

**Proceeding of the Training Course on
“Planting and Utilization of Bamboo”**



Course 1 : 15 – 17 February 2010 at Kuraburi Greenview Resort, Phang-Nga Province

Course 2 : 18 – 20 February 2010 at Prapat Beach Research Station, Ranong Province

Organized by

Royal Forest Department and Thai Environment Institute, Bangkok, Thailand

With the Cooperation and Support of

The International Tropical Timber Organization (ITTO)

February 2010

PREFACE

The training course on "Planting and Utilization of Bamboo" is one of the important activities under the PD 372/05 Rev.1(F) project "Contribution to Forest Rehabilitation in Thailand's Area Affected by Tsunami Disaster". The training course aimed to promote and develop local capacity in Tsunami affected areas on planting and utilizing of potential economic bamboo species. The training was carried out for 2 courses. Course 1 was held during 15 – 17 February 2010 at Kuraburi Greenview Resort , Phang-Nga province and course 2 was held during 18 – 20 February 2010 at Prapat Beach Research Station, Ranong province. Each course comprise of 50 participants from Tsunami affected areas in their province.

The lecture was done by bamboo experts from Royal Forest Department and the guest experts from successful private sectors. The lectures contain, introduction of economic bamboo species, bamboo propagation and utilization for extra income generation. The project staffs were the officers from Royal Forest Department and Thai Environment Institute. The activities included coordinating and responsibility on the training activities, technology and experiences transfer, and achievement evaluation.

After the course is over, the knowledge and experiences gained in various aspects on bamboo caused increasing on participants' incentive to evaluate bamboo as potential specie to promote in Southern part of Thailand for their sustainable utilization.

ACKNOWLEDGEMENT

We would like to extend our heartfelt gratitude to the International Tropical Timber Organization (ITTO) for providing financial support to this project and to the all participants who attended until the end of the training and made the training reach the objectives. The resource persons from Forest Regional Office of Krabi and Surattani province were very kind and helpful to make this training success. The kind hospitality of the staffs of Thai Environment Institute is very impressed by all visitors and should receive a lot of thanks. Finally, special thanks for all our staffs who worked very hard during the two entire courses of training. This training course would not have been possible without their help.

Training Course on Planting and Utilization of Bamboo

Phang-Nga Province and Ranong Province

15 – 20 February 2010

Organizing Committee

Chairman Committee

Mr.Sunan Arunnopparat Deputy Director General, Royal Forest Department

Organizing Committee

Mr.Surat Kanchanakunchon Chair of Committee

Mr.Suchat Kalyawongsa Contact Committee

Committee of Bamboo Silviculture Group

Mr.Smit Boonsermsuk Head of Group Committee

Mr.Suthat Laosakul Committee

Mr.Somboon Boonyean Committee

Dr.Kongsak Maekeaw Committee

Committee of Bamboo Utilization Group

Mrs.Mayuree Jitkaew Head of Group Committee

Miss Pannee Denrungruang Committee

Mrs.Arune Weenin Committee

Committee of Managing and Budget

Miss Sarantorn Sukwatnijakul Head of Group Committee

Miss Natthakorn Semsantud Committee

Mrs.Walaiporn Satitviboon Committee

Miss Preyanan Muangsan Committee and Secretary

Miss Chantira Sonklang Committee and Secretary

Contents

Preface	i
Acknowledgement	ii
Organizing Committee	iii
Program of the Training Course	1
Opening Address	4
Summary of the Training Course	6
Training Course Evaluation	8
Suggestion	10
Closing Remark	11
List of Participants	12
Annex	15

Program of Training Course 1

Monday 15 February 2010

- 16.30 – 18.00 Registration for Course 1 (at Kuraburi Greenview Resort, Phang-Nga province)
- 18.00 – 19.00 Dinner Reception

