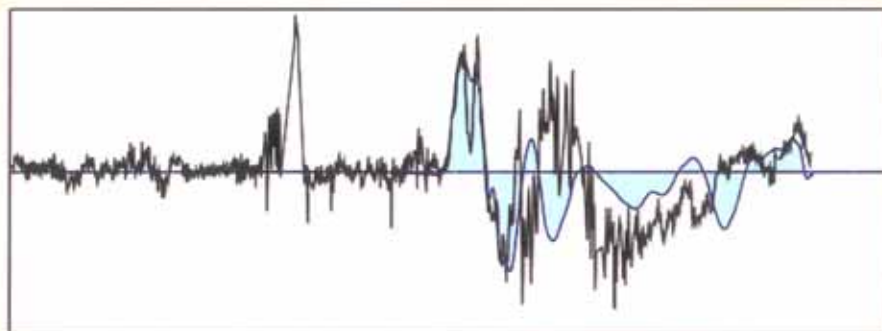
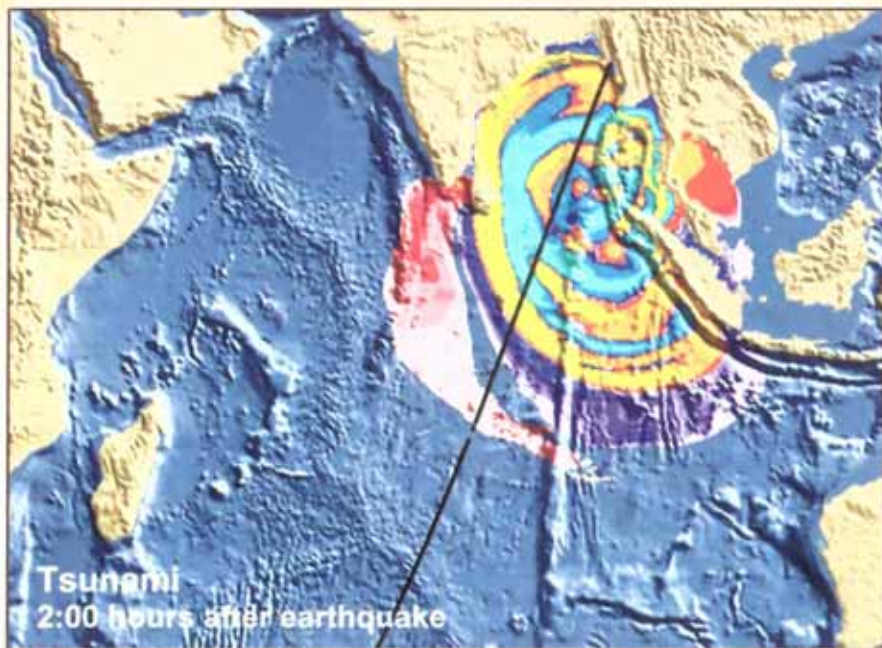




CCOP

COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES
IN EAST AND SOUTHEAST ASIA



ANNUAL REPORT 2005

CCOP TECHNICAL SECRETARIAT
BANGKOK, THAILAND

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Message from the Chairman

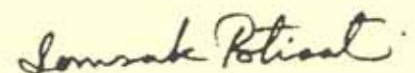


The year 2005 is a memorial period for the unimaginable disaster caused by the devastating tsunami on 26 December 2004. Geoscience's contributions to the well being of society has been further proven and enhanced after this tragic tsunami which struck the Indian Ocean, affecting the Asian region, among which are three of our CCOP Member Countries – Indonesia, Malaysia and Thailand. To all that have been affected by this shocking disastrous event, I convey my deepest condolences and sympathies.

CCOP, being a coordinating body for geoscience programmes in East and Southeast Asia, played an important role in the post tsunami action and implementation. CCOP in cooperation with its member countries and cooperating countries has been successful in the dissemination of several actions that geoscience can contribute to the post tsunami rehabilitation and reconstruction. Immediately after the tsunami, CCOP with the Department of Mineral Resources, Thailand and other affected countries organized an international seminar on Tsunami: "How Thailand and the Neighboring Countries will become ready for Tsunami?" with the objectives to discuss geoscience actions for post tsunami rehabilitation and reconstruction, tsunami mitigation and early warning system, creating public awareness of tsunami hazards and how the international communities can assist the affected countries to become ready for future tsunamis. A CCOP tsunami project planning workshop also developed a project plan document focusing on tsunami hazard as part of a fully integrated collaborative approach to coastal geohazards, particularly on three main geoscientific initiatives requiring urgent and concerted action: (1) Risk Assessment For Forward Planning, (2) Risk Mitigation and (3) Coastal Rehabilitation. Eventually, a Norwegian government supported project on "Tsunami Risk Reduction Measures with Focus on Landuse and Rehabilitation" commenced in June 2005 as an 8-month fast track study. The main purpose of this project is to establish practical guidelines for land use and rehabilitation of the devastated areas, considering the risk of future earthquake and tsunami events. A dissemination seminar is planned to be organized in March 2006 to share the results of the project to the stakeholders, planners, decision-makers as well as the international community.

For the year 2005, ongoing projects were operated intensively and efficiently. The Petroleum Policy and Management (PPM) Project supported by the Norwegian Agency for Development Cooperation (NORAD) was in its third year of implementation with a record number of activities. The 3-year Institutional Capacity Building in CCOP Countries Phase 1 Project and the Community and Small-Scale Mining in Asia (CASM-Asia) project started in 2005. We express our deep appreciation to the Danish Government and the World Bank for their support. Activities for the projects on PETRAD Seminars supported by Ministry of Oil and Energy, Norway; Development of Techniques for Landslide Hazards Assessment supported by the Ministry of Science and Technology, Republic of Korea; the Global Mineral Resource Assessment (GMRAP) supported by the United States Geological Survey; SANGIS Programme and the Asian Multilingual Thesaurus supported by CIFEG and UNESCO; GRIDNET; and the five projects supported by the Geological Survey of Japan, National Institute for Advanced Industrial Science and Technology (GSJ/AIST) were continued. We would like to thank GSJ/AIST for the strong support given to CCOP. Other activities such as seminars, workshops and meetings were also organized, supported by the CCOP Cooperating Countries and Organizations as well as the Member Countries.

I would like to thank the CCOP Member Countries, Cooperating Countries and Organizations, Honorary Advisors and friends for their active support, contributions, assistance, guidance and participation which have contributed to the successful implementation of our organization's activities through the year 2005. I would particularly like to thank the Government of Thailand through the Department of Mineral Resources for an uninterrupted support and facilitating the smooth and efficient operation of CCOP. On behalf of CCOP, I congratulate the Director of the CCOP Technical Secretariat and the Staff for attaining the highest level of activities and successfully implementing them for the benefits of CCOP Member Countries. I wish that CCOP, with the high level of activities, will achieve great success in its future endeavors.



Somsak Potisat
Chairman
CCOP Steering Committee

The Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) is an intergovernmental organization with the purpose of carrying out joint applied geoscience programmes for sustainable development in East and Southeast Asia.

The CCOP "Committee for Coordination of Prospecting for Mineral Resources in Asian Offshore area" was first established in 1966 by China, Japan, Republic of Korea and The Philippines under the auspices of UN-ESCAP. CCOP became an independent intergovernmental organization in 1987 based on the common understanding of its Member Countries and the aspirations of the United Nations. The name was changed in 1994 to Coordinating Committee for Coastal and Offshore Geoscience Programmes in East and Southeast Asia. During this period, CCOP devoted itself to the coordination of, and cooperation in scientific activities related to coastal and offshore areas with respect to geological/geophysical surveys, regional map compilations, database development, development of human resources and transfer of state of the art technology. In 2001, CCOP has reviewed and re-defined its programmes and activities accompanied by a name-change to Coordinating Committee for Geoscience Programmes in East and Southeast Asia. A new strategic plan was formulated with the focus on the following:

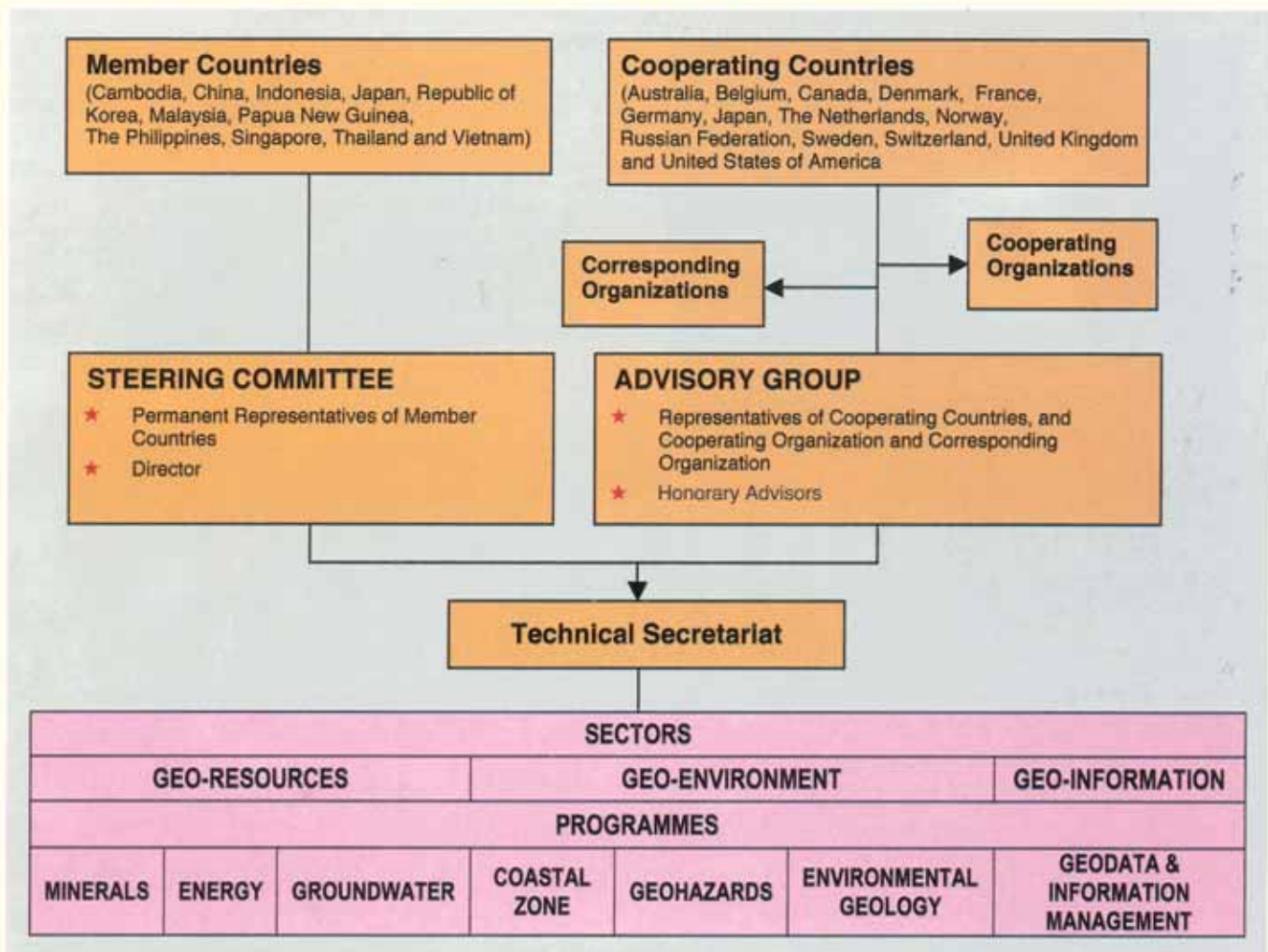
- ❑ Enhanced coordination of the geoscience programmes of the national geoscientific institutions of the CCOP Member Countries in order to promote cooperation and to maximize the benefits of programmes of regional significance.
- ❑ Continued human resource development and institutional capacity building in accord with national priorities in order to achieve greater regional self-sufficiency in providing the geoscience inputs to sustainable economic development, sound environmental management and improvement of the welfare of the people of the region.
- ❑ An greater flow of technical information between the Member Countries, Cooperating Countries and Cooperating Organizations of CCOP in order to share such information for their mutual benefit, to learn from each other's experience and to identify further opportunities for cooperation in capacity building.

