

FINAL REPORT

ON

THE PROJECT FOR TRAINING WORKSHOPS
ON SAFE HANDLING & USE OF PESTICIDES
FOR WOMEN GROUPS' LEADERS IN THAILAND



DEPARTMENT OF NONFORMAL EDUCATION
MINISTRY OF EDUCATION

AND

FOUNDATION FOR LIFE - LONG EDUCATION

BANGKOK, THAILAND

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Forward

This document is the report of activities of the Project for Training Workshops on Safe Handling and Use of Pesticides for Women Groups Leaders in Thailand undertaken by the Department of Nonformal Education in collaboration with the Foundation for Lifelong Education during May 1988 to December 1989 with a financial support of the United Nations Environment Programme. The report comprises 3 parts: part 1 is the background of the Project, part 2 is the details of the operation, part 3 is the follow-up of the project, the impact evaluation of the activities, the highlights, as well as the conclusions, and recommendations for the project. The project was undertaken in each of the 5 regions of the country: Pichit in the North, Burirum in the Northeast, Saraburi in the Central, Nakorn Nayok in the East, and Nakorn Sri Thammarat in the South.

Department of Nonformal Education and the Foundation for Lifelong Education hope that this document will be of use for further expansion of the project, for the study, investigation, and further references for similar project for the prevention of the harmful effects of toxic materials used in agriculture, households, and community in the future.

Department of Nonformal Education and the Foundation for Lifelong Education wish to thank United Nations Environment Programme, Ministry of Public Health, Ministry of Agriculture and Agricultural Cooperatives, and the National Environment Boards for allowing their officials to serve as the resources persons. It also extends its thankfulness to the participating Regional Nonformal Education Centers, and the Provincial Nonformal Education Centers for their activities involving coordination, organization of the workshops, and the various cooperations that caused the project workshops to attain their expected goods, and objectives.

**Department of Nonformal Education
Foundation for Lifelong Education**

TABLE OF CONTENTS

	PAGE
LIST OF TABLES	5
PART I BACKGROUND	7
1. Rationale	7
2. Project Objective	7
3. Workshop Location, Date & Participation	8
- General Characteristics of The Location	
- Map of Thailand	
4. Target Groups	10
PART II OPERATIONS	11
1. Preparation Activities	11
2. Workshops	11
2.1 Overall strategy & Individual Methodologies	
2.2 Content	
2.3 Results	
3. Spread Effect	12
PART III FOLLOW-UP IMPACT AND ANALYSIS	14
1. Follow-up	14
2. Impact	28
3. Analysis in training	29
Conclusions	30
Highlights of the Project	32
Recommendation	37
Appendix	39
Target Areas and Population	41
1. Target areas	41
2. The Planning and Preparations for the Workshops	42
3. Training Procedures	49
4. Implementation of the Training Workshop in 5 provinces	70
5. Training Results	83
The Executive Board of the Foundation for Lifelong Education	86
The Steering Committee	87
The Operational Committee	89
List of Names of Participants of the Project	90

LIST OF TABLES

TABLE	PAGE
1. How many workshop participants are there in each sex and occupation?	14
2. Showing responses of workshop participants in term of appropriateness of workshop structure and content.	15
3. Showing responses of workshop Participants in term of the use of workshop knowledge and experience, etc.	16
4. Showing responses of workshop participants concerning performances of resource persons, need for additional subject contents	17
5. Showing responses of workshop participants in term of the benefits of workshop experiences	18
6. Showing responses of workshop participants in term of the follow up activities	19
7. Showing workshop participants interest and intention to spread the workshop experiences	20
8. Showing principal occupation of the affected groups	21
9. Showing a affected groups' responses in terms of knowledge and frequencies received	22
10. Showing responses of affected groups in term of uses and interest in workshop experience	23
11. Showing responses of workshop participants in terms of applications and dissemination of workshop knowledge and experiences	24
12. Showing responses of workshop participants in terms of uses of workshop knowledge and experiences to families and desired for more knowledge and experiences	25
13. Showing responses of workshop's "Affected Group" in terms of extents and use of workshop's knowledge	26

PART I BACKGROUND

1. Rationale

Science and technology have contributed immeasurably to the advancement and comfort of the world's peoples. Impact has been particularly significant in food production and consumption as well as medicine. The manufacture of non-organic fertilizers, pesticides, herbicides, food preservatives, additives, and medicines has raised not only the quality but the length of life. Nevertheless, the negative side of these synthetic substances is becoming increasingly apparent as their effects accumulate and their number rise geometrically.

In rural areas and the populations of developing countries their use is especially difficult to control because of the inadequacy of information and understanding as well as economic conditions. The most effective weapon in combatting these toxic and dangerous chemicals is the person closest to the consumer and the one with the highest credibility. In rural areas this is most often a woman—a housewife, a farmer, a field official.

For these reasons, the Foundation for Lifelong Education, assisted by the Department of Nonformal Education and supported by the United Nations Environment Programme (UNEP), embarked upon the Project for Training Workshops on Safe Handling & Use of Pesticides for Women Groups' Leaders in Thailand in May of 1988 (with completion scheduled for April of 1990).

2. Project Objectives

2.1 To develop active local women leaders in rural areas to serve as a network for Provincial Nonformal Education Centers in disseminating and expanding knowledge and attitudes about toxic substances.

2.2 To have workshop participants realize the dangers of using chemical substances in their occupations and in the home.

2.3 To instill proper knowledge, understanding and attitudes in workshop participants regarding the use of chemical substances in their work and in the home.

2.4 To ensure that workshop participants understand appropriate techniques in disseminating knowledge on the use of toxic substances to member of their families and the community.

2.5 To advise workshop participants of the problems arising from the use of toxic substances in the community and how the community can best address these problems.

In addition to the above objectives, the specific expected outputs of the project were:

- 150 women leaders trained in the first phase and 10 times that number in the second phase (total 1,650 = $(150 \times 10) + 150$).

- audio-visual, printed and other materials necessary to the effective conduct of training.
- training manual, describing the objectives, principles, organization, content, methodologies, and evaluation of the training program.

3. Workshop Locations, Dates & Participation

Location	Date	Participation
Buriram Province (NE)	26-28 January 1989	50 persons
Saraburi Province (C)	15-17 February 1989	53 persons
Nakornsri Thammarat (S)	22-24 February 1989	58 persons
Nakorn Nayok (E)	13-15 March 1989	57 persons
Pichit Province (N)	27-29 March 1989	56 persons
Total		274 persons

General Characteristics of The Location

1. Burirum Province

Burirum Province is located in the Northeast of Thailand, at the attitude of 300 metres above the means sea level. It is approximately 412 kilometres from Bangkok with the land area of 9,772 square kilometres. It is divided into 14 districts, 158 sub-districts, 2,034 villages. Burirum has 1,356,951 populations. Most of the people use Thai language with Northeast dialect, Khmer is the next language of the area. 99.32 percent of the people are Buddhists. The main occupation of the people is farming while the next occupation is farming such as Casavas, jute, sugarcane, maize, ground-nuts and sesamaes. Industry of the province includes cloth weaving and basketries. The annual income of the population is 7,458 per persons. (Statistic 1986)

2. Saraburi Province

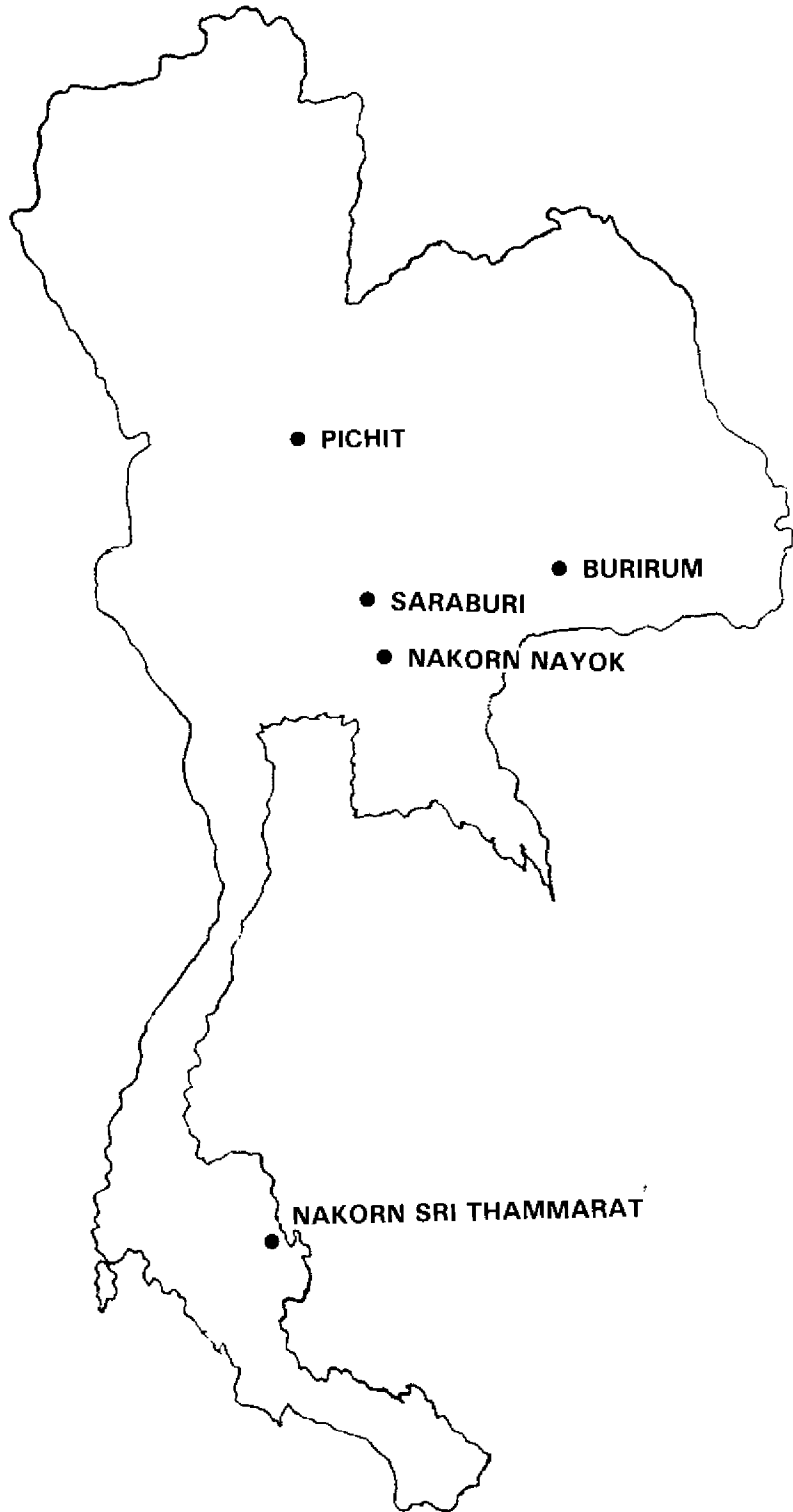
Saraburi, a province in the Central Part of Thailand, is 108 kilometres from Bangkok. It has a land area of 2,235,303 rais. The province is divided into 10 districts, 1 minor district, with the total population of 515,681.

Eighty per-cent of population engage in agricultural occupation such as rice and fruit trees gardening, animal raising. Saraburi is the province where industry is concentrated, resulting in the highest income of the people in this province comparing with the rest of other provinces in the central region.

3. Nakorn Sri Thammarat Province

Nakorn Sri Thammarat, a province in the southern part of Thailand. It is approximately 850 kilometres from Bangkok with the land area of 9,942.5 square kilometres. It is divided into 16 districts, 1 minor district, the total population of 1,492,000. Most of the people use Thai language with Southern dialect, most of the people are Buddhists and Islam.

The main occupation of the people is agricultural such as rubber plantation, fruit trees gardening, rice, fishery etc.



Map of Thailand: Showing the location of training.

4. Nakorn Nayok Province

Nakorn Nayok is 105 kilometres from Bangkok. It has the total land area of 1,326,250 rais. It is divided into 4 districts with the total population of 225,847.

The main occupation of the people of Nakorn Nayok is rice, fruit trees gardening and animals raising. Nakorn Nayok has 84 industrial factories. The annual income of the people of Nakorn Nayok is ฿ 12,996 per person. (1987)

5. Pichit Province

Pichit Province, located in the North of Thailand, is approximately 347 kilometres from Bangkok. It has the total land area of 2,831,883 rais of which 2,104,513 rais is devoted to agricultural farming. It has the total population of 499,724 people. Pichit Province is divided into 8 district, 79 sub-districts, 661 villages.

The main occupation of the people in Pichit Province is in agriculture such as rice, maize, beans, pomeloes, coconut, mangoes and jackfruits. Fishery is undertaken too; it includes freshwater fish raising. Pichit Province has 605 industrial factories producing food products, rock crushing, cloth weaving. Annual income of the population is ฿ 4,578 per person. (1985)

Reasons for selecting the 5 provinces as target areas:

1. They were the areas where uses of hazardous chemicals in agriculture, households, and community were found to be prevalent.
2. They were also the areas where it is possible to integrate the present project with another women's project.

4. Target Groups

The criteria for selecting target groups included: credibility, action-oriented, opportunity for effecting action programs, and interest. The major groups identified were:

- 4.1 Local housewife group leaders
- 4.2 Tambon level medical staff
- 4.3 Village Health Communicators & Village Health Volunteers
- 4.4 Volunteer teachers of the Department of Nonformal Education
- 4.5 Local leaders

In addition, women were generally selected over men.

PART II. OPERATIONS

1. Preparatory Activities

Prior to the organization of individual training workshops, several activities were conducted in preparation. It is essential to note that strong emphasis was placed on inter-agency coordination, with the result that the foundation received excellent cooperation from the 6 major Ministries (i.e. Interior, Education, Public Health, Agriculture & Cooperatives, Industry, and Science, Technology & Energy) throughout.

1.1 Appointment of the Steering Committee (with Dr. Virat Kamudamas, Director-General of the Dept. of NFE, and Khun Ying Dr. Ambhorn Meesook, President of the Foundation for Life-long Education, co-chairing) and the Operations Committee (with Dr. Vichai Tunsiri, Deputy Director-General of the Dept. of NFE, chairing).

1.2 Various meetings and workshops to prepare:

- training curriculum
- "Training Manual: Project for Protection Against the Danger of Toxic Substances"
- "Manual for Housewife Leaders: Protection Against Toxic Substances in Agriculture"
- "Manual for Housewife Leaders: Protection Against Toxic Substances in the Home & Community"
- posters and other teaching/learning materials
- local and national resource persons (GO and NGO)
- video presentation

2. Workshops

2.1 Overall Strategy & Individual Methodologies

The overall strategy elected to guide the organization and conduct of the 3 day workshop was: "participation in deed and not only in word". Emphasis was placed on non-academic group processes so as to allow all participants the opportunity to express and act in conditions within the family and community with respect to the use of toxic substances. This is essentially "kid pen" (critical thinking and reasoned action alternatives). The critical factors here were sincerity and group participation, both in thought and action.

