

Summary Report of the 2000 TCPA/APCPA Safe Use Project

Introduction

In recent years technological innovations to increase agricultural productivity have been introduced into all regions of Thailand. This had, however, led to some progressive



Hill Tribe farmers start training in their fields

farmers in rural areas using high levels of fertiliser and pest management products. In many cases the poorer farmers, who often lack adequate knowledge and understanding in the use of pesticides, have seen their health deteriorate. Awareness in personal safety, food safety and environmental protection was thus needed among the population. The Thai Crop Protection Association (TCPA) had long realized the importance of this issue; therefore, with the support of the Asia-Pacific Crop Protection Association (APCPA), in 1991 it implemented an innovative project- the 'Safe Use Project'.

Since that time, Thailand's Safe Use Project has been working with government agencies, donors, community organizations, and retailers as well as directly with farmers to improve awareness and practice in the handling, use, and disposal of crop protection products.

Project Objectives

- Reduce the number of pesticide-related incidents.
- Raise awareness of safe handling, storage and use of pesticides within the industry, medical profession and farming communities.
- Assist government and non-government agencies with resources, expertise and training.
- Improve compliance with the national laws and the FAO International Code of Conduct on the Distribution & Use of Pesticides.
- Protect the environment

Some of the project's accomplishments are outlined below:

1. Training and Education

1.1 Farmer Training.

1.1.1 Chiang Mai

Safe Use Project on the Highland During the past 3 years

Since February 1998, the Safe Use Project in the highlands of Northern Thailand has cooperated closely with a Chiang Mai-based NGO- the Thai Worldview Foundation (TWF). This joint initiative assists field workers of the Royal Project Foundation (RPF), which has 26 centres in the province of Chiang Mai. Field staff train and help hill tribe farmers to grow cash crops, instead of opium. Activities were jointly conducted in close coordination with the Royal Project Crop Protection's team. 20 hill tribe villages were targeted annually by the project, and in all a total of 69 villages were assisted over the past three-year period. The operations targeted whole communities, and reached a total of 4,388 households or 32,962 people.



TWF Trainers at work

With the professional mass-media expertise of the TWF, the project used a coordinated multi-media approach to reach hill tribe farmers with 'information, education and communication activities (known as IEC). The Mobile Team trainers have so far reached over 10,746 people during their evening campaigns and over the same period, intensively trained 4,973 hill tribe farmers during day time practical sessions. Every month, 20 sets of audiocassette programmes were delivered to the communities and broadcast on village loudspeaker systems. 2,000 copies of 'wall newspapers' were distributed regularly to target villages and local agencies. ('Wall newspapers' are a pictorial broadsheet of news to bring relevant information in a range of important topics to remote communities) Each year-end the project conducted village contests in order to award prizes to the five top villages, for the best 'safe use' practitioners. A total of 15 villages received these awards over the past three years.

In order to reinforce key safe use messages, articles for radio broadcasting were written by TWF staff and broadcast by hill tribe announcers on Radio Thailand's Chiang Mai services for hill tribe communities. The broadcasts covered most of the highland provinces in Northern Thailand. In addition, a daily radio programme called "Agriculture at Dawn" was directly operated by TWF at Kasetsart University Radio in Chiang Mai. It covers thousands of listeners/farmers in the lowland areas of Chiang Mai and also in neighbouring provinces. Finally, a weekly television programme called "Sons of Farmers" was produced and broadcast on Thai TV channel 11 covering eight Northern provinces.

The Safe Use Project deployed its field staff to work intensively and continuously in the target villages. Face-to-face intervention has reinforced the key safe use messages at farm and community level, helping to lead changes in farmers' behaviour to protect themselves and the highland environment. One of the most concrete results from the campaigns were an awareness of 'community regulation' for safe storage and disposal of chemical containers.

During the past three years, Thailand's safe use project has shown that a degree of behavioural change in crop protection practices can be achieved through participation,

partnership and a farmer-centric approach. This approach leads to a high level of cooperation and trust between the 'educator' and the target group.

Safe Use Project during the year 2000

After TCPA and the Thai Worldview Foundation (TWF) signed a Memorandum of Understanding, for a third year, on March 1, 2000, three field staff from TWF were sent to work in the field. In 2000, the project targeted 22 villages in 12 highland centres of the Royal Project. The village locations were in 11 districts of four provinces with a hill tribe population of 10,109 people in 1,371 households. Of this population, 60% were ethnic Karen, 20% Hmong, 15% Lisu and the remaining 5% lowland Thai.