With the new Strategic Plan, CCOP's technical activities were divided into three Sectors and seven Programmes that will allow the adoption of clear targets for the achievement of CCOP's strategic objectives. (Figure1).

- ◆ the **geo-resources sector**, consisting of the minerals programme, energy programme and groundwater programme
- ◆ the **geo-environment sector**, consisting of coastal zone programme, geohazards programme and environmental geology programme
- ◆ the **geo-information sector** with the geodata and geoscience information management programme

CCOP has 11 Member Countries; Cambodia, China, Indonesia, Japan, Malaysia, Papua New Guinea, The Philippines, Republic of Korea, Singapore, Thailand and Vietnam. CCOP is being supported by 14 Cooperating Countries and 13 International Organizations.

Figure 1
ORGANIZATION CHART OF CCOP



Professional Staff

- **Mr. Chen Shick Pei**
Director
- **Dr. Young-Soo Park**
Regional Expert
- **Mr. Simplicio Caluyong**
PPM Project Coordinator
- **Mr. Liu Liqun**
ICB Project Coordinator (from 1 September 2005)
- **Ms. Marivic Pulvera Uzarraga**
Geodata and Information Management

Support Staff

- **Mr. Anan Voratartrakul**
Finance and Administration
- **Ms. Petcharat Sarawisutra**
Technical Programmes
- **Ms. Sunit Prokati**
Publication and Documentation
- **Mr. Piyawatchara Pramalnrit**
Assistant in IT
- **Ms. Peerada Srisomboon**
Assistant in Technical
- **Ms. Sansanee Wudhivanich**
Secretary
- **Ms. Wanwisa Meengoen**
Assistant in Finance
- **Mr. Theerayan Thimasarn**
Clerk/Driver
- **Ms. Tawee Butrakaew**
Office Helper

The CCOP Technical Secretariat is responsible for the co-ordination of all activities carried out by CCOP. The CCOP Technical Secretariat is located in Bangkok, Thailand. The Secretariat is headed by a Director, who reports to the CCOP Steering Committee consisting of one permanent representative from each Member Country. With an able Technical Secretariat, target activities are optimized thus increasing benefits to all the member countries (Figure 2).

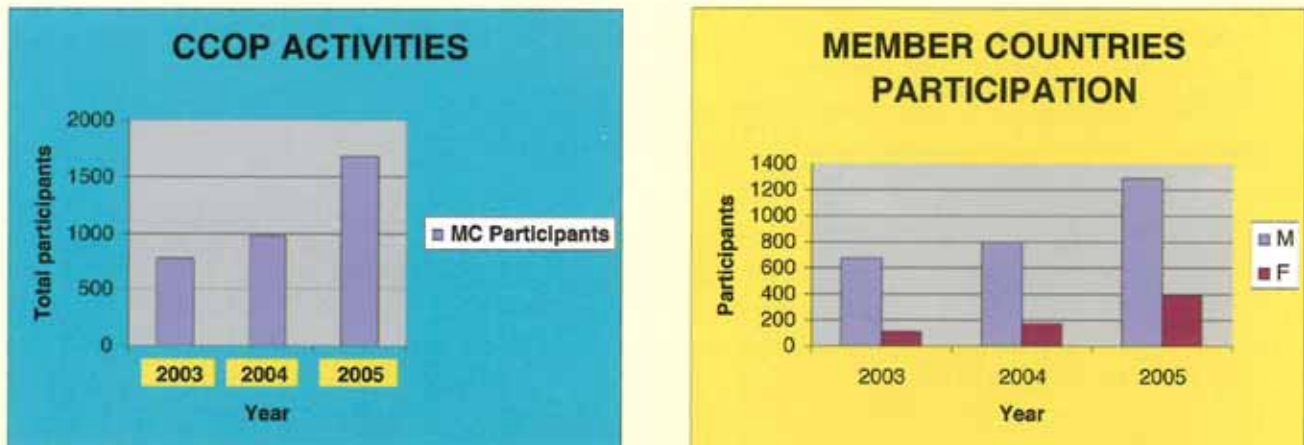


Figure 2. CCOP activities and Member Countries' participation recorded during the past three years.

CCOP's achievements have proven that it is a successful organization with the following advantages in regional cooperation.

- Data exchange and sharing of institutional and administrative experiences
- Regional data compilation and regional resource mapping
- Training and human resource development
- Standardization of resource classification and nomenclature
- Harmonization of regulatory environment
- Joint investment promotion

CCOP's financial source includes the cash contributions made by the Member Countries, project management cost received from major projects and other incomes. Funds for most technical activities are provided under project support to activity by concerned Cooperating Countries, Member Countries and Organizations.

As of 31 December 2005, the CCOP Technical Secretariat (CCOP T/S) has fourteen personnel, comprising five professional and nine supporting staff. The organization chart of the CCOP T/S is shown in Figure 1.

Mr. Somsak Potisat, Permanent Representative of Thailand to CCOP, Director General, Department of Mineral Resources, has completed his term on 31 December 2005 as Chairman of the CCOP Steering Committee and Dr. Eikichi Tsukuda, Director-General and Research Coordinator, Geological Survey of Japan (GSJ), Japan will succeed as Chairman of the CCOP Steering Committee for the period 2006-2007.

Dr. David Prior, Honorary Adviser, and Dr. Jos de Sonnevile, Representative of the Netherlands to CCOP continued their services as Chairman and Vice Chairman respectively of the CCOP Advisory Group.

Mr. Yoshinobu Hiraishi succeeded Mr. Toshihisa Takata as Minister of the Embassy of Japan, and as the Permanent Representative of Japan to CCOP. Mr. Pipob Wasuwanich, Deputy Director-General, Department of Mineral Resources (DMR), Thailand was appointed as the first Deputy Permanent Representative of Thailand to CCOP. Mr. Stevie Nion, Acting Secretary, Department of Mining, PNG was also named as Acting Permanent Representative of PNG to CCOP. Mr. Bambang Dwiyanto, head of the newly formed Geological Agency in Indonesia, succeeded Dr. Simon F. Sembiring, Director-General of Mineral, Coal and Geothermal, Indonesia, as the Permanent Representative of Indonesia to CCOP. Mr. Jeremias Dolino succeeded Mr. Horacio Ramos as the Director of the Mines and Geoscience Bureau of the Philippines and named as the Permanent Representative to CCOP, and Mr. Ranilo Abando from the Department of Energy, Philippines, Deputy Permanent Representative.

Mr. Yunus Abdul Razak has succeeded Dr. Chu Ling Heng as the Director-General of the Minerals and Geoscience Department, Malaysia. H.E. Mr. Sok Leng succeeded H.E. Mr. Sov Chivkun as Director-General of the General Department of Mineral Resources, Ministry of Industry, Mines and Energy, Cambodia.

Prof. Dr. -Ing. Friedrich-W. Wellmer, Representative of Germany to CCOP and President of the German Federal Institute for Geosciences and Natural Resources has retired. His successor is Prof. Bernhard Stribrny. Dr. Lars Persson succeeded Dr. Naz Ahmed Shaikh as Director of the Geological Survey of Sweden and Representative of Sweden to CCOP.

During the reporting period, there has been a slight change of personnel in the Technical Secretariat. Mr. Liu Liqun from SINOPEC, China took up his assignment as Regional Project Coordinator for the Institutional Capacity Building Project on 1 September 2005.

The Technical Secretariat office premise is continuously being provided by the Royal Thai Government, through the kind arrangement of the Department of Mineral Resources (DMR), Ministry of Environment and Natural Resources, at the 24th floor of the Thai CC Tower, Sathorn Tai Road, Bangkok, Thailand. This provision amounts to USD 39,745 for the year 2005. The Royal Thai Government through the DMR also accorded the privileges and the cooperation to enable the CCOP Technical Secretariat to operate efficiently and effectively.



CCOP Technical Secretariat members (left to right)

Front row : Dr. Young-Soo Park, Mr. Anan Voratartrakul, Mr. Chen Shick Pei and Mr. Simplicio Caluyong

Back row : Mr. Piyawatchara Pramalnrut, Ms. Marivic P. Uzarraga, Ms. Tawee Butrakaew, Ms. Sansanee Wudhivahich, Ms. Wanwisa Meengoen, Ms. Peerada Srisomboon, Ms. Sunit Prokati, Ms. Petcharat Sarawisutra, Mr. Liu Liqun and Mr. Theerayan Thimasarn

Highlights for the Year 2005

45th and 46th CCOP Steering Committee Meetings and 42nd CCOP Annual Session

The CCOP Steering Committee Meetings are held twice a year to review the programmes and activities of CCOP while the CCOP Annual Session assembles the three constituent units of CCOP, the Member Countries, the Cooperating Countries and Organizations and Advisors, for a General Consultative Meeting and country and organization presentations.

The 45th CCOP Steering Committee Meeting was held in the island resort of Phuket, Thailand from 31 March - 2 April 2005 and attended by 34 delegates from the Member Countries and the Technical Secretariat. The Meeting deliberated on the progress of CCOP activities for the calendar year 2004 as well as the progress on the implementation of activities for year 2005. The responses to Advisory Group's Brainstorming Recommendation were deliberated and discussed for implementation by the Technical Secretariat.



The 42nd CCOP Annual Session and 46th Steering Committee Meeting were held at the Minzu Hotel, Beijing, China on 13-20 September 2005. The host facilities were provided by the China Geological Survey and the Ministry of Land and Resources (MLR). The Annual Session and Steering Committee Meeting were attended by 121 and 39 delegates respectively, from Member Countries and Cooperating Countries and Organizations.