Individual methodologies employed during the course of the workshop followed a variety of themes, all related to reinforcement of participative processes, including:

- building of a simple, natural atmosphere conducive to group dynamics and self-generating processes
- respect for the participants and their ideas and modes of expression at all times

- self-directed understanding of the dangers of toxic substances to one's family and community
- limitations on the dependency on literacy in activities
- use of a variety of media and materials, using content from the daily lives of participants
- actual practice
- use of resource persons from a variety of backgrounds but each adept at participative methods and their subject matter
- cooperative effort among government and non-government personnel at local and national levels, including the personal attention of respected and ranking officials/persons

2.2 Content

Day 1 : Orientation (1 hour)

Atmosphere building, using puppets (1 hour)

General problems/dangers (1.5 hours)

Toxic substances in agriculture (2.5 hours)

Recreation & public speaking (2 hours)

Day 2 : Summary of Day 1 (.5 hours)

Toxic substances in the home & community (3 hours)

Techniques of disseminating information (1.5 hours)

Practice (3 hours)

Day 3 : Summary of Day 2 (.5 hours)

Field practice (2 hours)

Summary of field practice (1 hour)

Action Planning (1.5 hours)

Discussion/Presentation of certificates/Closing (1 hour)

The materials and learning aids employed during the workshop included: manuals, posters, printed materials, exhibitions, slide & video presentation, and puppets.

2.3 Results

Post workshop evaluations showed a high degree of satisfaction (60-94 percent) with all aspects of the 5 separate workshops on the part of participants (e.g. content, methods, resource persons, etc.) as well as the resource persons (in evaluating participant performance).

It is interesting that numerous participants expressed particular satisfaction with two aspects of the workshops-the genuine group participation and the orientation toward participant critical thinking. This resulted in other provinces, organizations, and persons requesting permission to attend and assistance with conducting similar efforts elsewhere.

3. Spread Effect

The original goal of 150 workshop participants and 10 times that number benefiting from second stage training and dissemination (a total of 1,650 persons)

was far exceeded as shown below.

Province	No. Persons Benefiting
Buriram	2,150
Saraburi	2,275
Nakorn Sri Thammarat	1,528
Nakorn Nayok	1,987
Pichit	<u>2,327</u>
Total	<u>10,267</u>

In no case was the spread effect less than 10:1 and in one case it was 300:1 within the 6 months following the workshop. The total number of beneficiaries was over 6 times that targeted.

PART III FOLLOW-UP IMPACT AND ANALYSIS

1. FOLLOW-UP

Six (6) months after the completion of the workshop, the follow-up was undertaken. For the follow-up evaluation, the questions were asked of 166 graduates of the training workshop (of 274 total), and 184 community's residents who had been marked as affected target. The instrument constructed for the purpose was an interview/observation schedule: The following is the evaluation report.

Table 1-7 Showing categories of Respondents and their responses

Part 1 General Data

Table 1 How many workshop participants are their in each sex and occupation?

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
1. Break down of the workshop participants into males and females							
- males	12	5	8	10	—	35	21.08
- females	10	32	27	28	34	134	79.72
Total	22	37	35	38	34	166	100
2. Occupations of the workshop respondents							
- Rice Farming	17	4	14	16	15	66	39.76
- Gardening	—	8	2	2	1	13	7.83
- Volunteer Teachers	5	4	13	9	6	37	22.29
- Wage Laborer	—	9	3	5	5	22	13.25
- Housewives	—	7	2	—	—	9	5.42
- Traders	—	4	1	6	4	15	9.04
- Government Employees	—	1	—	—	3	4	2.41
Total	22	37	35	38	34	166	100

Table 1 indicated that 79.92 percent of the workshop participants were females, 39.76 percent were engaged in rice farming, 22.29 percent served as Department of Nonformal Education's volunteer teachers. Others engaged in various occupations such as Wage Laborers, Housewives, Traders, and Government Employees. Though the workshop's experiences did not help their occupations in terms of raising their income, it was admitted by these participants that, they had used the experiences of the workshop in daily living and having been able to pass on such experiences to their neighbors and friends.

Part 2 Responses in term of Opinions Towards Workshop Structures and Contents.
Table 2 Showing Responses of Workshop Participants in terms of Appropriateness of Workshop Structure and Content.

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percen- tage
1. Whether or not workshop structure achieve the purpose of the workshop?							
- Achieved.	22	35	37	38	33	165	99.4
- Not Achieved	—	—	—	—	1	1	.6
Total	22	35	37	38	34	166	100
2. If the purpose is achieved what are the explanation?							
- Desire to pass on to others	7	5	—	—	—	12	7.28
- Desire to daily living	15	28	21	38	30	132	80.00
- Desire to pass on and promote living cendition	—	4	10	—	3	17	10.30
- Improve one's and Community's quality of life	—	—	4	—	—	4	2.42
Total	22	37	35	38	33	165	100
3. In what ways do you want to improve the next Training Workshop?							
- Broadern the scope of content	8	17	15	17	7	64	38.55
- Provide more opportunity for practical exercise and dissemination techniques	7	10	17	12	20	66	39.76
- More careful selection of resource persons	7	10	3	9	7	36	21.69
Total	22	37	35	38	34	366	100

Table 2 indicated that 99.4 percent of the respondents when enquired as to whether or not the workshop structure as it was capable of enabling the workshop's participants to reach the workshop's objectives, realied in affirmative, while only 0.6 percent answered that he/she had gone through the similar workshop once so it did not count much to him/her, 80 percent of 99.4 percent provided the reason for their opinions that they could use the knowledge and experience to benefit others and themselves in their daily living.

When enquired as to what more could be done for similar workshop in the future, 39.76 percent answered that more time be given to practical exercise in dissemination methods' and techniques, 38.55 percent opined that more detailed subject matter content be provided for the workshop to enable them to gain true understanding and self confidence to make fully use of the knowledge and experiences and to help others with the same thing, while the remaining 21.69 percent suggested that the resource persons should be more carefully selected to accore with the purpose of the workshop.

Table 3 Showing responses of Workshop Participants in terms of the Use of Workshop Knowledge and Experiences, etc.

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Perce- ntage
1. Extent of topics and issues' contributions towards work and career undertaking							
- Much	19	37	18	23	22	119	71.69
- Moderately	3	—	17	15	11	46	27.71
- Not Appropriate	—	—	—	—	1	1	.6
Total	22	37	35	38	34	166	100
2. Appropriateness of approaches of training experiences							
- Much	14	13	17	20	16	80	48.19
- Moderately	8	24	18	18	18	86	51.81
- Not Appropriate	—	—	—	—	—	—	—
Total	22	37	35	38	34	166	100
3. Satisfaction and admiration for the training experiences							
- Receiving information and experience of toxic substance	18	23	29	29	20	119	71.69
- Having good reception and honour from the meeting	2	7	4	3	6	22	13.25
- Receiving knowledge on dissemination method	2	7	2	6	8	25	15.06
Total	22	37	35	38	34	166	100

Table 3 indicated that among 71.69 percent of respondents who had gone through the workshop offered the opinion that subject matter and content of the workshop helped them to perform their daily functions and their occupations much better, while 27.71 percent answered that the workshop help them in a moderate degree. Farmers enquired had indicated that they had become more careful in the use of toxic substances in agriculture.

As far as the approaches or methods used in the workshop were concerned, it was the opinion of 48.19 percent of those who had gone through the workshop that they were of the best types, 51.18 percent thought that the methods used in the workshop were only good. All in all, all of of 166 workshop participants found certain aspects of the workshop likeable, but 71.69 of them this found satisfaction in gaining knowledge concerning the prevention of the harmful effects of the toxic chemicals, 15.06 percent found satisfaction in the techniques and approaches used in the workshop, the remaining 13.25 percent found satisfaction in the welcoming and honouring offered them by the host centers and resource persons.

Table 4 Showing responses of Workshop Participants concerning performances of resources persons, needs for additional subject contents.

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
1. Appropriateness of time allotments for resource person's presentation and for conduct of participants activities							
- Appropriate	18	37	35	26	28	144	86.75
- Not Appropriate	4	-	-	12	6	22	13.25
Total	22	37	35	38	34	166	100
2. Topics or issues workshop participants found most interesting							
- Roles Plays	4	10	9	14	6	43	25.9
- Puppets and Video	4	10	8	6	8	36	21.69
- Field and Practical Experiences	7	10	7	11	10	45	27.11
- Knowledge and Experiences Received from Resource Persons	7	7	11	7	10	42	25.3
Total	22	37	35	38	34	166	100

Response	Burirum	Saraburi	Nakorn Sri	Nakorn	Pichit	Total	Percentage
	Province	Province	Thammarat Province	Nayok Province	Province		
3. Need for additional contents in future workshop							
- Use of Toxic Substances related to Agriculture	13	10	11	13	11	58	34.94
- Selection and Use of foodstuffs that is free of toxic substances	9	27	24	25	23	108	65.06
Total	22	37	35	38	34	166	100

Table 4 Indicated that 86.75 percent felt that the time used by the resource persons were appropriate, while 13.25 percent that the time used by the resource persons was too short and should be extended to 2 more days.

Specifically, workshop participants were of the opinion that they were especially interested in practical field exercises 27.11 percent, role plays 25.9 percent, knowledge and information provided for by resource persons 25.3 percent, puppetries and VDO. 21.69 percent.

For future workshop similar to this, it was the opinion of 65.06 percent of the workshop participants that contents as well as techniques associated with choosing and cooking of vegetable foodstuffs, while 34.94 percent were of the opinion that the content should cover the selection and use of pesticides, as well as herbicides which would include use, prevention, and upkeeping of the said materials.

Part 3 Benefits of Workshop Experience

Table 5 Showing responses of Workshop Participants in terms of the Benefits of workshop experiences.

Response	Burirum	Saraburi	Nakorn Sri	Nakorn	Pichit	Total	Percentage
	Province	Province	Thammarat Province	Nayok Province	Province		
1. Whethere or not the workshop had enabled the workshop participants to gain information							
Increased	22	37	35	38	33	165	99.4
Not increased	0	0	0	0	1	1	0.6
Total	22	37	35	38	34	166	100

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
2. Topics or issues workshop participants found most interesting							
- Increase in General Areas	18	20	23	29	19	109	65.66
- Received Knowledge that is current	4	17	12	9	15	57	34.34
Total	22	37	35	38	34	166	100
3. As an employed person, whether or not the workshop helped in the raise or promotion							
- Increase in Pay/Salary							
Yes							
No							
- Advance in occupations							
Yes							
No							
Others							
Able to apply to everyday living	22	37	35	38	34	166	50
Pass on the knowledge and information to others	22	37	35	38	34	166	50
Total	44	74	70	76	68	332	100

Table 5 indicated that 99.4 percent of the respondents when enquired answered that they had derived much knowledge and information on the use of and the prevention of harmful effects of toxic substances in agriculture, households, and communities. And they also indicated that they were capable of passing on the knowledge and information to other people.

65.66 percent answered that they had received general knowledge concerning use and handling and prevention of harmful effects of toxic substances related to agriculture, households, and community. While 34.34 percent revealed that the workshop enabled the trainees to be up to date with the issues at hands (on toxic substances) and they, became more aware of the benefits and dangers of the substances.

The workshop participants also reported that eventhough they did not benefit from the training workshop in terms of raises or promotions but they had used their knowledge and experiences to improve the quality of life of themselves, their families, and their communities, they also had passed on the workshop experiences and concept to friends and neighbors too.

Table 6 Showing responses of Workshop Participants in term of follow up activities.

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
1. Whether or not workshop participants had passed on workshop's knowledge and experiences to others.							
- Passing on Knowledge/Experiences	22	37	35	38	34	166	100
- Did not Passing on Knowledge/Experiences	-	-	-	-	-	-	-
Total	22	37	35	38	34	166	100
2. Number of persons received workshop's knowledge and experiences ("affected")	2,150	2,275	1,528	1,987	2,327	10,267	-
3. Methods or approaches workshop's participants used to pass on the workshop's knowledge and experiences							
- On Individual Basis	22	37	35	38	34	166	50
- On Group Basis	22	37	35	38	34	166	50
Total	44	74	70	76	68	332	100

Table 6 indicated that everyone of the workshop participants when enquired as to whether or not they had passed on the knowledge and experiences of the workshop to other had answered that they did. They had passed on the knowledge and experiences to their family's members, neighbors, and community's inhabitants. Individual contacts, and group approach are among the methods widely used by the respondents. The number of the "affected clients" are many times over the number of workshop participants.

Table 7 Showing Workshop Participants interest and intention to spread the workshop experiences

Response	Burirum	Saraburi	Nakorn Sri	Nakorn	Pichit	Total	Percentage
	Province	Province	Thammarat Province	Nayok Province	Province		
1. Extent of interest that the *affected groups* showed in the knowledge and experiences passed on to them.							
- Much	13	30	18	26	19	106	83.86
- Moderate	9	7	17	12	15	60	36.14
- Little	-	-	-	-	-	-	-
Total	22	37	35	38	34	166	100
2. Degrees of intention to pass on the knowledge and experiences of the workshop further							
- Yes	22	37	35	38	34	166	100
- No	-	-	-	-	-	-	-
Total	22	37	35	38	34	166	100

Affected Group - In the workshop's objective it was designed in such a way that workshop's participants pass on workshop's knowledge, concepts, and experiences to atleast 10 members of their neighbors and friends. This group of intended recipients of workshop's knowledge and experiences are here, in this report, termed "affected group". They are second stage beneficiaries.

Table 7 indicated that 63.86 percent of the training participants had paid much interest in the workshop, and 36.14 percent had paid only moderate interest in the workshop. When enquired, the meeting participants had also indicated that they intended to pass on the knowledge, information, skills, concepts, and experience to other people because they had recognized the benefits that would accrue to the neighbors and communities, and the community's environment.

Table 8-13 Showing the responses of "affected groups"**Table 8** Showing Principal Occupation of the affected groups.

Response	Burirum	Saraburi	Nakorn Sri	Nakorn	Pichit	Total	Percentage
	Province	Province	Thammarat Province	Nayok Province	Province		
Principal Occupation							
- Students					11	11	5.98
- Rice Farming	30	16	20	8	28	102	55.43
- Upland crop Farming	3	16		2		2	11.41
- Gardening				4		4	2.17
- Traders	3	2	3	1	5	14	7.61
- Fishery			4			4	2.17
- Wage Laborer	1	3		1	5	10	5.43
- Retire Government employees		1				1	0.54
- Housewives		4	5		4	13	7.07
- Government employees		2			2	4	2.17
Total	37	44	32	16	55	184	100

Table 8 From among 184 workshop participants among the five pilot provinces, 55.43 percent were engaged in rice farming, 11.41 percent were engaged in upland crop farming, the rest were engaged in trading, and being housewives.

Table 9 Showing a affected groups' responses in terms of knowledge and frequencies received.

