2012:** \*\*\*Private sector started to apply FFS in specific crop production - “Area Wide Fruit Fly control in Mango Production”

\*\*\* Publication of FFS Project Evaluation Reports by INGOs and NGOs

**2013:** \*\*\*\*\* National Level review workshop on FFS with key stakeholders of FFS; \*\*\* Government widely used mix approach (FFS and demonstration Farm to promote National Crop (Rice) production with support from FAO

2015: widely use FFS in many projects of INGOs/NGOs across the country with different design/different curriculum

**2016:** N.A.

### Evidence of progress

- inventory of funding from various sources ( *Livelihood and Food Security Trust Fund, DFID, Italian Government, SWISSAID, Oxfam, Norwegian People Aids, Caritas Switzerland, Caritas Australia, DANIA, SIDA, Mercy Corp/USAID, etc*)
- Training curricula (within Department of Agriculture, Metta Development Foundation, and Publications by LIFT into IPs of Food Security Projects.)
- *Sample handbooks of Farmer Field School Facilitators by Metta Development Foundation at <http://www.lift-fund.org/news/best-practices-news/liftlearning-facilitators-handbook-farmer-field-schools-metta>*

**Success Factors/Challenge/Lessons (What really worked?)***Local Level*

- Decision making of farmers and their leadership skills has increased.
- Improve yield at lowest cost without using fertilizer and pesticide Metta reported that the yields of participating farmers increased significantly, more than doubling from two to five tons per hectare.
- Area wide pest and disease control can see some effectiveness.
- More success in upland area where subsistence farmers face severe food insecurity, limited access to agriculture supplies and technology
- More success in some organization – where – focused on strong capacity building of Farmer Field School Facilitators
- More success in some organizations – where- program/projects can have flexible and customized on designing FFS against crops and or location (rice, corn, pea, vegetables, fruit, etc). Some organizations are able to replicated FFS into other subsectors.

**Monitoring quality of FFS**

As there is no quality standard for FFS from designing to monitoring and evaluation. Development Practitioners are monitoring FFS at their own guidelines and arrangement. It is very important not only national level but also in local level especially for Farmer Field Facilitators along with action research period.

**Priorities for FFS Institutionalization**

National Workshop on “Institutionalization of FFS” with key stakeholders should be organized to promote recognition of FFS as effective approach and to create common understanding among key stakeholders. It will also identify further priorities for institutionalization of FFS in Myanmar.

## **COUNTRY PROFILE: Nepal**

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### **Summary**

Plant Protection Directorate (PPD) is one among the twelve Directorates of the Department of Agriculture (DoA). Its apex body is the Ministry of Agriculture development of the Government of Nepal. Major responsibility of this Directorate is to formulate the suitable policies of plant protection and implement through different organizations in the country.

Although Nepal has no longer history of Integrated Pest Management (IPM) in the country, however, it is the central strategy to crop protection. It was started only in the year 1997 through the Technical Cooperation Program of FAO, supporting financially and operating through the coordination of Plant Protection Directorate. IPM in Nepal has undergone some changes through its funding mechanisms and operational modality. After about a half decade of FAO supports, this program has been financially supported by Norwegian Government and been operated by PPD of the Government of Nepal. This has been one of the important programs of PPD and within DoA, where many farming communities and staffs have been involved in catering FFS for the effective implementation of IPM.

More than 200 cadres of officers. 369 JT/JTAs from ranges of disciplines are trained in and serving as in DoA. For the horizontal expansion more than 1100 farmers' level IPM facilitator is prepared. More than 55 thousand farmers are graduated in IPM FFS. The concept of FFS is expanded to cereals and now the program has more focus on vegetables, potato and recently to tea and coffee. Initially the FFS was begun with rice and later on in diverse crops. The outcomes of IPM program is highly promising on the area of reduction on pesticide use, empowerment of farmer, participation of female, institutionalization of IPM program.

### **1. FFS in Nepal-Historical Perspective**

- A pilot programme on IPM FFS in rice was started in May 1997 based on season long Farmer Field School (FFS) approach through Technical Cooperation Programme (TCP).
- This was followed by Nepal's participation in the FAO Regional Program on Community IPM in Asia from 1998 to 2002 funded by the Government of Norway. During this period hundreds of government field officers, extension agents and farmers were trained as 'Facilitators in IPM' in rice and vegetables. More than 14000 farmers were trained
- Upon phase out of the FAO Community IPM Program in 2003, first phase of National IPM Program was implemented with the funding support of Norway for a 4-year project from 2004 to 2007. The major outcome of this project was the initiation of institutionalization process of IPM-FFS through establishment of coordination committees and farmers association.
- To continue the initiatives of IPM program, Support to National IPM Program-phase II (SNIPM-II) was prepared with the participation of the Government and FAO in 2008, taking into account of lessons learned in earlier FAO and Royal Norwegian Government assisted IPM projects (UTF/NEP/055/NEP) realizing that IPM is not just about pest control, but about a holistic and sustainable production management that can help achieve food security, reduce poverty and safeguard environment. The programme started in June 2009 and ended officially in 31<sup>st</sup> January, 2014. The outcome of the project was the major breakthrough in institutionalization of FFS in Nepal.
- The second phase of SNIPM Project contributed in institutionalizing IPM FFS within the department of agriculture (DoA), education institutes (IAAS and HICAST) and Council for Technical Education and Vocational Training Centre (CTEVT) stressing production of quality human resource through inclusion of IPM curriculum in their regular academic courses.

- The project strategically focused on past strength with major emphasis on consolidation and validation of good IPM practices and capacity building of technicians and farmers. Remarkably, IPM-FFS farmers formed a network at VDC and District level for organized production and marketing of IPM product with building communication and synergy with local service providers and market actors.
- With the support from project, FFS networks establishment of Community IPM Resource Centre in 3 districts for rearing and production of bio-agents through community IPM Resource Centre.
- Market stall of IPM products established in 10 districts with the support of DADO and farmers association.
- More than 8500 neighboring farmers found adopting IPM technology in project sites.

## 2. FFS Institutionalization in Nepal

- Agriculture Development Strategy (ADS) of Nepal has stated FFS as major extension approach in food security.
- DoA has institutionalized FFS approach in its programme directorates and allocates some budgets for FFS through PPD.
- IPM-FFS is included in the regular course curricula of agriculture universities (IAAS, HICAST, AFSU) and training and vocational institutions (CTEVT).
- More than 100 Subject Matter Specialists (SMS) and 300 JT/JTAs of outreach offices and program directorates of DoA have received IPM-FFS master level ToF. It resulted a national level association of IPM trainers called TITAN.
- A total of 63 faculty members and instructors of academic and vocational training institutions have been trained to develop adequate human resource in the country.
- In addition, 558 students and 11 faculty member graduated from Student-Teacher IPM Field Schools conducted in academic and vocational training institutes.
- As part of institutionalization, yearlong IPM FFS curriculum for 11 high value crops and vegetables has been developed.
- At local level, more than 1000 farmers received ToF in IPM crop production FFS. They have established associations at district, region and national level.
- Farmers network 181 farmer groups, which then formed 30 IPM farmer network at VDC level and 8 IPM district network helped to institutionalize the IPM in the country building social and human capital for its sustainability.
- Information Dissemination and Publication in the website of Plant Protection Directorate: [www.ppdnepal.gov.np](http://www.ppdnepal.gov.np). has been developed.
- There is an archives of training, manual and guidelines of FFS related documents and information available at PPD and FAO Nepal.
- AFSP, KUBK, IWRMP are the National level programs of MoAD in which FFS has been major entry point of program implementation at community/farmers level.

Institutionalization Framework of FFS in Nepal can be broadly categorized in the following levels:

### A. *Coordinating institutions*

IPM coordination committees (NCC, RCC and DCC) and District Technical Team (DTT) are in places which contribute to establishing the institutionalization and governance system at beneficiary level. Regular

meetings of NCC, RCC and DCC is held. IPM Coordination Committee made functional at all levels. Policy level issues are discussed at NCC meeting chaired by DG of DoA.

#### *B. Plant Protection Directorate of DoA*

Plant Protection Directorate of DoA is the lead agency in Nepal that has FFS in its program and budgeting. It has IPM Unit established with regular staff supporting the IPM unit. Acting as pivotal role, it developed FFS manual, guidelines and training curricula developed for 11 crops and vegetables and ToF curriculum for farmer, JT/JTAs and officers. With its effort, IPM policy has been drafted. There is a Nepal IPM standard within the framework of National GAP for 13 major crops. It has now archive of documents of all FFS related reports, manuals and guidelines developed so far.

#### *C. Service Provider Level*

Outreach offices of DoA, such as DADO has trained human resources in planning, implementing and supervising FFS activities. There are trained IPM facilitators available in Directorates of DoA, and outreach offices (officers: 100 +, JT/JTAs: 300 +). The staff are receiving in-service training through ToF and Refresher Training of staff and farmers ensured adequate human resources. Some DADO allocates regular budget for IPM-FFS in the districts. DADO, DDC and other service provider organization including farmer association are facilitating the marketing of IPM products.

#### *D. Education and vocational Institutions*

As part of pre-service training, effort was made in the inclusion of IPM-FFS in the training curricula of education, vocational and training institutes. Accordingly, IPM FFS has been embedded in TSLC and JTA and ISc (ag.) Curriculum of CTEVT. And there is revised curricula in the undergraduate course Curriculum of oIAAS (TU), HICAST (PU) and AFSU (Agriculture and Forest Science University). A total of 63 faculty members and instructors of CTEVT, IAAS and HICAST have received IPM-FFS ToF. Nearly 1000 JTAs produced from the CTEVT each year.

#### *E. Training Institutions*

Directorate of Training (DoE) is the main training directorate of DoA. DoA has adopted IPM-FFS as main tool for extension approach. DAT has included IPM-FFS in its training curricula. DoA has developed and practiced norms and guideline for FFS and post FFS. DoE also organizes in-service training of officer and non-officers in the IPM-FFS.

#### *F. Farmers Institution*

From the continuous effort of FFS implementation, there are network and association of farmer and FFS practitioners.

- IPM Farmers Network developed (District Level: 10, VDC Level:30, Village Level: 181)
- Farmer Facilitator Association (National Level:1,Regional Level:5, District Level:33)
- IPM Resource Center established and functional in 3 districts
- Market stall established in 10 districts
- participatory system for organized production, monitoring and certification

#### *G. Research Institution*

NARC is the research institution of MoAD. Though it did not collaborate with past projects implemented by PPD, it is now implementing the first component (Technology development and adaptation) of Agriculture and Food Security Project of MoAD. NARC through its research stations closely works with DADO and conducts PVS trial with FFS farmers in the 19 project districts of AFSP. It has also developed FFS model in IPM, ICM and IDM.

#### *H. Synergies and collaboration*

Adoption of IPM FFS approach by number of I/NGOs and projects /programs in agriculture development namely CARITAS, World Education, LI-BIRD, CARE Nepal, RRN, UN agencies (EUFF, UNJoP, WFP). Support from EUFF project to organize season long ToT for 50 Officer level agriculture technicians, refresher training for 199 JT/JTA and 451 farmer facilitators. Similarly support on production of publication for the IPM FFS practitioners.

The above mile stones so far achieved are the continued efforts made by Government of Nepal, Government of the Kingdom of Norway and the farming communities. FAO's Technical assistance remained vital in overall for overall development and institutionalization of FFS in Nepal.

#### **FAO's Role in development and institutionalization of FFS in Nepal**

FAO has over 50 years engagement in agriculture development and emergency response in Nepal. FAO has an excellent working relationship with the Government of Nepal, and has received specific request for assistance in relation to development and emergency assistance. There is currently a good national team in the country, with a clear understanding of the situation and the needs to be addressed in technical and operational areas.