The main focus of the Annual Session was on progress report, financial matters, workplan and the status of current projects and new initiatives. The Steering Committee approved the proposed budget for 2006 and discussed the various issues on CCOP activities covering the three main sectors on Geo-resources, Geo-environment and Geo-information. The implementation of the action plan for the Advisory Group's Brainstorming Recommendation was presented and various suggestions were made on the recruitment of sector managers, the admission of new members in CCOP and the business plan. The thematic session was jointly held with the Commission on Geoscience for Environmental Management of International Union of Geological Sciences (IUGS-GEM) on 16-17 September 2005 with the theme "Sustainable Development of Geo-resources and Geo-environment".



Technical Cooperation and Activities

Technical Cooperation with Cooperating Countries and Organizations

Cooperating Countries and Organizations continued to provide technical support for activities contributing to sustainable geo-resources and environmentally-sound development in the CCOP region as summarized in Table 1. Member Countries also provide in-kind support to CCOP work programmes, to optimize the benefits of the support provided by the Cooperating Countries and Organizations.

Other Cooperating Countries generally continued their technical support to a number of CCOP programmes through implementation of bilateral activities with CCOP Member Countries and by providing valuable advice and guidance. Thanks are due to the Cooperating Countries for their provision of representatives to CCOP who have contributed in large measure to CCOP work programmes. During the Director's missions to some Member Countries, the Permanent Representatives and their staff have made excellent arrangement and prepared purposeful programme for his visit. They have also accorded the warmest hospitality, cooperation and assistance that have facilitated the successful completion of the missions.

Table 1. Summary of CCOP Technical Cooperation with Cooperating Countries and Organizations

| Cooperating Country/ Organization | Activities |
|---|--|
| Canada | Cooperation and support for an Ocean and Coastal Mapping Workshop to Member Countries. Discussion for a workshop in Malaysia is going on |
| Denmark | Support of the Capacity Building in CCOP Countries Project Phase 1 (ICB-CCOP 1), petroleum sector |
| France | Support to the SANGIS Training-Bibliographic Phase and Asian Multilingual Thesaurus through CIFEG. A new project on European-Asian thesaurus is also being discussed. Support to technical visits of CIFEG experts to Member Countries |
| Japan | Five Projects are being supported for 2005-2006, 4 with GSJ/AIST and 1 with University of Tokyo. Cooperation and support for the CASM-Asia Project. |
| Germany | Cooperation / communication through bilateral projects with Member Countries |
| The Netherlands | A NEW INITIATIVE ON INDIAN OCEAN COASTPLAN has been proposed by TNO-National Geological Surveys. Assist in seeking funding support also for the CCOP Tsunami Project. |
| Norway | Support for the Petroleum Policy and Management (PPM) Project Support of the project on TSUNAMI RISK REDUCTION MEASURES WITH FOCUS ON LAND USE AND REHABILITATION Through PETRAD, CCOP organized tailor-made bilateral seminars/ workshops for the CCOP Member Countries |
| United Kingdom | Cooperation with GETECH in the production of aeromagnetic and gravity maps Assistance in seeking funding support for CCOP'S TSUNAMI PROJECT from DFID, and from EU through EUROGEOSURVEYS |
| United States of America | Through U.S. Geological Survey, cooperation on the implementation of the Global Mineral Resource Assessment Project (GMRAP) Offered seminars on gas-hydrates and coal bed methane for MC on bilateral basis Initiative on Sea Grant model programme for the region with NOAA Texas A & M University made available Fellowships for the Member Countries Support for Integrated Ocean Drilling Programme for global climate change study and involvement of CCOP in the programme is under discussion CCOP's interest in USAID supported Indian Ocean Tsunami Warning System Project |
| Asean Council on Petroleum (ASCOPE) | Close cooperation is maintained through jointly organizing seminars, information exchanges for the benefit of the Member Countries. Participation in ASCOPE Joint Committees Meeting to discuss current issues on CCOP and ASCOPE energy programmes. |
| Circum Pacific Council | Cooperation on the WGGC Project CPC named CCOP as the international secretariat for the proposed International Energy Conference 2007. New Initiative on Powering the Rim, and discussion on a project to develop new modules of RIMSIM game for different scenarios |
| Economic and Social Commission for Asia and the Pacific (ESCAP) | Information exchange and discussion, cooperation on technical activities as well as organizing workshops and conferences. CCOP reports to the UN-ESCAP Commission Session and participates in the subcommittee meetings |
| International Union of Geological Sciences (IUGS) | CCOP is an Associate Partner in the International Year of Planet Earth initiative. IUGS support to CCOP activities. Application for Associate Membership in IUGS. Cooperation in various IUGS/IGCP projects and IUGS Commission activities. Jointly held CCOP thematic session for 2005 Annual session with IUGS-GEM |
| United Nations Educational, Scientific & Cultural Organization (UNESCO) | Support to the organization of the SANGIS Training - Bibliographic Phase and SANGIS Asian Multilingual Thesaurus Support for technical visits of CIFEG experts to Member Countries. Information exchange, discussion and cooperation on CCOP technical activities were continued and new initiatives on groundwater discussed |

Technical Programmes and Activities

The Technical Secretariat has achieved the outstanding activities of its planned targets under the three Sectors. Records of Member Countries' participation increased dramatically in the past five years.

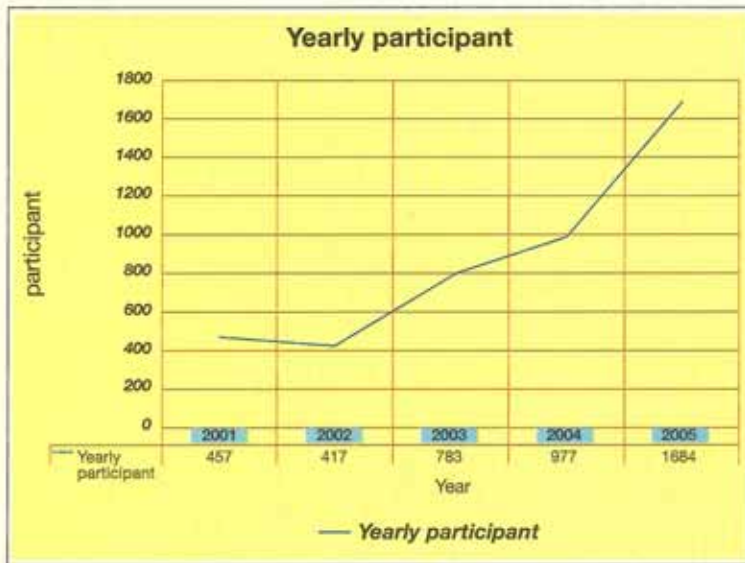


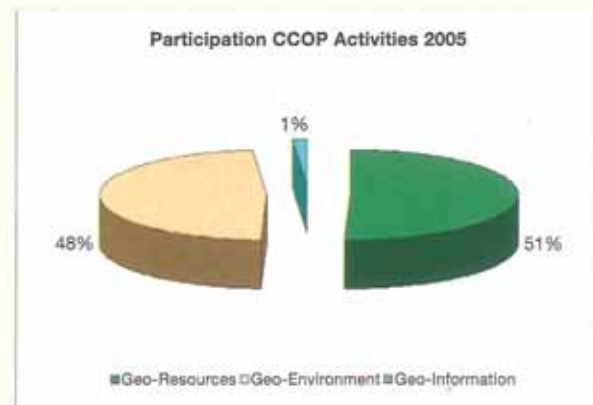
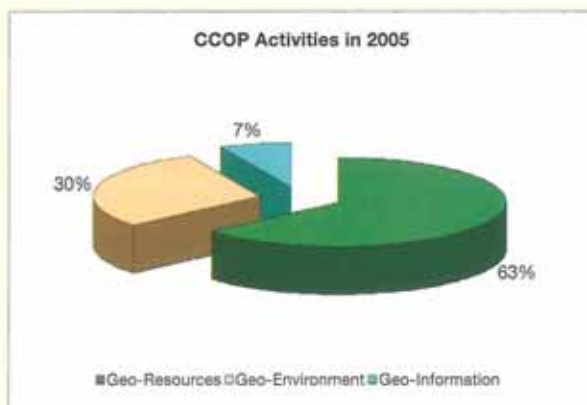
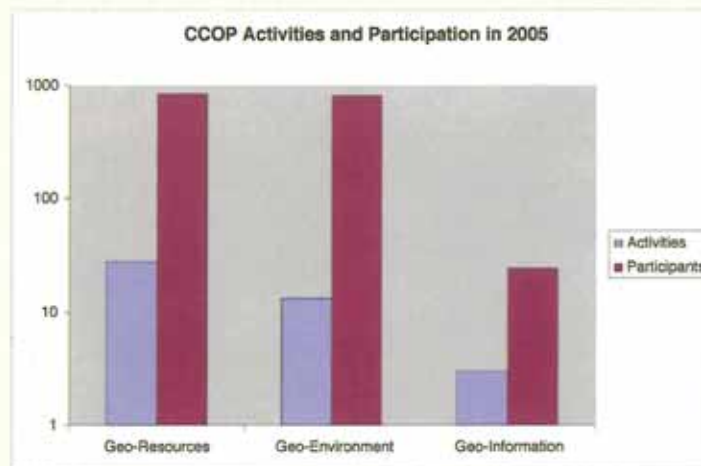
Figure 3. Record of MC participation during the past five years.

During 2005, a record number of 44 seminars, technical meetings/workshops and trainings were held and attended by 1,684 participants from the CCOP Member Countries (Table 2). Aiming at capacity building and technology transfer, these activities were highly appreciated by the participants. Visits to Member Countries were made by CCOP experts to provide advisory services.

Table 2. Number of activities and participants of CCOP technical programmes in 2005

| Sector | No. of activities | No. of participants |
|-----------------|-------------------|---------------------|
| Geo-resources | 28 (*5) | 851 (*408) |
| Geo-environment | 13 | 809 |
| Geo-Information | 3 | 24 |
| TOTAL | 44 | 1,684 |

*CCOP-PETRAD Seminars



The world socio-economic depend, to varying extents, on the earth's supply of natural resources to support, maintain and improve the quality of life. Many of these resources, vital to our national life-support systems, are geology dependent. Properly executed geo-scientific programmes of research and development are essential for their discovery and responsible usage. Under this sector, CCOP aims to strengthen the Member Countries' technical capabilities in establishing the developmental potential of their mineral, energy and groundwater resources and promoting their socially responsible and environmentally sustainable exploration, development and conservation.

Under the Geo-resources Sector, intensive activities were conducted throughout the year with a total number of 28 workshops and seminars. Participants of these activities were mainly from CCOP Member Countries with total number of 851.