Response	Burirum	Saraburi	Nakorn Sri	Nakorn	Pichit	Total	Percentage
	Province	Province	Thammarat Province	Nayok Province	Province		
1. Receiving knowledge from the workshop participants about:							
- Toxic substances related to households and community	50	42	34	15	39	180	75.95
- Toxic substances in agriculture	18	17	11	4	7	57	24.05
Total	68	59	45	19	46	237	100
2. Number of times that they had received Knowledge and Experience	154	83	70	75	171	553	3 times person

Table 9 A question was posed do the respondents as to the sources of information on toxic substances they had derived from and specifically on what topics, and whether those topics really interest them, 75.5 percent of the respondents offered the opinions that they had received the information from the workshop participants on the dangers of toxic substance that related to households, and community. The topics received included the cleaning of toxic substances from vegetables leaves, use of the monosodium glutamate, use of pesticides in homes, etc. These topics interest them very much because it is the dealing with things at hand. Another 24.05 percent was found to be only moderately interested and received information on toxic substances that is related to agriculture.

Table 10 Showing Responses of Affected Groups in Term of Uses and Interest in Workshop Experiences.

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
1. How much would you rate the usefulness to individuals of the knowledge and Experiences of the Workshop?							
Much	40	53	28	16	33	170	92.89
Moderate	4	2	4		4	14	7.61
Total	44	55	32	16	37	184	100
2. How much would you rate your interest in the topic problems of toxic substances?							
Much	31	42	18	15	55	160	96.86
Moderate	6	2	14	1	1	24	13.94
Total	37	44	32	16	56	184	100
3. What topics you are most interested in							
Toxic Substances Related to Agriculture	7	15	3	2	16	43	19.37
Toxic Substances Related to Households and Community	30	46	37	19	47	179	90.63
Total	37	61	40	21	63	222	100

Table 10 92.39 percent of the affected group had expressed the opinion that the subject matters that they had received from the workshop participants were useful to themselves for the reasons that they must encounter in everyday living. 7.61 percent were of the opinion that the workshop was only moderately useful to them because they were already familiar with the subjects and practiced upon it from time to time and that they had not met with the disaster with any proportion. 86.96 percent of the affected group had admitted that they had a high interest while 13.04 percent of the affected group felt they had a moderate interest in receiving the Knowledge and information related to toxic substances.

Enquired as to the types of topics they are interested to know, 80.63 percent answered that they were interested in problems associated with problems of toxic substances related to households, and communities and 19.37 percent were interested in problems associated with problems of toxic substances related to agriculture.

Table 11 Showing Responses of Workshop Participants in Terms of Applications and Dissemination of Workshop Knowledge and Experiences.

Response	Burirum Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
1. Whether or not after receiving the knowledge and experiences the affected groups have applied the knowledge and experience							
- Applied	34	44	27	16	54	175	95.11
- Not Applied	3	—	5	—	1	9	4.89
Total	37	44	32	16	55	184	100
2. Whether or not the affected groups had passed on knowledge and experiences							
- Had	33	44	32	14	47	170	92.39
- Had not	4	—	—	2	8	14	7.61
Total	37	44	32	16	55	184	100

Table 11 Among those who had received training experiences, 95.11 percent had applied them in every day's living, in a gradual and step by step manner; while 4.89 percent failed to do so for the reason that their normal practices already matched with the new experiences. Also among the persons who had received the training experiences, 92.39 percent had attempted to pass on the knowledge, concepts, and experiences gained to others; while 7.61 percent said that had not done so for the reason that they lacked necessary self confidence that they could do so.

Table 12 Showing Responses of Workshop Participants in Terms of Uses of Workshop Knowledge and Experiences to Families and Desired for More Knowledge and Experiences

Response	Burirum	Saraburi	Nakorn Sri	Nakorn	Pichit	Total	Percentage
	Province	Province	Thammarat Province	Nayok Province	Province		
1. Which topics, serced your purpose better and you would like to have more of it.							
- Toxic substances related to agriculture	17	15	5	16	16	69	30.53
- Toxic substances related to households and community	20	41	29	20	47	157	69.47
Total	37	56	34	36	63	226	100

Table 12 indicated that 69.47 percent of the respondents when enquired as to types of subject matters they would like to hear repeated by former workshop participants reported that they would like to have these topics repeated the prevention of toxic substances in the households and communities. The remaining 30.53 percent preferred to hear about toxic substances that related to agriculture, including the remedies to be applied to affected person (s)

Table 13 Showing Responses of Workshop's "Affected Group" in terms of Extents and Uses of Workshop's Knowledge

Response	Buriram Province	Saraburi Province	Nakorn Sri Thammarat Province	Nakorn Nayok Province	Pichit Province	Total	Percentage
What is your opinion concerning the knowledge dissemination on the toxic substances from Workshop participants							
- Wish for more knowledge and experiences that was related to agriculture stating that they were useful in daily living	7	5	5	8	27	52	27.51
- Satisfied with and desired for more knowledge and experiences related to topic substances in agriculture, households and community.	5	18	15	—	20	58	30.68
- Every aspect of presentation concerning toxic substances in households and communities were useful to selves and communities as they increased alertness of dangers of those substances.	20	21	12	10	16	79	41.81
Total	32	44	32	18	63	189	100

Table 13 indicated the kind of responses to the general question put forward to respondents as to the nature of the knowledge and information provided for them by the resource persons. From among the respondents, 21.81 percent reported that they felt that emphasis should be placed on toxic substances related to foods and drugs, 30.68 percent felt that topic of toxic substances that were related to agriculture, households, and communities are important, and the remaining 27.51 percent opined that (the project/center (s)) should frequently make available information on toxic substances, especially those related to agriculture.

Suggestions

1. Additional workshops be organized to provide more knowledge and experience for the former workshop's participants.
2. Similar workshops be organized in other villages all over the country
3. More field practical experiences be organized at the workshop to be organized later.
4. Similar workshops should be organized for teachers in the formal schools so that they can pass on the knowledge and experiences to the students while attending formal education
5. Duration of training should be lengthened to 5 days so as to provide more time for techniques and approaches to the dissemination of knowledge and experiences.
6. Provide for more follow-up and evaluation
7. Provide for the opportunity for the recognition of natural substances that could substitute the harmful chemical substances.
8. Increase the production of documentary as well as electronic media.

2. Impact

2.1 On Participants. Persons completing the training expressed a sense of urgency in transferring the knowledge and techniques gained to their families and neighbors. Although they sometimes met opposition in the attempt to dissemination of the new knowledge on toxic substances. In most cases the villagers tended to disbelieve in the competency of village volunteers (ex-trainees) whom they claimed had gone through only one workshop. The village volunteers however were able to counter this by confirming their oral information with written materials.

In conversation with those participating in the workshops or second stage beneficiaries, it was found that they had accepted the new knowledge and attitudes and were making gradual adaptations and changes in their behavior. For example, in the past many farmers had taken no precautions in using pesticides and were otherwise using them in improper ways. Now they were making both safer and more effective use of these chemicals.

Many were becoming more cautious in their choice and use of fish sauce (nam pla) and some had even begun to make their own particularly in Buriram and Nakorn Nayok Provinces. Both consumers and retailers were using less monosodium glutamate (MSG). Those who had purchased prescription drugs without a doctor's advice had ceased this practice. And many had stopped using artificial food coloring. This is found to be true in all the five provinces in the follow-up process.

2.2 On participating & Other Agencies. Although the project had a limited number of specific objectives, several additional positive outcomes resulted with respect to the agencies involved.

1. Supplementary materials and activities were prepared and conducted in an effort to encourage and assist for those completing the training. For example, in Pichit Province, public address announcements and plays were held in the villages. In Saraburi Province, Songs were composed about the dangers of toxic substances.

2. Provincial Nonformal Education Center and other officials showed improved understanding and realization of the dangers of chemical substances as well as a sense of urgency in expanding the number of second stage beneficiaries.

3. Besides the 5 pilot experimenting provinces, there are a number of provinces which undertook to disseminate ideas, concepts, and experiences related to the topics in various ways: organizing the training for volunteer teachers so that they could pass them on to their target clientelles. The main method emphasized was the natural method for example infusing them into the on-going basis functional literacy classes, use relevant issues from the Quality of Life Improvement classes, design and develop materials based on villages conditions related to the topics for the villagers. Besides, the project had provided these provinces with related materials. These provinces are such as Yasothon, Loei, Chaiyaphoom, Kampangetch, Chumphon, Chachoengsas, Kanchanaburi, Samutprakarn, Ayuthaya, Prachinburi, Chantaburi, Trat, Raiburi and Nonthabour.

4. Other government and non-government organizations, such as Mahidol University, Suan Sunantha Teachers College, the Womens Foundation, Office of the National Environment Board, and several Divisions of the Ministry of Public Health, also asked to study the project and requested assistance in their own programs for training and dissemination of information on toxic substances.

3. Analysis in training

It is advantageous to explore both the reasons for the success of this project as well as recommendations for future actions.

3.1 Why was the project so successful? The reasons are varied, but are also mutually reinforcing.

1. High Ranking and respected persons were both sincere and committed in their support of the project, especially the President, Secretary-General and members of the Foundation for Life-long Education, the Director-General, Deputy Director-General and Chief of the Supervisory unit of the Department of Nonformal Education and their key staff, the Secretary-General of the Office of the National Education Commission, Provincial Governors, and the heads of various provincial agencies (e.g. agriculture, education, interior, health).

2. The dangers of toxic substances is a timely and important topic which villagers are already aware of to some extent. Judicious selection of the target population best equipped and most concerned about quantitative and qualitative improvement in this area provided for a very receptive and talented core of change agents. Flexible external funding allowed them to realize their potential.

3. Perhaps most important was a sincere and reasoned commitment to "peoples' participation" and respect for the peoples' wisdom, desire, and abilities in responding to a problem facing their families and communities. This commitment was reflected in the emphasis placed on process rather than (short-lived) product, as well as workshop organization aimed at facilitating participative "whit pan" processes.

With regard to the limitation or short coming of the workshop and materials, there is no clear evidence from the evaluation. Most participants expressed satisfaction with the produced materials, but also expressed their feeling that subsequent or future materials should go into greater details on toxic substances, and in agricultural products and foods etc. Also it is the opinion of resource persons concerned that pedagogic materials should also deal with toxic substance which finds its way into the river, and stream and causes detrimental effect on life in the water.

In addition, in recruiting target groups for initial training, we should focus on their willingness, or other wise if they are compelled to come, they would not willingly cooperated.

Conclusions

The follow-up of the workshop in all the regions of the country revealed that:

1. 79 percent of the workshop participants were females who were engaged in rice farming, volunteer walking teachers, wage earners, traders, housewives, etc. Experiences did not affect working promotions, but were useful for individual's and community's living.

2. The structure of the workshop had enabled 99 percent of workshop participants to attain their objectives and to make use of the knowledge and experiences gained from the workshop in their daily living as well as to spread the knowledge and experiences to their neighbors and friends. Their suggestions had also included the provision of more practical exercises, and more detailed contents.

3. 71 percent of the workshop participants felt that the content areas of the training workshops were useful for their occupation. They were satisfied with the knowledge and experiences related to the uses and prevention of the harmful effects of toxic substances in agriculture, health, and community. They also felt that the approaches used in the workshop were suitable for the purpose.

4. 86 percent of the training workshop participants felt that time allotments for resource persons as well as those for participant's activities and exercises were enough and suitable. However in the future should similar workshop be organized, it was suggested that the workshop should provide more content, as well as techniques in dissemination of the workshop's contents and experiences to others.

5. 99 percent of workshop participants felt that they had received the knowledge and experiences related to use and prevention of toxic substances related to agriculture, households, and community. They were now in a better position to make wise use of current news and information related to toxic substances. They had worked with their friends and neighbors in individuals, and in groups in passing on the knowledge and experiences of the workshop. 63 percent of those who had received the knowledge and experiences, the affected group, related that they were satisfied and intended to pass on such knowledge and experience further.

6. 75 percent of the affected group showed interest in receiving further on the knowledge and experiences related to toxic substances in a griculture, households, and communities stating the reason for their interest that they were something near them, which they find in daily living. They cited the example of these substances such as the toxic substances found in foodstuffs, and the toxic substances found in use in agricultural purposes.

7. 80 percent of the affected groups related that they had found the presentation of the topic on use and prevention of toxic substances in the home, community, and agriculture very interesting. After they received information on such topics, the affected groups had applied them in their living. They became more careful in the use and handling of toxic substances. They also had undertaken to pass on such information to their neighbors and friends.

8. Individual provincial nonformal education center reported that they had constantly undertook to carry out continued activities of the project to reach their target clientelles. Apecifically, this is their report:

8.1 Buriram Province:

Buriram Provincial Nonformal Education Center had undertaken to produce a set of leaflets, and publicity boards for each district. The center also undertook to carry out follow-up activities monthly.

8.2 Saraburi Province:

Saraburi Provincial Nonformal Education Center had undertaken the development of publicity boards, as well as (cassettes tapes). The center had focussed on a primary school in the District of Saw Hai.

8.3 Nakorn Sri Thammarat Province:

Nakorn Sri Thammarat Provincial Nonformal Education Center working with the cooperation of the volunteer teachers, and the target population undertook to develop publicity boards to publicize the dangers of toxic substances. The center had also organized a committee to formulate the guidelines and to develop materials for the projects that suited the local conditions. The topics they had come up with had been used to develop an additimal 14 topics for Life Quality Promotion Programs. The follow up was undertaken on a monthly basis.

8.4 Nakorn Nayok Province:

Nakorn Nayok Provincial Nonformal Education Center had undertaken the development of additional materials, and publicity boards, improvement of village reading centers, cassettes tapes which carried message of uses and provention of toxic substances for village publicity. The follow up was also carried out once a month.

8.5 Pichit Province:

Pichit Provincial nonformal Education Center working with the local Women's Volunteer Development Group of Tab Klaw District and the province's former workshop participants to produce a Video set for Lamtat (Local mix-individual recitations). The provincial center also undertook to produce cassettes tapes as well as some materials for village reading centers as well as village publicity centers. The provincial center also undertook to carry out follow-up activity once a month.

9. The expansion phase (after the first group of participants had undergone the training) could not be done very quickly because the training participants had to go back and engaged in their occupations while the volunteer teachers must divide up their time for other duties as well. The extending of the concepts and experiences of the workshop there for could be carried out only on a gradual basis.

Highlights of the Project

The training approaches has to be the Project's highlight for they directly contribute to the Project's success, i.e. reached it's stated objectives. Through the project, the training participants were involved in a variety of activities related to the workshop.

1. The participants were divided into small groups to study from the Documents, Video-Visual Materials, Displays and Exhibits.



Figure 1 Participants studying fro papers and documentary materials.



Figure 2 Participants studying from exhibition.

2. Participants are organized into discussion groups so that they have opportunity to exchange ideas and experiences among themselves, to draw conclusions and present them to the meeting.



Figure 3 Participant were divided into discussion groups.

3. In practical exercises, participants were divided into groups to organize and run roleplays for approaches to disseminate skills and experiences of the workshop that had been provided them earlier in theories or concepts. The practical exercises of roleplays can sharpen the skills and allow the training participants to understand more deeply the training experiences related to how to spread the training concepts and experiences.





