



SUMMARY

The CCOP-AIST/GSJ Training Programme of the Groundwater Project in 2005
Groundwater Assessment and Control in the CCOP Region
31 October – 4 November 2005, Bangkok, Thailand



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November 2005

PROGRAMME

1. Research theme:

Groundwater Assessment and Control in the CCOP Region

2. Objectives:

We will evaluate the groundwater resources and environments through its monitoring. The project have these three sub-purposes as follows:

- 1) Groundwater Environment and Management in the Urban Coastal Area
- 2) Groundwater and Land Subsidence Monitoring
- 3) Groundwater Evaluation Using Monitoring System

3. Date of the Training Programme

Oct. 31 (Mon) to Nov. 4 (Fri) in 2005

4. Place of the Training Programme

Imperial Queen Park Hotel, Bangkok

5. Schedule of the Training Programme

Oct. 30 (Sun): Arrival to Bangkok, Thailand

Oct. 31 (Mon): Training Programme

0900: Registration

0930: Opening Address and Photo (Mr. Chen and CCOP Staff)

1000: Coffee

1020: First Announcement about the Meeting (Dr. Marui)

1030: Groundwater Observation and its Problems (Mr. Ito)

1200: Lunch

1330: Groundwater and Subsurface Thermal Observation for Flow Simulation (Dr. Miyakoshi)

1500: Coffee

1530: Groundwater Problems in the Big River Basin (Ms Somkid)

1700: Break

1730: Move to party (J support)

Nov. 1 (Tue)

0900: Groundwater Use and its Impacts in China (Land subsidence) (Dr. He or his colleague)

1030: Coffee

1045: Groundwater Quality Analysis and its Management (Dr. Ahn)

1215: Lunch

1330: How to Construct the Groundwater Monitoring System (Dr. Kim)

1500: Coffee

1520: Groundwater Flow Simulation in the Large Basin (Dr. He or his colleague)

1650: Break

1730: Move to dinner (K support)

Nov. 2(Wed):

0900: Mapping of Hydrogeological Characteristics (Dr. Cho)
1030: Coffee
1050: Evaluation of Groundwater Development and Environment and role of
Hydrogeologists (Dr. Yano and Dr. Marui)
1220: Break
PM Free

Nov. 3 (Thu): Meeting (Country Reports and Group Meeting)

0900: Morning Address (Mr. Chen)
0915: Country Reports (Chairman Dr. Marui; Cambodia, China, Indonesia)
1000: Coffee
1030: Country Reports (Chairman Dr. He; Japan, Korea, Malaysia)
1115: Country Reports (Chairman Dr. Ahn; Philippines, PNG, Thailand, Vietnam)
1215: Lunch
1330: Group Meeting (discussion about the activities and expected results)
1500: Coffee
1530: Group Meeting (making minutes in each group)
1700: Break (no party, fix the plan of sub-group)

Nov. 4 (Fri): Meeting

0900: Presentation of Sub-group projects (30min each, incl. discussion and question)
1000: Coffee
1030: Presentation of Sub-group projects (continue)
1100: Discussion of Total Project Plan
1200: Lunch
Dr. He, Dr. Ahn, Ms. X (CCOP) and Dr. Marui: making minutes
Other members of the Meeting: Free
1630: Adoption of the Minutes
1700: Closing
1800: Farewell Party

Nov. 5 (Sat.) Departure from Bangkok

6. Requirements (deadline: Oct. 14, to CCOP and Dr. Marui by e-mail):

Speaker of Country Reports: Submit the paper about followings in your country

- 1) Nature (climates, geology, hydrology) and human activities
- 2) Groundwater use and condition (resources and environments)
- 3) Groundwater problems and monitoring

Lecturer of the Training Course: Submit a proceeding in 4 pages

Sub-project Leader: Submit a plan of each project (target, schedule etc.)

LIST OF PARTICIPANTS

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Opening Address
TRAINING PROGRAMME ON GROUNDWATER PROJECT, 2005

31 October -4 November 2005
Bangkok, Thailand

Dr Eikichi Tsukuda, Director General GSJ/AIST
Distinguished Resource Persons and Training Programme Participants
Ladies and Gentlemen

Good Morning and Sawasdee Karp

First of all, I would like to inform you that Mr Somsak Potisat, Chairman CCOP Steering Committee, Director General, Department of Mineral Resources would very much like to be with us in this opening ceremony. Due to urgent important business that he needs to attend to this morning, he is unable to be present. He asked me to convey his best wishes for the success of this CCOP-GSJ/AIST Training Programme on the Groundwater Project 2005 and to wish all participants from abroad a pleasant stay in Thailand.

On behalf of CCOP, I would like to warmly welcome all the resource persons, CCOP Member Countries' experts and participants to this Meeting. I would also like to say a big thank you to our colleagues and friends in GSJ/AIST, particularly Yano San and Marui San for their strong interest and the generous support, which has made this Training Programme for the Groundwater Project in Bangkok possible.

Many of you who are here today have taken part in the earlier Kick-off Meeting for the Groundwater Project held on 1-2 March 2005 in Bangkok during which we have developed the outline implementation plan for the Project. This training programme is part of the activities that we considered as needed and beneficial in the Groundwater Project plan.