Participants for Geo-resources Sector

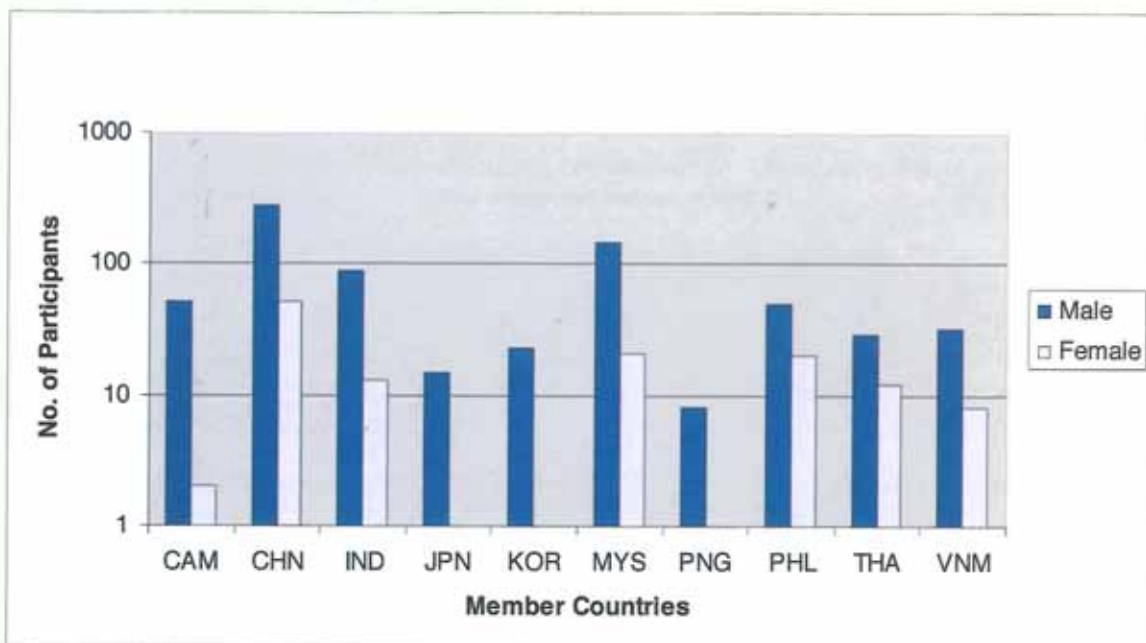


Figure 4. Number of participants from Member Countries in Geo-resources Activities

► GEO-RESOURCES SECTOR: ENERGY PROGRAMME

The production of the so-called fossil fuels - oil, natural gas and coal or lignite - is a very significant revenue earner in a number of the CCOP member states and the region as a whole is both an important producer and consumer of such products. CCOP programmes in the energy sector have been sustained as a systematic regional endeavor of resource assessment and evaluation which is fundamental to sustainable development of the hydrocarbon resources in the region.

1) Petroleum Policy and Management Project (PPM)

Among the highlights of the PPM Project's activities for the reporting period are the holding of workshops for the case study countries, expert visits, planning/coordination meetings, and the annual seminar. The PPM Project is in full implementation during the 2005 period and the following activities were carried out:

Workshops

- ❑ The 4th Philippines Case Study workshop on *field development solutions* was conducted in Manila on 14-19 March 2005 and was attended by 36 participants from 9 CCOP Member Countries.
- ❑ The 3rd China Case Study workshop on *onshore gas development solutions and policies for investment opportunities* was conducted in Beijing on 20-24 June and attended by 34 participants from 8 Member Countries.
- ❑ The 3rd Indonesia Case Study workshop on *marginal fields and petroleum economy* was conducted in Surabaya on 18-22 July 2005 and was attended by 38 participants from 8 Member Countries.
- ❑ The 5th Cambodia Case Study workshop on *natural gas contracts and market* was conducted in Sihanoukville on 29 August - 2 September 2005 with 34 participants from 8 Member Countries.





Expert Visits / Training Courses

- ❑ Messrs. Robert Wong Hin Fatt and Othman Ali Mahmud of PETRONAS visited the Philippine DOE in Manila to conduct a short course on Sequence Stratigraphic Analysis on 17-21 January 2005.
- ❑ Dr. Alfred Kjemperud of the Bridge Group AS (Norway) visited CNPA to train its technical staff on a systematic approach to petroleum prospect and play risking on 7-11 February 2005.
- ❑ Dr. Alfred Kjemperud visited the E & P Research Institute of SINOPEC in Beijing on 20-24 April 2005 to discuss with the China PPM team members some issues related to petroleum economy and conducted a short course on Economic Modeling of Exploration projects using the GeoX software V5.4.
- ❑ Mr. Supat Napanoparatkaew, a Petroleum Engineer of the Department of Mineral Fuels (DMF), Thailand conducted a training course on field development solutions and experiences in the Gulf of Thailand (GOT) in Cambodia National Petroleum Authority (CNPA) on 24-25 May 2005
- ❑ Dr. Allen Beasley, Executive Director of the ASCOPE GAS CENTRE conducted a seminar on Natural Gas Management - the role of the Government to participants from the different units of the Philippine Department of Energy (DOE) on 24 November 2005.
- ❑ Professor Arnfinn Nergaard of the University of Stavanger, Norway visited Indonesia and conducted a seminar on deepwater technologies to meet the needs of the Indonesia PPM team on 13-14 December 2005.

Seminar

The 4th PPM Project Seminar was held on 3-7 October 2005, in Hua Hin, Thailand. The seminar was attended by 24 participants from 8 Member Countries and covered presentations from the case study participating countries on knowledge dissemination and the project's impact and benefits, including some recommendations to improve the project implementation.



Planning Meetings

The Project Coordinator also attended several planning meetings including the National Project Coordination Committee meetings in the case study countries. He also represented the Technical Secretariat in the ASCOPE Joint Committees Meetings, in a PETRAD seminar and other petroleum-related conferences.

CCOP-NPD-MFA Annual Review Meeting

The CCOP-NPD and CCOP-MFA (Norwegian Embassy in Bangkok) PPM Annual Meetings for 2005 were held in Bangkok on 14 and 27 June, and 28 June respectively. The meeting with NPD focused on the institution support provided by NPD to the project.

Details of the PPM Project can be accessed at the website: <http://www.ccop.or.th/projects/PPM.html>.

2) Institutional Capacity Building in CCOP Countries Project Phase I (ICB-CCOP 1)

The 3-year Danish government-supported ICB-CCOP 1 Project started in January 2005. The long-term objective of the project is to strengthen the capacity of the public authorities within the CCOP Member Countries to assess their countries' hydrocarbon potentials. It involves cross-border case studies in Vietnam-China and Indonesia-Malaysia-Philippines.

ICB Activities

- ❑ Mr. Chen Shick Pei, Director of the Technical Secretariat and Mr. Ioannis Abatzis, Representative of Denmark to CCOP made consultative visits to ICB-CCOP1 Project case study host countries, China, Indonesia, Malaysia, Philippines, Vietnam.
- ❑ Inception Phase meeting was held in Bangkok, Thailand on 16 -18 May 2005. There were 19 participants from 10 CCOP Member Countries that attended the workshop.

- ❑ ICB-CCOP1 Project 1st China workshop was held in Guangzhou, China, on 7 - 9 September 2005. There were 12 participants from China and Vietnam that attended the workshop on the Yinggehai-Song Hong Basin case study.
- ❑ ICB-CCOP1 Project 1st China meeting was organized in Beijing, China, on 20 - 21 October 2005 with 10 participants from China that attended the meeting.
- ❑ ICB-CCOP1 Project 1st Vietnam workshop was held in Hanoi, Vietnam, on 19 - 21 December, 2005. There were 23 participants from China and Vietnam, and 5 from Denmark, Japan, including Deputy Permanent Representative of Japan, and Director of the Technical Secretariat.

Details of the ICB Project can be accessed at the website: <http://www.ccop.or.th/techdetail.asp?id=31>

3) CCOP/ASCOPE/PETRAD Programmes

With the technical and financial support of Norway, CCOP/ PETRAD cooperation to undertake activities at the request of CCOP Member Countries remained active and successful. The Technical Secretariat and PETRAD have been compiling a list of topics provided by the Member Countries, which will serve as the basis to request for funding support from the Government of Norway.

During the reporting period, five seminars were held with a total of 408 participants.

- ❑ 12-15 January 2005, Seminar on Deepwater Technology in Hainan, China, completed with 105 participants and 31 papers were presented.
- ❑ 11-14 April 2005, Seminar on IOR-EOR Technologies in Tianjin, China, completed with 109 participants and 23 papers were presented.
- ❑ 1-2 August 2005, Seminar on EOR Application and High CO₂ Gas Field Development in Kuantan, Malaysia, completed with 110 participants and 19 papers were presented.
- ❑ 3 August 2005, 1-Day Workshop on Integrating high CO₂ Gas Field Development and EOR Implementation in Kuantan, Malaysia, completed with 41 participants. Case Study and discussions were conducted.
- ❑ 5-9 December 2005, Seminar on Petroleum Policy, Regulations, Administration and Tools in Upstream and Downstream Petroleum Management in Jakarta, Indonesia, completed with 43 participants and 26 papers were presented.





CCOP-PETRAD-AGWA (Active Management of Groundwater Aquifers). A side meeting on assessing the interest of Member Countries on AGWA was held during the 42nd Annual Session. A Working Group Meeting has been planned for 2006.

▶ GEO-RESOURCES SECTOR: MINERALS PROGRAMME

1) CCOP-USGS Global Mineral Resource Assessment Project

The CCOP-USGS Global Mineral Resource Assessment Project (GMRAP) is part of the 5-year initiative to assess the identified and undiscovered non-fuel mineral resource of the world. A series of workshops and seminars were planned for the CCOP Member Countries between 2003 and 2007. For the reporting period the following was undertaken:

- The 3rd Workshop was held in February 2005 in Kunming, China. Descriptive models for the assessment of other commodities, potash, PGE's, nickel laterite, and Sn-W deposits are being assembled. Permissive tracts for copper are being re-examined by the National Coordinators to finalize their data and concepts for the assessment process.

2) Community and Small-Scale Mining in Asia (CASM-Asia) Project

The CASM-Asia Project has been endorsed by the 44th Steering Committee Meeting held on 19-20 November 2005 in Tsukuba, Japan. This three-year project, from 1 May 2005 to 31 April 2008, is supported by the World Bank in close cooperation with the Geological Survey of Japan, AIST. The objective of the project is to function as a hub for CASM activities through which cooperation network of those engaged or have interest in artisanal/small scale mining can be built and to bridge the artisanal/small miners with the stake holders, communities, technology and science in the Asia-Pacific region.

The Project was launched at the Inaugural Meeting held in Bangkok, Thailand on 25-26 July 2005 with 18 participants from the CCOP Member Countries and four from non-CCOP Member Countries. A Goal-Oriented Project Planning (GOPP) workshop on 30 November – 2 December 2005 with 10 participants from the CCOP Member Countries and 3 from non-CCOP Member Countries was also organized. The workshop produced a project-planning matrix that outlines the activities to be carried out.