Figure 4-5 A roleplay is shown here being run to demonstrate uses of chemicals in agriculture.

4. Field exercises. Training participants were divided into 3-5 member groups each of which was assigned with at least 1 resource person whereupon each group was brought into a village earlier selected by the Provincial Non-Formal Education Department Center to practice putting knowledge and experiences in the dissemination of the workshop's experiences to the real life situations. When they returned to the meeting each group would file the report and presented it to the meeting.





Figure 6-7 Showing field practical experiences

3.2 What's next? A number of recommendation have grown out of the experiences of this project.

1. This project should be continued and expanded to many other provinces.
2. The assistance of other agencies should be enlisted in the production of more learning and information materials and activities, including various non-government organization (NGOS) and the Ministries of Interior, Education, Public Health, Agriculture & Cooperatives, Industry, and Science, Technology & Energy.
3. The target groups should be supported in conducting additional activities
4. Case studies should be conducted on both workshop participants and second stage beneficiaries in order to better understand their ideas, methods and resulting impact.
5. Subject matter on the dangers of toxic substances should be included in compulsory nonformal education courses.
6. Study trips and exchanges between countries should be conducted in order to widen the scope of these activities and share experiences.
7. A seminar should be organized for the participants of the original 5 workshops in order to exchange ideas, experiences, content, and possible study trip sites. Such a seminar would serve to boost the confidence of persons engaged in these programs.
8. Emphasis should be given the real problems that actually occur in the target areas. As such, survey and research should be conducted at the beginning of the project.
9. Senior, highly respected private and government officials should be active and involved at all stages of operations/implementation of the project, in order to enhance effective implementation.
10. Coordination of both the vertical and the horizontal nature must be effective and through.
11. Involve target groups i.e. trainees in the conduct of the workshops as much as possible and provide for them as much opportunity as possible to have hands-on practical experiences.
12. Be clear as to the purpose (s) of the workshop in selecting the trainees to the workshop:
 - Choose mixed groups, male-female, government-nongovernment, if the project wants to have spread effects.
 - Choose a specific target group e.g. women's leaders if the Project wants specific problems in specific target groups/areas solved.
13. Choose, produce, and use different kinds of media to suit the reading levels, interests, physical limitations, and workshop conditions.
14. Evaluation and follow-ups should be continuously conducted at the levels of project's organizers and field-level implementers.
15. Evaluators and follow-up personnel should be able to help the people solving their problems in the field, provide them with supplementary knowledge and information, and to provide them with access to other resource persons.

APPENDIX

Target Areas and Populations

1. Target areas

Because it is a pilot project devised to test the model and procedures and the methods whereby the knowledge and information concerning the chemical uses are being channeled to the target populations who are the women's leaders in the rural areas with differing socio-economic, traditional and cultural beliefs, and differing varieties of chemical uses, the 5 provinces, each representing a differing geographical region of the country was chosen as target areas. There are:

1. In the Northeastern region: Buriram
2. In the Northern region: Pichit
3. In the Southern region: Nakorn Sri Thammarat
4. In the Central region: Saraburi
5. In the Eastern region: Nakorn Nayok

The criteria for the selection of the five provinces were the opinions of experts, and the research findings that revealed high toxic chemical concentrations.

Target Populations

The Project's target populations included women's leaders residing in the rural areas of the country. They comprise:

1.1 Local women's leaders. The reasons for the selection of this group of the target populations because in the that families normally it is the women who are entrusted with the responsibility of handling of chemicals both in the preparation of food and the prescription of first aids for members of the family. Women are seen to have always served as providers of counsels concerning the use of chemical hazards as they might occur in occupational undertakings. In many parts of the country, women are the actual users of the chemicals. Besides, rural women usually work in tight-nitted groups therefore have strong wielding power. They are usually the most committed groups willing to sacrifice there time and efforts and are persistent in their efforts to spread the concepts and knowledge gained from the training to others.

1.2 Sub-District Health Officers. The principal reason why sub-district level health officers were chosen as target populations is because they are usually regarded by the general public as possessing knowledge and experiences in providing the first aid services and treatment to the people who are victimized by the toxic chemicals. They are usually respected as the people of authority therefore are reliable agents for the spreading of information both in quantitative as well as qualitative terms.

1.3 Local informants and basic health volunteers. These groups of people had gone through the training in health cares and information dissemination. They are the established authorities in the village and consequently have been well trusted by the public.

1.4 Department of Nonformal Education's volunteer teachers. The volunteer teachers of the Department of Nonformal Education serve the attempts well in the follow-ups, and evaluation, and the providers for source of continuous spring of

encouragement and inspiration. Their regular duties with the Department of Nonformal Education answer well to the calls of their new and expected functions required of them by the pilot project.

1.5 Local leaders. The local leaders are a group of chosen people in the communities which means they already had the trust and respect of the people. As such they are the useful people for the project, especially at the initial test period.

2. The Planning and Preparations for the Workshops

2.1 Orientations:

2.1.1 A workshop was organized to work on project's thrusts and execution involving key personnel of Foundation for Lifelong Education and Department of Nonformal Education. The thrust was consequently therefore that the training would be organized for 150 target women groups' leaders from a group of selected rural areas for the purpose of increase the trainees' awareness and knowledge concerning the dangers of toxic chemicals to the degrees that for each individual would be capable to passing on such knowledge and information to atleast 10 household or community members. There would therefore be atleast 1,650 persons who would have undergone the project's workshops. The United Nations Environment Programme (UNEP) and the Foundation for the Lifelong Education would be responsible for providing content, technical, and financial supports, while Department of Nonformal Education would be responsible for the implementation, coordination, follow-ups, and evaluation with the supports sought from government and nongovernment organizations in the technical and operational aspects.

2.1.2 The Foundations for Lifelong Education and Department of Nonformal Education's working together to produce the project paper for submitting to UNEP for the support. It would be a two-year project starting from 1987 to 1989 with the financial request for US \$56,700. Of this, UNEP had replied on 10 May 1988 proposing US \$41,700.

2.1.3 Department of Nonformal Education's supervisory unit was requested to serve as the Project's Secretariat working in cooperation with related centers/units.

2.2 Organization of the Various Committees.

Department of Nonformal Education and Foundation for Lifelong Education have jointly agreed to establish two sets of committees as followings:

2.2.1 The Steering Committee. The steering committee is jointly chaired by Department of Nonformal Education's Director-General, Dr. Virach Kamudamas, and Chairman of Foundation of Lifelong Education, Dr. Khunying Ambhorn Meesook. Committee membership comprises representatives of either the government and nongovernment agencies. The Steering Committee has the responsibility for the formulation of policies, principles, as well as approaches contents, principles, spreading of the effects, post workshop's evaluation, as well as the principles and the material development. This committee also serves as a sounding board

which would serve to provide technical judgements for the operations committees as required. It would also serve as equal partners in the operations and evaluation of the project.

2.2.2 The Operations Committee. The Operations Committee was headed by a Deputy Director-General of Department of Nonformal Education in this instance it was served by Dr. Vichai Tunsiri. He was assisted by Head of Supervisory Unit, Dr. Thongyoo Kaewsaiha in the capacity of the Project's secretary. The Chairman of the Foundation for Lifelong Education and the Director-General of Department of Nonformal Education would serve as advisors. This committee was responsible for the preparation of the operational plans, selecting target areas and target populations, coordinating the project's activities with agencies at the provincial level. It coordinates agencies at the vertical and horizontal levels. It provided the guidelines for curriculum and materials development. It also has the responsibility for producing training materials and follow-up and evaluation instrument. All for submitting for approval of the Steering Committee. It is also charged with the responsibility to operate and follow through all the administrative and academic procedural steps, and to conduct the evaluation and follow-up of the project.

2.3 Preparations and Organizations of the Curriculum, Subject Matters (Contents), Procedures, Materials, and Training Guides

2.3.1 The Steering Committee had agreed to limit the scope of the curriculum and the subject matter for this training only to the type of chemicals found to be in wide use for homes and agriculture. This would include the foods and medicines which at this juncture of times are wielding great and pernicious influence upon the rural communities. The curriculum committee had finally approved of these topics for the training curriculum:

- A. Dangerous effects of the chemicals used in the homes and agriculture;
- B. Safehandling of these chemicals;
- C. Methods of knowledge dissemination which would include the persuasion methods to encourage and support the rural villagers to recognize the dangers of chemicals, and the safehandling, as well as the use of the chemicals' substitutes.

2.3.2 The operations committee had organized two workshops to produce training manuals and curriculum materials. These two workshop were:-

First Workshop: The first workshop was organized to produce training guides and curriculum materials. It took place on 10-16 October 1988 at Chonburi Province. It was attended by 38 participants. At the workshop these were the run of the events:

1) Dr. Virach Kamudmas, Director-General of Department of Nonformal Education, president of the meeting had pointed out of the workshop's participants the relationship of this project with the activities of the Department of Nonformal Education as a whole; the place of this project in the context of the rural residents' quality of life; important characteristics and different varieties of media which would cater to different needs, circumstances of different groups of the target populations.

2) Dr. Khunying Ambhorn Meesook, Chairman of the Foundation for Lifelong Education traced the evolution of the project; provided for the audience her concepts and experiences concerning environment management development and efforts; related to the audience her wide ranging experiences in relations to the campaigns to prevent the dangers of the chemicals both in the country and outside. Dr. Khunying Ambhorn Meesook continued to stay with the workshop to provide her counsels and encouragement.

3) Dr. Charupong Boon-long representing the National Environmental Boards of the Ministry of Science and Technology and Energy, Ms. Pranee Kiatsurayanon, and Ms. Yupin Lawanprasert from the Office of Foods and Medicines, Ministry of Public Health participated as resource persons and in the process provided the audience with their views concerning the concepts, subject matters, and experiences in connection with the efforts at preventing dangers of the chemicals.

4) Local resource persons - An District Agriculture Officers from Bang Lamoong, Chonburi province participated as resource person relating his experiences working with rural villages in preventing toxic spread in agriculture.

5) Department of Nonformal Education's Supervisory Unit's Chief, Dr. Thongyoo Kaewsaiha, and Nonformal Education Development Section's Dr. Kla Somtrakool participated as resource persons providing their counsels, relating their experiences in connection with the production of training manuals, methods of training, and the types of media suitable to the rural populations.

This first meeting 3 prototypes of documents were produced

A) A Resource persons' handbook for the training of rural friends in the prevention of toxic chemical. In this handbook, there contain instructions of how to use the handbook, characteristics of and instructions on how to use the training packages, plans and schedules, coverages, activities, training strategies, cases, and evaluation instruments.

B) A women's leaders' handbooks. These handbooks contain simple subject matters for later references.

C) A set of training materials. The materials were divided into the supplementary materials that would aid the trainees to better understand the subject matters as well as the concepts as well as the type that would be given to the participants to take home to further spread the knowledge and information to their friends and neighbors when they finished with the workshop. The materials that were produced under this heading included 3 Video's scripts, 3 scripts for handpuppetries, 31 sketches for posters.

The handbooks as well as the materials mentioned here were prepared in complete forms however in sketches and submitted for consideration by a panel of experts to establish the validity of the contents as well as the appropriateness of the training procedures. They were to be completed before 2nd workshop.

Second Workshop: The second workshop involved an editorial operations of the prototype handbooks and materials. It was held on 25-29 October 1989 in Chonburi. It was attended by 21 editorial personnel. The rundown of the activities at this workshop could be summarized as followings:-

1) Mr.Sompong Palasoon, a government official and writer had presented to the audience the methods to make the materials more attractive to the readers and the viewers.

2) The workshop's participants were divided into 5 groups for editorial operations.

Group 1 : Editorial operations on the resource persons' handbook.

Group 2 : Editorial operations on the 2 sets of women's leaders' handbook.

Group 3 : Editorial operations on the 31 sets of pictorial instructional sheets which were divided into

- Agriculture related 12 subsets
- Food related 10 subsets
- Materials related 9 subsets

Group 4 : Editorial operations on the 3 scripts of the Video sets:

Set 1 : "Hazards Near You" 15 min.

Set 2 : "Is there in the Home" 10 min.

Set 3 : Comprises 7 subsets, namely,

- "How Good Our Mother Is"
- "Start when Young"
- "Expire Medicines, Beware!"
- "Insecticides or Suicides"
- "Make Merits, Strive to Gain Merits"
- "Who are the Murderers?"
- "Good Quality Fish Sauce Must Have Trade-Mark"

For each topic in the group 3rd, the time for screening presentation takes approximately 2-3 minutes.

Group 5 : Editorial operations on 3 puppetry sets:

- (1) "The World of Deaths (Pipop Majuraj)"
- (2) "A quick witted intellectual", and
- (3) "Oh Papa, Oh Mama!"

All together 20 min.

After editorial operations, the jobs to be accomplished were divided up and assigned to different parties as followings:-

Northern Regional NFE Center took up the development of the Video tape entitled:

“Is there in the Home”

Northeast Regional NFE Center took up the development of the Video tape entitled:

“Hazards Near You”.

Eastern Regional NFE Center took up the development of 8 puppets. Supervisory Unit coordinated, collect, and produce all the materials. Each of the participating provincial NEF center took up the development of the audio-visual small projects that had been decided by the committees.

After the editorial works had been completed the dummies and final drafts of the materials before they were sent to printing shop were undertaken.

2.4 The Preparations of Workshops' Resource persons.

Throughout these workshops 4 sorts of resource persons were being utilized:

2.4.1 Principal resource persons who would serve as technical and subject matters specialists. They had the duty to provide technical inputs and provide the workshops with examples of successful examples. This group of persons were such as the local resource persons in the persons such as provincial gricultural, and health officers.

This group of local resource persons have the true knowledge of the conditions as they exist in the areas. They had a more understanding of local languages and cultures that would help in the getting the messages across to the workshop's participants. To help orient them, it was the duty of the provincial level coordinating unit. The resource persons were helped to understand the curriculum, scope of subject matter, and process for which the latter was intermingled with role plays, short lectures, question-answer periods, demonstrations, and the use of slides and video presentation.

2.4.2 Specific subject matter specialists and resource persons for special purposes included those from the central unit of Department of Nonformal Education, and Department of Nonformal Education's Regional Nonformal Education Centers. Resource persons in this category provided technical inputs and participated in the conduct of puppets shows, etc. Department of Nonformal Education's supervisory unit served as coordinator for this category of specialists.

2.4.3 Department of Nonformal Education's supervisory unit provided another set of resource persons who would participate in the miscellaneous functions of duties pertaining to coordination, conduct of evaluation of the workshop, participate in puppets shows, providers for critiques of the processes, and conduct of field exercises.

2.4.4 Department of Nonformal Education's provincial Nonformal Education provided local resource persons who would participate in the training processes, in the recreations, exhibitions of materials, and the chemicals as used in the homes and agricultures. They provided the contacts with local organizations in

connections with field exercises. They arranged meeting places, and facilities for lodgings, meals takings, and miscellaneous kinds of activities such as mornings exercises, and meditations.

2.5 Coordination

2.5.1 The project's secretariat working in close consultations and coordination with the Lifelong Education Foundation and UNEP in the organization of the training workshop, financial reports, reports of activities, actual implementations, consultations, financial disbursement and use of resource persons.