Tuesday 16 February 2010

- 08.00 – 09.00 Registration for Course 1 (continued)
- 09.00 – 09.30 Opening Ceremony
- 09.30 – 09.45 Coffee Break
- 09.45 – 10.30 Lecture on "Introduction of New Economic Bamboo and Experience on Bamboo Farming"
Mr.Navee Prangcharoj, Agriculturist
- 10.30 – 11.15 Lecture on Bamboo in Thailand and Bamboo Propagation
Mr.Suthat Laosakul, Forest Reseach and Development Bureau
- 11.15 – 12.00 Lecture on Bamboo Planting in Southern part of Thailand
Mr.Somboon Boonyean, Forest Reseach and Development Bureau
- 12.00 – 13.00 Lunch
- 13.00 – 14.00 Lecture on Utilization of Bamboo
Mr.Prachaen Soyongkam, Forest Reseach and Development Bureau
- 14.00 – 14.30 Coffee Break
- 14.30 – 15.30 Lecture on Marketing of Bamboo
Mr.Krissana Homkong, Bamboo business owner

15.30 – 16.30 Exchange Experience and Discussion

Wednesday 17 February 2010

08.30 – 09.30 Breakfast

09.30 – 12.00 Field Trip to visit farmer's bamboo plantation at Krabi province

12.00 – 13.00 Lunch

13.00 – 16.00 Field Trip to visit farmer's bamboo plantation at Krabi province (continue)

Program of Training Course 2

Friday 19 February 2010

08.00 – 09.00 Registration for Course 2 (continued)

09.00 – 09.30 Opening Ceremony

09.30 – 09.45 Coffee Break

09.45 – 10.30 Lecture on "Introduction of New Economic Bamboo and Experience on Bamboo Farming"

Mr.Navee Prangcharoj, Agriculturist

10.30 – 11.15 Lecture on Bamboo in Thailand and Bamboo Propagation

Mr.Suthat Laosakul, Forest Reseach and Development Bureau

11.15 – 12.00 Lecture on Bamboo Planting in Southern part of Thailand

Mr.Somboon Boonyean, Forest Reseach and Development Bureau

12.00 – 13.00 Lunch

13.00 – 14.00 Lecture on Utilization of Bamboo

Mr.Prachaen Soyongkam, Forest Reseach and Development Bureau

14.00 – 14.30 Coffee Break

14.30 – 15.30 Lecture on Marketing of Bamboo

 Mr.Krissana Homkong, Bamboo business qwner

15.30 – 16.30 Exchange Experience and Discussion

Saturday 20 February 2010

08.30 – 09.30 Breakfast

09.30 – 12.00 Field Trip to visit farmer's bamboo plantation at Krabi province

12.00 – 13.00 Lunch

13.00 – 16.00 Field Trip to visit farmer's bamboo plantation at Krabi province (continue)

OPENING ADDRESS (Course 1)

Mr. Pachoen Molee

Director of Natural Resources Management Office 12, Krabi province

Project Leader, Participants and Distinguished Guests;

It is a great honor for me to come to chair the opening ceremony of the Training Course on "Planting and Utilization of Bamboo" today. Based on the report of working committee, there are 50 participants from Phang Nga province attending this course. I would like to chair my warm welcome to all of you.

Royal Forest Department is trying to promote bamboo planting and utilization to the people who live in areas affected by Tsunami due to the consideration that bamboos are fast growing species, short harvesting rotation, all parts can be utilized and rapid income in return. Normally, the bamboos spend 2 to 3 years for growing and after that it can be continuously harvested and utilized. This is a new challenge in economic development which can improve livelihood and generate an additional income to the rural community together with natural forest and environment conservation.

On this occasion, I would like everybody to pay much attention to the knowledge on planting and utilizing of promoted bamboos to enlarge the bamboo planting areas in the target sites. Please also exchange your knowledge and experiences to adjust for the sustainable growing and utilizing of bamboo in the South.

May I have this opportunity to bless the organizing committee and all staff, the International Tropical Timber Organization (ITTO), and all participants to have good health and success in their training.

