

# CCOP



COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)

## 2003 CCOP ANNUAL REPORT

● Message from the Chairman	3
● About CCOP	4
● Management and Organization	5
● Milestones and Highlights for the Year 2003	7
● Technical Cooperation and Activities	8
● Director's Missions	18
● Publications	19
● Financial Highlights	20
● List of CCOP Members Countries, Cooperating Countries and Organizations, and Honorary Advisers	26

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## Message from the Chairman



First of all, I would like to thank the Member Countries and Cooperating Countries which have been actively participating and contributing to the successful implementation of the activities through the year 2003. The year has been very encouraging as we have registered a record number of technical activities being undertaken. On behalf of CCOP, I congratulate the Director of the CCOP Technical Secretariat and the Staff for successfully implementing the activities of CCOP for the year.

For the year 2003, the Petroleum Policy and Management (PPM) Project was in full implementation with the case studies in Cambodia, China, Indonesia and the Philippines. Our appreciation to the Norwegian Agency for Development Cooperation (NORAD) for the support of the PPM Project. The year also witnessed the enhancement of activities for the projects on the Digital Compilation of Geoscientific Maps (DCGM) Phase IV supported by Japan, PETRAD Seminars, Development of Techniques for Landslide Hazards Assessment supported by the Ministry of Science and Technology, Republic of Korea, the Global Mineral Resource Assessment supported by the United States of America, SANGIS Programme and the Asian Multilingual Thesaurus supported by CIFEG and UNESCO, and GRIDNET. 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 give my sincerest thanks to the Member Countries, Cooperating Countries and Organizations, Honorary Advisors and friends for their contributions, assistance and continuous support. I am confident that the coming year will be very promising for CCOP with the high level of activities being maintained and the implementation of new projects being planned for the benefits of its Member Countries.

A handwritten signature in black ink that reads "Somsak Potisat".

**Somsak Potisat**  
**Chairman**

CCOP Steering Committee



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

The CCOP "Coordinating Committee for Offshore Prospecting in Asia" was first established in 1966 by China, Japan, Republic of Korea and The Philippines under the auspices of ESCAP and the United Nations. CCOP became an independent intergovernmental organisation 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 maximise 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.
- A greater flow of technical information between the Member Countries, Cooperating Countries and Cooperating Organisations 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.

- 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 **geoinformation 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 14 international organisations.

The CCOP Technical Secretariat is responsible for the co-ordination of all activities carried out by CCOP. The Secretariat is headed by a Director, who reports to the CCOP Steering Committee consisting of one permanent representative from each Member Country. The Headquarters of the CCOP Technical Secretariat is located in Bangkok, Thailand.