FAO has long experience in the technology transfer to farming community. FFS was introduced in Nepal in 1997. With the support from FAO, IPM programme has proven to bring a positive change to the agricultural sector in Nepal. IPM FFS has been implemented for rice, vegetables, tea, ginger, citrus, apple and recently attempts are underway to introduce IPM for fruits and livestock using FFS approach. Knowledge management in FAO is the greater tool for collecting, sorting, analyzing and disseminating information to building capacity of both government and farmers groups. In addition, FAO has built trust among academic and training institutions in Nepal that helped them inclusion of IPM-FFS in the course curricula. FAO has also proven that FFS could be applied in the emergency programme in the EU Food Facility programme and successfully to improve crop production through dissemination applied technology in the rural farming community. Now, FAO has providing technical assistance to Agriculture and Food Security of MoAD where FFS is the entry point of project interventions. FAO always advocates to institutionalize FFS in its all projects and provides technical assistance to government of Nepal in planning, implementation, supervision, monitoring and reporting the FFS activities.

## COUNTRY PROFILE: Pakistan

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### Major Achievements

- The Ministry of Food, Agriculture & Livestock (MINFAL) in 2000, established National IPM Program (Nat-IPM) by consulting and involving Agriculture Extension, Agriculture Universities and Agriculture Research Organizations for implementation and incorporation of FFS as a learning tool.
- Emergence of FFS-based farmer organizations throughout the country which later on lead to develop a national network "*Society of Facilitators and Trainers*" (SOFT).
- Incorporation of FFS approach in National Agriculture University, Agriculture Extension Curricula and in National Policy-Vision 2030

### Progress/major Steps

- An FFS-led Integrated Pest Management (IMP) model was implemented in Pakistan during 1996-97 in district Vehari -the site of the first FFS project in cotton in Pakistan through Asian Development Bank (ADB) titled "*IPM Implementation through Training of Trainers and Farmer Field Schools*" popularly known as "*Vehari Model*" clearly demonstrated that IPM could be implemented on a large scale at the farm level.
- UNDP-FAO Policy Reform Project provided required policy level support to scale up the Farmer-led IPM in the country.
- An analysis of Pesticide Policy under UNDP-FAO Policy Reform Project in 2000 along with input from FAO-EU IPM Programme for Cotton in Asia paved the way for the establishment of a Nat-IPM with four Provincial units. It provided instruments to scale up the Farmer led IPM approach in different agro-ecological zones of the country through integration of international and national efforts on various fronts.
- Initially 2 ToFs and related FFS on cotton were organized/established in Sakrand and Khairpur districts of Sindh in 2001.
- Women Open School (WOS) approach -parallel to FFS was developed and first Women ToF on pesticide risk reduction was organized in district Khairpur in 2002.
- Postgraduate research initiated in 2002 and first thesis on FFS approach titled "*Integrated Disease Management of Cotton crop through agro-ecosystem analysis*".
- First Farmer Organization named "*Kissan Welfare Association*" (KWA) was registered in Bahawalpur district, Punjab in 2004 followed by a women farmer based organization named "*Women Agriculture Development Organization*" (WADO) in district Khairpur Sindh.
- FFS on other crops & commodities also initiated.
- Children Ecological Clubs to create aware among FFS village children about environment, ecology, diseases & pests and pesticides etc. were introduced in 2004 by KWA and Nat-IPM.
- Model Farm Service Centers were introduced in Khyber Pakhtunkhwa province in 2006 run by Agriculture Extension and farming community to facilitate local farmers.
- FFS Expertise were shared with countries in Central Asia and Africa from 2004 onwards.
- Family Farm FFS were introduced in district Rahim Yar Khan Punjab by Kissan Foundation (KF) in 2006.

- A major shift of FFS was seen from public to private sector where FFS approach was incorporated in various projects.
- FFS approach was incorporated in National Policy document i.e. vision 2030.
- In 2009, FFS-based community network named “*Society of Facilitators and Trainers*” was established at national level to facilitate and coordinate farmer organizations throughout the country.
- In 2009, FFS knowledge data base was created having booklets/books, research papers, popular articles and manuals etc.
- In 2011, FFS approach was included in National University Curricula of Plant Protection and Agriculture Extension.
- Alumni Association Network was established in 2012 by FAO, NARC and SOFT involving farmer-based organizations working throughout the Pakistan
- Creation of FFS Policy Forum is under discussion in 2015-16

#### **Evidence of progress (documents as proof)**

- Mandate of National IPM Program- (available)
- National Policy-Vision 2030 (available)
- National University Curricula (available)
- Agriculture Extension Policy-KPK (available)
- Annual Budget allocations (available)

#### **Success Factors/Challenge/Lessons (What really worked?)**

- Stakeholders on board
- Influential leadership
- FFS as a learning tool- at private and public level
- Organizational development and movement
- Effective bottom up approach attracted farming communities

#### **Monitoring quality of FFS**

- At National Level by National IPM Program Facilitators
  - At Local level by certified farmer based organizations
  - At Provincial level by FFs trained Agriculture Extension Personnel
- National IPM Program, NARC was basically responsible for technical backstopping and monitoring & evaluation through its collaboration with Partner Organizations, Agriculture Extension and farmer organizations through regular FFS visits, monitoring formats, FFS Data books, monthly meetings/ progress review meetings etc.

**Priorities for FFS Institutionalization**

| <b>Short term</b>                                                                                                                                                                                                                                                                                                                               | <b>Long Term</b>                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Advocacy at political and Institutional level</li> <li>• Establishment of FFS Policy Forum</li> <li>• Farmers Education Fund</li> <li>• FFS Centre of Excellence</li> <li>• Revision of Existing FFS implementing program portfolio</li> <li>• Translation of FFS Guide to local conditions</li> </ul> | <ul style="list-style-type: none"> <li>• National FFS Authority</li> <li>• Farmer Open University</li> <li>• Regional FFS Network</li> </ul> |

**Challenges faced and overcoming approach**

| <b>Challenge</b>                                | <b>Overcoming approach</b>                                                                                         |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Advocacy/Bureaucracy                            | Approached and contacted Government officials                                                                      |
| Documentation                                   | Compilation but not systematic and regular                                                                         |
| FFS as a learning tool                          | Adoption by Farmer Organizations and KPK Agriculture Extension                                                     |
| Gap between bureaucracy and farming communities | Bureaucrats and Government officials were invited in various farmer programs to increase interaction among the two |

**Major Weaknesses**

- Steady resources FFS programs and limited scaling up
- Regular impact assessment activities and frail monitoring & evaluation.
- Coordination among FFS implementing organizations/stakeholders.

## COUNTRY PROFILE: The Philippines

*Prepared by Ofelia A. Sanchez and Jimmy Q. Abarabar*

### Achievements

The top 3-5 “big accomplishments” towards institutionalizing FFS in your country? Explain why you consider them as a major achievements and what changes did they made?

1. Develop “champions” from among the leaders of the rebel group who were trained on the production technologies of various commodities following the FFS approach. Presently, they are accredited as learning site operators and serve as facilitators during trainings conducted in their respective locality. Learning sites are jointly funded by the farmer themselves and the government through the DA-Agricultural Training Institute.
2. Develop local farmers into farmer technicians (LFTs) who were trained on FFS-Rice to assist Agricultural Extension Workers in the conduct of FFS in far flung barangays
3. Promotion of Good Agricultural Practices (GAP) for a number of high value crops (vegetables, banana, cacao, mango, coffee) are facilitated through the FFS approach
4. Development, production, and distribution of information education and communication (IECs) in print and electronic copies
5. Institutionalization of Memorandum of Agreement (MOA)/Memorandum of Understanding (MOU) to forge commitment support from partner institutions/agencies in the implementation of FFS
6. Establishment of FFS-managed village-level Bio-Con Centers for the mass rearing and distribution of biological control agents

### Progress

The integration of FFS in the agricultural system is dynamic as it evolves based on the needs of the current times. In the 1970’s, accompanying the promotion of the Green Revolution Program, there was increased usage of subsidized broad spectrum insecticides which resulted in massive insect outbreak. Likewise, the program promoted rice monoculture leading to land degradation.

Below outlines the major steps in institutionalizing FFS in the country:

- |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1978 – 1980 | Creation of the IPM-FFS approach for 5 consecutive planting season. There was training of cadre of officers for the Crop Protection Division of the Bureau of Plant Industry                                                                                                                                                                                                                                                                                                                                                             |
| 1982        | The FAO Inter-country Program for Integrated Pest Control in rice in South and Southeast Asia provided technical and financial support for capability enhancement                                                                                                                                                                                                                                                                                                                                                                        |
| 1984        | Trained 200 master trainers, 4,500 extension agents and 55,000 farmers on Integrated Pest Management                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1993        | Start of the massive implementation of FFS not only on rice but it expanded to other commodities such as corn, vegetables, coconut, abaca, mango, sugarcane and cotton with a total of 18,500 FFSs, 476,00 farmer-graduates and 5,360 trainers. These were conducted in 80 provinces and 7 chartered cities about 11,000 barangays in 1,226 municipalities nation-wide. The Philippine National IPM Program dubbed as KASAKALIKASAN has become a self- reliant national program with funding support from national and local governments |
| 2008        | Palaycheck System (PCS) was disseminated to the farmers through FFS approach in 58 provinces and cities of the country with 2,474 trainers and 87,901 farmer as graduates                                                                                                                                                                                                                                                                                                                                                                |
| 2010        | Pilot testing of the enhanced climate Farmers Field School (enFFS) in 2 regions in the Philippines (Region 6 and Region 2). The initiative was funded by World Bank.                                                                                                                                                                                                                                                                                                                                                                     |
| 2012        | Farm Business School using the FFS methodology was pilot tested in two provinces: Nueva Ecija and Nueva Viscaya with 32 FBS. This is a joint undertaking of the Department of Agriculture (DA) – Agricultural Training Institute, DA-Agribusiness & Marketing Assistance                                                                                                                                                                                                                                                                 |

Section and the Department of Agrarian Reform to empower the farmers to become farmer-entrepreneur

- 2014 Radiate the implementation of FBS in all regions throughout the country with >500 and about 6,300 agricultural workers and farmers/rural folks graduates, respectively

### **Evidence of Progress**

“Evidence” of progress towards institutionalization of FFS are the following:

1. Issuance of memorandum orders (Presidential Memo Order No. 126 ) for the implementation of the National IPM program with IPM as the standard approach in crop husbandry
2. Creation of steering committees, technical working groups, focal persons/coordinators and training teams at the regional and municipal levels to train farmers in season-long FFS
3. Enactment of RA 8435 (Agriculture and Fishery Modernization Act of 1997) call for the development of medium and long term plans at reducing the use of agrochemical
4. Food Security Agenda declaring IPM as the national crop protection strategy and the expansion of the FFS in all national food production programs
5. Yearly budgetary allocation for the implementation of FFS
6. Forging of Memorandum of Agreement/Memorandum of Understanding with respective Local Government Units for the latter to commit the services of the Agricultural Extension Workers as facilitators of the FFS
7. Development of training curriculum/guidelines/protocols in the implementation of FFS
8. Organization of IPM-FFS farmers at the regional, provincial and municipal levels which have been active in sustaining local government support to sustainable agriculture

### **Success Factors in Institutionalization of FFS**

- strong coordination and collaboration effort among the pillars of agricultural development namely: National Government Agencies (NGAs), Non-Government Organizations (NGOs) and the Local Government Units (LGUs)
- strengthened partnership with the LGUs at the provincial and municipal level through regular consultations
- continuous capability enhancement program for the pool of trainers of FFS
- installation of monitoring system for the maintenance of quality FFS by designating IPM coordinators at the municipal, provincial and regional level
- organization of farmer graduates into local farmer technicians (LFTs/barangay extension workers/barangay agricultural workers)

### **Priorities for FFS Institutionalization**

#### *Short term*

- Continue to get commitment support from partner institutions through MOA/MOU
- Partner with the Dept. of Education (DepEd) for the integration of FFS as a methodology in teaching crop husbandry at the elementary/secondary level
- Work with the state, colleges, and universities to integrate FFS into their college curriculum

#### *Long Term*

- Push for a policy document for the institutionalization of FFS at the local level to sustain its implementation to safeguard

**COUNTRY PROFILE: Thailand**

*Prepared by: Marut Jatiket, Director, Thai Education Foundation*

**Background and history**

Farmer Field Schools were first introduced in Thailand in 1990 by the FAO Community IPM Program. The first four FFSs in rice were conducted as a pilot project in four provinces in the central region of Thailand. In 1993, a global workshop on FFS was held in Thailand. After this workshop, strong interest developed on the part of private, non-governmental, and governmental agencies on the potential of FFS's to provide farmers with education necessary for the improvement of agricultural livelihoods.