May I now declare the training course open.

OPENING ADDRESS (Course 2)

Mr. Supat Sararat

Director of Natural Resources Management Office 11, Surat Thani province

Project Leader, Participants and Distinguished Guests;

It is a great honor for me to come to chair the opening ceremony of the Training Course on "Planting and Utilization of Bamboo" today. Based on the report of working committee, there are 50 participants from Ranong province attending this course. I would like to chair my warm welcome to all of you.

Royal Forest Department is trying to promote bamboo planting and utilization to the people who live in areas affected by Tsunami due to the consideration that bamboos are fast growing species, short harvesting rotation, all parts can be utilized and rapid income in return. Normally, the bamboos spend 2 to 3 years for growing and after that it can be continuously harvested and utilized. This is a new challenge in economic development which can improve livelihood and generate an additional income to the rural community together with natural forest and environment conservation.

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May I have this opportunity to bless the organizing committee and all staff, the International Tropical Timber Organization (ITTO), and all participants to have good health and success in their training.

May I now declare the training course open.

Summary of the Training Course

After the registration and opening ceremony, first lecture on "Introduction of New Economic Bamboo and Experience on Bamboo Farming" was made by Mr.Navee Prangcharoj, an awarded - outstanding agriculturist of the country and the owner of economic bamboo plantation from Karnjanaburi province. His lecture covered an introduction to the new challenge economic bamboo specie (Pai Kimsung) that can grow very fast and provide high yield of shoot production. Moreover, the braches cutting for vegetative propagation can be sold at higher price than those from other economic bamboo species. The benefit of this specie is smoothness of shoot with less hair or almost hairless together with the good taste of soft tissue and flood resistance that made it become a promising specie to be co-planted with rubber tree or oil palm tree in the southern part of Thailand. He also creates an incentive to grow bamboo as agro-forestry system together with the species that original grown and the annual crop in rural area to create more income from annual crops, bamboo shoots, bamboo culms and bamboo products.

The second lecture was made by Mr.Suthat Laosakul from Forest Research and Development Bureau, Royal Forest Department. He gave the lecture in the topic of "Bamboo in Thailand and Bamboo Propagation". His lectures covered an introduction of bamboo species in Thailand, species distribution, propagation and silvicultural practice.

The third lecture was made Mr.Somboon Boonyean from Forest Research and Development Bureau, Royal Forest Department. His lecture was "Bamboo Planting in Southern part of Thailand". He shared the knowledge on bamboo species that were planted in rubber plantation and utilization of bamboo in the southern part of Thailand.

The fourth lecture was made by Mr.Prachaen Soyongkam from Forest Research and Development Bureau, Royal Forest Department. He gave a lecture on "Utilization of Bamboo" which covers all kinds of utilization both experienced in Thailand and from other countries.

The last lecturer is Mr. Krissana Homkong, a bamboo business owner who has an experience on bamboo business for more than 30 years. He gave his lecture on "Bamboo Marketing". The lectures contain the trend of bamboo marketing, bamboo value added products, bamboo industries, and experience on bamboo markets in other countries.

The field trip was done in the next day to visit the successful farmer on bamboo plantation at Krabi province. Discussion was made after the lecture session and evaluation was done after came back from the field trip. It was found that most of the rural people in Tsunami affected areas becoming interested in planting bamboo as a second choice of income. Opportunities and proper species to be planted were discussed. Based on the limit amount of financial supported, it was decided that the proper specie are *Dendrocalamus asper* (green variety for shoot production and giant variety for stem production), *Thyrsostachys oliveri* (for stem production). Pai Kimsung, that was introduced by the lecturer was also highly needed but due to the unclear history of this bamboo specie it might be risky to promote at this moment. Therefore, some amount of Pai Kimsung might be distributed as a trial but not much.