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

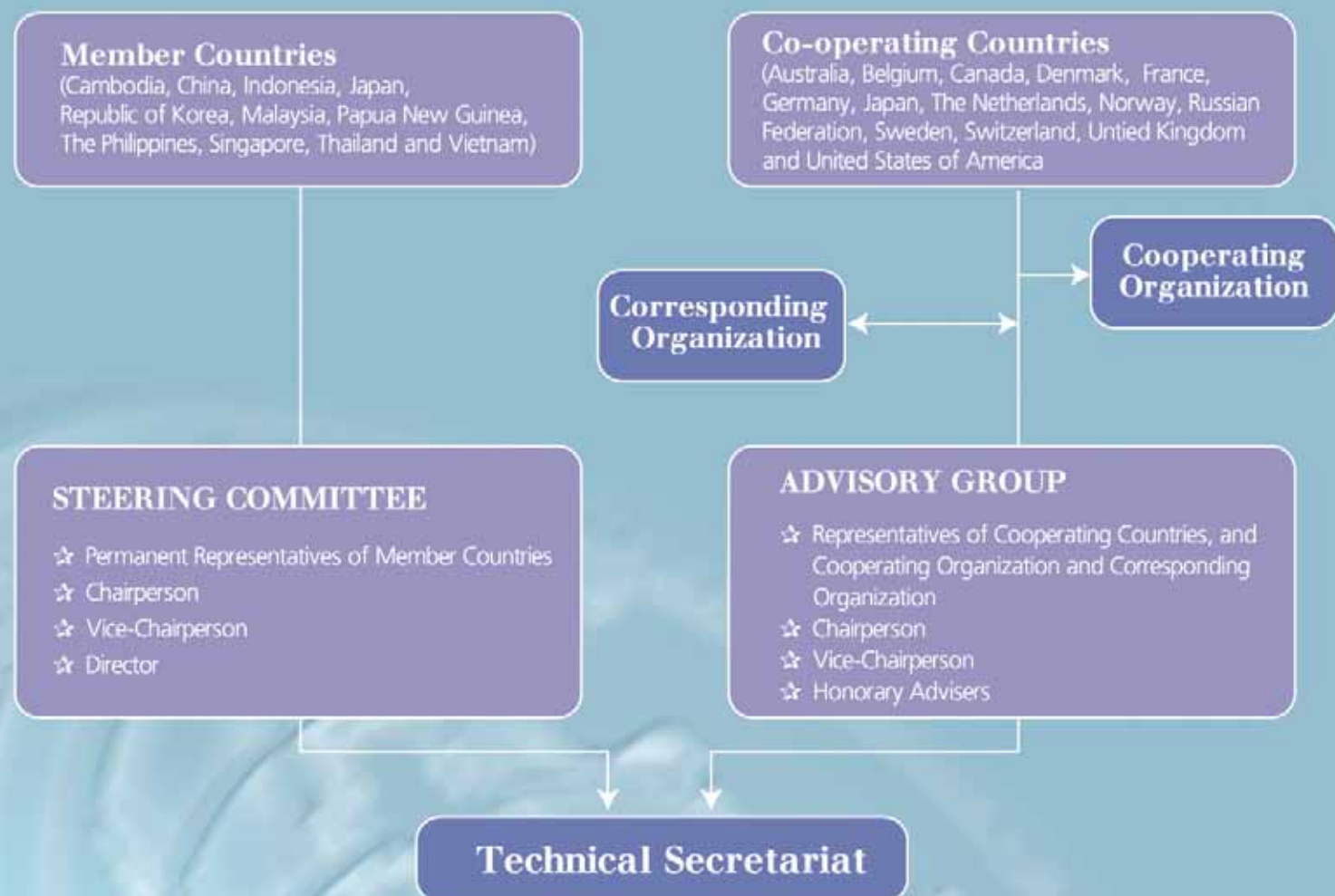
- Data exchange and sharing of institutional and administrative experiences
- Regional data compilation and regional resource mapping
- Training and human resource development
- Standardization of resource classification and nomenclature
- Harmonization of regulatory environment
- Joint investment promotion

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.



# Management and Organization

## ORGANIZATION CHART OF CCOP



### Professional Staff

**Mr. Chen Shick Pei**

Director

**Dr. Seville D. David Jr.**

Regional Expert

**Dr. Eizo Yamada**

DCGM Project Coordinator

**Mr. Gunnar Soiland**

PPM Project Coordinator

**Mr. Simplicio Caluyong**

PPM Regional Project Coordinator

**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 Pranalnrit**

Assistant in IT

**Ms. Pornsiri Sattayakhun**

Assistant in Technical

**Ms. Sansanee Wudhivanich**

Secretary

**Ms. Wanlaya Kanakarnjanakul**

Assistant in Finance

**Mr. Visuth Theemasarn**

Clerk/Driver

**Ms. Tawee Butrakaew**

Cleaner



During the reporting period, there have been several changes of personnel in the Technical Secretariat. Mr. Simplicio Caluyong has been recruited as the Regional Project Coordinator for the Petroleum Policy and Management Project in April 2003. Dr. Eizo Yamada, DCGM Project Coordinator, completed his assignment at the CCOP Technical Secretariat at the end of March 2003. A new Assistant, Ms. Pornsiri Sattayakhun, was hired.

Mr. Toshihisa Takata, Minister, Embassy of Japan in Thailand was appointed as Permanent Representative of Japan to CCOP. Dr. Simon F. Sembiring, Director General of Geology and Mineral Resources, Indonesia is the new Permanent Representative of Indonesia to CCOP succeeding Dr. Wimpy Tjetjep. The following were also appointed as Deputy Permanent Representatives of the concerned CCOP Member Countries:

- ❖ Mr. Chrea Vichett, Deputy Director, Department of Mineral Resources Development, General Department of Mineral Resources, Ministry of Industry, Mines and Energy for Cambodia.
- ❖ Mr. Ma Yongzheng, Deputy Division Director, Department of International Cooperation, Science and Technology, Ministry of Land and Resources for China.
- ❖ Mr. Jiro Usui, Counsellor, Embassy of Japan in Bangkok for Japan.
- ❖ Mr. Stevie Nion, Deputy Secretary of the Department of Mining for Papua New Guinea.
- ❖ Dr. Tawsaporn Nuchanong, Director, Geological Resource Conservation and Management Division, Department of Mineral Resources (DMR) for Thailand.