During the mid-late 1990's, use of the FFS model expanded throughout Thailand. In 1995, TEF became the first organization to implement the FFS model in primary and secondary public schools. From 1997-2001, three Training of Trainers for School IPM Programs were conducted by TEF and supported by FAO Community IPM Program and OPEC in approx. seventy schools across Thailand. In 1999, the NFE took the first steps to institutionalize the IPM program by approving and implementing a nationwide curriculum and allocating a budget. FFS's were established nationwide under support of the Royal Patronage. Under this support, 15,000 FFSs were carried out, 75,035 farmers were trained, and 503 extension officers were trained as TOTs by DOAE.

In 2000, TEF established a partnership with Agricultural and Technology Colleges and during the following year a TOT for 36 A&T Colleges was conducted. The fiscal plan placed emphasis on the monitoring and follow-up of FFSs, including an impact study of the IPM courses supported by NFE. A curriculum development workshop was organized in May 2001 to draft the training curriculum. In 2002, support from the DoAE was discontinued due to restructuring and FFS's were excluded from policy and not allotted budget this term, however FFS continued and TEF continued to advocate for resumed DoAE support.

In 2004, the Rural Ecological Agriculture for Livelihood (REAL) Agriculture Program curriculum was piloted and in 2007, the REAL program expanded to include four other partner countries. From 2013-2016, six TOT's were conducted supported by NFE and TEF covering 37 provinces supported by NFE, TEF, and Keml. In 2009, support from the DoAE had resumed and CPMCs were established nationwide. CPMCs were established in 2009 to function as a local pest management unit.

Noting program success, support from the DoAE continued to strengthen over the following years. At present, FFS approach is integrated in DoAE and DNFE policies and FFS is used as a tool for DoAE and DNFE extension services. Over forty schools in Thailand are currently implementing an FFS based curriculum. DNFE and DoAE, as well as local governmental and non-governmental organizations have allocated budget to support FFS in various capacities. The DoE has launched the utilization of FFS approach in Community Pest Management Centers (CPMC) nationwide.

**Lessons learned**

1. Aligning the FFS approach with national initiatives and already existent policies helps to secure sustainable support and leaves room for future expansion of programs. Examples of this include 1.) Coordination with His Majesty King Bhumibol Adulyadej's principles of self-sufficiency and economy; 2.) Coordination with DoAE's establishment of CPMC's nationwide; 3.) Lastly, coordinating with already existent efforts to improve and develop vocational education programs in Thailand.
2. Capacity building is necessary for programmatic sustainability. New networks of trainers must be continually trained in order to continually replace retirees or individuals who have been promoted or leave their jobs.
3. Focus on support of small-scale farmers and younger generation farmers in order for young farmers to improve their livelihood within agricultural sectors.
4. FFS should diversify to address current issues including: food security, climate change, gender equality, and market access.

**Next steps**

1. Establish CPMC's nationwide by DoAE.
2. Department of Non-formal Education will expand FFS on Ecological Agriculture curriculum and conduct more TOTS for farmers to more provinces. This will include a review and revision the current training curriculum for farmer trainers.
3. TEF and partners will further develop the curriculum to raise awareness of the impacts of pesticides on human health and food supply (school lunch program) and important role of ecological agriculture.

**Partners and Donors**

Department of Agricultural Extension (DoAE), Ministry of Education, Department of Non-formal Education, FAO Community IPM Program, Thai Education Foundation, Kemi, Sida, FAO, National Government of Thailand

## COUNTRY PROFILE: Vietnam

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### Achievements

- MARD's Direction No. 2027 / QD-BNN dated June 2, 2015 on the promotion of application of IPM, period from 2015 to 2020.
- 2014 Irrigation Sector - MARD issued the plan by year 2020 with the goal of 30% of irrigated rice cultivation to adopt SRI, and other environment friendly methods
- Budget allocation from the government (central and local level) as well as CSOs, private companies and community to support FFS.
- Cooperation with the Ministry of Education and Training to promote FFS through community learning centers and secondary school in rural area.
- Farmers created initiatives such as: on sustainable crop intensification - response to climate change, pesticide risk reduction, etc. Simultaneously farmers are also the resources to expand these initiatives through FFS.



### Progress

- With the assistance of FAO, FFS has been introducing to Vietnam since 1992 through the Integrated Pest Management - IPM Programme. FFS aims to increase small-scale farmers' knowledge and skills enabling them to make better-informed decisions in the management of their crop production systems which will lead to a more sustainable production and greater farm-level benefits including human health and environment protection.
- At the national level, The Department of Plant Protection - MARD is responsible for overall coordination of the implementation of the Programme. FFS has been implementing in all 63 provinces. At the provincial level, Plant Protection Sub Departments (PPSD) are in charge of managing the programme and implementing FFSs and follow-up activities. In each province, there is a nucleus of FFS trainers that plays a central role. At commune level, the FFS alumna (especially woman) as the core force to mobilize IPM training activities and disseminate the IPM in their commune. The Support of Communal authority and participation of civil society organizations (CSO) play important role in sustainable development of IPM in communes. Further more FFS alumna also present their initiatives during the "Field day" organized by them to convince the province's policy Makers as well as Ministry of Agriculture and Rural Development (MARD) for policy support for many farmers in other provinces to learn and apply.
- Since 2007 the National IPM Programme has developed the strategic direction for its activities on "Capacity building on pesticide risk reduction" to strengthen support for the implementation of the National's programmes on food security, food safety and climate change. FFS alumna plays an important role in development of initiatives (sustainable crop intensification - response to climate change, pesticide risk reduction, etc.) One of the highlights was FFS alumna actively involved in piloting the models "Community Education Programmes on Pesticide Risk Reduction". This Model provided input to develop standards for the Commune "Nong thon moi" (new rural development) as part of the Prime Minister's Programme on "Agriculture, Farmers and Rural Development" (Tam nong).

- Since 2012, Ministry of Education and Training has promoted FFS through Community Learning Center (CLC) and secondary school in rural area to educate farmer student on pesticide risk reduction and agro-biodiversity conservation and use.
- In 2015 MARD has issued the Scheme "Promoting the application of integrated pest management (IPM) on crop period from 2015 to 2020" to contribute to implementation of the Prime Minister' Scheme on "restructuring the agricultural sector towards increasing added value and sustainable development."
- Basic FFS approach has been applied in various training topics in order to build knowledge and skill for farmers and students, such as: IPM on crops, pesticide risk reduction, agro-biodiversity conservation and utilization, pesticide impact assessment, Household's Herbal Garden and Nutrient and health, Vegetable GAP, produce bio-fertilizer (Composting/Bio Mat)

### Evidence of progress

- From year 1992 to 2015, there were 3,243 PPSD's technicians trained to become FFS trainers, and 5,855 farmers were trained to become Farmer trainers; 1,231,488 farmers and school students (53% female) were trained through IPM FFS. FFS IPM have been conducting on main crops such as Rice, Vegetables, Cotton, Maize, Tea, Citrus, Soybean, Cassava, Dragon fruit, pesticide risk reduction, agro-biodiversity conservation and utilization, pesticide impact assessment, Household's Herbal Garden and Nutrient and health, Vegetable GAP, produce bio-fertilizer (Composting/Bio Mat)...
- In order to implement the the MARD' Decision dated in 2015 on "Promoting the application of integrated pest management (IPM) on crop period from 2015 to 2020", since 2015 all 63 provinces throughout the country have annual plan for expansion of FFS. At central level, government allocate budget for IPM FFS through World Bank loan projects (WB6, WB7).
- With support from the regional CSO The Field Alliance/Thai Education Foundation, Center of Initiatives on Community Empowerment and Rural Development (ICERD) collaborated with The Department of Continuing Education - Ministry of Education and Training (MoET) and The Plant Protection Department (PPD) – MARD to develop FFS curricular on agro-biodiversity and pesticide risk reduction (PRR) to be integrated in teaching programme of the District Community Learning Centre (CLC) and secondary school in rural area. In 2015, nearly 11,000 Community Learning Center at commune (Commune CLC) and over 600 District Continuing Learning Center (District CLC) using documents. The number of farmers, students engage in learning in the above documents is about over 18 million through Commune CLC and more than 200 thousand students learning at District CLC.
- In 2014 Irrigation Sector - MARD issued the plan by year 2020 with the goal of 30% of irrigated rice cultivation to adopt SRI, and other environment friendly methods.

| 1992                             | 1992 -1998                 | 1996                                                                                                  | 1998                                                        | 2007 - 2016                                                                                                               | 2015                                                                                                 |
|----------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| FFS was first introduced         | Training of trainers (TOT) | Issued National strategic on promotion of IPM FFS; goal: FFS covering of 90% of growing rice communes | Launched promotion of community networks to sustain IPM FFS | Capacity building on pesticide risk reduction to support national programmes (food safety, food security, climate change) | MARD's Direction No. 2027 / QD-BNN on the promotion of application of IPM, period from 2015 to 2020. |
| <b>Government budget for FFS</b> |                            |                                                                                                       |                                                             |                                                                                                                           |                                                                                                      |
| 0                                | 10%                        | 10%                                                                                                   | 15%                                                         | 40 - 95%                                                                                                                  |                                                                                                      |

### **FFS alumna contribution to innovation**

- Minimum tillage and mulching with rice straw in potato production: Potato production could bring incomes twice higher than rice production. However it requires more investment in land preparation and harvesting. FFS farmers developed the minimum tillage practices in combination with mulching using rice straw practices can bring highly effective such as increase productivity: 8-25%, increase income: 19-31%; reduce labor: 28-47%; reduce use of water for irrigation: 25 - 67%, and reduce pesticide: 75%. Application of minimum tillage potato production will allow the women in the North to grow potato again on paddy land so that they can harvest three crops per (Rice – Rice – Potato) instead of only two mono cropping of rice per year as currently practiced. Furthermore, the use of rice straw for mulching can overcome the burning of straw that causes environmental pollution. In addition, the biomass of rice straw used for mulching will rehabilitate the paddy soil ecosystem. In 2013, MARD issued Decision Number 204/QD-TT-CLT recognizing “no tillage potato IPM in combination with rice straw mulch” as an “agricultural technical advancement” instructing all potato-growing provinces to apply the practice. Since then 22 provinces has an annual funding to organize the training for farmers to apply. In Winter Crop 2014, practice of minimum tillage in potato was applied by over 4,500 farmers (70% woman).
- Model on “Community Education on Pesticide Risk Reduction and Development of Local Safe Vegetable Programme and Market Access”. The model aims to demonstrate the partnership between and amongst GOs, NGOs as well as local groups and networks of small holder IPM farmers to address pesticide risks and related issues together, develop their local safe vegetable production (in compliance with GAP) and facilitate market access for farmer’s products as a community.
- FFS alumni study alternatives to chemical pesticides, e.g., biological control such as predators and parasitoids, with assistance from IPM Trainers and researchers. The aim of the activity is to develop capacities of farmer groups as to be able to rear and mass produce alternatives to pesticides at community level for sustainable crop production. Rearing linkage with field experiment of control pest convinced farmers about sustainable management of pests and encouraged many farmers to maintain self-production of bio agents and help other farmers to apply. In 2015 there were 23 FFS alumna groups in Mekong Delta maintained mass rearing pathogen *Metherezium* by their own resource and applied to control BPH.
- Biodiversity Use and Conservation Asia Programme (BUCAP) adapted the IPM FFS approach as a research and extension methodology to promote Plant Genetic Resource Management. FFS alumna conserve and make sustainable use of local agro-biodiversity and develop new rice varieties as part of participatory community breeding programs. 5,150 rice FFS alumna of 200 communes of 13 provinces throughout Vietnam has involved and maintained their activities without project fund. FFS alumna's effective implementation of biodiversity conservation and use provided important input to formulation of MARD’s Decision No: 35 dated 15 January /2008/QD-BNN on Regulation on “On-farm Plant variety production.
- The System of Rice Intensification (SRI): IPM trainers and IPM FFS alumna working together to develop the initiative SRI to overcome existing rice production problems, namely, the overuse of chemical fertilizers (especially nitrogen) and lack of good quality seeds. High application of nitrogen and high transplanting densities are two of the major reasons for the rice crop’s vulnerability to pests and



diseases, resulting in lower yields and profits. SRI helps farmers to save on seeds and fertilizer inputs without yield penalties. Apply SRI also makes rice plant to be tolerant to the extreme weather and pests. In 2007, MARD issued decision No.3062/QD-BNN-KHCN dated 15 October, 2007 on the recognition of SRI as advanced technology and instructing promotion of SRI application in all Northern provinces. Since then 29 provinces has an annual funding to organize the training for farmers to apply. In 2014, there were 1.813.201 farmers of 29 provinces applied SRI, with 394,894 ha.