► GEO-RESOURCES SECTOR: GROUNDWATER PROGRAMME

1) CCOP-AIST/GSJ Project on Groundwater Assessment along Great River Basins in East and Southeast Asia

The CCOP-AIST/GSJ Project on Groundwater Assessment along Great River Basins in East and Southeast Asia is a 3-year activity which commenced in April 2004 with the support of the Geological Survey of Japan / AIST. For the reporting period the following activities were undertaken:

- ❑ Kick off Meeting on Groundwater Assessment for Deltas in Southeast and East Asia was held on 1 March 2005 in Bangkok, Thailand, attended by 22 participants. The project is divided into 3 sub-projects: (1) Groundwater Environment and Management in the Urban Coastal Area, (2) Groundwater and Land Subsidence Monitoring and (3) Groundwater Evaluation Using Monitoring System. The Meeting agreed to change the name of the project to "Groundwater Assessment and Control in the CCOP Region".
- ❑ Training programme on Groundwater Project was organized during 31 October - 4 November 2005, Bangkok, Thailand attended by 26 participants from Member Countries, and staff of CCOP T/S.



The Geo-environment Sector's activities were carried out intensively throughout the year on subject related to the 2004 tsunami disaster with total number of 13 workshops and seminars. Participants of these activities were mainly from CCOP Member Countries and tsunami affected countries with total number of 809 participants.



*Satellite images of Lam Pakarang, Phang-Nga Province, Thailand;
before and after tsunami 2004*

Participants for Geo-environment Sector

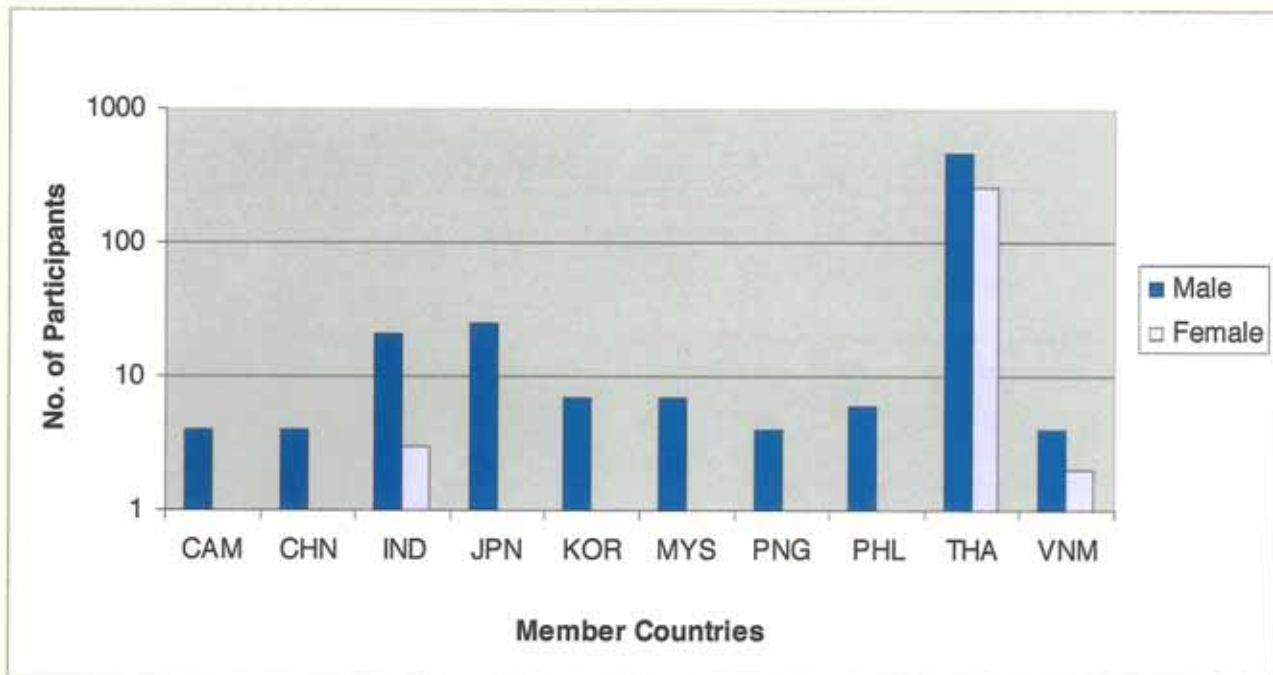


Figure 5. Number of participants from member countries in Geo-environment Activities.

► GEO-ENVIRONMENT SECTOR: GEOHAZARDS PROGRAMME

1) Development of Techniques on Landslide Hazards Assessment Project

With the support of the Government of Korea through the Ministry of Science and Technology (MOST), CCOP and KIGAM initiated a 3-year project in 2002 entitled "Development of techniques on landslide hazards assessment". The project aims to develop the techniques for the assessment of landslide hazards in the CCOP Member Countries with respect to application study of geographic information system (GIS) and remote sensing.

The third phase of the project, 1 August 2004 - 31 July 2005 has been shortened to end of April 2005 due to financial measures taking place at MOST, Korea. Therefore, the planned 3rd Workshop of the Project has been cancelled. However, expert visits to the Member Countries in this phase continued.

2) Field Workshop for Volcanic Hazards Mitigation

The CCOP-GSJ/AIST Project on Field Workshop for Volcanic Hazards Mitigation is a 4-year project which commenced in April 2004 with the support of the Geological Survey of Japan, AIST. This Project aims to conduct a comparative study of the volcanic hazards faced by CCOP Member Countries.

The project's second field workshop was organized in Yogyakarta, Indonesia from 5-11 September 2005 and attended by 22 researchers from Indonesia, Papua New Guinea, the Philippines, and Japan.

3) International Seminar on Tsunami: “How Thailand and the Neighbouring Countries will become ready for Tsunami?” (31 January – 1 February 2005, Bangkok, Thailand)

Subsequent to the December 26, 2004 Tsunami disaster, the Department of Mineral Resources of Thailand (DMR) in cooperation with CCOP organized an international seminar on Tsunami in response to the role of geoscience in the post tsunami rehabilitation and reconstruction, longer term planning, tsunami mitigation, early warning and creating public awareness. The seminar was supported by the DMR, the British Geological Survey (BGS), TNO - National Geological Survey of the Netherlands, and the National Institute for Advanced Industrial Science and Technology/ Geological Survey of Japan (GSJ/AIST).

The seminar officiated by H.E. Dr. Thaksin Shinawatra, Prime Minister of Thailand, was held in the Miracle Grand Hotel, Bangkok, Thailand on 31 January – 1 February 2005. A total of 679 participated in the seminar, among which 612 are from Thailand and 67 foreign experts from other countries, namely Canada, Finland, Germany, India, Indonesia, Japan, Korea, Malaysia, Netherlands, Norway, Papua New Guinea, Poland, Sri Lanka, United Kingdom and United States of America. A total of 61 agencies/organizations were represented; 25 from Thailand and 36 from other countries.

Prior to the seminar, on 28-30 January 2005, a field trip to the tsunami affected areas in Thailand, Phuket and Phang Nga Provinces was organized by DMR. A total of 27 foreign scientists from various countries and organizations (Japan, Korea, Myanmar, Norway, UK, USA, CPC, CCOP, JICA), and one journalist from BBC News participated in the field trip.

4) Project Planning Workshop on Tsunami (28-30 March 2005, Phuket)

Following the recommendation of the successful DMR-CCOP “International Seminar on Tsunami” held in Bangkok, Thailand on 31 January to 1 February 2005, a “Project Planning Workshop” was held in Phuket on 28-30 March 2005. The objective of this workshop is to develop a multi-nation project on Tsunami to carry out needed work and analysis addressing both short and longer term needs of the Tsunami-affected countries. Representatives of CCOP Member Countries - Thailand, Malaysia and Japan, and CCOP Cooperating Countries - Canada, Germany, the Netherlands, United Kingdom, and the Chairman of the Advisory Group participated in the Workshop.

A project document was developed at the end of the workshop, focusing on tsunami hazard as part of a fully integrated collaborative approach to coastal geohazards, particularly on three main geoscientific initiatives requiring urgent and concerted action: (1) Risk Assessment For Forward Planning, (2) Risk Mitigation and (3) Coastal Rehabilitation.

5) Project on Tsunami Risk Reduction Measures with Focus on Landuse and Rehabilitation

Upon the approval of the project by the 45th Steering Committee Meeting, 31 March to 2 April 2005 in Phuket, Thailand, implementation of the Royal Norwegian government supported project on "Tsunami Risk Reduction Measures with Focus on Landuse and Rehabilitation" commenced in June 2005. This project is an 8-month fast track study in consideration of the urgent needs for reconstruction works to commence.

The project is conducted by the Norwegian Geotechnical Institute (NGI), the project's technical executing organization (TEO) in close cooperation with the Department of Mineral Resources (DMR), Thailand and the Technical Secretariat.

The following activities were carried out during the reporting period:

- ❑ CCOP-DMR-NGI Meeting on 30 June 2005 in Bangkok. At the meeting the TEO presented the overview of the Project and its workplan.
- ❑ Field Trip to the three case study areas on 1-3 July 2005. The TEO with DMR staff inspected the three case study areas of the Project: (1) Patong City, (2) Ban Niang beach resort area and (3) Ban Nam Kem fishing village.
- ❑ First Local Advisory Panel Meeting on 4 July 2005 in Phuket. The project's tasks and workplan were presented at the meeting for the information and comments of the local advisory panel.
- ❑ Training on 23 September 2005 in Bangkok. Topics include earthquake-initiated tsunami hazard, mitigation and re-construction, tsunami risk assessment and rehabilitation plans for Thailand, risk assessment and criteria, preliminary tsunami – modeling results, the tsunami phenomena - its characteristics and behaviors. It was attended by 33 participants from DMR.
- ❑ CCOP-DMR-NGI Progress Meeting on 23 September 2005 in Bangkok.
- ❑ 2nd Local Advisory Panel Meeting on 6 December 2005 in Phuket. The TEO presented the results of the study to the local advisory panel for comments and recommendations for consideration in the finalization of the project. Fifteen representatives from the local authorities were present at the meeting, as well as 5 from the DMR.
- ❑ Workshop on 7-9 December 2005 in Phuket. Topics include earthquake hazard assessment, tsunami modeling, mitigation measures, and experiences from tsunami mitigation in the region around the Indian Ocean. It was attended by 24 participants from the CCOP Member Countries, 5 from India and Sri Lanka, and 5 experts from the TEO.

A dissemination seminar is planned to be organized in March 2006 to share the results of the project to the stakeholders, planners, decision-makers as well as the international community.