You may perhaps also recall that during the kick-off meeting, we have planned for 3 sub-projects:

- Groundwater environment and management in the urban coastal area led by Japan
- Groundwater and Land subsidence monitoring led by China
and
- Groundwater evaluation using monitoring system led by Korea

During the course of this training programme, we will have the opportunity to learn about the country status on these groundwater issues and to further discuss the activities and the expected results from the project. With these, we can expect to finalize the framework of activities for the groundwater project.

I would like to take this opportunity to once again thank GSJ/AIST for the support of CCOP activities. We particularly would like to congratulate the Resource Persons led by Marui San for having developed very comprehensive training course contents and prepared the training materials. We deeply appreciate their interest and commitments in sharing their deep knowledge and experience with us and for taking their valuable time to come to Bangkok to conduct the training and join the Meeting.

We also like to thank experts from Geological Survey of Japan/AIST together with experts from China Geological Survey and Korea Institute of Geoscience and Mineral Resources for playing the lead roles in the implementation of the 3 sub-projects. This is indeed very much in line with CCOP's goal of promoting the use of regional expertise and sharing of knowledge among fellow colleagues in the Member Countries.

Before I conclude, I would like once again thank Yano San and Marui San and the organizers from AIST/GSJ and CCOP Technical Secretariat for their hard and efficient work, and smooth arrangement for this Meeting.

I wish you a successful and fruitful workshop and a pleasant stay in Bangkok, Thailand.

Thank you and Khob khun karp

**The Minutes of the CCOP-AIST/GSJ Training Programme of the Groundwater Project
in 2005**

Groundwater Assessment and Control in the CCOP Region
31 October – 4 November 2005, Bangkok, Thailand

The CCOP-AIST/GSJ Training Programme of the Groundwater Project, Groundwater Assessment and Control in the CCOP Region was held on 31 October to 4 November 2005 in Bangkok, Thailand. It was attended by a total of thirty-three participants from Cambodia, China, Indonesia, Japan, Korea, Malaysia, Papua New Guinea, Philippines, Thailand, Vietnam and the CCOP Technical Secretariat.

The Training was officially opened by Mr. Chen Shick Pei, Director of the CCOP Technical Secretariat. Dr. Eikichi Tsukuda, Research Coordinator from the Geological Survey of Japan, AIST welcomed the participants to the Training.

A total of ten lectures were made by resource persons from China, Japan, Korea and Thailand during the two and a half day training. On the third day of the programme, country reports were presented on the groundwater use and condition, problems and monitoring in the participants' respective countries. Each sub-group gathered together and discussed on the plans of its sub-project.

On the last day of the meeting, each project leader presented the outcome of the discussion. Dr. Ahn from KIGAM presented the planned 2nd Training Programme (Attachment 1) with KOICA to be held next year in September at the meeting. The tentative title of the training programme is Optimum Assessment and Management of Groundwater Resources. KIGAM will ask KOICA to give priority to the CCOP Member Countries, since their training programme is open to all countries worldwide. Once the training programme is approved, this will be announced worldwide and the application for acceptance to the programme is on a first come first serve basis. He also presented the plan of the sub-project "Groundwater Evaluation Using Monitoring System" (Attachment 2).

Mr. Ito from AIST/GSJ presented the plan of the sub-project "Groundwater Environment and Management in the urban coastal area" (Attachment 3). The goals of the sub-project are the following:

1. Evaluation of groundwater resources and environments in the urban coastal area
2. Trial calculation about the groundwater volume in the coastal aquifer

Mr. Chen suggested that one of the goals of the sub-project may include doing a comparative study of the groundwater laws and regulations of the CCOP Member Countries.

The image of the products of the sub-project is included in the attached plan.

To carry out the sub-project's activities, the CCOP Member Countries are requested to provide the following:

- Laws and regulations in your country about groundwater resources, groundwater environment, drinking water
- Data for calculation of water budget: geological, hydrological, climatology and social data in one basin will be required

Dr. He from China Institute for Geo-environmental Monitoring (CIGEM) presented the plan of the sub-project Groundwater and Land Subsidence Monitoring (Attachment 4). He also informed that Thailand will try to pursue a case study in Bangkok to use advance technology in constructing a land subsidence monitoring system. There is also a challenge in the case of Vietnam since the land subsidence data resides in the different ministry, the Ministry of Construction. Mr. Chen Shick Pei, the Director of the CCOP Technical Secretariat commented that a manual in developing the land subsidence monitoring network may be developed, and be one of the outputs of the sub-project. He also added that it may be helpful for the sub-project to investigate similar previous works.

Mrs Nguyen Thi Ha from the Department of Geology and Minerals of Vietnam presented the data control guidelines for the groundwater project (attachment 5).

This Minutes is adopted as signed.

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<hr/> China	<hr/> Papua New Guinea
<hr/> Indonesia	<hr/> Philippines
<hr/> Japan	<hr/> Thailand
<hr/> Korea	<hr/> Vietnam