2.5.2 The projects secretariat coordinated with related agencies in determination of the scopes of subject matter, information and data needed in the preparations of the various handbooks, materials as well as all the supplementary materials. It was indeed very fortunate that all those organizations had indeed been very helpful in granting their assistances and cooperations. These organization were such as Ministry of Public Health, National Environment Boards, Ministry of Agriculture and Cooperatives. They had made available useful materials, resource persons, the production of handbooks and materials, and participation in the workshops at each of the target provinces.

2.5.3 The project's secretariat coordinated with the 5 target provinces to hold consultative meetings with directors and staffs of the target provincial nonformal education centers.

The matters discussed at these meetings were such as:

A) Project's Background, training procedures, Users' guide for instructional materials, and the preparations for the training workshops.

B) Resource persons: the use of local resource persons such as authorities from provincial agriculture officers, and provincial health officers. They were instructed that they must bear in minds the realization that the project was an pilot and experimental one when workshop and procedures for training workshop would be put to use. They should also try to adhere as closely to activities suggested in the handbooks so as not to deviate too far out of objectives and materials suggested for the workshop. However, they were given with the freedom to adapt i.e. delete certain materials and steps in order to accommodate varieties of local conditions and clients' needs.

C) Organization of chemicals used in agriculture, foods, medicines, protective gears, samples of foods and medicines separated into bad and out-of-date, as well as the good and in current use.

D) The target populations that was separated into 30 for each target province focusing on Women's Leaders, Sub-district Medics, Public Health Informants, Department of Non-formal Education Volunteer Teachers. The latter could be either males or females but who could be expected to spread the knowledge further. The Provincial Nonformal Education Centers were given with the task of selecting the target populations.

E) Post workshop follow-up and evaluation would be taken up atleast once a month. It was expected that 1 workshop graduate would spread the knowledge further to atleast 10 other persons. The walking teachers were required to reported the training, and make periodic reports to Department of Nonformal Education.

2.6 Public Relations Campaigns:

The committees had made necessary preparations for public relations campaigns and had insured that there would be articles written in the newspapers, and other periodicals. The preparations were also be made for the development of Video programs on the projects' goals and activities. Radio programs were also developed to effect the public relations campaigns. The planning was jointly done with the cooperation of the United Nations Environment Programme, the Foundations for the Lifelong Education, the pilot provincial Nonformal Education Centers, as well as Department of Nonformal Education. Arrangements for TV and Radio Broadcast interviews at the opening sessions were planned and insured that it always happened.

2.7 The Follow-up and Evaluation

To insure the spread of the training workshops' effects the programs for follow-ups and evaluation were insured as followings:-

2.7.1 The volunteer teachers were given with the responsibility for carrying the follow-ups and the coordination with the training workshop's graduates. They were to collect names of the training program's beneficiaries and made the reports to the Provincial Nonformal Education Centers. They would also compile the reports on behaviors and attitudes changes occouiring in each of these effected groups also.

2.7.2 The Provincial Nonformal Education Centers' project's coordinators were required to follow up of the project's activities while on tours to observe project's activities. They were to coordinate with the volunteer teachers to be informed of the new developments in behaviors and attitudes changes occurred in the spread effect clientelles. They carried out visitations to provide supports, suggestions, and encouragement to the workshop's graduates. They would provide material supports and help the workshop's graduates with references to other resource units.

2.7.3 The central unit of Department of Nonformal Education's project Secretariate would conduct the follow-ups, provide encouragements, and necessary resources to both training workshop's graduates and the spread effects' beneficiaries. The follow-ups would be carried out 2 times, the first time around July, the second time, around October 1989.

2.7.4 The Operations committee conducted analysis of the follow-ups and evaluation data and submit the findings and results to the Steering Committees by December 1989.

2.8 In order to insure the spread of the workshop's effects, the workshop was designed that the training workshop's participants spread the knowledge and information they receive from the workshop to at least 10 other people in the family or neighborhood. The project to this effect had allocated a sum of Baht 20,000 to each of the participating province to carry out their own project with their clientelles in those provinces with this sum, they could either continue to produce additional materials, or carry out other relevant activities such as contributions toward establishment of a trust fund for poison-free food preparation group activities, and campaigning in specific topic and problems, etc.

3. Training Procedures

To insure effectiveness and efficiency for the training workshop for the project to train the Women's Group's Leaders in the Prevention of Hazardous chemicals the following procedures are insured:

3.1 The training workshop would not exceed 3 days for the reason that these women's leaders were usually busy with household's chores and their occupations.

3.2 The subject matter should answer to the problems and experiences of target populations.

3.3 The workshop's procedures should make available the opportunities for the training participants to express themselves, asking questions and offering answers, rather than remaining passive listeners.

3.4 Providing for the opportunities for the participants to do practical works and carry out field activities.

3.5 Create and stimulate the natural atmosphere rather classroom like atmosphere for the workshop.

3.6 The workshop should require little use of reading and writing skills.

3.7. Use a combination of media with simple languages, and use of local and traditional customs of the people to facilitate the communication process.

Following are the Run Down of Project's Steps and Activities:-

SCHEDULE OF THE WORKSHOP
THE PROJECT TO TRAIN WOMEN LEADERS IN THE
PREVENTION OF DANGEROUS CHEMICALS

TIME	08.30 - 12.00 A.M.		1.30 - 4.00 P.M.	7.00 - 9.00 P.M.
DAY 1 OF THE WORKSHOP	Registration & Orientation (60 min)	Opening	Chemical uses in Agriculture (150 min)	Recreation Exercises in Public Speaking (120 min)
		Atmosphere Building Puppet show (60 min)		
DAY 2 OF THE WORKSHOP	Review of Day 1 Activities (60 min)	General Introduction Dangers of Dangerous Chemicals (90 min)	Dissemination Methods, practical exercises (90 min)	Practical Exercises (120 min)
		Chemical uses in homes and communities (180 min)		
DAY 3 OF THE WORKSHOP	Review of Day 2's Preparations for Field/ Practical Exercise (40 min)	Practical Exercise (120 min)	Projects Planning & Home Assign-ments (90 min)	Questions & Answers period (60 min)
		Review of Practical Exercises (50 min)		

Special Note: The Schedule is to be adapted if needs arise.

Atmosphere building (40 min)

Objectives

- To increase familiarity among workshop participants, and the resource persons.
- To increase the readiness for the workshop.
- To increase openness among the participants.

Subject	Steps of Procedures	Media	Time	Responsible parties	Notice
Atmosphere building	<ul style="list-style-type: none"> - Activities to be conducted after opening - Resource persons use appropriate techniques such as games or songs or others - Special lecture (Project Background, Objectives, Continued activities) 	<ul style="list-style-type: none"> - Games - Songs - Paper - Colours etc. 	40 min	<ul style="list-style-type: none"> - Resource persons - PNFECC or others - Special resource persons - Special resource persons 	<ul style="list-style-type: none"> - Increased involvement of workshop participants is desirable

Puppet Show (20 min)

Objectives

- To provide the total picture of toxic chemical uses
- To entertain as well as to provide the Subject matter
- To provide prerequisites for further training

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
<ul style="list-style-type: none"> - Puppet Show "The World of the Deaths" 	<ul style="list-style-type: none"> - Resource persons provides an introduction - Puppet Show 	<ul style="list-style-type: none"> - Resource persons - puppets - Screen 	20 min	<ul style="list-style-type: none"> - Resource persons from DNFE's central unit 	<ul style="list-style-type: none"> - To be implemented after 'atmosphere building' session

(90 min)

General Situations of Chemical uses

Objectives

- Workshop participants will be able to tell and explain situations of chemical uses.
- Workshop participants will be able to tell and explain dangers of hazardous chemicals.

Subject	Steps of Procedures	Media	Time	Responsible agents	Notice
<ul style="list-style-type: none"> - General situation 	<ul style="list-style-type: none"> - Introduction (referring to puppet show) - Pose questions to selected participants - Concluding - Viewing Video : "Dangers nearby" - Participants viewing exhibits general situations of chemical uses distribution of job sheets. 	<ul style="list-style-type: none"> - Transparency - Resource persons - Transparency Sheets - Video - Model - Photos - Pictures - Posters etc. 	10 min 15 min 15 min	PNFEC Resource persons	

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p>General situation of dangerous chemicals</p> <p>From looking at the Video programs and exhibitions what do you think are the problems?</p> <ol style="list-style-type: none"> 1. 2. 3. 4. <p style="text-align: right;">etc</p> </div>	<p>- Job sheet 1</p>			

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<p>Group 2</p> <p>Dangers of chemical uses in Homes</p> <div data-bbox="683 1021 1007 1570" style="border: 1px solid black; padding: 5px;"> <p>Assigned Topics</p> <ul style="list-style-type: none"> - What are some of the chemical used in the homes - What are some of the dangers of the chemical used in homes </div> <p>1.6 Each group is given 10 minutes to make presentation</p> <p>1.7 Conclusion is to be jointly undertaken by resource persons and participants.</p>	<ul style="list-style-type: none"> - Job sheet 3 (Group 2) - Transparency - Proof paper 	<p>20 min</p> <p>20 min</p>		

Dangers of Dangerous chemical used in agriculture (150 min)

Objectives

- Participants able to explain characteristics and preventive measures for chemicals used in agriculture.

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
<ul style="list-style-type: none"> - Dangers of Dangerous Chemicals used in Agriculture 	<p>Activity 2</p> <ol style="list-style-type: none"> 1. Atmosphere building 2. Introduction with references made to contents in roles plays 3. Rolesplays on "Help my Husband" 4. Brainstorming on given issues <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>After observing the roles plays occurred to you what would you do? How would you present them?</p> </div>	<ul style="list-style-type: none"> - Resource persons participants - Resource persons Transparencies - Group of resource persons - Resource persons Participants - Proof paper - Job sheet 4 	<p>5 min</p> <p>5 min</p> <p>10 min</p> <p>15 min</p>	<p>PNFEC, Resource persons</p> <p>Resource persons</p> <p>Resource persons</p> <p>Resource persons</p>	<ul style="list-style-type: none"> - DNFE's central unit prepared Transparencies - Use Brainstorming

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<ul style="list-style-type: none"> - Summarization & Conclusion by resource persons and participants 5. Spit into 5 groups (Using group process technique) and give reading assignments <ul style="list-style-type: none"> - Each group selects topics from readings assignments and - Answers in Job sheets (resource persons explain) and hold group discussions 	Proofsheets - Resource persons - Documents	5 min 30 min	Resource persons PNIFEC's or central unit of DNFE	- Resource persons explain each of the roles of the group such as chairman, secretary, and members
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Topics <ul style="list-style-type: none"> - What is the topics - What are the main issues - Explain the problems and ways to prevent them </div> 6. Each group sends forward 1 member to present a report for 2 min	- Job sheet 5 - Proof sheets Job sheets	10 min		

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<p>7. Summarization/Conclusion by each</p> <ul style="list-style-type: none"> - Trainees - Resource persons <p style="text-align: center;">Atmosphere building</p> <p>8. Discussion on "Dangers of dangerous chemicals in Agriculture"</p> <p>9. Summarization (allow time for discussion) and recommendations: to involve work-shop's participants and resource persons</p>	<ul style="list-style-type: none"> - Proof sheet - Transparencies - Reading assignments 	<p>10 min</p> <p>50 min</p>	<ul style="list-style-type: none"> - Quest resource persons (Agri.) 	<ul style="list-style-type: none"> - Lectures texts distributed

Dangerous chemicals in Homes and Community (Foods/Medicines)

180 min)

Objectives

- Workshop's Participants being able to explain the characteristic and dangers of chemicals used in Homes and Communities.

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
- Dangers of hazardous chemicals used in Homes and communities.	1. Atmosphere building	- Resource persons	5 min	- PNFECC	- Use an appropriate techniques
	2. Resource persons' introduction of the topic "Dangers of Hazardous chemicals Used in Homes"	- Resource persons - Transparencies 3	15 min	- Guest resource persons	- To discuss matters with resource persons ahead of time
	3. Participants viewing the Video "It is in the Home"	- Video	10 min		
	4. Participants pick their pairs, to discuss and answer the issues-questions	- Proof sheet	15 min	- Resource persons	- Use group process techniques

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Based on the Video's Program's Viewing How can you prevent the dangers of the dangerous chemicals? </p> </div> <ul style="list-style-type: none"> - Selecting persons to ask questions and group's doing summarization <p>5. The meeting is split into 5 groups to</p> <ul style="list-style-type: none"> - Study from assorted documents. - Each group choose topics to study. - Answer questions in Job sheets. (Holding groups discussion) 	<ul style="list-style-type: none"> - Job sheet 6 (Issues base on Video program) 	<p>15 min</p>	<ul style="list-style-type: none"> - Resource persons - Participants 	
	<p>5. The meeting is split into 5 groups to</p> <ul style="list-style-type: none"> - Study from assorted documents. - Each group choose topics to study. - Answer questions in Job sheets. (Holding groups discussion) 	<ul style="list-style-type: none"> - Documents (assorted) 	<p>30 min</p>		

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">Topics</p> <ul style="list-style-type: none"> - What are the issues? - What are some of the principal issues? - Tell the problems and their solutions </div> <p>6. Each group presents 9 report (2 min. each)</p> <ul style="list-style-type: none"> - Individuals/Resource persons draw conclusion <p style="text-align: center;">Atmosphere building</p> <p>7. Lecture (Resource persons from Health Office)</p> <p>8. Conclusions/Recommendation</p> <ul style="list-style-type: none"> - Resource persons - Workshop's participants 	<ul style="list-style-type: none"> - Job sheet 7 - Proof sheet - Job sheet - Transparencies - Articles - Real Objects 	<p style="text-align: center;">20 min</p> <p style="text-align: center;">60 min</p> <p style="text-align: center;">10 min</p>	<p style="text-align: center;">Guest resource persons</p>	

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<p>3. Resource persons select participants to ask questions after viewing Video</p> <p>Topics</p> <div style="border: 1px solid black; padding: 5px;"> <p>Have you ever practiced disseminating or telling things to other people?</p> <p>1. Yes, (on what occasions?)</p> <p>.....</p> <p>Methods (Your own)</p> <p>.....</p> <p>2. No, (State the reason(s) why not?)</p> <p>.....</p> <p>3. Other methods or techniques known to you (describe 1)</p> <p>.....</p> <p>.....</p> </div>	<p>- Job sheet 8</p>	<p>30 min</p>	<p>- PNFECC/ RNFECC</p>	<p>Job sheet 8 are the issues to be posed to participants (not hand out)</p>

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<p>4. Groups/Resource persons draw lessons and conclusions</p> <ul style="list-style-type: none"> - Resource persons - Participants <p>5. Participants matching in pairs; discussion topics assigned</p> <p style="text-align: center;"><u>Topics</u></p>	<ul style="list-style-type: none"> - Proof sheets 	<p>20 min</p>	<ul style="list-style-type: none"> - PNFEF/ RNFEF 	
	<div style="border: 1px solid black; padding: 5px;"> <p>Other than what you have seen on the Video program, Do you think you would have either occasions or methods to disseminate information? Explain</p> </div>	<ul style="list-style-type: none"> - Job sheet 9 			
	<p>6. The group separates into 6 subgroups to prepare for field exercise (Use group processes)</p>	<ul style="list-style-type: none"> - Proof sheet - Magic colors 	<p>10 min</p>	<ul style="list-style-type: none"> - PNFEF/ RNFEF 	<ul style="list-style-type: none"> - Resource persons assist workshop's participants on the tasks.