According to the 2000 annual plan, 1,000 farmers were to be trained in Chiangmai Province. Together with the Royal Project Foundation and the Thai World View Foundation, the SUP Trainer of TCPA for Chiangmai conducted 22 Safe Use courses to farmers in various villages under Royal Project areas, using the Mobile Unit Training. This technique has demonstrated its effectiveness and is ideal for this application and environment. Altogether, 1,575 farmers were trained as intensive farmers and 1,457 farmers were treated as non-intensive farmers. The training accomplishment in Chiangmai was thus 157.5 % compared with the annual target.

Field Training and Mobile Team Campaigns

A multi-media campaign was organized in the hill tribe communities, aiming at educating farmers in Safe Use and IPM practices. Starting in March 2000, the mobile team first started at the Mae-Sa-Reang Royal Project Centre in Santitham Village, Mae-Sa-Riang district, in Mae Hong Son Province. The team worked in the target villages throughout the year. The last training was at Bankhun-Sab village, Pang Da Royal Project Centre, Samerng District in Chiang Mai. The grand total of mobile team sessions conducted in the communities was 66 days and 44 nights (an average of three daytime and two night time sessions for each village). There were in total 1,575 farmers who joined practical training in the daytime and 3,438 people who joined the campaigns in the nighttime. The use of night time sessions allowed the whole community- not just male farmers- to participate, including women and children, who are all too often overlooked as influencers and target groups.



TWF Trainer during a night session

The mobile team campaigns include the following activities:

Video recording of the community situation. One of the mobile team members is assigned to make a video recording on general geographic, agricultural and farming practices as well as social lifestyles of the community. The video footage usually lasts around 30 minutes. During the evening campaigns, the hill tribe people are invited to watch these video footages, which reflect the actual situation of their own communities. The team then invites the people to air their opinions on current community issues in a problem-solving mode. This technique is used to bring more personal participation from the community members, and an active interest in issues related to their management of pesticides.



Video drama with community participation

is a more advanced technique to get individual farmers to be more actively involved in the learning process. The video drama consists of live performances by villagers recorded on video camera. The topic of the drama always relates to aspects of pesticide use in their everyday life. The story will then be shown to the community as it gathers for the evening campaign. This process reinforces awareness in the whole village about safety in the use of pesticides. It is also an important learning process for the farmers and the community in problem identification and solving within the community.

A drawing contest is conducted to help the children in the village express their care and concerns for their parents, who routinely use pesticides. It seeks to get them to reflect in their drawings what they see in their daily lives. The mobile team always invites these children to present their drawings to the community, thus letting others know about the misuse of pesticides in order to encourage behavioural change. It was found to be most effective when those drawings were left exhibited in each village. The drawings played a role in stimulating all people in the village to see the significance of the concern from the children.



A Village drawing competition

Community Radio (Loudspeaker Tower System)

Targeted at the leaders or the committee members of the villages, who are keen to use the loudspeakers in a form of teaching and announcement.



Village Committee members use loudspeakers as medium

The staff teaches them how to report news and information to other members via a radio programme. By choosing a situation that took place in their own villages and by discussing and analysing it, it attracted the attention of the other committee members and was a good medium to talk on-air about safer ways to using pesticides. This was an effective means to reach isolated rural communities more easily.

Distribution of additional printed material

During the mobile team-training programme, the team, supported by TCPA, distributed visual aids such as posters and brochures. A total of 1,000 copies were distributed in 22 villages of 12 districts in 4 provinces. TCPA has provided additional support for these printed media, which focus on simple safety precautions when using pesticides.

In summary, the farmer-training accomplishment was estimated at 157.5 % in terms of participants. (A list of trained farmers is available from the TCPA Office).

1.1.2 Upgrading additional training materials

In parallel to the activities of the mobile team, TV/video documentary footage was made to record the field activities. The programme was scripted and edited later in the year under the title 'Safe Use 2000'. This 11-minute programme was produced at broadcast quality and sent to Thai TV Channel 11 in Chiang Mai. It was broadcast on a local channel covering eight provinces in the upper north.

1.2 Post Training

1.2.2 Reinforcement: Field Staff

The working methods of the project field staff are an important factor in the success of the project. The team had to build good working relationships with the staff of the Royal Project Centres, villagers, village committees and village headmen. After that, the various forms of media were distributed in the villages, for example cassette tapes of the 'Community Radio' series, wall newspapers, and pamphlets from TCPA. The field staff then sought to strengthen their relationship with the villagers whenever possible by attending village meetings, working with volunteers for the Community Radio program, and by visiting and instructing the farmers on their farmlands.