▶ GEO-ENVIRONMENT SECTOR: COASTAL ZONE PROGRAMME

1) CCOP-GSJ/AIST Project on Integrated Geological Assessment of Deltas in Southeast Asia (DelSEA Project)

The CCOP-GSJ/AIST Project on Integrated Geological Assessment of Deltas in Southeast Asia (DelSEA Project) is a 4-year project which commenced in April 2004 with the support of the Geological Survey of Japan, AIST as part of the IGCP 475 "DeltaMAP" project.

The Kick-off Meeting of the CCOP DelSEA Project was held in Ho Chi Minh City, Vietnam from 9 to 16 January 2005 in conjunction with the International Conference on DELTAS and the 2nd Annual Meeting of IGCP-475 DeltaMAP and APN MegaDelta. Eight participants from the CCOP Member Countries attended the Meetings.

▶ GEO-ENVIRONMENTAL SECTOR: ENVIRONMENTAL GEOLOGY PROGRAMME

1) Research on the Coastal Environment Management Strategy of the Asian Delta Region (Phase I)

The CCOP-GSJ/AIST Research Project on Coastal Environment Management Strategy of the Asian Delta Region (Phase I) is a 3-year project which was started in April 2004, and is being supported by Tokyo University in close cooperation with the Geological Survey of Japan, AIST.

A field study, including aerial and ground survey of the Chao Phraya Delta was carried out on 25-26 January 2005. It was followed by the Japan-Thailand Joint Seminar in Bangkok on Strategy for Sustainable Development of Coastal Area on 27 January 2005 organized by the Technical Secretariat in cooperation with the Department of Mineral Resources Thailand (DMR), University of Tokyo, and GSJ/AIST. It was attended by 15 participants from Japan and Thailand, and 4 from the Technical Secretariat.

Two students from the University of Tokyo visited DMR on 25-28 April 2005 to collect and digitally compile old airphotos of the Chao Phraya River. These digitized airphotos together with remote sensing images will be used to analyse the coastal changes of the Chao Phraya River delta area.

2) CCOP-KIGAM Workshop and Training on Current Issues in Geoscience

CCOP and the Korea Institute of Geoscience and Mineral Resources (KIGAM) organized a tri-thematic workshop and training on current issues in geoscience on 26-28 October 2005 in Bangkok. The three parallel thematic sessions are as follows:

- ❑ Theme I: Seawater Intrusion Problems in the CCOP Region. It was attended by 11 participants from CCOP Member Countries.
- ❑ Theme II: Mineral Potential Mapping using GIS and Remote Sensing. It was attended by 12 participants from CCOP Member Countries, and 4 from non CCOP Member Countries.
- ❑ Theme III: A New Strategy for Marine Aggregates Development and Information Management. It was attended by 8 participants from CCOP Member Countries.



The Geo-information Sector activities were mainly focused on in-house geo-information and database management activities, that included 3 workshops with 24 participants.

Participants for Geo-information Sector

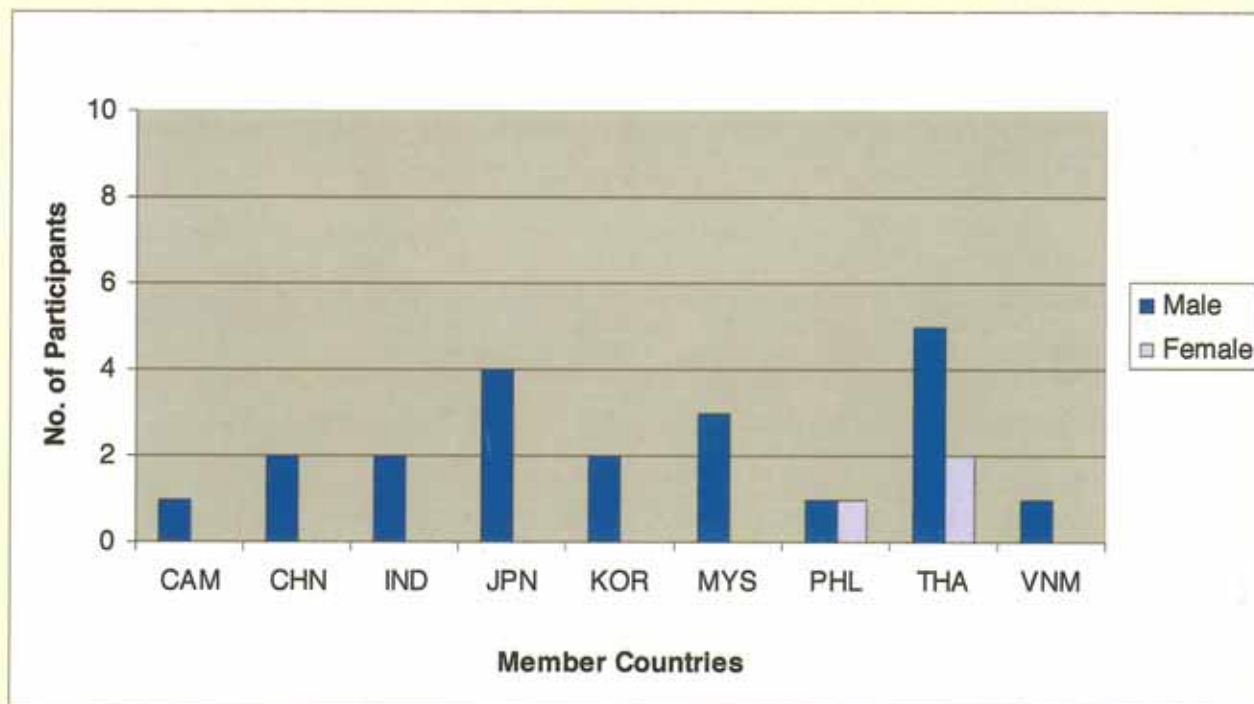


Figure 6. Number of participants from member countries in Geo-information Activities.

1) SANGIS

CCOP-CIFEG- UNESCO Asian Multilingual Thesaurus for Geoscience (AMTG)

The Asian Multilingual Thesaurus is a tool for information retrieval across language barriers. This facilitates multilingual research and information exchange. CCOP Member Countries participating in this initiative include Cambodia, China, Indonesia, Japan, Korea, Malaysia, Thailand and Vietnam. Lao PDR was also invited to participate. The Thesaurus shall be integrated in the SANGIS Bibliographic Database, enabling each country to work on its own language.

A printed AMTG is planned to be published in 2006, and to be made available in the CCOP website at <http://www.ccop.or.th/amtg>.

SANGIS Bibliographic Database

With the compilation of the AMTG, the SANGIS bibliographic database on Microsoft Access application has been enriched, with the AMTG integrated into the system. The Chinese National Coordinator of the SANGIS programme visited CIFEG on 20 to 25 June 2005 to customize the SANGIS Access application for Chinese language. The Chinese version of SANGIS database is now ready for use. A training course on the use of this database for six regional libraries of China Geological Survey was conducted by CIFEG on 5-9 September 2005.

UNESCO through CIFEG provided the Technical Secretariat a server to host the SANGIS web database, which was successfully transferred on November 2005. The SANGIS web database can now be accessed at <http://www.ccop.or.th/sangis>.

2) GRIDNET

The GRIDNET (Geoscience Report and Information Dissemination Network) aims to ensure that information, reports and other products from Cooperating Country and Organization's bilateral and other aid-funded research projects relevant to the CCOP region are made available to organizations in CCOP Member Countries. The titles available in GRIDNET as well as the web links to the reports/publications of some Cooperating Countries can be seen in the CCOP Homepage,

3) CCOP-GSJ/AIST Project on Geoscience Asian Information Network (GAIN)

The CCOP-GSJ/AIST Project on Geoscience Asian Information Network (GAIN) is a 3-year project which was started in April 2004, and is being supported by the Geological Survey of Japan, AIST. This project aims to establish a clearinghouse of geoscience information of East and Southeast Asia where customers worldwide can get the necessary information on the availability of geoscientific information particularly of CCOP Member Countries. Data and information will reside in the respective Member Countries. The website for the CCOP Metadata / Clearinghouse is at <http://www.aist.go.jp/RIODB/GeoMetaData/ASIA/>

Under this project, the 3rd Working Group Meeting of CCOP Metadata Project was held on 24-25 November 2005 in Bangkok, Thailand. The meeting was attended by 12 participants from the Member Countries. The 4th Working Group Meeting is planned to be held in conjunction with the CCOP/CGS Seminar on Geoinformation Technology in September 2006.

▶ FELLOWSHIPS AND GRANTS

1) CCOP Texas A & M University Fellowship Programme

The CCOP Texas A & M University (TAMU) Fellowship is a cooperative programme between CCOP and the Texas A&M University in the USA and provides graduate education fellowships to outstanding government and industry personnel from the CCOP Member Countries. In addition to the educational aspects, the project hopes to develop joint research projects between TAMU faculty and scientists and agencies in the CCOP Member Countries.

The first recipient of the award is Ms. Corazon Sta. Ana from the Department of Energy of the Philippines. There are two more places available for the CCOP Member Countries under this program.

2) East Asia Geoscience and Environmental Research (EAGER) Project

The EAGER Project is a trust fund set up in the Geological Society of America with personal contribution of Dr. Maurice "Ric" Terman, CCOP Honorary Advisor, to be used for funding research in geoscience in the region. Under the programme, a grant will be made available for researches in Geoscience and Environment in East and Southeast Asia to candidates from the Member Country hosting the CCOP Annual Session.

For 2005, the recipient of the award was Ms. Pan Xiao-Fie for her research work entitled "*The pressure depth temperature regime (P-T-X) for fluid infiltration and auriferous fluid source of two typical Indonesian gold deposits, the Nanjinshan and the Jinwozi, in the Beishan mountains*". She is a PhD student at the Institute of Geology and Geophysics, Chinese Academy of Science, Beijing, China.

Mission Trips to Malaysia, Indonesia, Vietnam for the ICB-CCOP 1 Project

The Director together with Mr. Ioannis Abatzis, Representative of Denmark to CCOP, and PPM Project Coordinator made visits to Malaysia and Indonesia on 8-10 March 2005, and Vietnam on 17-18 March 2005 in connection with the implementation of the DANIDA supported Institutional Capacity Building Project for CCOP Member Countries. The Director also discussed with the Chinese colleagues about the project on the occasion of officiating one of the PETRAD seminars held in China.

Mission Trip to Cambodia for the Groundwater Project

Upon the request of the Cambodian Government to CCOP to assist in groundwater for Cambodia, a visit was made on 1-4 June 2005 with one of the JICA consultants which have previous experience in similar project to Phnom Penh and Siem Reap. During the visit, discussions were held with the Permanent Representative of Cambodia to CCOP, the Under Secretary of the Ministry of Mines, Industry and Energy, the Director of the Water Supply Authority, The Director of the Phnom Penh Water Supply Authority, APSARA Authority in Siem Reap, and the Water Supply Department of Siem Reap.