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<p>7. Preparations for Field's Exercises</p> <p>8. Conduct practical exercises; giving 15 min to each group; 5 sheets are to be given each group.</p> <ul style="list-style-type: none"> - All other participants observe while other groups are conducting such exercises and commit their opinions in writing on Job sheets - Resource persons making observations and critical judgement and offer recommendations <p>9. All groups draw the lessons and recommendations</p> <ul style="list-style-type: none"> - Resource persons draw conclusions - Resource persons explain the field trip 	<ul style="list-style-type: none"> - Transparency No 4 	<p>60 min</p> <p>90 min</p> <p>30 min</p>	<ul style="list-style-type: none"> - PNFE/ RNFE - DNFE's central unit's resource person (s) 	<ul style="list-style-type: none"> - No 8 & 9 Night's session of Day 2

Field Exercise (The Dissemination of Information on Chemicals Uses) (210 min)

Objectives

- Workshop's participants able to pass on the knowledge and information to the public.
- Workshop's participants able to freely perform information dissemination methods in an easy and natural way.

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
Field's Exercises	<ol style="list-style-type: none"> 1. Atmosphere building (Resource person's own techniques) 2. Explain the Conduct of Field's Exercises <ul style="list-style-type: none"> - Reasons - Methods - Recording - Reporting of Field Exercises - 2 participants pairing to conduct field exercise 3. Take on the fieldtrip to assigned area(s) (PNFEC prepares the areas) 4. Participants and resource persons draws conclusion 	<ul style="list-style-type: none"> - Record forms - Analysis forms 	5 min 35 min 120 min 50 min	<ul style="list-style-type: none"> - PNFEC/ RNPEC 	<ul style="list-style-type: none"> - Field Visit - Explanation for field exercises included in the appendix

Subject	Steps of Procedures	Media	Time	Responsible agent	Notice
	<p>4. Each group submit 5 min report (submit the plans)</p> <ul style="list-style-type: none"> - Question and answers sessions - Participants - Resource persons <p>5. Representatives of each group conclude the lessons and experiences of the work-shops</p> <ul style="list-style-type: none"> - Resource persons conclude (May use puppets) <p>6. Missions Assigned</p>	<ul style="list-style-type: none"> - Trans- parency - Proof sheet 	<p>25 min</p> <p>20 min</p> <p>15 min</p>		

4. Implementation of the Training Workshop in 5 provinces:

4.1 Training of rural women leaders of Burirum Province.

4.1.1 The training workshops were organized in the period January 26-28, 1989.

4.1.2 Venue of the training was the 200th year of Ratanakosin Hall of Burirum Teachers' College.

4.1.3 Target population. There were 50 trainees. Among there, 30 were supported by UNEP (18 males and 12 females). The rest were supported by budget allocated from the Thai Government. (12 males and 8 females). All of them were from Ampur Muang District, Poothaisong District and Satuk District. All of these trainees can also be classified according to their officially assigned status as:

- Village leadmen (4)
- Sub-district medics (5)
- Sub-district chief (1)
- Sub-district deputy (1)
- Women leaders (3)
- Youth leaders (2)
- Public Health Informant (6)
- Basic Health Volunteer (1)
- Member of village council (1)
- NFE volunteer teachers (6)

4.1.4 Training activities.

4.1.4.1 The training session was opened by the Provincial Governor (Mr.Porn Udompongse) and had Director of NFE Provincial Centre welcomed him to the event.

4.1.4.2 Khunying Ambhom Meesook outlined the project backgrounds.

4.1.4.3 Dr.Vichai Tunsiri was invited to deliver a speech especially prepared for the occasion. He stressed that this training project had been part of a great thought in improving human's quality of life. It was an idea aimed to fight against a threat to the Thai society. This included the whole world which was turning into a dreadful society - becoming a newly industrialized country (NIC). What was worthy to consider if Thailand actually turred into a NIC, what should be taken as preventive measures to rule out such short-comings, because being a NIC had positive and negative consequences. In the positive side, the economy would be better. Negatively, economic proper would bring rot to human's mind.

The present economic system had many repurcussions: great consumption of natural resources which resulted in tremendous subsequences. Working to prevent poison could be regared as a regared as a movement to restore natural environment. Not only matters of oral consumption which had to be corrected- be it tiny matters or not - which could be done away with, but the most important

thing was to pull humans back to the society which was natural, with an aim to build better quality of life.

On behalf of the Thai Nonformal Education Department, Dr. Vichai Tunsiri thanked the Life-long Education Foundation-particularly Khunying Ambhorn Meesook who dedicated her life and for nonformal education endeavours; and UNEP for giving its financial support. The Thai Non-formal Education Department only represented the Thai government in co-ordinating with NGO's. The main component was the rural women leaders who would spearhead the task and accomplished it according to its objectives. Thus, he asked the trainees to pass knowledge and experiences to family members, communities and villages; and try to understand these concepts in order to build a better quality of life.

4.1.4.4 Puppet show

There were 3 puppet shows in the training session:

- The World of Deaths (Pipop Majuraj) it was a story of inappropriate use of chemicals in a bid to get rid of insects; not only insects died, the King of Deaths also died.

- A quick witted intellectual. The show told an account of dyed food consumptions. The dyes were not for food. The food was also mixed with "crisp" powder (borax). All these caused dangers.

- Oh! Papa Oh! Mama. The show was about the use of outdated drugs and expired medicines which instead of curing, they killed.

The three puppet shows to draw a picture of a consequence resulted from the use of poisonous substances by incorporating entertainment with facts. It was noted that the puppet shows at Burirum were somewhat dragging and consumed too much time. It should be improved and tightened up. However, all trainees were interested and had fun. They also learned matters regarding the use of chemical in household agriculture, including inappropriate uses of drug and food stuffs.

4.1.4.5 Giving knowledge regarding problems and use of poisonous substances was executed by employing "multimedia" such as exhibitions, video, transparencies and real objects. The approach also used "job prescriptions" so as to enable them to find answers to the studied issues. Besides, the trainees were divided into 2 groups to study documents in the exhibitions and report back. The topics studied in the groups were that group one studied dangers of poisonous substances in agriculture, and group two studied dangers of poisonous substances in the families. Finally, instructors and the trainees jointly concluded the contents learned in the trainees. Training activities were aimed to enable the trainees to identify and describe problems, situations and dangers resulted from uses of poisonous substances.

The instructors responsible for these sessions were from the NFE Provincial Centre and the Bangkok NFE central office. The contents received fair interest from the trainees. This was so may be because the employment of "multimedia". Studying in groups allowed them to select chair persons, secretaries, etc. In effect, their roles were clearly defined and responsible.

4.1.4.6 Giving knowledge on dangers of poisonous substances in agriculture. Before giving them knowledge, there was a session where the atmosphere was built in order to secure confidence and interest. After that, the volunteer teachers joined in role playing by having contents regarding inappropriate uses of agricultural chemical, compared with appropriate ones - by emphasizing possible dangers. Then, the trainees were asked to brain storm - answering the issues according to the job prescriptions. The instructors and trainees concluded the training contents.

The trainees were divided into 5 groups by using division techniques. The groups were asked to study documents; choose interesting topics; each group sent representatives to report the out-comes; and the instructors and trainees concluded the training contents.

There was a lecture, by Mr.Yongyooth Prapasarapongse - an instructor from the Provincial Agriculture Department and Mr. Varasakdi Kuratbuachom - from pesticide and insecticide unit, on dangers of poisonous substances in agriculture. The lecture was accompanied by slides. After the lecture, there were times for conclusion, asking/answering questions, and giving more suggestions. It was also observed that during the session, the two instructors had an urgent mission. They had to return to their office. As a result, they could not participate right from the beginning as specified. They could participate only in the later part of the session. This might contribute to the fact that the instructors stressed only contents on insects hazardous to vegetables and plants. However, it was later adjusted by instructors from Bangkok central office and documentary study.

4.1.4.7 Giving knowledge on dangers of poisonous substances in the family and community.

The session was similar to that of the preceding topic. The content of this topic stressed poisonous substances in the household and employed a video cassette entitled "It is in your house." The content was on warns to use chemicals inappropriately in killing household insects. As a result, the family members were endangered; thus, being sick.

Other activities followed the same course, and the session was concluded by a lecture by Mr.Somporn Utissampankool, a pharmacist from the Provincial Public Health Department. The lecture was accompanied by transparencies and real objects. The trainees were obviously interested in the lecture. This was shown by participating in the discussion and questioning. This was so attributing to the fact that the content was directly concerned with their daily life which they had encountered every now and then.

4.1.4.8 Transfer of knowledge technique activity. This activity aimed to transfer the knowledge to the target groups. The trainees underwent practical works, watched techniques shown on the video presentation, answered the issues in the job prescriptions, and the instructors and trainees together concluded the concepts learned in the activity. The trainees were divided into 6 groups to undergo

practical works in the fields. Each group prepared content, equipment and means to transfer by having each group undergoing role playing in matters of means to use chemicals in agriculture - emphasizing how to mix chemicals, spraying, equipment cleaning, expired drugs, pain killers and weans to select canned fish. While one group was undergoing role playing, the other five would observe its activities, and noted in their job prescriptions. This also applied to the instructors' case.

The trainees participated in the training by preparing stories, preparing a show for the afternoon and gave the show dusk fell. The trainees had considerable time to prepare themselves for the show. Their stories were well built up. They acted well and realistically to a point. They had co-operations from all trainees. Besides their understandings in content and means to transfer, they also had fun in this activity.

4.1.4.9 Field-work activity. The area chosen for field-work experiences was Bandan sub-district, Ampur Muang District. The trainees were divided into 5 groups. Each group had 2 instructors (or resoure persons) and 1 volunteer teacher as their coaches. Each group practiced transfer techniques with 5 families.

As a result of such fieldwork activity, they learned that Bandan a problem of sub-standard fish source consumption. The goods did not bear any production origin. Neither had it is stamp of the Food and Drug Control commission. The villagers needed to produce their own fish source from stored smelly-fish (which is a mean to reserve fish-translator). This task was undertaken by the Provincial NFE Centre -to give knowledge on such matter. Another problem encountered was a wide spread of "Ya Maa" or **amphatamine** among truck drivers, and a use of seasoning flakes among housewives. It was observed that the trainees who were somewhat of older tended to have approaches, processes and techniques which worked well in persuading villagers and built up trust better than their younger colleagues.

4.1.5 Recreational Activities

Recreation activities in the training were well incorporated in every step. They were for entertainment such as ramwong, singing and games as well as for linking one step of training to another such as dividing trainees into groups. It was observed that recreation scivities of the farmer type helped the trainees very well in changing the atmosphere and bridging the gap among the trainees who were different in age; decreasing boredom; and meeting defensive behaviours among them.

4.1.6 Strengths of the training at Burirum.

It could be regarded that its operational plan was excellent. Although it had been the first province to be trialed with this project, the results were extremely satisfactory - particularly the exhibitions which were beautifully organized and had real objects accompanying to more clarify the contents. The training activities received fair attention from the trainees. This might be due to the fact that "multimedia" was employed and resource persons were from many places (Bangkok

and local departments). In addition, division of groups for documentary study was effective for role identification had been clearly set.

Weaknesses. The points which need to be connected are puppet show in matters of story which was dragging, and consumed unjustified time. It took longer time than originally planned. The story needs be tightened up.

4.2 Operation of rural women leaders training in Saraburi.

4.2.1 Duration of the training was between February 15-17, 1989.

4.2.2 Venue of the training was covention Hall of Saraburi NFE Provincial Centre.

4.2.3 Target population. The total 53 trainees were split into those who were supported by UNED (18 males and 12 females) and the rest were supported by the Thai government. The trainees were from 11 districts: Sao-hi, Nong Sang, Ban No, Nong Done, Pra Pootabath, Viharn Dang, Kang Koy, Muag Lek, Muang, Nong Kae and Don Pood. The trainees can be also classified according to their officially assigned status:

- Women Group Chair persons (7)
- Women Group Chair person Deputy (1)
- Sub-district doctors (5)
- Agriculture Housewife Group chair persons (3)
- Village Woman Development Board Chair person (1)
- Women Group Secretaries (3)
- Village Headman Deputys (1)
- Village Development Volunteer Leaders (3)
- Public Health Informants (5)
- Basic Health Volunteer (1)

4.2.4 Training activities.

They were somewhat similar to the Burirum experiences, and differed slightly in some details. Therefore, it is thought appropriate to cite only the differences.

4.2.4.1 Opening ceremony was declared by Saraburi Governor (Mr.Vichien Suwattee)

4.2.4.2 A special lecture given jointly by Khunying Ambhorn Meesook, Director-General of Non-formal Education Department (Dr.Virach Kamudamas), UNEP representative (Miss Nahako Tanaka), and Director of Environmental sanitation Division (Ms.Nitaya Mahaphol). The lecture content stressed a need for co-operation among governmental and non-governmental agencies, and local women leaders in protecting local resources by using chemical appropriately.

4.2.4.3 Puppet showing

The stories to play with the puppet shows were improved, tightened up and modified to embrace contents in chemicals uses in agriculture, food and drugs. The shows therefore were split into two. One was on uses of chemicals in

agriculture-stressing means to use chemical safely. The other was on how to consume food safely, by avoiding dyne stuff and crisp powder (borax). One tactic was that the shows were kicked off before lectures. It was hoped-by this means, the audience would be better able to envisage a whole picture of how poison hurt people and the environment.

4.2.4.4 Giving knowledge on problem situations and the use of poisonous substances. Activity organization in this respect was not different from those of Buriram Province, both in approaches and procedures. These practices included employment of various media and a lectures, i.e. Mr.Sala Jeerawatana, Director of Saraburi NFE Provincial Centre.

4.2.4.5 Giving knowledge on dangers of agricultural poisonous substances. The resource persons were Mr.Prem Thamajakr and Mr.Alan Rona from Pesticide and Insecticide Unit II, Lopburi and Mr.Karen Otter from Saraburi Agriculture Department. The approaches and procedures, however, were not different from those of Buriram Province, particularly in the area of insects.

4.2.4.6 Giving knowledge on dangers of poisonous substances in the family and community. The resource person in this area was Mr.Termsakdi Asaiboon, a disease control officer of Saraburi Public Health Department. The approaches and procedures were not different from those of Buriram Province, but the resource person did not operate the whole process. He only concluded the content at the last stage. The operators of the whole process, be of recreational activities or issue studying, resource persons from the NFE Provincial Centre and Bangkok control office.