- Home vegetable garden: FFS training activities related to understanding of nutrient of indigenous vegetable, traditional medicine plants and food safety (pesticide risk) have encouraged farmers become more interested in growing of vegetables in home garden with organic farming, but it also could be opportunity for market access afterwards. Since 2014 total 116 farmers (99% woman) of three provinces (Bac Giang, Lao Cai and Quang Binh) maintaining "vegetable home garden" by their own resources. This activity really help women create food safety products, diverse nutrition for daily diet of the family, on the other hand also contributed to saving the money from buying vegetables.
- Response to Climate change: In order to improve the knowledge and skill of farmers on response to climate change, there are several exercises on this topic to be integrated in the other training contents for trainers and farmers (Training of trainer "TOT"), training on ABD, PRR, training for farmers the conservation of aquatic animal (Fish). The climate change are also discussed in the meetings of the Women Club. Raise awareness about climate change also include facilitating farmers to discuss measures to mitigate and response to climate change. The end of training, a plan on mitigation and adaptation to climate change in intensive crops, especially rice has been developed by farmer and local stakeholders.
- Conservation of fish and aquatic animals in rice field: In some rice-growing areas (Bac Giang province, Quang Binh, Yen Bai, Ninh Binh), in recent years here the effects of extreme weather, rice are were flooded and losses from 30 to 100% of the rice production / every winter - spring crop in those flooded areas. FFSs were organized to help farmers in these communes to switch from individual rice to rice - fish combinations, so that, when the rice was loss due to flooding, farmers still have income from fish, therefore, still ensure improve family life. The average gross income from integrated rice-fish-aquatic production is US\$7,751 compared to US\$1,892 obtained from producing only rice. Utilization of integrated rice-fish-aquatic biodiversity production practices resulted in average gross income ranging from 211%-551% compared with producing rice only. In 2015, total 180 farmers, 104 woman (58%) from 4 provinces: Bac Giang, Quang Binh, Yen Bai and Ninh Binh maintained by their own resources on "conservation of fish and aquatic animals in rice field".
- Production of organic fertilizer from "Bio-mats" residue: Many farm families still maintain a good practices that is raising pigs and chickens to serve the nutritional needs for the family and for sale, buffaloes for plough and harrowing. However, due to the narrow campus of house's garden, so where livestock are usually adjacent to resident, this situation caused the stench. To limit odour, many families have made investments in the cement floor to facilitate the rinse, cage wash water be poured into the sewer pit in the village, causing the stench and pollution rural environment. FFS was organized to helped women to improve environmental knowledge, and skills of raising pigs and chickens on the Bio-mats in order to reduce environmental pollution caused by the production process and take advantage of source of organic fertilizer for sustainable crop production, since the overuse of chemical fertilizer, especially nitrogen in crop cultivation is causing pests and diseases outbreak and affect environment as well as increase unnecessary inputs. Since 2014, total 171 farmer households of four provinces (Bac Giang, Lao Cai and Quang Binh, Yen Bai) maintaining their own resources to make organic fertilizer from "Bio-mats" residue.

- With support from the regional CSO The Field Alliance/Thai Education Foundation, since 2012, The Center of Initiatives on Community Empowerment and Rural Development (ICERD) has collaborated with The Department of Continuing Education - Ministry of Education and Training (MoET) and Plant Protection Department (PPD) – MARD to organize pilot model of training for secondary school students in rural area on agro-biodiversity and pesticide risk reduction (PRR). In 2015 total of 15 secondary schools from 6 provinces (Lao Cai, Ninh Binh and Yen Bai, Bac Giang, Ha Noi and Quang Binh) organized training for students on agro-biodiversity and pesticide risk reduction (PRR). During three years (2013 – 2015) total of 2,231 students of secondary school attended FFS, in which 1,258 was girl (56%) attended FFS.

### **Training curricula development**

- FFS curricular has been developed and timely improved by trainers and farmers in order to response to the innovation of farmer training programs. During 1992 to 2015 there were 35 training curricular and technical guide line developed to support FFS training programme. In 2015 ICERD in coordination of local ICERD with the Department of Continuing Education - Ministry of Education and Training (MoET), and the Department of Plant Protection (PPD) - MARD published Teaching Manual on agro-biodiversity and pesticide risk reduction (PRR) to be integrated in teaching programme of the Community Learning Centre (CLC) throughout the country.

### **Monitoring**

- Monitoring and evaluation has been conducted at central and provincial level. At the Center, Plant Protection Department (PPD) - Ministry of Agriculture and Rural Development (MARD) is overall responsible for monitoring, PPD reported to the Ministry every week, month, quarter, and annual of the FFS programs.
- At the provincial, Plant Protection Sub-department (PPSD) - the Department of Agriculture and Rural Development (DARD) as the focal point to gather data on the performance of FFS in districts, communes, and evaluate the results achieved as well as the difficulties and limitations in the process of implementation and recommend to PPD. Annual survey (nationwide), snapshot monitoring

### **Challenges/limitations**

- The government recently has been implementing the standardize of the training curricula to meet the allocation of funds for the training programs, while the FFS curricular is being developed very diverse.
- Demand for more FFS trainers, while many experienced FFS trainers have retired or switched positions.
- The FFS will be more organized and how to ensure the quality
- Lack of coordination among agencies such as Extension, Plant Protection (PPD), cultivated in directing production plant, so it has limited capacity to promote FFS.
- No strong incentive policies for promotion of application of biological control, reduction of agricultural chemicals;
- Promotional activities, trade of pesticides and fertilizers in village-level community / villages / hamlets still inadequate, due to lack of control role of local government. Along with the ignorance of the people, leading to overuse of pesticides, fertilizers, increasing ecological imbalances, causing outbreaks.

### **Lessons learned**

FFS to build core farmer groups at commune level. Key farmers to help local authorities to conduct field experiments and piloting models of sustainable production, and they are also the extension forces to extend the application of the model results in the communities. Key Farmers also involved in policy advocacy.

FFS to build capacity and encourage farmers to participate in the field trials, then mobilize community to apply in a larger scale, then advocate for policy support

Mobilize communities to pilot the models: Community Education Programmes on pesticide risk reduction (PRR), sustainable intensification. Model aims to demonstrate the partnership between GOs and NGOs, local groups and networks of small holder IPM farmers to address PRR, to facilitate market access for farmer's products, and support the Government in enforcing regulations including strengthening pesticide management at commune level particularly in relation to food safety in crop production.

Link with media agencies to inform and disseminate the results experiences from farmers.

Participation in national workshops to propagate.

### **Priorities for FFS Institutionalization**

*In the coming year:*

- MARD to issue FFS standards as a basis for planning budget
- Provincial FFS Strategy completed to promote sustainable crop intensification and response to climate change

*Long-term:*

- Reduce pesticide use, improve adaptive capacity, improve farmers' incomes across the nation

*In the next 2-3 years:*

- Building capacity for staff on FFS facilitation
- Promoting organic production
- Promoting agricultural biodiversity, pesticide risk reduction
- Promote training programs on nutrition and health
- Bring youth into agriculture



# BANGLADESH



**Major steps for FFS institutionalization in Bangladesh**

**1990** FFS was first introduced on IPM by FAO's Inter-Country IPM programme

**1996** Nationwide FFS programme started. IPM-FFS implemented by FAO-UNDP. GOB support started by IESs sharing

**2001**

- The FAO-EC-GDB Regional Cotton IPM Programme worked on cotton FFSs.
- Vegetable IPM research activities started by Bangladesh Agricultural Research Institute (BARI)

**2002**

- National IPM Policy approved by the government and FFS approach considered in Agriculture policies.
- FFS implemented on IPM by SPPS project (phase I) under DANIDA support. GOB support was 10%. NGOs started IPM-FFSs. Government implemented, supervised, monitored and evaluated FFS activities with donor staff.
- Public-private partnership developed for FFS. CARE Bangladesh started FFS.
- Farmer Organizations formed and continuing practices of FFS learnings.

**2006**

- FFS implemented on Integrated Crop Management (ICM) by Agricultural Extension Component (AEC) project, Agriculture Support Services Programme (ASSP II) under DANIDA support. GOB support was 10%. IPM concept included in curriculum in national level educational institutes, but not FFS. Government (MOA) implemented, supervised, monitored and evaluated FFS activities with donor staff.
- Regional Fisheries and Livestock Component (RFLDC) Implemented FFSs on livestock and fisheries under DANIDA support and formed CBCs.

**2008**

- Government funded FFS implemented first time without donor support by GOB-IPM project throughout the country

**2013**

- Safe Crop Production through IPM approach project started FFSs in all the 64 districts with full GOB support (100%).
- FFS implemented on Integrated Farm Management (IFM) by IFMC project (phase II), Agriculture Support Services Programme (ASSP II) under DANIDA support. GOB support is 25%. Government (MOA, MOFL) is implementing, monitoring and backstopping FFS activities with donor staff.
- Till to day approximately 44000 FFSs implemented



FFS Session AESA



FFS Trial



Homestead Gardening



Field Day



Farmer Organization (FO)



Collection Point for marketing by FO

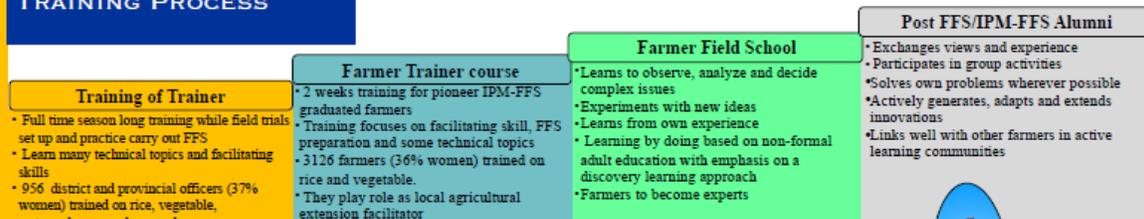
# Farmer Field School in Cambodia

**What is Farmer Field School (FFS)?** Is a "school without walls", is usually made up of 25-30 farmers (women and men) who meet half a day each week to learn, starting at the time of planting and continuing until harvest.