Training Course Evaluation

Training course on "Planting and Utilization of Bamboo"

15 – 17 and 18 - 20 February 2010

Kuraburi Greenview Resort, Phang-Nga Province

and Prapat Beach Research Station, Ranong Province

1. Opinion on curriculum	Best	Good	Moderate	Fair	Poor
- Understanding before training	9	20	29	39	3
- Understanding after training	11	72	15	2	
- Contents are useful for further application	33	58	9		

2. Opinion on trainer	Best	Good	Moderate	Fair	Poor
- Clear and easy to understand	22	71	7		
- Order and continuity of the lecture	25	54	21		
- Clearly answer to the question	26	57	17		

3. Venue and tools for the training

50 Best 45 Good 2 Moderate 3 Need to be improved

4. Time and duration for the training

29 Best 63 Good 4 Moderate 4 Need to be improved

5. The need in the next training?

- Bamboo furniture making and bamboo utilization.
- How to inter-crop bamboo with other crop species such as oil palm and rubber tree.

6. Suggestion

- Training time is short.
- Need more practice on bamboo planting and propagation.

Expectation and commitment from the training course

The participants' expectation and commitment can be summarized as follows:

Expectation	Commitment
<ul style="list-style-type: none">• Gain new knowledge and experience• Bring back knowledge to the village• Transfer experience and extension• The knowledge learnt will be useful for present and future generation	<ul style="list-style-type: none">• Interesting in training• Training with satisfaction and strong intention• Satisfy to exchange experiences• Believe in the resource persons and bring experiences back home• Complete all the training program with interest for future application

Suggestions

The training course on "Planting and Utilization of Bamboo" is aimed to elucidate local people in Tsunami affected area on the present situation of bamboo both in Thailand and in the world to create more incentive of growing bamboo as the second choice of income in the disaster area. According to the training course there are some suggestions as follows.

1. Sufficient amount of selected bamboo seedlings should be prepared and distributed to local people in the early stage.
2. Planting and utilizing technique on bamboo of each participant should be monitored.
3. Establish bamboo plantation to supply seedlings or planting materials in the area to save cost of transferring from central and avoid illegal harvesting from natural forest.
4. Local bamboo product cooperatives should be established.
5. Coordination among participants, resource persons, and concerned institutions should be strengthened to help improving in technique and finding markets in future

CLOSING REMARK

Mr.Surat Kanchanakunchon

Project Leader

Training Committee, Distinguished Guests and Participants;

It is a great honor for me to chair the closing ceremony for the training course on "Planting and Utilization of Bamboo" today. I am glad to hear that this training course is successful and reach our objective as expected.

The objectives of this training course are to train and to develop skills on bamboo planting, utilizing and including proper way of management. The training expects that all participants will get more information and more experiences on bamboo that it is not a plant that we had ever known before. By the present technology, it is more what we know and I hope that this will make all of you understand why Royal Forest Department is trying to promote this specie to you and to the area affected by Tsunami here.

I would like to thank the organizing committee, resource persons, training committee and all participants for your kind cooperation and contribution to make the training successful.

I wish all of you to be good luck and return home safely.

Training Course on "Planting and Utilization of Bamboo"

15 – 17 and 18 - 20 February 2010

Kuraburi Greenview Resort, Phang-Nga Province
and Prapat Beach Research Station, Ranong Province.