4.2.4.7 Transfer of knowledge technique activities. Approaches and procedures were not different from those of Buriram Province. The trainees were divided into 5 groups. Each group chose to study and practice in areas of means to mix chemicals in agriculture; means to use chemicals to get rid of household insects; mean to use chemicals and set drugs; and means to buy fresh vegetables.

4.2.4.8 Fieldwork activities.

The vicinity used in field work practice was Nong Yao Sub-district, Muang District, Saraburi. Implementation of activity this stage was similar to those of Buriram Province.

Results of practical work were that majority of the villagers had problems with "Ya Maa" or amphetamine, seasoning flakes (Mono Sodium Glutamate), APC (Aspirin with caffeine) and uses of chemicals in agriculture. The trainees tried to give knowledge, persuade and suggest villagers to realize dangers, and reduce the consumption.

4.2.5 Recreational Activities.

It could well be said that recreational activities in the training at Saraburi were many more that Buriram had experienced. This might due to the fact that resource persons of the province had well planned in advance and meant to built

up atmospheres conducive to training, tension relieving and bridging up generation gaps.

Characteristics of the recreational activities stressed areas of entertainment by incorporating singing, ramwong and games before embarking upon a new episode of content. Even in a matter of saying 'thank you' to the resource persons, they did it with a song. Division of trainees, content conclusion and speech practice were in a form of recreational activity in every step. It really gave another interesting perspective.

4.2.6 Strength of the training at Saraburi

Now that it was the second province in the training series and the officials had closely watched the activities at Burirum; as a result, they had opportunities to correct the situations. Its strengths are many such as training process, fieldwork activities, publicity (seen from the number of training applicants from other provinces) and co-operations it could have from neighbouring departments. Moreover, it has a clear plan to multiply the results, and there is a board working on such matters. For the board, they elected the chairperson and the secretary.

4.3 Training of local women leaders in Nakorn Sri-Thammarat Province.

4.3.1 Duration of the training was between February 22-24, 1989.

4.3.2 Venue of the training was Meeting Hall of Pak Panang Municipality.

4.3.3 The number of trainees was 58 Thirty of them were financially supported by UNEP (9 males and 21 females). Twenty-eight of them were supported by the Thai budget (9 males and 19 females). All the target population came from Pak Panang District. They can be classified as:

- Sub-district doctors (4)
- Sub-district Chief Deputy (1)
- Chairpersons of women groups (3)
- Deputy Chairperson of Women Groups (1)
- Members of Women Groups (5)
- Public Health Informants (8)
- Basic Health Volunteers (3)
- NFE Volunteer-teachers (5)

4.3.4 Training Activities.

4.3.4.1 Opening ceremony was presided by Nakorn Sri Thammarat Province Governor (Sub-lutenant Amnuay Thaiyanond).

4.3.4.2 A special panel discussion presentation by Khunying Ambhorn Meesook, Mayor of Pak Panang Municipality, Khunying saising Siributr, Miss Nakako Tanaka, Dr.Tongyoo Kaewsaiha and Mr.Rob Raksapram.

Essence of the discussion stressed general knowledge of poisonous substance uses, problem conditions and general suggestions. It also stressed co-operations between governmental and non-governmental agencies and

the local women leaders in protecting local natural resources.

4.3.4.3 Puppet shows

The stories used in puppet shows in Nakorn Sri Thammarat had been already adjusted and improved similar to those shown in Saraburi. However, the linguistic aspects were changed to be of Southern dialect. The aim was to inculcate acquaintance among the trainees who were natives of the South and the instructors, and to be carried away with the dialogues.

4.3.4.4 Giving knowledge on dangers of poisonous substances in agriculture.

The instructor was Mr.De-choe Plaichoon from Nakorn Sri Thammarat Agriculture Department.

4.3.4.5 Giving knowledge on dangers of poisonous substances in the family and community. The resource person was Mr.Surasak Siriborirak, a pharmacist, from Nakorn Sri Thammarat Public Health Department.

It was noted that knowledge given by Mr.Dechoe Plaichoom and Mr.Surasak Sriborirak was not in accordance with the training schedule. A major reason was that co-ordination between the Provincial NFE Centre and the two resource persons was rather poor. As a result, there was a Miss-understanding. The sessions, subsequently, were postponed for 3 hours. Most of the time then was spent in lecturing. There were no accompanied audio-visual aids; little time for questioning, and the trainees were numb to the presentation - lacking enthusiasm, due to the fact that they were just affected by the recent floods.

4.3.4.6 Transfer of knowledge technique activities and practical work.

Organization of activities at this stage had many steps and approaches similar to the previous provinces. However, some activities of role playing were added. Practical work at the training site meant their practical activities were recorded by video cassetts. They were later shown to the trainees to see how they had been in role playing. Then, the trainees and resouce persons jointly concluded and criticized their learning experiences and concepts. The session helped the trainees to see strengths or weaknesses which needed to be altered.

4.3.4.7 Fieldwork activities

The site for undertaking of fieldwork activities was Village III, East side, Pak Panang. Organization of activities at this stage was similar to those undertaken in the previous provinces.

Some of the lessons learned from the fieldwork activities were that, because the people in the neighbourhood were fishermen, chemicals used in food preservation were common in place of ice. The chemicals were dangerous to the consumers. Besides, it was found that formalin was used to preserve dried sea food. Application of formalin resulted in the sea food to be free from the fly worms. The trainees tried to pass their knowledge to the villagers so they would be aroused of possible dangers, and realize in their responsibilities.

4.3.5 Recreational activities.

Organization of recreational activities in Nakorn Sri Thammarat Province did not emphasize entertaining aspects. Rather, it sought to express in games. In this regard, puppet shows played a significant role in helping the resource persons in recreational matters, and also concluding the contents.

4.4 Training of local women leaders in Nakorn Nayok.

4.4.1 The training duration was between March 13-15, 1989.

4.4.2 The training venue was Suan Seeda Meeting Hall of Nakorn Nayok Province.

4.4.3 The target group of the training comprised of 57 persons. Thirty of them were financially supported by UNEP (1 male and 29 females). The rest were supported by the Thai budget (6 males and 21 females). They were from Ban Na District who can be classified as:

- Village Headman Deputy (1)
- Sub-district Doctor (1)
- House-wife Group Leaders (6)
- Youth Leaders (2)
- Public Health Informants (6)
- Basic Health Volunteers (5)
- House-wife Group Member (1)
- Nfe Volunteer Teachers (8)

4.4.4 Training activities.

4.4.4.1 Registration.

The trainees reported themselves at the registration desk one day ahead of the training commencement. They stayed at Suan Seeda Dormitory. After dinner, they sat in for the orientation session.

4.4.4.2 Opening ceremony.

Director of NFE Provincial Centre welcomed the governor to preside the ceremony (Mr. Suchan Pongsene). His speech can be summarized as follows: People of governmental and non-governmental sectors had concerns over health of our human-follows with regard to the uses of chemicals which were certainly inappropriate and incorrect. The practices could endanger the users as well as the consumers. Thus, there was definitely a need to organize a training to inculcate knowledge among the women leaders so they could utilize it for the benefits of their families, and transfer it to the people at large.

4.4.4.3 Special panel discussion by:

Nakorn Nayok Governor, Khunying Saisingh Siributr, Dr. Jarupongse Boon-long, Dr. Panom Pongseepaiboon and Dr. Tongyoo Kaewsaiha. The presentation was on general knowledge regarding uses poisonous substances, problem situations and general suggestions. Dr. Jarupongse Boon-long particularly stressed dangers resulted from chemicals used in agriculture which the users underwent inappropriate applications. This in effect caused dangers to the users and

people in the neighbourhood, who tell victimized by their ignorance.

4.4.4.4 Puppet shows.

There were efforts to fighten up the stories make them more clear; and make them night to the allotted time. In addition, the sound system was largely improved and made it suitable to the puppets' characteristics. However, they still maintained the show number as before, i.e. 3 shows in the training. They were:

– "Insecticides also kill human-beings". The story content was on using chemicals to get rid of insects. However, the users did not dress themselves properly, i.e. wearing masks and protections, dangers were generated - as a result.

– "More delicious with poisonous substances". The story dealt with eating food which was mixed with dangerous dyne stuff and "crisp" power (borax). The substances might make the food look nicer to eat and crispy to shew, but the dangers were clearly in them.

– "The world of deaths" or Pipop Majuraj. It was a story of inappropriate use of chemicals in a bid to get rid of insects; not only the insects were killed, the king of such world also was killed.

The first two stories were played after the opening ceremony and before the trainees were "exposed" to learning sessions. This was aimed to present a whole picture of the poisonous substance uses while the trainees were also entertained. The third story was shown at night - after the usual sessions.

4.4.4.5 Giving knowledge on problem conditions and uses of poisonous substances was executed in ways similar to those in the previous provinces. The resource persons were from the NFE provincial centre, NFE regional centre for the Central Region and from the Bangkok central office. It was observed that the trainees well paid attention to the training activities in these sessions.

4.4.4.6 Giving knowledge on dangers of poisonous substances in agriculture.

The resource person on this topic was Mr.Vichian Nabsanit from Nakorn Nayok Agriculture Department. Steps in giving knowledge were the same as practiced in the previous provinces, which are specified in the **Instructor's Manual**. As the resource person had participated in the activities from the beginning, the means and procedures in giving the knowledge were thus in accordance with other instructional media. The resource person himself felt that the content of this subject well covered the topic; was suitable; and relevant to the problems occurring in the province. After the lecture, the resource person allowed the trainees to criticize and ask questions.

4.4.4.7 Giving knowledge on dangers of poisonous substances in family and community.

The resource person on this topic was Mr.Sangchai Jaikla, a pharmacist of Nakorn Nayok, who lectured on precautions people should take in

choosing to buy food, dangers and means to prevent such dangers; means to use coloring materials in food preparation; seasoning flakes; fungi; canned food; amphetamine, and etc. Then, the trainees were allowed to ask questions. Means of the resource person in delivery the subject content was congruent with steps, approaches, and media of the project. He appeared to be pleasant, non-aloof and friendly to the trainees. The other activities, however, were similar to those conducted in the previous provinces.

4.4.4.8 Transfer of knowledge technique activities and practical works.

The resource persons were from NFE Provincial Centre and NFE Regional Centre. Steps and procedures employed were the same as those used in the previous provinces. Nevertheless, times for practical works were shifted to be in the afternoon. The trainees prepared equipment, contents, and proceeded to their practical works in the afternoon of the second day. It was so, because the night session was preserved for extra-curriculum activities.

Practical works involved video shots which were viewed by the trainees later so they could see their performance afterwards. The viewing activity was organized in such a way that one group saw themselves in the video while the others picked up points for criticism, *vis-à-vis*. Although they had little time to prepare themselves, all trainees gave much attention and well co-operated, to an extent that they could do it as though they had been in real situations.

4.4.4.9 Fieldwork activities.

The site for fieldwork activities was that of Nang Rong District by being split into 2 groups: **Water falls** area and **Coffee Farms**. Activity execution in this respect was similar to those in the previous provinces.

The lessons learned as a result of fieldwork were that people in different areas had different problems. For example, villagers living in Water-falls area commonly had problems regarding food and drugs, i.e. seasoning flakes, fish source, vinegar, amphetamine, and set drugs (ya chood). However, the people living in the coffee farms had problems regarding chemicals used in agriculture. In effect the people always had problems - being sick. The trainees, therefore, tried to render knowledge which might help lesson the problems.

4.4.5 Recreational activities.

Recreational sessions in Nakorn Nayok of each day began early in the morning by having meditation and physical exercises. We felt that meditation helped the trainees to be more patient in the learning process, enthusiastic and in a better spiritual state. In addition, they had consequent activities such as games, ram wong, and group division.

4.4.6 Strengths and weaknesses of the training at Nakorn Nayok.

Strengths of the training at Nakorn Nayok really stood out and were different than the other provinces in matters of regional co-ordination and co-operation and of the nearby provinces. Particularly, the NFE Regional Centre had

contributed **Burapa Sarn** (The Eastern Letters), which belonged to the centre, for the matter of agricultural chemicals, their effects to households, and food and drugs - emphasizing the good and reversal effects of chemical uses. The volunteer-teachers also had a role to play in such training. They played a support role in providing food; looking after accommodation; and the like. The trainees work up early in the morning and underwent meditation and exercises. Besides, they were visited by their spouses which caused a great deal of fun and morale. It indicated in a sense that they were seriously supported by their spouses. As for the puppet shows, the acoustic system was clear, and the stories (contents) were satisfactory

4.5 Training of local women leaders in Pichit.

4.5.1 The training duration was between March 27-29, 1989.

4.5.2 The training venue was the meeting hall of Pichit NFE Provincial Centre.

4.5.3 The target groups.

There were all together 56 participants. Among these, 30 of them were financially supported by UNEP (1 male; 29 females). The rest (26) were supported by the Thai budget (18 males; 8 females). The trainees were from 3 districts: Sam Ngam, Wang Tongpoon and Tub Klau. They comprised:

- Woman Development Committee of village level Chairpersons (2)
- Woman Development Committee of village level Vice-Chairpersons (2)
- Woman Development Committee of village level secretary (1)
- Woman Development Committee of village level treasurer (2)
- Woman Development Committee of village level liaison (1)
- Woman Development Committee of village level public relations personnel (1)
 - Village Headman Deputy (1)
 - House-wife Group Leader (1)
 - Agriculture House-wife Group Leader (1)
 - Agriculture House-wife Assistant Public Relations Personnel (1)
 - House-wife Group Members (10)
 - Woman Development Volunteer Group Members (5)
 - Village Volunteer (1)
 - Vocational Extension Group Member (1)

4.5.4 Training activities.

4.5.4.1 Registration

The trainees could register since the afternoon of the day before the training commencement. The trainees had dinner together in the evening; they exchanged conversations to build up acquaintance; melt behaviours; were oriented; and together lit a candle of "wisdom". All the trainees joined in the activities organized in the meeting hall. The stressing point was religious, comparing lighting the candle as a symbol of knowledge development.

4.5.4.2 Opening ceremony.

The session was presided by the Deputy-Governor of Pichit. Before the opening ceremony inauguration, there were speeches by Dr. Tongyoo Kaewsaiha, Khunying Ambhorn Meesook and Dr. Ney Htun by having Dr. Jarnpongse Boon-long translated Dr. Ney Htun's speech into Thai.

Dr. Ney Htun stressed how chemicals essentially effected people's livelihood. Particularly, in the rural - we should stress utmost utilization of chemicals with least danger, i.e. use it right to the place, time and means. UNEP saw such importance. Thus, it pushed many sectors for co-operation in order to give knowledge to woman leaders, in a hope that these women would be able to apply the knowledge, and expand the results in their community for at least to 10 people per trainee.

4.5.4.3 Puppet shows.

The organizers also had the puppet shows played to the trainees - based on the improved scripts. The events were similar to those in Nakorn Nayok.