## CONCEPT EVOLUTION

- Chemical intervention Agriculture ⇒ Ecological/ Sustainable Agriculture ⇒ Organic Agriculture
  - IPM → IP<sup>2</sup>M → IP<sup>2</sup>M<sup>2</sup> → CIPM
- (Integrated Pest Management → Integrated Pest and Production Management → Integrated Pest and Production Management and Marketing → Community IPM)

## TRAINING PROCESS

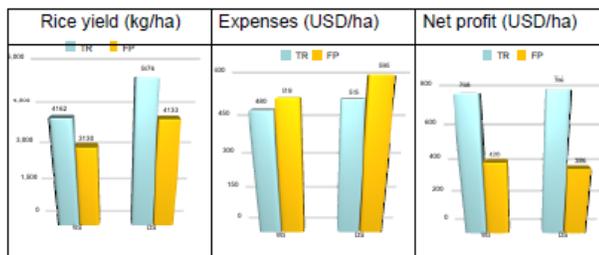
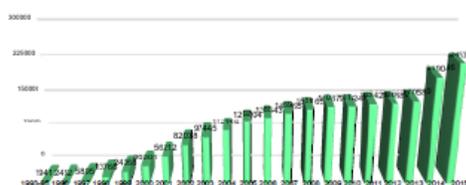


## PROGRESS OF FFS



| 1993 - 1995                                                                                                                                                                                                                              | 1996 - 1999                                                                                                                                                                                                                                                                                                                                                           | 2000 - 2005                                                                                                                                                                                                                                                                                                                                                                | 2006 - 2010                                                                                                                                                                                                                                                                                                                    | 2011 - 2016                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Initiated phase of IPM and FFS was first introduced as pilot in rice</li> <li>Supported by IDRC, IRRI and FAO</li> <li>Building capacity of trainers and developing training materials</li> </ul> | <ul style="list-style-type: none"> <li>MAFF recognized FFS approach</li> <li>FFS started to spread out and adopted by many IOs and NGOs</li> <li>FFS was not only used for farmer training on rice IPM but also used for training on vegetable and mungbean and life school. Training curriculum and field guide of each subject was developed and adopted</li> </ul> | <ul style="list-style-type: none"> <li>Wider spread of FFS. It covers about 80% of provinces in Cambodia</li> <li>Big funded supports from Danida, World Bank (Govt. loan) and FAO</li> <li>The approach became more popular and adopted by IOs and NGOs</li> <li>FFS was extended to maize, watermelon and integrated farming (rice-vegetable-fish-livestock).</li> </ul> | <ul style="list-style-type: none"> <li>FFS was integrated into the sub national democratic development secretariat (NCDDS) and commune council adopted the approach</li> <li>Danida, IFAD, CIDA, FAO, IOs still supported the FFS</li> <li>FFS approach was adapted for training on animal health and fish raising.</li> </ul> | <ul style="list-style-type: none"> <li>Government first funded FFS in 2011</li> <li>MAFF included FFS in the agricultural extension policy</li> <li>Continue supported from IFAD, ADB, FAO, IOs</li> <li>FFS approach was also used for training on cassava and chilli</li> <li>....</li> </ul> |

## ACHIEVEMENTS OF IPM-FFS



## EVIDENCES OF PROGRESS

- IPM-FFS is considered as one of the country's key crop protection and production strategies
- National IPM Program is mandated to facilitate and coordinate all IPM-FFS in the country
- Training materials, curriculum and field guide exercises for running FFS were available
- FFS approach was used by many projects funded by various IOs&NGOs
- FFS was included in the national agricultural extension policy
- Government started to provide fund for FFS activities.

## PRIORITIES FOR FFS INSTITUTIONALIZATION

- Promote FFS through the national agricultural extension policy
- Integrate FFS in all organizations and donor funded projects for farmer education
- Update the curriculum and training materials to reflect the emerging issues and needs
- Maintain the quality of FFS and continue to disseminate impacts to policy makers
- Encourage the Government to allocate more fund for FFS activities
- Integrate FFS into commune council plan through decentralized policy

# FARMER FIELD SCHOOL IN CHINA

## Timeline

➤ May, 1988, in Hunan province, the first TOT organized for rice IPM. Then, cotton and vegetable IPM followed.



➤ From 2005, NGO and international organizations adopted FFS as farmer education, rural poverty alleviation, and environment conservation. Beijing launched the first FFS.

➤ In national level, MOA issued a series of documents especially related to FFS.

## Achivement

### ➤ Current situation of FFS establishment

From 2009-2015, 598 master trainers trained in 9 sessions of TOT by MOA. Totally, 12800 FFS established in government system. Additionally, by different international NGO or organizations, more than 500 FFS has been conducted in different fields.

### ➤ Success of FFS



Through FFS norms, more than 300 counties generated 250,000 leading farmer household. In agriculture, technology dissemination and impact more than 5 million farmers in adoption of new technologies.

The team of agriculture extension technician changed their extension methods, gradually changed their attitude and behavior. FFS has become the major modules of agriculture extension.

## Success Factors

### ➤ Main stream support structure



### ➤ Other support of FFS

- WB
- ADB
- GLZ
- CIDA
- BSR
- RARE
- IFAD
- EU
- Enterprise and FC

### Types of FFS

- Crop IPM
- Animal husbandry
- Fishery
- Dairy
- Climate change
- Poverty alleviation
- Forestry
- Agrobiodiversity

### ➤ Overall quality improved remarkably



Farmers' ability to discover, analyse, and resolve problems improved. The accuracy rate of identification of pests and diseases increased from 35% to 61%. The allocation of pesticide accuracy increased from 50% to 82.5%. Usage of pesticides on facility vegetables within a growing season reduced 3~10 times. Farmers' net income per 667m<sup>2</sup> increased 500-1500yuan.

### ➤ Special fund to support FFS

Agriculture extension system reform program last 5 years from 2008-2013. Each county allocated 200,000 yuan to support demonstration FFS annually in national wide. In provincial level, there are special fund to support. In Beijing, 60,000 yuan for each new FFS and 40,000 yuan for continued construction, continuous support for three years. In Guangxi, local government support 10 FFS per year.

### ➤ Village agricultural techniques extension team



Farmer participated in the FFS training, and then held the first FFS launched by farmer and 40 farmers from other villages attend the full training. Excellent students were invited by farmers of other districts even other provinces to teach agriculture technology. A group of village IPM plant protection officer have been cultivate

### ➤ Technical support

MOA set up professional team from different institutions to support FFS, implement, such as organized TOT, develop different FFS manual and guidelines, establish demonstration FFS, work out indicators of FFS M&E.

### ➤ Established a set of standardized criterion



Farmer field school construction guide and Farmers' demand survey, two books were issued to provide reference standard to establish FFS.

the song of FFS farmers FFS logo

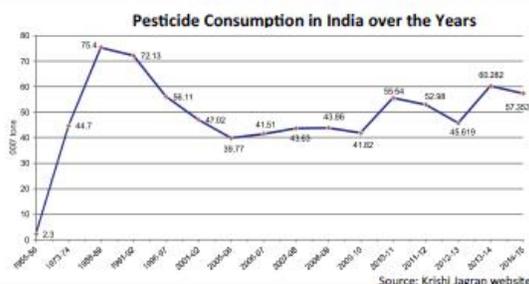


uniform clothing

# Institutionalization of FFS in India

## Achievements

- Directorate of Plant Protection Quarantine & Storage (D-PPQ&S) established 31 Central Integrated Pest Management Centers (CIPMCs) for implementing FFS
- Cost norms for FFS implementation established
- D-PPQ&S established standard operating procedures for implementing FFS
- Technical booklets on AESA based IPM for 79 crops



## Time Line



## Evidence of Progress

- FFS listed as an activity for popularizing IPM under the DoA
- GoI funds State Agricultural Extension through National Food Security Mission (NFSM) to implement 3650 FFS per year. Additional FFS conducted by Central Integrated Pest Management Centers (CIPMCs), Agriculture Technology Management Agency (ATMA), NGOs, and Krishi Vigyan Kendras (KVKs) (under ICAR), etc.
- D-PPQ&S established standard operating procedures for implementing FFS and brought out technical booklets on AESA based IPM in 79 crops to train state-level agriculture extension functionaries and technical officers of the Directorate
- NFSM has established cost norms for FFS implementation

## Success Factors

- Pesticide consumptions has come down from 75.4 thousand tons to 45.39 thousand tons from 1988-89 to 2012-13
- GoI, state governments, and other lead agencies recognize that FFS enables farmers to learn optimally from field observations and experimentation
- FWS enables farmers to become water literate and builds their capacities for collective management of the depleting water resources

## Limiting Factors

- Quality and quantity FFSs implementation requires strong policy support, timely availability of funds, and technical capacities at the local levels
- Lack of monitoring and evaluation systems affect FFS quality
- Poor networking and coordination between FFSs implemented by various agencies
- Non-availability of inputs like bio agents / bio pesticides and other components constrain farmers to adopt FFS practices

## Way Forward

- FFS programs should build a strong core, viz. eye of a storm. Use ripple effect model to scale up
- FFS curriculum should be market-linked
- FFS should be owned by farmers. Establish cluster-level 'agriculture information centers'
- Maintain farmer records
- IT based platforms for sharing experiences and good practices
- Transitioning to outcome- or criterion-based subsidies
- Mobile application for capturing real time data & real-time monitoring
- Certification program to incentivize Extension Officers implementing FFS

## Next steps

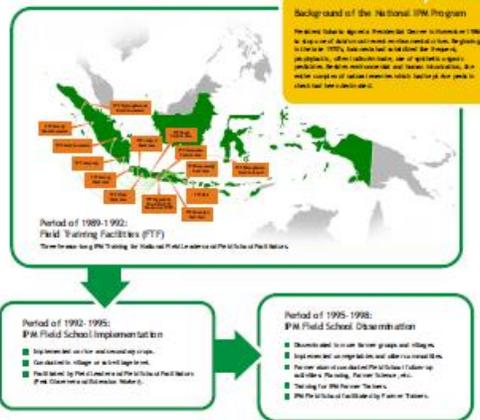
- Governments of UP and Maharashtra to design FWS
- Build capacities of Mizoram Govt to implement FFS
- Work collaboratively with SEWA to design FWS and FCS in Gujarat
- GEF funds : implement FCS in Odisha, Rajasthan, Madhya Pradesh, Uttarakhand, and Mizoram



# Field School in Indonesia



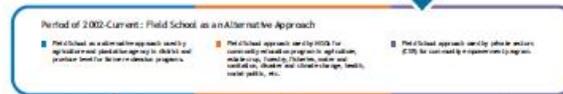
## The National IPM Program Phase



## The FAO-Community IPM in Asia Phase



## The Post IPM Program in Indonesia Phase



### IPM Field School in South Sulawesi: A Case of 2014-2016

The IPM Program in South Sulawesi was initiated in 2014. The first Field School was established in 2014 in the village of ... The program was then expanded to other parts of the province, with a total of 10 Field Schools established by 2016.



### Field School Approach Used by FIELD Indonesia in Various Contexts

The Field School approach is used by FIELD Indonesia in various contexts, including: ...

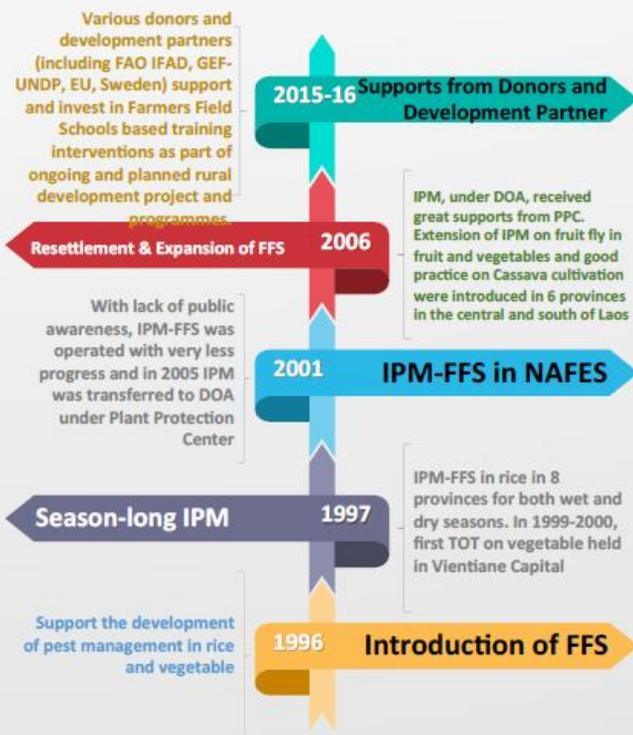
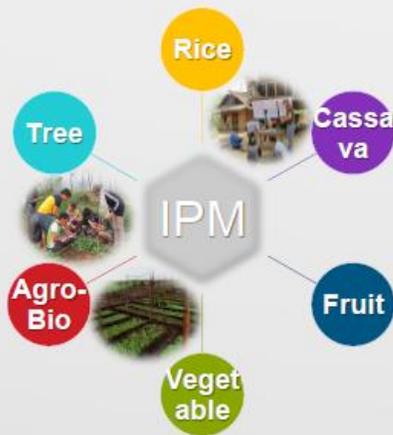


### Field School Approach Used by Private Sectors in their Program

The Field School approach is used by private sectors in their programs, including: ...