Circum Pacific Council Director's Meeting (CPC)

The Director attended the CPC annual meeting which was held in Santiago, Chile 20-22 April 2005. CPC is a cooperating organization of CCOP. During the meeting, the major CPC activity of organizing the International Energy Conference in China in 2007 was discussed. The Technical Secretariat has been identified to serve as the international secretariat for the Conference.

Southeast Asia Regional Sea Grant Model Meeting

The Director attended the Southeast Asia Regional Sea Grant Model meeting held in Jakarta on 30 April to 4 May 2005 in conjunction with Indonesia's regional Sea Partnership Programme meeting. During the meeting the Director introduced CCOP as the regional intergovernmental geoscience organization. He also elaborated on the geohazard and coastal zone activities of CCOP to the Meeting and explained about the CCOP hazards programme on tsunami risk assessment, mitigation and rehabilitation.

Tsunami-related Meetings/Conferences

The Director and the Regional Expert attended the following meetings related to tsunami to promote CCOP's collaborative project on tsunami.

- ☆ 61st UN-ESCAP Commission Session on 13 May 2005 at UN Convention Center (UNCC), Bangkok, Thailand.
- ☆ High-level Panel on Tsunami Recovery Development and Emerging Issues in Response to Tsunamis & Other Natural Disasters; Ministerial Segment of the 61st ESCAP Commission Session at UNCC, Bangkok, Thailand on 16 May 2005.
- ☆ Scientific Forum on the Tsunami, its Impact and Recovery at Asian Institute of Technology (AIT) Conference Center, Bangkok, Thailand on 6-7 June 2005.
- ☆ High-level Expert Group Meeting on Technical Options for Disaster Management Systems: Tsunamis and Others at UNCC, Bangkok, Thailand on 22-24 June 2005.
- ☆ Workshop on Sustainable Management of Risks due to Natural Hazards in the Region of South and South-East Asia, at Asian Institute of Technology (AIT), Bangkok, Thailand on 23-25 August 2005.
- ☆ US Indian Ocean Tsunami Early Warning System (IOTWS) Coordination Session in Bangkok, Thailand on 12 September 2005.
- ☆ Natural Resources CANADA-GISTDA Thailand Disaster Mitigation and Management Workshop, Bangkok, Thailand on 29 September 2005.
- ☆ Concluding Regional Workshop on Methodologies to Assess Socio-economic Impacts of Natural Disasters in UNCC, Bangkok, Thailand on 19-21 October 2005.

Nine newsletters, proceedings and reports were published during the reporting period. The workshop and seminar reports and proceedings of the major project, Petroleum Policy and Management are published in the CCOP PPM Website.

CCOP Annual Session Proceedings

Proceedings of the 41st CCOP Annual Session Part I

Proceedings of the 41st CCOP Annual Session Part I, documentation of the 41st CCOP Annual Session Meeting, 15-18 November, 2004, Tsukuba, Japan (Hard-copy and CD-ROM).

Proceedings of the 41st CCOP Annual Session Part II (Thematic Session)

Includes papers presented at the thematic session on "Geo-environment of Delta and Groundwater Management in East and Southeast Asia", 17 November 2004, Tsukuba, Japan (Hard-copy and CD-ROM).

CCOP Steering Committee Meeting Reports

Report of the 44th CCOP Steering Committee Meeting

A report on the minutes of the Steering Committee Meeting held in Tsukuba, Japan on 19-20 November, 2004 (Hard-copy).

Report of the 45th CCOP Steering Committee Meeting

A report on the minutes of the Steering Committee Meeting held in Phuket, Thailand on 31 March - 2 April, 2005 (Hard-copy).

Report of the 46th CCOP Steering Committee Meeting

A report on the minutes of the Steering Committee Meeting held in Beijing, China on 19-20 September, 2005 (Hard-copy).

Technical Activities Reports/Proceedings

PPM Project

Report of the PPM Mid-term Review

A report on the PPM Mid-Term Review conducted in 2004 to assess the implementation of the Petroleum Policy and Management (PPM) Project.

Proceedings of PPM Workshops/Seminars are published in the Web.

PETRAD Seminars

Report of the CCOP-PETRAD-CNOOC-MLR-CGS Seminar on Deepwater Technology

A documentation of the CCOP-PETRAD-CNOOC-MLR-CGS Seminar on Deepwater Technology in Hainan, People's Republic of China on 12-15 January, 2005 (Hard copy and CD-ROM).

Report of the CCOP-PETRAD-CNOOC-MLR-CGS Seminar on IOR-EOR Technologies

A documentation of the CCOP-PETRAD-CNOOC-MLR-CGS Seminar on IOR-EOR Technologies in Tianjin, People's Republic of China on 11-14 April, 2005 (Hard copy and CD-ROM).

Report of the CCOP-PETRAD-PETRONAS Seminar on EOR Application and High CO₂ Gas Field Development

A documentation of the CCOP-PETRAD-PETRONAS Seminar on EOR Application and High CO₂ Gas Field Development in Kuantan, Malaysia on 1-2 August, 2005 (Hard copy and CD-ROM).

Report of the CCOP-PETRAD-BPHMIGAS-BPMIGAS Seminar on Petroleum Policy, Regulations, Administration and Tools in Upstream and Downstream Petroleum Management

A documentation of the CCOP-PETRAD-BPHMIGAS-BPMIGAS Seminar on Petroleum Policy, Regulations, Administration and Tools in Upstream and Downstream Petroleum Management in Jakarta, Indonesia on 5-9 December, 2005 (Hard copy and CD-ROM).

CCOP Homepage

The CCOP Homepage is continuously being updated. New webpages are added for new projects and activities.

Sales of Publications

Proceeds from the publication sales during the reporting period amounted to **USD 80.62**.

From January 1 to December 31, 2005, Member Countries' total cash contributions amounted to **USD 190,366.91**, of which **USD 30,000.00** were for the arrears of 2003 from Korea, **USD 41,465.91** for the arrears of 2004 and **USD 118,901** for cash contributions of 2005. The expected cash contributions from the rest of the Member Countries are **USD 135,000** for 2004, **USD 176,099** for 2005 and **USD 295,000** for 2006 (Table 3).

At the end of 31 December 2005, total income for the year 2005 was **USD 359,545.52**. In addition to Member Countries' contributions, the Technical Secretariat also earned **USD 160,386.45** from the management of projects during this period. The amount of **USD 8,792.16** was received from other incomes which included interest earned, sale of publications, and miscellaneous incomes. The expenditure of **USD 366,771.05** was incurred for operation and administrative support. As of December 31, 2005, the CCOP General Fund registered a cash balance of **USD 326,817.75** (Table 4.). Detail on CCOP Projects and CCOP Short-term Project financial Statement are also shown in Table 5 and 6. In comparison with 2004 performance, the revenue and expenditure clearly show the significant development in Technical activity.

The Technical Secretariat office premise is continuously being provided by the Royal Thai Government, through the kind arrangement of the Department of Mineral Resources (DMR), Ministry of Environment and Natural Resources, at the 24th floor of the Thai CC Tower, Sathorn Tai Road, Bangkok, Thailand. This provision amounts to **USD 39,745** for the year 2005. The Royal Thai Government through the DMR also accorded the privileges and the cooperation to enable the Technical Secretariat to operate efficiently and effectively.

Table 3: MEMBER COUNTRIES' CASH CONTRIBUTIONS
For the year ended December 31, 2005
(amount in US Dollars)

| Member Country | Contribution received in the year 2005 | | | Expected to receive in the year 2006 | | |
|---------------------|--|------------------|-------------------|--------------------------------------|------------------------------|-------------------|
| | 2003 | 2004 | 2005 | Arrears of 2004 Contribution | Arrears of 2005 Contribution | 2006 Contribution |
| Cambodia | | | 5,000.00 | | | 5,000.00 |
| China 1) | | | | 50,000.00 | 50,000.00 | 50,000.00 |
| Indonesia | | | | 25,000.00 | 25,000.00 | 25,000.00 |
| Japan 2) | | | | | | - |
| Korea 3) | 30,000.00 | | | 60,000.00 | 60,000.00 | 60,000.00 |
| Malaysia | | | 50,000.00 | | | 50,000.00 |
| Papua New Guinea 4) | | 5,449.73 | 5,583.53 | | 4,416.47 | 10,000.00 |
| Philippines 5) | | 36,016.18 | 3,317.47 | | 36,682.53 | 40,000.00 |
| Singapore | | - | - | | | - |
| Thailand | | | 40,000.00 | | | 40,000.00 |
| Vietnam | | | 15,000.00 | | | 15,000.00 |
| Total | 30,000.00 | 41,465.91 | 118,901.00 | 135,000.00 | 176,099.00 | 295,000.00 |

1) *Partial Contribution 2004 (USD28,000) received after December 31, 2005*

2) *Contribution made under Contract of Entrustment*

3) *Partial Contribution received for 2003*

4) *Partial Contribution received for 2004 and 2005*

5) *Partial Contribution received for 2004 and 2005 (USD 5,780.47) received after December 31, 2005*

Table 4: CCOP GENERAL FUND FINANCIAL STATEMENT
For the year ended December 31, 2005
(amount in US Dollars)

| | 2004 | | 2005 | |
|---|-------------------|---------------|-------------------|---------------|
| | USD | % | USD | % |
| Fund Balance | 344,576.82 | | 400,308.03 | |
| Income: | | | | |
| <i>Member Countries' Contributions</i> | 288,353.13 | 70.13 | 190,366.91 | 52.95 |
| <i>Publications sales</i> | 1,543.13 | 0.38 | 80.62 | 0.02 |
| <i>Project management</i> | 123,004.51 | 29.92 | 160,386.45 | 44.61 |
| <i>Others</i> | (1,722.72) | (0.43) | 8,711.54 | 2.42 |
| Total Income | 411,178.05 | 100.00 | 359,545.52 | 100.00 |
| Expenditures : | | | | |
| <i>Personnel expenses</i> | 261,785.29 | 73.17 | 264,656.33 | 72.16 |
| <i>Meeting / travel expenses</i> | 44,052.79 | 12.31 | 44,960.45 | 12.26 |
| <i>General administrative expenses</i> | 30,597.84 | 8.55 | 29,087.09 | 7.93 |
| <i>Publications</i> | 8,401.61 | 2.35 | 11,687.05 | 3.19 |
| <i>Technical activity support</i> | 781.01 | 0.22 | 5,046.56 | 1.37 |
| <i>Special expenditures</i> | 12,138.83 | 3.39 | 11,333.57 | 3.09 |
| <i>Others</i> | - | - | - | - |
| Total Expenditure | 357,757.37 | 100.00 | 366,771.05 | 100.00 |
| Income over/(under) expenses | 53,420.68 | | (7,225.53) | |
| Total Fund Balance before adjustment | 397,997.50 | | 393,082.50 | |
| Adjusting entries | | | | |
| <i>Unrealized gain/(loss) on exchange rate for Retained Earning</i> | 2,310.53 | | 4,744.04 | |
| <i>Tax payable</i> | - | | - | |
| Year-end Balance | 400,308.03 | | 397,826.54 | |
| Adjustment to reflect actual cash inflow/(outflow) : | | | | |
| <i>Receivables & Advance</i> | - | | - | |
| <i>Office equipment (net)</i> | (21,760.54) | | (13,471.17) | |
| <i>Advance</i> | (24,688.61) | | (58,412.94) | |
| <i>Tax deductible</i> | 1,113.43 | | 875.32 | |
| Year-end Cash Balance | 354,972.31 | | 326,817.75 | |