Preparing locally-made protective clothing

The aim of these efforts was to encourage good agricultural practice, and particularly the correct application of pesticides. The collaboration and support of the Royal Project was invaluable in the following ways:

1. Campaign planning and organization: inform farmers about project activities, encouraging participation, support in campaign planning
2. Training: RPF staff worked as trainers in highland cultivation methods, to show how to use fertilizer, to produce compost, to conduct insect and disease sampling check-ups for vegetable crops, and to use insect traps, according to IPM principles.
3. Message dissemination: distribute community radio cassettes and newspapers to the villages under the responsibility of The Royal Project.
4. Technical advice: observe and provide information on local farmer practice.

The Safe Use team regularly visited the trained farmers in villages to reinforce their practices in line with their previous training. The team visited 63 villages (242 times) during January – December 2000.

1.2.3 Reporting

The program's reports comprise 1) report, including pictures of training sessions and list of participants. 2) monthly report from TCPA coordinator 3) semi-annual report and 4) annual report.

1.2.4 The Model Village Competition

Under a cooperation agreement between TCPA and TWF, this campaign was launched by the mobile team in target villages. To promote the program, TCPA and TWF officers visited and observed the target villages to evaluate post-training improvements in farmer practice.

Five villages were rewarded as Model Villages:

- Nhung Lom village, Inthanon Royal Project Centre, T. (Tambon) Ban Luang A. (Amphur) Jomthong, Chiang Mai.
- Khun Jea village, Mae Poon Luang Royal Project Centre, T. Viang, A. Viang Pa Pao, Chiang Rai
- Mon Ngo village, Mon Ngo Royal Project Centre, T. Muang Gai, A. Mae Thang, Chiang Rai
- Ang-Ga-Noi village, Inthanon Royal Project Centre, T. Ban Luang, A. Muang, Chiang Mai
- Dok-Daeng village, Mae Tho Royal Project Centre, T. Bosli, A. Hod, Chiang Mai

1.3 Education

In 1998, the Faculty of Agriculture of Kasetsart University adopted 'Safe Use of Pesticides' as one of the courses in its curriculum for bachelor degree students. Instruction in this subject started on 29 June 1999, when 33 students enrolled in this course. In 2000, all course materials were combined and printed as a manual & reference for interested students and instructors.

Kasetsart University (KU) is acknowledged as the leading agricultural educational institute in Thailand. It is hoped that other educational and training institutes will follow KU's lead and introduce safe use as a course module within their own curricula.

2. Safe Use Awareness

The Safe Use Awareness programme comprises several activities. All activities were completed according to the initial plan. Details of the programme are given below:

2.1 Audio Cassette for Community Radio: "Ban Doi Pattana"

Cassette recording is one of the methods of providing general knowledge and information



on current events to the villages. The programme covered local current events, problems, and solutions, presented in an entertaining, conversational form. Songs during the program added more interest and helped create a relaxed mood.

The recording itself was performed at TWF's Chiang Mai studios, and broadcast from local radio stations in the communities. In total, 180 copies per month were distributed to target villages. In 2000, there were 10 original cassettes and 1,800 copies produced.

Ban Doi Pattana being recorded

2.2 SUP TV Program: "Look-Kaset" (Sons of Farmers)

'Look Kaset' is a TV program seeking out farmers' problems and offering new solutions, broadcast in eight provinces in northern Thailand. Over 50% of the population in these provinces earn their living from agriculture. There are various forms of farming depending on social, economic, and geographic conditions. Nowadays, farming has moved away from subsistence to a more industrialized agriculture, and so new knowledge, skills and understanding are now required. A lack of access to such knowledge is seen as a constraint to farm productivity, hence the reason why the TV program 'Look -Kaset' was produced as an interactive medium for farmers to share their issues, ask questions on-air to specialists in the studio, and find solutions to the everyday problems they encounter.

'Look -Kaset' TV program ran from January to May 2000, a total of 20 weeks on Channel 11 Chiang Mai at 4-5pm for people in the eight most northern provinces of Thailand. The program was structured as follows:

- Look-Kaset News: This reported agriculture-related news and current events sourced from government agencies and the private sector.
- Local Wisdom: This provided tips and techniques on local knowledge and customs.
- Progressive agriculture: This feature reported on developments in research and on innovations in agricultural systems that promise better returns.
- Farmers' Problems: This allowed farmers to ask questions, with prizes for some lucky participants.

2.3 Wall Newspaper "Worldview For Development"

In 2000, each month 2,000 copies of these monthly newspapers were published- a total of 24,000 copies circulated during the year. The newspaper was distributed to target project villages, 35 Royal Project Highland Centres, 194 villages, 280 companies, 759 government and NGO Offices.