# IPM-FFS in Lao PDR



# Institutionalization of Farmer Field Schools

## Myanmar

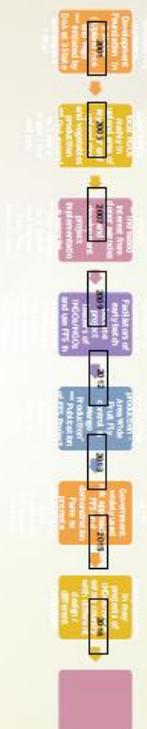
Metta Development Foundation, Myanmar Fruit, Flower and Vegetable Producer and Exporter Association, EMPower Consultancy Ltd

### Where are we now

Well known approach among Agri and Food Security based NGOs, CSOs and Department of Agriculture

- National level**
  - Awareness on FFS in the agriculture policies makers (both government and congress)
  - Public budget allocation to support FFS (not directly support to FFS yet)
  - FFS is used in national extension services (by Department of Agriculture - Plant Protection, Seed, extension works at all levels since 2001 to date)
  - Not yet develop Quality Standards for FFS programme design, implementation and evaluation system
  - Not yet integrate- integration in the education system
  - Informal network only through Metta Development Foundation and Food security Working Group) has established National network of community of FFS practitioners is not yet connected.
  - FFS is initiated in fruit and vegetable grower group/producer associations- promotion of production of specific commodity
  - Still relying on donor funding
- Local level**
  - FFS is well recognized/supported by CSOs, local NGOs and INCOs
  - Informal networks such as Farmer Field Facilitators of Metta or Alumni of FFS lot batch 1,2,3... etc established
  - The terms "FFS" is well known in most of rural area of Myanmar (both upland and lowland region)

### How did we get there



### Evidence of Progress

- National level workshop framing FFS as effective approach in extension works, more participation and practice change of Farmers
- Many donor organizations provide funding for FFS
- Not yet develop and not integrated in organizational policy documents
- Several education training curriculum have published and disseminated – Facilitator's handbook, technical Manuals with different ethnic languages
- Private sector Associations are interested in FFS approach
- Government use FFS as tool to promote to increase production of National crop rice
- Annual budget allocation from the central and/or local government (I am not sure how much budget allocate to extension works and mainly for FFS)
- First generation of Farmer Field School Facilitators/TOs are now become program leaders/ Seniors in several organizations and thus they continue FFS in their own program

### What really worked?

- Local level**
  - Decision making of farmers and their leadership
  - Improve yield at lowest cost without using fertilizer and pesticide
  - Participation of farmers
  - Area wide peer and disease control
  - More success in upland area where subsistence farmers face severe food resource, limited access to agriculture supplies and technology
  - More success in some organization – where – focused on strong capacity building of Farmer Field School Facilitators
  - More success in some organization – where- program/projects can have flexible and customized on designing FFS against crops and or location (rice, sesame, corn, stacked veg/ season long FFS or Village based FFS)

### Priorities for FFS institutionalization

- Short Term**
  - National level - Quality Standards for FFS programme design, implementation and evaluation set and or customized design of FFS to respond to specific project objectives/needs
  - Establishment of National level FFS network mainly FFS Facilitator network
  - Support to provide incentive/benefit for local FFS facilitators not only from project/donor fund but also from farmers (to keep resource person at community level)
  - Promotion of FFS into private sector
- Long Term**
  - Agriculture Policies
  - Public budget allocation for FFS
  - More private sector participation ( FFS and linkages with market ) ( FFS to respond to one way contract farming practice)

### Challenges vs opportunity

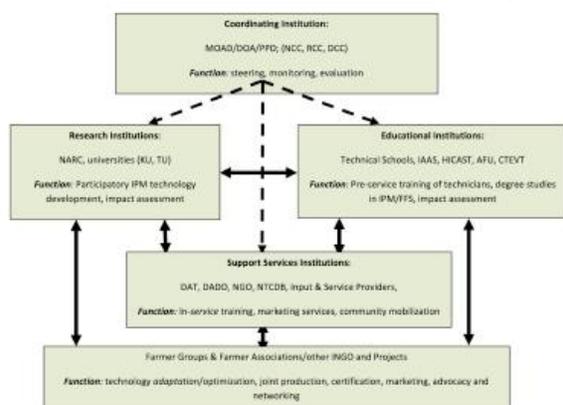
Especially ending telecommunication sector. Farmers' behavior are now changing and widely use mobiles in Myanmar  
Farmer Field School to Farmer Mobile School



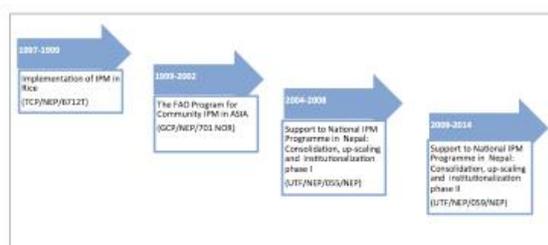
Photo 1: Farmer Field School (FFS) activities in Myanmar. (a) Farmer Field School (FFS) activities in Myanmar. (b) Farmer Field School (FFS) activities in Myanmar. (c) Farmer Field School (FFS) activities in Myanmar. (d) Farmer Field School (FFS) activities in Myanmar.

# FFS institutionalization in Nepal

## IPM/ FFS Institutionalization Framework in Nepal



Development of FFS in Nepal-Historical Perspective

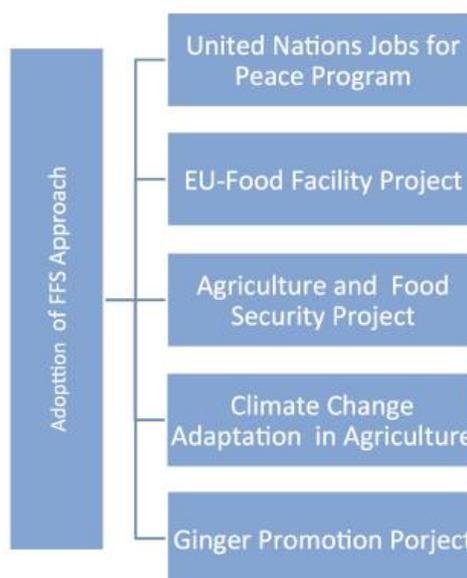


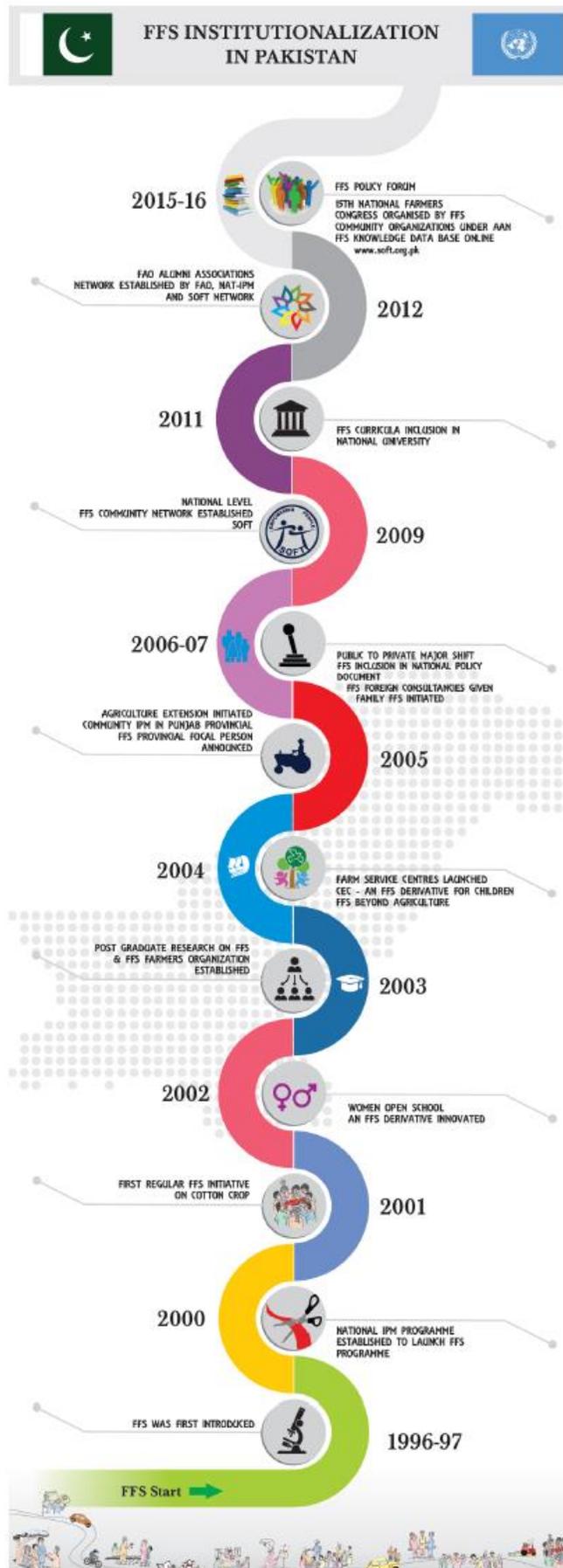
## Progress on institutionalization of FFS in Nepal

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>National Institution (PPD)</b>            | <ul style="list-style-type: none"> <li>• IPM unit Established and functional in Plant Protection Directorate (PPD) of Department of Agriculture</li> <li>• PPD regular staff supporting the IPM unit</li> <li>• FFS manual, guidelines and training curricula developed for 11 crops (cereals, vegetables, Tea, Citrus, Ginger and Apple)</li> <li>• Tail curriculum developed for farmer, JT/JTAs and officers.</li> <li>• IPM policy prepared.</li> <li>• Nepal IPM standard Developed within the framework of National GAP for 13 major crops</li> <li>• Repository developed to store and disseminate FFS related reports, manuals and guidelines</li> </ul> |
| <b>Coordination Mechanism</b>                | <ul style="list-style-type: none"> <li>• Coordination Committees at national, regional and district level (NCC, RCC, DCC) formed.</li> <li>• NCC, RCC and DCC meetings have been regularized.</li> <li>• IPM Coordination Committee made functional at all levels</li> <li>• Policy related issues discussed and directives circulated to outreach offices and program directorates</li> </ul>                                                                                                                                                                                                                                                                   |
| <b>Education &amp; Vocational institutes</b> | <ul style="list-style-type: none"> <li>• CTEVT, IAS and HICAST have IPM/FFS trained faculty members</li> <li>• IPM FFS embedded in TSLC and JTA and IS (ag.) curriculum of CTEVT</li> <li>• Nearly 1000 JTA produced from the CTEVT each year already having exposure to IPM/FFS</li> <li>• IAS (TU), HICAST (PU) and AFU has embedded IPM-FFS curricula in undergraduate courses</li> </ul>                                                                                                                                                                                                                                                                     |
| <b>Training institution</b>                  | <ul style="list-style-type: none"> <li>• Department of Agriculture (DoA) has adapted FFS as main tool for extension approach.</li> <li>• Directorate of Training (DAT) has included FFS in its training curricula of Officers and Technicians</li> <li>• DoA has developed standard norms and guideline for FFS and post FFS trainings and adopted in all government and Non-Government projects/programme</li> </ul>                                                                                                                                                                                                                                            |
| <b>Research Institution</b>                  | <ul style="list-style-type: none"> <li>• Nepal Agriculture Research Council (NARC) coordinates with DoA and PPD for the development of crop specific IPM, ICM, IDM technologies.</li> <li>• Conducts Farmers Acceptance Trials in coordination with FFS groups</li> <li>• NARC carry out participatory varietal selection (PVS) trials with FFS farmers</li> </ul>                                                                                                                                                                                                                                                                                               |
| <b>NGO/INGOs &amp; UN agencies</b>           | <ul style="list-style-type: none"> <li>• Synergy and collaborations with NGOs, INGOs and other UN agencies for promotion of FFS</li> <li>• CARTAS, World Education, TITAN, U-BIRD, CARE Nepal, IRN, UN agencies (EUFF, UNDP, WFP) adopt FFS in agriculture development programs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Service Providers level</b>               | <ul style="list-style-type: none"> <li>• FFS training and follow up capacity exist within District Agriculture Development Offices (DADO)</li> <li>• Trained IPM facilitators available in Directorates of DoA, and outreach offices (offices: 100+, JT/JTAs: 300+)</li> <li>• Regular Tail and Refresher Training of staff and farmers ensured adequate human resources</li> <li>• DADO allocates regular budget for IPM/FFS in many districts</li> <li>• Marketing of IPM products facilitated by DADO and local level Government</li> </ul>                                                                                                                   |
| <b>Farmers Association/ Network</b>          | <ul style="list-style-type: none"> <li>• IPM Farmers Network developed (District Level: 10, VDC Level: 30, Village Level: 181)</li> <li>• Farmer Facilitator Association (National Level: 1, Regional Level: 5, District Level: 33)</li> <li>• IPM Resource Center established and functional in 3 districts</li> <li>• IPM based crop produce channelized to Market by establishing IPM market stalls in 10 districts</li> <li>• Participatory quality assurance system based on Truthful labelling for organized production, monitoring and certification of safer crop products established and functional within FFS groups</li> </ul>                       |