Table 5: CCOP PROJECTS FINANCIAL STATEMENT
For the year ended December 31, 2005
(amount in US Dollars)

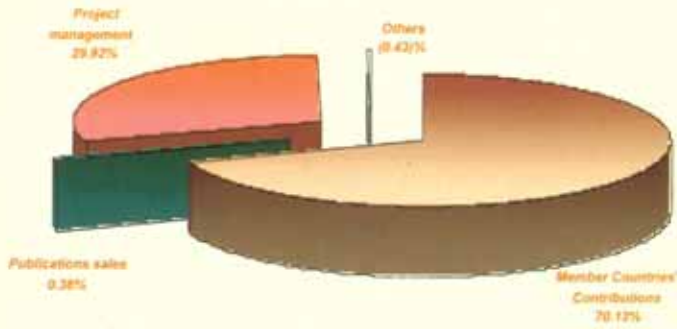
| | JECF (A) FUND | | PPM Fund | | DANIDA Fund | |
|--|------------------|-----------------|-------------------|-------------------|-------------|-------------------|
| | 2004 | 2005 | 2004 | 2005 | 2004 | 2005 |
| Fund Balance | 30,034.61 | 3,741.18 | 277,767.30 | 522,344.43 | | - |
| Income : | | | | | | |
| <i>Received from Fund</i> | - | - | 997,375.01 | 612,811.94 | | 104,462.72 |
| <i>Others</i> | 142.47 | 188.82 | (1,122.51) | 5,961.55 | | 749.99 |
| Total Income | 142.47 | 188.82 | 996,252.50 | 618,773.49 | - | 105,212.71 |
| Expenditures : | | | | | | |
| <i>Technical Activities Expenses</i> | 26,435.90 | 3,366.15 | 753,456.70 | 528,391.01 | | 60,137.09 |
| Total Expenditure | 26,435.90 | 3,366.15 | 753,456.70 | 528,391.01 | - | 60,137.09 |
| Income over/(under) expenses | (26,293.43) | (3,177.33) | 242,795.80 | 90,382.48 | - | 45,075.62 |
| Adjusting entries : | | | | | | |
| <i>Unrealized gain/(loss) on exchange rate</i> | - | 73.25 | 1,781.33 | 1,062.90 | | 765.78 |
| Year-end Balance | 3,741.18 | 637.10 | 522,344.43 | 613,789.81 | - | 45,841.40 |
| Adjustment to reflect actual cash inflow/(outflow): | | | | | | |
| <i>Tax deductible</i> | - | - | 2.74 | - | | - |
| <i>Advance Remittance to CCOP General Fund</i> | - | - | (46,111.51) | (41,101.53) | | - |
| <i>Office equipment (net)</i> | (0.05) | (0.05) | - | - | | - |
| Year-end Cash Balance | 3,741.13 | 637.05 | 476,235.66 | 572,688.28 | - | 45,841.40 |

Table 6: CCOP SHORT-TERM PROJECTS FINANCIAL STATEMENT
For the year ended December 31, 2005
(amount in US Dollars)

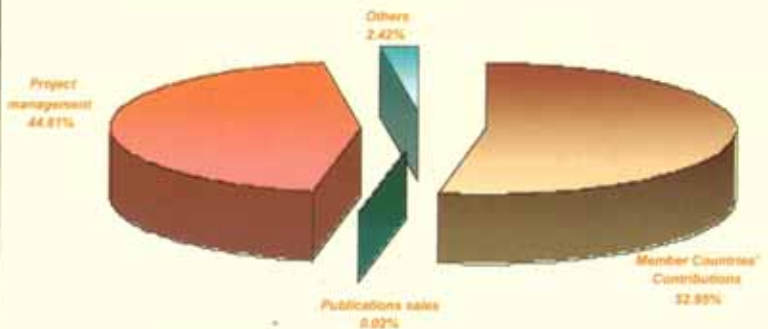
| | MFA Norway Fund | | CASM Asia Fund | |
|--|-----------------|-------------------|----------------|------------------|
| | 2004 | 2005 | 2004 | 2005 |
| Fund Balance | | - | | - |
| Income : | | | | |
| Received from Fund | | 391,193.48 | | 46,863.93 |
| Others | | 2,287.52 | | 303.30 |
| Total Income | - | 393,481.00 | - | 47,167.23 |
| Expenditures : | | | | |
| Technical Activities Expenses | | 220,376.19 | | 27,852.90 |
| Total Expenditure | - | 220,376.19 | - | 27,852.90 |
| Income over/(under) expenses | - | 173,104.81 | - | 19,314.33 |
| Adjusting entries : | | | | |
| Unrealized gain/(loss) on exchange rate | | 166.97 | | (26.75) |
| Year-end Balance | - | 173,271.78 | - | 19,287.58 |
| Adjustment to reflect actual cash inflow/(outflow): | | | | |
| Tax deductible | | - | | - |
| Advance | | - | | - |
| Remittance to CCOP General Fund | | - | | - |
| Office equipment (net) | | - | | - |
| Year-end Cash Balance | - | 173,271.78 | - | 19,287.58 |

CCOP GENERAL FUND

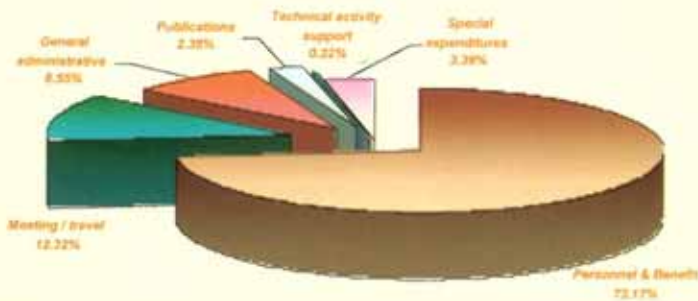
Revenue for the year 2004



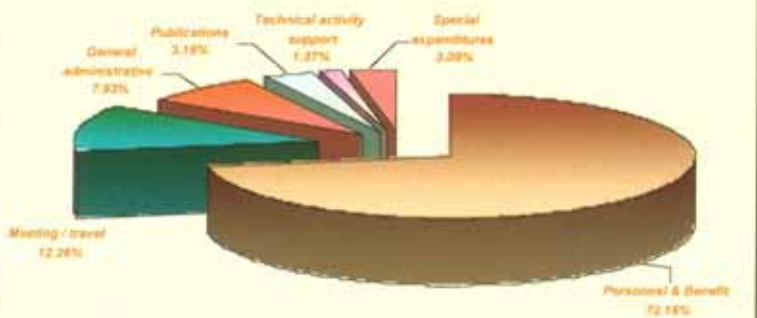
Revenue for the year 2005



Expenditure for the year 2004



Expenditure for the year 2005



▶ CCOP Member Countries and Permanent Representatives (11)

CAMBODIA:

H.E. Mr. Sov Chivkun
Permanent Representative of Cambodia to CCOP
c/o General Department of Mineral Resources (GDMR)
Ministry of Industry, Mines and Energy (MIME)
#45, Preah Norodom Blvd., Phnom Penh
Cambodia

CHINA:

Prof. Dr. Zhang Hongtao
Permanent Representative of China to CCOP
Deputy Director-General
China Geological Survey (CGS)
Ministry of Land and Resources
24 Guangsi Dajie, Xicheng District
Beijing 100011 People's Republic of China

INDONESIA:

Mr. Bambang Dwiyanto
Permanent Representative of Indonesia to CCOP
Head, Geological Agency
Ministry of Energy and Mineral Resources (MEMR)
Jl. Gatot Subroto Kav. 49, Jakarta 12950
Indonesia

JAPAN:

Mr. Yoshinobu Hiraishi
Permanent Representative of Japan to CCOP
Minister
Embassy of Japan
1674, New Petchburi Road
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Thailand

KOREA:

Dr. Tai-Sup Lee
Permanent Representative of Korea to CCOP
President
Korea Institute of Geoscience and Mineral Resources (KIGAM)
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MALAYSIA:

Mr. Yunus Abdul Razak
Permanent Representative of Malaysia to CCOP
Director-General
Minerals and Geoscience Department
20th Floor, Tabung Haji Building
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PAPUA NEW GUINEA:

Mr. Stevie T.S. Nion
Acting Permanent Representative of Papua New Guinea to
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Private Mail Bag, Port Moresby Post Office
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Papua New Guinea

THE PHILIPPINES:

Mr. Jeremias L. Dolino
Permanent Representative of Philippines to CCOP
Director, Mines and Geosciences Bureau (MGB)
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SINGAPORE:

Mr. Chang Chin Nam
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Economic Development Board (EDB)
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THAILAND:

Mr. Somsak Potisat
Chairman, CCOP Steering Committee
Permanent Representative of Thailand to CCOP
Director-General
Department of Mineral Resources (DMR)
Ministry of Natural Resources and Environment
Rama VI Road, Ratchathewee
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VIET NAM:

Dr. Tran Ngoc Canh
Permanent Representative of Vietnam to CCOP
President and CEO of PETROVIETNAM
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BELGIUM:

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--

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Managing Director
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CPC:

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President, Circum Pacific Council
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EURO-GEOSURVEYS:

Mr. Patrice Christmann
Secretary General, EuroGeoSurveys
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Executive Vice President and Provost
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GEOSCIENCE

For a SUSTAINABLE FUTURE

The Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) is an intergovernmental organization whose mission is to facilitate and co-ordinate the implementation of applied geoscience programmes in East and Southeast Asia in order to contribute to economic development and an improved quality of life within the region.

To this end, CCOP promotes capacity building, technology transfer, exchange of information and institutional linkages for sustainable resource development, management of geoinformation, geohazard mitigation and protection of the environment.

Member Countries:

Cambodia, China, Indonesia, Japan, Republic of Korea, Malaysia, Papua New Guinea, The Philippines, Singapore, Thailand and Vietnam.

Cooperating Countries:

Australia, Belgium, Canada, Denmark, France, Germany, Japan, The Netherlands, Norway, Russian Federation, Sweden, Switzerland, United Kingdom and United States of America.

Cooperating Organizations:

ASCOPE, CIFEG, CPC, EuroGeosurveys, GETECH, IOC, IOMAC, IUGS, PETRAD, UN-ESCAP, UNEP, UNESCO, WORLD BANK