4.5.4.4 Giving knowledge on problem situations and means to use poisonous substances means in giving knowledge in such topics were not different to the ones carried out in the other provinces. However, the training schedule of this province was rather short because the opening ceremony and special speech presentation were conducted fully as they should be in the formality (but they were very useful). Therefore, conclusions of the content in these topics were rather short. Nevertheless, they were added up in the session of dangers of poisonous substance in agriculture.

4.5.4.5 Giving knowledge on dangers of poisonous substances in agriculture.

Approaches and procedures were not different from those executed in the previous provinces, although they were different in case examples given. In this training, there was no video, but the cases were presented by the trainees by means of role playing which helped to include fun and clarity of concepts.

The resource persons in this part was Mr. Kriengsakdi Intaratat from Insecticide and Pesticide control for Plants Department.

4.5.4.6 Giving knowledge on dangers of poisonous substances in family and community.

4.5.4.7 Transfer of knowledge technique activities and practical works.

4.5.5.8 Fieldwork activities.

The area chosen for fieldwork activities was in Rong Chang sub-district, Muang District of Pichit. Means to practice, however, was not different from the previous provinces.

Result from the fieldwork activities were that most

people in the area had problems in using chemicals in agriculture. They were found that the villagers inappropriately used the chemicals. Besides, uses of set drugs were more popular than seeing a doctor.

4.5.4.9 Recreational activities.

Throughout the training, the instructors incorporated recreational activities in the training activities, be it atmosphere building before embarking on a learning session; and division of trainees into groups. It was noted that the trainees virtually took the recreational activities as theirs. For example, few minutes between lunch time and breaks, they took up recreational activities such as singing, playing puppets, folk plays which had contents on chemicals in agriculture, food and drug. This in effect really created fun and interesting moments for the trainees.

In addition, prior to the commencement of each day's training, the province had organized physical exercises such as aerobic dancers which were quite interesting.

4.5.4.10 Strengths and weaknesses of the training in Pichit.

As for the strengths, there had been good planning for the training which stressed the whole system. The trainees had versatile elements in social status, qualifications, ages and experiences. However, they could fighty from into groups. It had the opening ceremony which was much different from those in the other provinces, i.e. it took about 200 hours. There was a light of a candle of "wisdom" before the orientation. As for the puppet shows, the content and acoustic system were clear and fightened up. Besides, the province expanded the results which showed great creative thinking.

5. Training Results

A whole picture of the training results in the 5 provinces which are drawn from questionnaires and observations are as follows

5.1 Training management

5.1.1 Organization of the training venues.

Most trainees (91.33%) thought that the training organizers could organize training places, convenient and suitable.

5.1.2 Food and drink services.

Most trainees (82.67%) thought that were very satisfied with food and drink provided during the training.

5.1.3 Accomodation.

Most people (78%) thought that the training organizers had prepared the accommodation suitably good.

5.1.4 Training atmosphers.

Most trainees (74.67%) felt that the atmospheres were suitably good. They had fun and substances which were very useful.

5.1.5 Toilets and baht.

A fairly high proportion of the trainees (60%) thought that preparation and looking after of the toilets and bathrooms were good. Four per cent of them thought that there should be improvement. And about one third (36%) thought that it was almost good.

5.1.6 Duration of training.

About half of the trainees (58.67%) thought that the number of training days was suitable. Only a small portion of them (12%) thought that it should be expanded to be 5-7 days.

5.2 Instructors or resource persons. Obtained from the questionnaires, the results are:

5.2.1 Most trainees (75.83%) were pleased with approaches, procedures and contents used by the instructors.

5.2.2 Most trainees (68.67%) felt that the approaches, procedures and contents used by the instructors were very satisfactory.

5.2.3 A fair amount of trainees (68.67%) were very satisfied with the instructors' approaches, procedures and contents used in the training.

5.2.4 A fair amount of trainees (55.33%) were very satisfied and slightly smaller group (43.33%) of trainees were fairly satisfied with approaches and procedures of instructors in the areas of transfer techniques and practical works.

5.2.5 A fair amount of trainees (50.67%) were fairly satisfied and a slightly smaller portion of them (44.67%) were very satisfied with approaches, procedures and contents used by the instructors.

5.2.6 44 per cent of the trainees were very satisfied with approaches and procedures of the recreational activity and speech training sessions and 43.33 per cent of them were fairly satisfied in the same areas.

As for the whole picture in the evaluation of training in the areas of uses of poisonous substances, poisonous substances in agricultural, poisonous substances in family and community, transfer techniques and practical works, planning and task assignment recreation activities and speech training. 59.35 per cent of the trainees were very satisfied and 36.67 per cent of them were fairly satisfied with the instructors handling the above subjects.

5.3 Evaluation of the training achievement reveals that 28 per cent of the trainees had the most knowledge in poisonous substances in family and community; 69.33 per cent of them had knowledge in dangers of uses of poisonous substances; 60.67 per cent of them had knowledge in poisonous substances used in agriculture, transfer techniques and practical works; 49.33 and 46.67 per cent of them respectively had knowledge in the area of poisonous substance uses in agriculture and transfer techniques and practical works; and 59.33 per cent of the trainees had received fair knowledge in planning and task assignments and 36.67 per cent of them had received much knowledge in this domain.

It can then be concluded that 58.27 per cent of the whole trainees had good understanding and knowledge from the training.

With regard to passing on the knowledge to the family members, neighbours and community, 74 per cent the trainees felt that they could do so in the area of poisonous substances in family and community, 68 per cent of them thought that they could do so with the dangers of poisonous substances in general; and 60.67 per cent of them were confident that they should transfer knowledge in poisonous substances in agriculture.

The trainees in general thought that they could well pass on the knowledge and make practical application possible. To be precise, 62.33 per cent of them were very confident of such possibilities, and 36.25 per cent of them were fairly confident.

5.4 The evaluation also took the instructors' into consideration. They gave opinions regarding the trainees as they had observed which can be summarized as follows:

5.4.1 48.39 and 29.03 per cent of the trainees well and very well participated the training activities.

5.4.2 Regarding the exchange of views and experiences among the trainees, 43.01 and 17.20 per cent of them well and fairly well co-operated and joined in giving opinions respectively.

5.4.3 With respect to questioning and answering, 43.01 and 27.96 per cent of them respectively fairly well and well co-operated in questioning and interacting while in the training.

5.4.4 On the matter of group report, they indicated that 48.39 and 23.66 per cent were well and fairly well enthusiastic in undertaking group reports respectively.

5.4.5 The trainees were well and fairly well (40.86 and 34.41 per cent respectively) enthusiastic in practical works.

5.4.6 A fair amount of the trainees were well punctual (41.94 per cent). The rest (23.73 and 21.51 per cent respectively) were fairly and very well punctual.

As a whole, the trainees were responsible, enthusiastic in joining the activities and expressing opinions in various behaviours. 41.76 per cent and 19.71 per cent of them were well and very well on the above areas respectively.

From the data obtained from the questionnaires and observation while in the training with respect to process, approaches, steps, participation of the trainees and instructors, we can conclude that they are good and fair on the scale in most matters. Very few areas need to be improved and solved.

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4. Mr.Sukree Kammuen
5. Mr.Prakarn Changtham
6. Mr.Anant Watethaisong
7. Mr.Pradit Rairat
8. Mrs.Bang-on Siwthaisong
9. Mr.Sawaeng Wiagthaisong
10. Mr.Wuthikorn Puttaiwat
11. Mr.Somsri Kanha
12. Mr.Sawang Kwatthaisong
13. Mr.Kampog Chalee
14. Mr.Sila Malee
15. Ms.Panthipa Yiamprakone
16. Mr.Boonna Champathong
17. Mr.Saeng Tentaram
18. Ms.Nitya Pornrucha
19. Mr.Buaha Patchana
20. Ms.Somchit Buransuk
21. Mr.Supan Suepnitsai
22. Mr.Thongsuk Titsanguan
23. Ms.Sudchai Poenakae
24. Ms.Patcharee Poo-amorn
25. Ms.Pranee Chungchalart
26. Mr.Pichai Kraipanyapongse
27. Mr.Thong Chuayram
28. Mr.Choon Chenthorn
29. Ms.Payom Yomram
30. Mr.Banja Amartsena

2. Saraburi Province

1. Mrs.Thongdee Piromya
2. Mrs.Thongchun Moolwongse
3. Ms.Ampan Daengpanich
4. Mrs.Suwimol Saengpakdi
5. Mrs.Chaluay Rachawat
6. Mrs.Thongyoy Chotikul
7. Ms.Amporn Paengtra

8. Mrs.Thongdee Ketboonmee
9. Ms.Paloenpit Chomchai
10. Ms.Samran Kamme
11. Ms.Nualsri Tanchin
12. Ms.Aree Tanchin
13. Mr.Thongdul Manorotpanich
14. Mrs.Chumpa languanpak
15. Mrs.Ploy Chankruengsik
16. Mrs.Thia Suwansing
17. Mrs.Chamrat Boonramnarong
18. Mrs.Samlee Klayklin
19. Mr.Rabiab Thitathananonda
20. Mrs.Malee Prapatsorn
21. Mrs.Chawee Bootsi
22. Mr.Charoon Nillom
23. Mrs.Pranee Amarttayakul
24. Mr.Apichart Suebsaen
25. Ms.Narumol Harindej
26. Ms.Waree Pakiranum
27. Ms.Achara Chansila
28. Ms.Sopha Chitlertwilai
29. Ms.Mayura Khunthong
30. Ms.Pranee Boonpeng
31. Mr.Pithak Chumchuen
32. Ms.Pattra Kettusanong
33. Mr.Nithat Sidammon
34. Ms.Wanna Poompoon
35. Ms.Pornsri Tiansamruay
36. Ms.Lommart Thongmark
37. Mr.Prachalak Sikunaporn
38. Mrs.Am Thongchalaem
39. Mr.Thawat Pridi
40. Mr.Somthawil Tasanapan
41. Mrs.Chamnearn Luang-on
42. Ms.Duangrudee Siriparp
43. Mr.Thirathat Chamnuanchit
44. Mrs.Mali Kachapongse
45. Mr.Srachai Adikarnkul
46. Mr.Chu Nartsewi
47. Mr.Sommut Wongras
48. Police Master Sgt. Banya Chemthong
49. Mr.Supote Panpromthada
50. Mr.Chanwit Phongjamorn

3. Nakorn Sri Thammaraj Province

1. Mr.Saner Rodyoo
2. Ms.Nitya Chantawong
3. Mr.Prasert Maniwongse
4. Mrs.Tian Maniwongse
5. Mrs.Boonlue Maniwongse
6. Ms.Kesorn Maniwongse
7. Mrs.Usa Nusaen
8. Mrs.Panga Chimngeon
9. Mrs.Wanpen Luagthue
10. Mrs.Sakorn Taenniew
11. Mr.Charas Maklub
12. Ms.Wimon Kongkham
13. Mrs.Kuson Kaewmanee
14. Mrs.Channearn Khaeduang
15. Mrs.Chaay Meenoon
16. Mrs.Wimon Thongnoo
17. Mrs.Kesorn Tipkaew
18. Ms.Supaporn Chittrong
19. Mr.Charong Khanarn
20. Mr.Sophon Phuttasaen
21. Mrs.Renu Puttasaen
22. Mrs.Uthai Rodkaew
23. Mr.Somma Pongsiri
24. Mr.Sattha Damsri
25. Mr.Chamnarn Sangkhao
26. Mrs.Pluem Saengkhae
27. Mrs.Nongyao Wongleang
28. Mrs.Somsri Khongpan
29. Mrs.Sakorn Chindawong
30. Mr.Wanno Thanurat
31. Ms.Saowanee Nunthong
32. Ms.Mayura Thongwichit
33. Mr.Boonyang Meewongse
34. Ms.Naengnoi Khampan
35. Mr.Thavorn Ruangdit
36. Ms.Anong Hemthanon
37. Ms.Pipray Chimisik
38. Ms.Chutima Phaikhao
39. Mr.Anon Thongsikaew
40. Mrs.Arawan Siyayote
41. Mr.Surasak Kongchuay

42. Mr.O-soth Nukachorn
43. Mr.Niyom Chawchan
44. Mrs.Supanee Akkaborworn
45. Mr.Phan Tiprod
46. Mrs.Nittra Kaewrat
47. Mrs.Sarapee Koomuang
48. Mrs.Arapin Wasawanon
49. Mrs.Rapee Chintrarak
50. Mrs.Somklin Kriangnarong
51. Mr.Niyuth Chantratip
52. Mrs.Tian Kaewkamnerd
53. Mrs.Nuanchan Chantratip
54. Mrs.Kiew Heng-yee
55. Mrs.Pitsawong Ramnarong
56. Mrs.Supatra Sirikarin
57. Mrs.Pitsawong Ratapana
58. Mr.Sakol Maniwong

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3. Ms.Rampai Chareanchit
4. Mrs.Charan Sa-ardchai
5. Mrs.Somchit Sakulwongsa
6. Ms.Wanpen Wiset
7. Mrs.Lamai Ekchat
8. Mrs.Amporn Naboon
9. Mrs.Ampai Lokenimit
10. Mrs.Nop Naboon
11. Mrs.Ruang Sabsombat
12. Mrs.Thongkhao Sangkarak
13. Ms.Pranom Chaiboon
14. Mrs.Charin Pinthong
15. Ms.Suwan Kongchoom
16. Ms.Wirat Siwilai
17. Mrs.Urai Mankong
18. Mrs.Samlee Suebwongse
19. Mrs.Kloy Wuttichart
20. Mrs.Thongsuk Pansin
21. Mrs.Chan thongpradab
22. Mrs.Chalor Subprasert
23. Mrs.Boonchuay Poonsawat
24. Mrs.Samnearng Kusollam

25. Mrs.prasert Srisawat
26. Mrs.Sarjob Saengthong
27. Ms.Pranom Nearnchan
28. Ms.Patcharee Ekchat
29. Mr.Thawatchai Manimart
30. Ms.Amporn Loknimit
31. Ms.Nualchawi Boonjong
32. Ms.Ruanchai Isarangkul na Ayuthaya
33. Ms.Patchara Petchprayoon
34. Ms.Sampao Ekchat
35. Ms.Piyanand Kongsilpa
36. Ms.Ampai Mongkol
37. Ms.Boonruang Sa-ard ploy
38. Mr.Wichian Soythong
39. Ms.Boonchu Mangkang
40. Ms.Kleddao Konnan
41. Ms.Anchan Yaemklin
42. Ms.Chalemsri Thamwong
43. Mr.Sommaai Pornchenworapong
44. Mr.Apisith Wapinanon
45. Mr.Suwan Chanma
46. Mrs.Sunee Aleeusaman
47. Mrs.Rapipan Chareonchan
48. Ms.Chanya Chaturanon
49. Mr.Wichet Nongpongse
50. Mr.Pornchai Limkul
51. Ms.Prayong Rahotarn
52. Ms.Roong-aroon Suesaming
53. Ms.Ampai Hemra
54. Ms.Chan Thongaram
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5. Pichit Province

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3. Ms.Nares Chotepuang
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7. Ms.Somboon Thongtap
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11. Ms.Payao Kaithong
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13. Ms.Mai Muangthong
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23. Mrs.Muan Pintham
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