## Adoption of FFS Approach in other Projects/Programme





# Institutionalization of Farmer Field Schools in Thailand Past, Present, and Future

Support of FFS from **Department of Agricultural Extension (DoAE)** and **Thai Education Foundation** demonstrated through DoAE and NFE's policies, their budget allocation, and standardized TOT and FFS training curricula implemented nationwide.



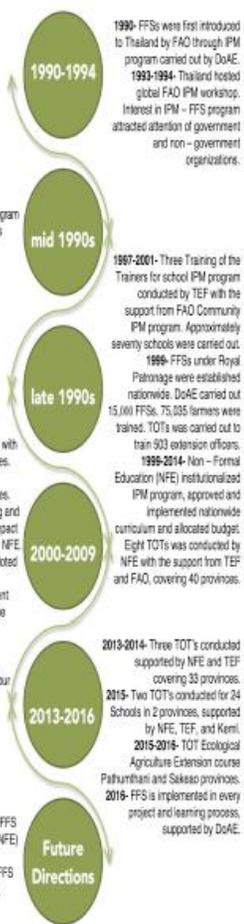
1999-2000- TEF pilot school IPM program in primary and secondary schools was started with the support from FAO Community IPM program.

## Success factors and Lessons Learned

1. His Majesty King Bhumibol Adulyadej's recognition of FFS approach as a tool for empowerment of rural community.
2. Implementation of FFS in primary and secondary schools and Agricultural and Technology colleges.
3. Establishment of CPMCs nationwide to function as a local pest management unit.
4. Training of the trainers (TOTs) to facilitate FFS.
5. FFS practitioners extend FFS approach to every learning process of their communities.

- 2000- TEF established partnership with Agricultural and Technology colleges.
- 2001- TOT was conducted for 36 Agricultural and Technology colleges. Fiscal plan emphasis on monitoring and follow - up of FFSs, including an impact study of IPM courses supported by NFE. A training of farmer trainers was piloted in Uthairitree and Nakhonsawan provinces. A curriculum development workshop was organized to draft the training curriculum.
- 2004- REAL Agriculture Program curriculum piloted.
- 2007- REAL program expands to four other partner countries.
- 2009- FFS approach has been implemented through CPMCs.

As of 2016, institutional support of FFS (primarily by the DoAE, MeE, and NFE) is demonstrated through: budget allocation; standardized TOT and FFS training curricula; and creation of a national policy.



- ### Priorities for FFS Institutionalization
1. TEF will continue to seek institutional support from both government and private donors to expand and develop the program.
  2. DoAE will continue FFS support by 1) continuing the DoAE FFS policies, 2) FFS budget allocation, and 3) promoting application of FFS approach in every activity.
  3. Build FFS networks and promote stakeholders participation in the networks.



### Achievements

- Operational since: 1992
  - Implementing agency: Plant Protection Department
  - FFS conducted: 49,099
  - Farmers and school students trained: 1,231,488 (53 % female)
  - Operational since: 1992
  - Implementing agency: Plant Protection Department
  - MARD's Direction No. 2027 / QD-BNN dated June 2, 2015 on the promotion of application of IPM, period from 2015 to 2020.
  - Budget allocation from the government (central and local level) as well as CSOs, private companies and community to support FFS.
  - Cooperation with the Ministry of Education and Training to promote FFS through community learning centers and secondary school in rural area.
  - Farmers created initiatives such as: on sustainable crop intensification - response to climate change, pesticide risk reduction, etc. Simultaneously farmers are also the resources to expand these initiatives through FFS.
- Progress:** Standards for FFS, TOT, has not been issued by MARD, so that some provinces have difficulty in financial planning to implement FFS.
- Monitor:** Annual survey (nation wide), snapshot monitoring

### Evidence of progress

- All 63 provinces throughout the country are being planning for expansion of FFS
- Budget allocation from the central government through the WB projects
- Annual budget allocation from local government to organize FFS
- Issue of "CIRCULAR - Guiding on the collection, transportation and disposal of the packaging of pesticides after use"
- Participation of the Ministry of Education and Training in promotion of FFS to reduce pesticide risk and promote agro-biodiversity.
- Training curricular are developed and published.
- Quantitative data on pesticide reduction and improved farmer income



### Progress of institutionalization FFS

| 1992                     | 1992 - 1998                | 1996                                                                                                     | 1998                                                       | 2007 - 2016                                                                                                                    | 2015                                                                                                 |
|--------------------------|----------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| FFS was first introduced | Training of trainers (TOT) | Issued the National strategic on promotion of IPM FFS goal: FFS covering of 90% of growing rice communes | Largely promotion of community networks to sustain IPM FFS | Capacity building on pesticide risk reduction, IPM to support national programmes (food safety, food security, climate change) | MARD's Direction No. 2027 / QD-BNN on the promotion of application of IPM, period from 2015 to 2020. |

### Government budget for FFS programme



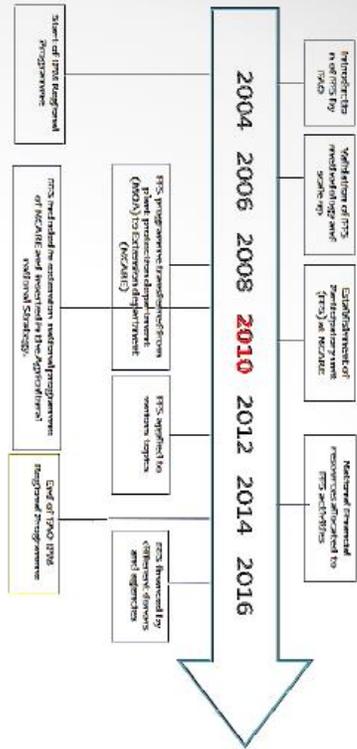
### Priorities for FFS Institutionalization

- In the coming year:**
- MARD to issue FFS standards as a basis for planning budget
  - Provincial FFS Strategy completed to promote sustainable crop intensification and response to climate change
- Long-term:**
- Reduce pesticide use, improve adaptive capacity, improve farmers' incomes across the nation
- In the next 2-3 years:**
- Building capacity for staff
  - Promoting organic production
  - Promoting agricultural biodiversity
  - Promote training programs on
  - Nutrition and health
  - Bring youth into Agriculture

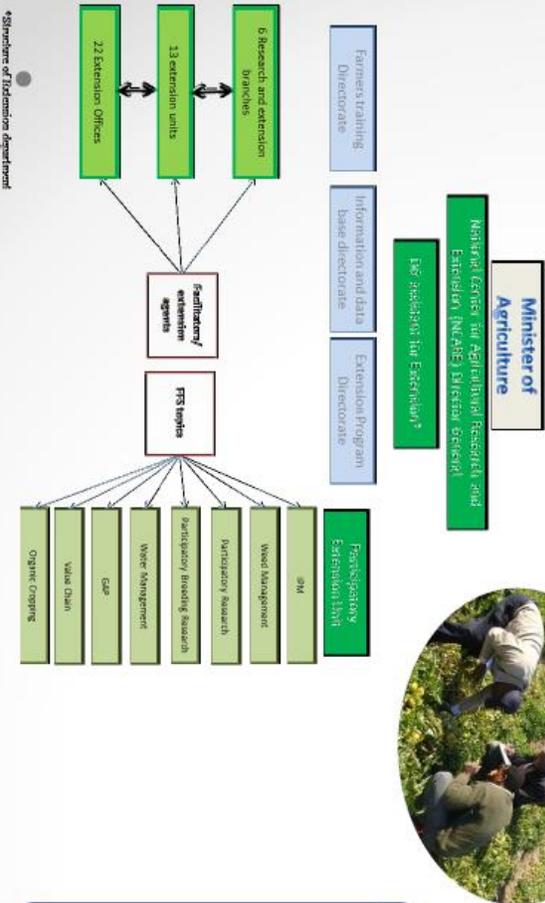


# FFS institutionalization in Jordan

## Progress of FFS in Jordan



## Organigram



## Elements of institutionalization in place

- Validation of FFS methodology
- Establishment of national FFS core team
- Development of ToI and ToF
- Availability of facilitators from Government Extension Services, NGOs, Farmer's Union, local communities, farmers and private sector
- NCARE and MOA requested institutionalisation of FFS and to be part of the national system of extension services.
- Creation of a Participatory Extension Unit (PEU) at NCARE
- FFS to be applied in other agricultural development topics

## Institutionalization



## Awareness Campaign

The Programme developed training and information publications while local newspapers, radio and TV programmes played an active role in raising awareness. The awareness campaign involved students and teachers from schools and universities, committed volunteers, and NGOs such as The Jordan Environment Society and Friends of the Environment Society. Meanwhile, through FFS programs the Programme encouraged farmers to produce clean products, self-finance FFS activities and organize themselves in farmer associations. In Jordan, mass media and FFS programs were used jointly as tools of agricultural extension. While mass media increased public awareness of good agricultural practices, FFS programs applied concepts on the field level, demonstrating practical results of implementing these practices.

Where is this little news box supposed to be?

ngitu  
ndch  
zarro

# Farmer Field Schools in FAO

## Farmer Field Schools – the start



- FAO develops the FFS concept in 1989, in Indonesia, with a focus on Integrated Pest Management on Rice
- FFS provides a platform for farmer groups to strengthen knowledge and skills on agro-ecology, and to make informed decisions to improve production and use inputs more efficiently, reducing impact on health and environment
- Strengthening social cohesion is part of the FFS process, bringing farmers together to address broader community concerns

## Evolution of the Farmer Field School approach

Soon other Asian countries, and then other regions discover and appreciate the FFS approach, start developing FFS programmes, while adapting and innovating to accommodate new ecosystems and socio-economic conditions.