2.4 SUP Radio Programme

During 2000, a SUP 2000 radio programme was broadcast from January to June, a total of 124 times on Kasetsart University Radio 612 MHz AM stereo.

The programme, scheduled Monday-Friday 5 to 6.30am consisted of:

- Market Report: Live news report on daily prices of agricultural products in the northern biggest central market, reported by staff to the radio station in a live programme.
- Agriculture News: this feature presented academic reports on agriculture, information and current events regarding agriculture from each region and nationwide. The information was selected from daily newspapers, from documents of agriculture related-organizations, and from farmers' own feedback. Apart from this, the broader relationship of agriculture with the natural environment was also discussed, together with solutions and suggestions for improving their co-existence.
- Talk with experts: This section presented new agricultural technologies and information that interested the farmers. A question and answer session provided



SUP Radio live from KU Radio

farmers with an opportunity to participate by calling or writing to the program. The programme generated a total of 650 responses.

Safe Use Instruction Guidelines: TCPA developed a leaflet containing 13 simple safety reminders. These were converted and produced as short radio spots, which were broadcast daily during this programme.

In June 2000, the project initiated a new radio program from "Kaset – Kon-Jeang" to "Community Agriculture". The programme ran from July to December 2000 on Radio Thailand's Chiang Mai Station, FM 93.25 MHz, Monday - Friday at 11-12 a.m. This 'talk show' programme consisted of a phone-in dialogue between agricultural experts and farmers regarding agriculture with a question and answer session. This programme had 124 broadcasts, the 13-point safe use radio spots were also aired, three points per broadcast.

3. Ad-Hoc Program

Equipment Maintenance: Development of equipment support; The project's field equipment has been developed to maximize the performance such as Digital 8 video system, wireless microphone and a well-maintained 4WD vehicle for off-road highland terrain.

4. Additional Activities.

In addition to activities specified in the annual plan, TCPA has conducted some additional activities in support of good stewardship, as follows:

4.1 SUP Exhibitions

Three exhibitions on Safe Use of Pesticides were conducted:

- "Rice Technology towards the new Millennium Fair" at Sunphathong Rice Station, Chiang Mai, on 4-5 April 2000.
- "AGRO EXPO 2000" fair at Muang Thong Thani Exhibition Hall, during 29 April –21 May 2000.
- "National Pineapple Day" at Bangsan Beach Hotel, Muang District, Chonburi 14-16 July 2000.

4.2 Farmer Training by TCPA members

Eight TCPA member companies conducted farmer training all over Thailand as part of their farmer meeting programmes. Altogether 81,586 farmers were reached in this way during 2000.



Farmer Training

4.3 Retailer Training

TCPA joined with the Department of Agriculture (DOA) to organize thirteen retailer-training courses in various provinces. Altogether, 2,086 pesticide retailers attended these two full day courses. The courses are now a legal requirement for retailers wishing to apply for sales permits from the DOA.

4.4 PR Activities

TCPA hired Prime Media Co., Ltd. as a PR agency to promote the Safe Use program 2000. Throughout 2000, the company worked closely with TCPA and APCPA. Their activities included the following:

4.4.1 Press Releases

42 press releases were printed in public media; Thai Rath, Daily News, Matichon, Thai Post, Naew Na, Bangkok Post, Manager Daily, Prachachartturakij, Khao Sod, Money Game.

4.4.2 Press Releases

13 photos with captions were provided and carried in the printed media: Naew Na, Bangkok Post, Manager Daily, Money Game. PR activities helped to promote and publicize the Safe Use Project. This has resulted in increased visibility and image for TCPA and APCPA among relevant agencies and the public as a whole.



Typical SU Photograph carried in Thai press

In summary, all Safe Use activities were completed according to the annual plan of 2000.

Conclusion

After completing phase 3 of the SU project in 2000, TCPA and TWF staff evaluated the outcome. This survey revealed that many farmers in the 22 target villages now have a better understanding in using pesticides than before.

In addition, surveys in 47 villages in Phases 1 and 2 of the project have shown that many farmers have applied this knowledge and are using pesticides more safely and responsibly.



A Chiang Mai Farmer gives SUP course feedback

The safe use project has shown the value of multi-stakeholder partnerships in reaching rural populations. Combining grass roots training within the community with the use of mass media reinforces messages and raises awareness within remote rural communities. Although the Safe Use Project can today only address a small proportion of Thailand's farmers, improvements in farmer practice have been achieved in target villages. Using a systematic media campaign, participative training at community

level, and effective stakeholder partnerships, such a model could be more broadly applied to bring a much needed improvement to the lives of many more farmers and their families.

TCPA