LIST OF PARTICIPANTS

1. Mr.Umpol Narkpeng
2. Mr.Somchai Tohsakul
3. Mr.Songkram Pengprapan
4. Mr.Suchid Saelong
5. Mr.Somboon wangkhamlue
6. Mr.Sucheeep Boosanong
7. Mr.Leefuern Salee
8. Mr.Thanongsak Tongkul
9. Mr.Lormard khanardpol
10. Mr.Horop Savaree
11. Mr.Teerapong Inthasoot
12. Mr.Prasit Jewang
13. Mr.Theerayut Mart
14. Mr.Pracha Kawichit
15. Mr.Daahod Rewangngan
16. Mr.Mardsem Kaewsod
17. Mr.Venit Anupawarp
18. Mr.Vanchai Chomchuen
19. Mr.Dolramarn Rawangngan
20. Mrs.Krisana Songnark
21. Miss Vannee Panan
22. Mr.Kieattisak Sroyson
23. Mr.Chanitch Chuaylek
24. Mr.Boonchoo Cherdchoo
25. Mr.Vimol Thonglek
26. Ms. Jaranya Limsakul
27. Mr.Tawat Sookratch
28. Miss Orathai Promthong
29. Mrs.Amnuay Promthong
30. Mrs.Samruay Tannui
31. Mrs.Kesorn Promkerd
32. Miss Pranee Promkerd
33. Mrs.Natesai Pongprasert
34. Mrs.Saowanee Thongprasert
35. Mrs.Yura Charoenlarp
36. Mr.Chalor Charoenlarp
37. Mrs.Rin Buaphan
38. Mrs.Pittaya Thongmee
39. Mrs.Seaa Petchawee
40. Miss Bootsakorn Srisawat

41. Mrs.Kanya saeung
42. Mr.Mongkol runsopa
43. Mr.Vichan Thuekaew
44. Mr.Boonpart Ruengnun
45. Miss Suda Charoenrit
46. Mr.Decha Duangnamol
47. Mr.Soontorn Harnthale
48. Mrs.Arreya meekong
49. Mr.Dusit Boothong
50. Mr.Udom Bangkhram
51. Mrs.Jamnean Charoenngam
52. Mrs.Wanna Poothong
53. Mr.Panit Singkeepong
54. Mrs.Anong Boonpayon
55. Mr.Somsak Duangrak
56. Mrs.Amnuayporn Jakkapong
57. Miss Siringarm Chuytookpuean
58. Miss Saovaluk Varee
59. Mr.Thanongsak Juntuan
60. Mr.Suradej Nuiapakdee
61. Mr.Surin Amornman
62. Mr.Manus Arree
63. Mr.Vudtiinan Savaree
64. Mrs.Chuanpit panchang
65. Mr.Boonterm boonnarin
66. Mr.Iyares Raksakaew
67. Mr.Tongthai Klartalae
68. Mrs.Surinporn Sriintra
69. Mr.Viroj Dejsongpraak
70. Mr.Yim Longlom
71. Mrs.Hayaa Arjharn
72. Mrs.Liya Heathong
73. Mrs.Jim Temwan
74. Mr.Cha Pasuu
75. Mr.Somyos Indraprom
76. Mr.Boonruang Kongthong
77. Mr. Arthorn Petchnoi
78. Mr.Pai Kingkaew
79. Mrs.Beab Amkhum
80. Mrs.Kanthamalee Sriparn
81. Mrs.Kongkaew Iarpa
82. Mrs.Thussanee Petchnoi
83. Mr.Kum Saelim
84. Mrs.Saowakon Poomipaolo
85. Mrs.Jintana Jindapol
86. Mrs.Kanya Petchnoi
87. Mr.Tanom Vongnarin
88. Mr.Sivapong Arjharn
89. Mrs.Wanna Kudji
90. Mr.Sorlae Pakdee
91. Mr.Anucha Harnjit
92. Mr.Anuvan Tongsomart
93. Mr.Dolkorsem Padungchart
94. Mrs. Faa laeha Padungchart

95. Mrs.Maream Manoch

96. Mrs.Saudah Kongyos

97. Mrs.Ornuma yuusri

98. Mrs.Teedah Salee

99. Mr.Varapong Tongkhamsuk

100. Miss Prangtip chitaur

ANNEX



Training at Kuraburi Greenview Resort, Phang Nga province



Opening ceremony and lecture at Kuraburi Greenview Resort



Training at Andaman Coastal Research Station for Development (Hard Prapas), Ranong province



Field trip to successful farmer on bamboo plantation at Krabi province