## FAO and FFS – biennium 2016-17



- Most departments recognize FFS as an important approach to deliver results in interaction with rural communities for different Strategic Programmes
  - Strengthening Global FFS networks
  - Guidance Document for Quality FFS Programmes
  - Knowledge and information products (FAO-FFS website, global FFS platform)
  - Regional FFS Networks: technical support, information exchange, exchange of expertise, programme development, policy advocacy
- Linking FFS experts and practitioners at local, national, regional, global levels  
 • Largely informal • information exchange, technical support, coordination, policy advocacy

## Regional FFS Networks



Latin America and Caribbean



West and Central Africa



South Africa



Asia and the Pacific



East Africa



South Africa



Near East & North Africa



Regional Workshop on Institutionalization of FFS in Asia  
 May 23-27, 2016  
 Bangkok  
 By FAO team

## Annex 6: Resolution

## Regional Workshop on Institutionalization of Farmer Field School at the Local and Regional Level

**24-27 May 2016**

**Sukosol Hotel, Bangkok Thailand**

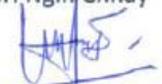
# RESOLUTION

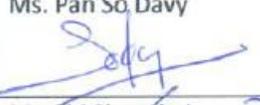
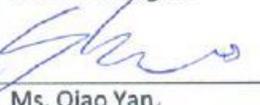
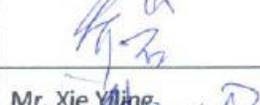
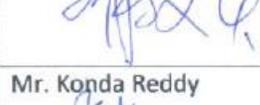
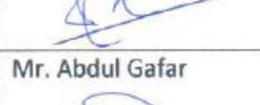
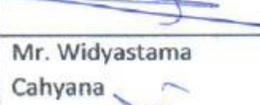
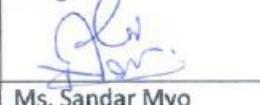
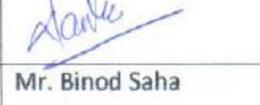
We, the participants of this workshop representing regional countries urge FAO that it should take the lead in institutionalization of FFS learning system at local, national, regional, and global levels and setting up the FFS support centres at appropriate levels.

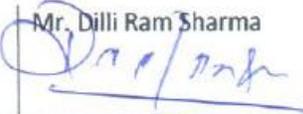
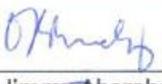
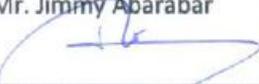
We urge our respective governments to approach FAO for its continuous support in the institutionalization.

We urge all other stakeholders at local, national, regional and global levels including private sector, NGOs, INGOs, farmer's networks and development partners to join hands in institutionalization of FFS.

### Workshop participants

| Countries     | Name                                                                                                          | Organization                                                                           |
|---------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. Bangladesh | Mr. Mriyunjoy Roy<br>      | Integrated Farm Management Component (IFMC),<br>AGEP Project, DAE                      |
|               | Mr. Md. Taifiquel Alam<br> | Integrated Farm Management Component, DAE                                              |
| 2. Cambodia   | Mr. Ngin Chhay<br>         | General Directorate of Agriculture, Ministry of<br>Agriculture, Fisheries and Forestry |

|              |                                                                                                                 |                                                                                                       |
|--------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|              | Ms. Pan So Davy<br>            | Agriculture Technology Services Association (ATSA)                                                    |
| 3. China     | Mr. Shi Shangbai<br>           | Chinese Social Science Academy                                                                        |
|              | Ms. Qiao Yan<br>               | Plant Protection Station of Beijing City, Beijing, China                                              |
|              | Mr. Xie Yiling<br>             | Provincial Plant Protection Station of Guangxi Zhuang Autonomous Region, Nanning City, Guangxi, China |
| 4. India     | Mr. Konda Reddy<br>            | FAO India                                                                                             |
| 5. Indonesia | Mr. Abdul Gafar<br>            | Food Crop and Horticulture Protection Center, South Sulawesi                                          |
|              | Mr. Widyastama Cahyana<br>   | Field Indonesia                                                                                       |
|              | Ms. Yunita Winarto                                                                                              | Department of Anthropology, Faculty of Social and Political Sciences, University of Indonesia         |
|              | Mr. Joharipin<br>            | Aliansi Petani Indonesia (API), on behalf of Asian Farmers Association                                |
| 6. Lao PDR   | Mr. Bounsy Nanthaphone                                                                                          | Department of Planning and Cooperation, Ministry of Agriculture and Forestry                          |
|              | Mr. Chanthalath Pongmala<br> | FAO Representation                                                                                    |
| 7. Myanmar   | Ms. Sandar Myo<br>           | Myanmar Vegetables Flowers and Fruits Producers and Exporters Association (MVFFPEA)                   |
| 8. Nepal     | Mr. Binod Saha                                                                                                  | FAO Representation                                                                                    |

|                 |                                                                                                                 |                                                                                                                                                   |
|-----------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | Mr. Dilli Ram Sharma<br>       | Plant Protection Directorate, Department of Agriculture, Ministry of Agriculture Development                                                      |
|                 | Mr. Sashi Adhikari<br>         | The IPM Trainers Association Nepal (TITAN)                                                                                                        |
| 9. Pakistan     | Ms. Tahira Yasmin<br>          | Department of Plant and Environmental Protection<br>National Agricultural Research Center, PARC                                                   |
|                 | Mr. Jam Khalid<br>             | Society of Facilitators and Trainers (SOFT)                                                                                                       |
|                 | Mr. Iftikhar Ahmad<br>         | FAO Representation Pakistan                                                                                                                       |
|                 | Mr. Munawar Raza Kazmi<br>     | Australian Centre for International Agricultural Research                                                                                         |
| 10. Philippines | Dr. Jesse Binamira                                                                                              | Department of Agriculture                                                                                                                         |
|                 | Ms. Ofelia Sanchez<br>       | Agricultural Training Institute XI                                                                                                                |
|                 | Mr. Jimmy Abarabar<br>       |                                                                                                                                                   |
| 11. Thailand    | Mr. Lakchai Meenakanit<br>   | Plant Protection Promotion, Soil and Fertilizer Management Division, Department of Agricultural Extension, Ministry of Agriculture & Cooperatives |
|                 | Ms. Khanitha Pongpreecha<br> | Plant Protection Promotion, Soil and Fertilizer Management Division, Department of Agricultural Extension, Ministry of Agriculture & Cooperatives |
|                 | Mr. Ars Ponhet                                                                                                  | Sa Kaeo Vocational Training and Development Center for Thai People, Office of Non-formal and Informal Education                                   |
|                 | Ms. Sutisa Choonharaungdej                                                                                      | Operation Promotion Division (OPD), Office of Non-formal and Informal Education                                                                   |

|             |                                                                                                          |                                                                        |
|-------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
|             | Mr. Marut Jatiket<br>   | Thai Education Foundation                                              |
| 12. Vietnam | Mr. Ngo Tien Dung<br>   | Center of Initiatives on Community Empowerment and Development (ICERD) |
|             | Mr. Nguyen Duy Hong<br> | Hanoi Plant Protection Sub Department                                  |

## Annex 7: Evaluation

### EVALUATION QUESTIONNAIRE

Regional Workshop on Institutionalization of Farmer Field Schools

24-17 May 2016, Bangkok, Thailand

Please respond to the following questions.

#### 1. What has been most valuable about this workshop? How so?

- The concept and content of IPM have been review, the difference and similarity of IPM practice of each particular countries. Attempt to initiate the IPM network in the region.
- Understanding the concept of institutionalization with reference to FFS (?) systems at local, national and collective regional level. Brought clarity that FFS is primarily a process that requires institutionalization.
- Networking. Learning how FFS can be used (?)
- Bringing regional countries together in developing common understanding about making FFS as learning system and stepping toward its institutionalization at all levels.
- Sharing experiences from different countries. Clearly many concepts about institutionalization of FFS.
- Meeting and networking with colleagues from different countries and learning about ongoing country programs.
- Recommitment to FFS regional efforts with country actors - both for FAO links but also country-to-country links. Also enjoyed panel by many kinds of FFS institutionalizes.
- Shared ideas & lesson learnt about FFS. FFS guide document is very useful. Poster presentations are very informative.
- Discussion and result presentations. We shared information and learned from other countries. We will seriously institutionalize FFS.
- The workshop brought together for sharing all the stakeholders views irrespective of their field of involvement regarding IPM FFS. The sustainability of the FFS process for the small farmers' benefit. The process as a tool to be applied in any other service delivery system for effectiveness.
- Get valuable knowledge and experience of FFS in various countries in Asia.
- Knowledge & experiences shared from participants. Guidance of FFS.
- Formation of Regional FFS network. It definitely helps to share the innovative ideas among the countries.
- Clarity of institutionalization.
- FFS network & institutional mechanism discussion.
- How to institutionalize farmer field school. Brainstorm, discussion between different countries.
- How to push institutionalization forward, because it is the future of FFS.
- Experience and knowledge sharing, though various activities. Tighten network and relationship.
- Effective discussion process.
- Sharing experience between countries. The FFS guidelines.
- Discussion process (how to facilitate the discussion).
- Sharing of country profile - giving me the idea on how to further strengthen FFS implementation in the country side.
- Institutionalisation in FFS system in region, national and local level, excellent sharing. Countrywide experience sharing on FFS system, institutionalization, networking etc. found very good.
- The establishment of a regional FFS network and the recommendations to operationalize it towards institutionalization of FFS.
- Institutionalisation of FFS establishment in local, regional & national level.

-Small/sub gouger discussions. Bust stop exercise for country profiles.

## **2. What has been least valuable about this workshop? Why?**

- Provide opportunity for scientists, extension officials from the country in the region to have chance to exchange views and experiences.
- Some old friend missing
- Could not finalize the making and mode of regional network as we were expecting. Still hope the request will be addressed.
- Not reaching about consensus to launch a regional network from FAO.
- Too many calories at coffee break - let's meet at ashram next time! Seriously about workshop, least valuable might have been distance between FAO and countries - we need to find better means of integration.
- I don't think in my opinion, there is any least valuable aspect of the workshop.
- It is very pit if this workshop is only the arena for brainstorming,
- No any comment.
- Who found it? Tell me!
- Not applicable.
- Lack of documentary video to show.
- None in particular.
- None.
- Nothing significant.
- None.

## **3. Are there any improvements that you would recommend for this workshop or for a similar event in the future?**

- The workshop should include the adverse effect of pesticide and encourage IPM as an alternative. Also, IPM for policy makers should be organize in respective country and at regional level!
- Field visit
- Field visit. More time for interaction.
- A field exposure was extremely expected to get learning from people at ground.
- More time for sharing country experiences.
- Need to maintain same level. Field visits. Time for people to speak.
- Less food; more 'green location'; maybe in FFS village? We need more integration - no sure how yet...
- More concrete oriented outcomes planned. Should share some successful technical innovation.
- Let me think about it!
- I recommend similar type of event or seminar in near future to share again the process or activities in the concerned field progress.
- We should discuss about the key success factors and the critical risks of institutionalization.
- Reduce time on not so important topic.
- Half day, there should be presentation the ideas of countries regarding objectives of workshop.
- Need more experienced FFS person (?) and clear instruction for group discussion.
- Field visit (real cases visit in farmer education context).
- Enlarge the scale. Invite farmers to attend. Different countries could host the workshop in turn.
- Every country has a farmer in the workshop, share experience.
- Participants shall be earlier informed and urged to submit their assignment on time.
- There should be documentary video (experience from countries) to be shown in the workshop.

-Held somewhere else. Inclusion of a “field visit” activity to give the participants some information/knowledge on existing and workable (good agricultural practice) which is worth replicable in our country.

-Need to organize another/similar workshop in the next for follow up/review the recommendations & implementation progress & challenges faced. Good to be add a field visit to get real idea where some institutionalization steps implemented.

-Earlier invitation to participants so they can prepare well.

-Inclusion of outside field visit programme.

#### **ORGANIZATION/ADMINISTRATION**

Please rate your experiences regarding the following.

(1= needs improvement, 5 = excellent)

#### **4. Email communication leading up to and during the workshop.**

1 (0) 2 (1) 3 (1) 4 (6) 5 (16)

*-Some email communication missed/not received.*

#### **5. Air travel**

1 (0) 2 (0) 3 (2) 4 (8) 5 (11) Not Applicable (4)

#### **6. Hotel and foods**

1 (0) 2 (1) 3 (0) 4 (7) 5 (16)

*-Too much, too urban*

#### **7. On-site assistance by FAO and TEF staff regarding administrative matters.**

1 (0) 2 (0) 3 (0) 4 (4) 5 (21)

#### **Additional comments (you continue on the back of this form):**

-Workshop should include field trip

-Workshop should rotate among country member.

-Have many more events like this.

-Thank you very much for giving me the chance to be part of the activity.

-Thank you for spearheading the work (and funding it) of FFS institutionalization. More workshops please.