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 24<sup>th</sup> Floor of the Thai CC Tower, Sathorn Tai Road, Bangkok, Thailand. The Royal Thai Government through the DMR also accorded the privileges and the cooperation to enable the CCOP TS to operate efficiently and effectively.



# Milestones and Highlights for the Year 2003

## 41<sup>st</sup> and 42<sup>nd</sup> CCOP Steering Committee Meetings and 40<sup>th</sup> 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 assemble 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 41<sup>st</sup> CCOP Steering Committee Meeting was held in the island resort of Koh Samui, Thailand from 27- 28 March 2003 and attended by 35 delegates from the Member Countries, Chairman of the CCOP Advisory Group, Technical Secretariat and resource persons from USGS. The Meeting deliberated on the progress of CCOP activities for the calendar year 2002 as well as the progress on the implementation of activities for 2003.



The 40<sup>th</sup> CCOP Annual Session and 42<sup>nd</sup> Steering Committee Meeting were held at the Hotel Nikko in Kuala Lumpur Malaysia on 6-10 and 13-14 October 2003 respectively. The host facilities were provided by the Government of Malaysia through the Minerals and Geoscience Department, Malaysia. The Annual Session was attended by 109 delegates from Member Countries and Cooperating Countries and Organizations.

The main focus of the meetings was on progress report, financial matters, workplan and the status of current projects and new initiatives. The Steering Committee approved the proposed budget for 2004 and discussed the various issues on CCOP activities covering the three main sectors on Geo-resources, Geo-environment and Geo-information. A thematic session was held on 9 October 2003 with the theme "Raising awareness on the importance of geoscience and promotion of the use of geoscience information and services".

Mr. Somsak Potisat, Permanent Representative of Thailand to CCOP was elected Chairman of the Steering Committee for the period 2004-2005.



# Technical Cooperation and Activities

## Technical Activities 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 below. 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 several cooperating countries in Europe, the 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.

Cooperating Country/ Organization	Activities
<b>Canada</b>	Cooperation on the possible support to a Ocean and Coastal Mapping Workshop to Member Countries
<b>Denmark</b>	Continued consultation for new initiatives for CCOP Member Countries
<b>France</b>	Provided the services of Dr. Henri Fontaine, Pre-Tertiary Geologist Support to the SANGIS Training-Bibliographic Phase and Asian Multilingual Thesaurus Programme and the CCOP Metadata Project through CIFEG Support of technical visits of CIFEG experts to Member Countries Discussion are on-going on new initiatives between BRGM, CIFEG and CCOP
<b>Japan</b>	Contributions to the DCGM Project and institutional support with JECF Funds and provision of non-reimbursable expert's services Cooperation on the Symposium/Workshop on Geo-information via the Internet and CCOP Metadata New Initiatives are being discussed
<b>Germany</b>	Discussion on support for the Workshop on Goal Oriented Project Planning (GOPP) to be held in 2004
<b>The Netherlands</b>	Communicating with TNO-NITG on CCOP-Netherlands cooperation for new activities A new initiative on groundwater management is being discussed Support to the CCOP Metadata Project
<b>Norway</b>	Supported the Resource Evaluation and Planning Phase II Support to the Petroleum Policy and Management (PPM) Project Through PETRAD, CCOP organized tailor-made bilateral seminars/work-shops for the CCOP Member Countries Supports for training on delineation of continental shelf and Petrad series of seminars are under discussion
<b>United Kingdom</b>	Cooperation on the KaR Metadata Project and support for CCOP Metadata Project through the British Geological Survey Cooperated with GETECH in the production of aeromagnetic and gravity maps Provided resource persons for various CCOP seminar/workshop
<b>United States of America</b>	Through U.S. Geological Survey, cooperation on the implementation of the Global Mineral Resource Assessment Project (GMRAP) and offered seminars on gas hydrates and coal bed methane Initiative on Sea Grant programme 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
<b>Asean Council on Petroleum (ASCOPE)</b>	Close cooperation is maintained through jointly organizing seminars, information exchanges for the benefit of the Member Countries Participation of the Secretariat in Joint Committees Meeting to discuss current issues on CCOP and ASCOPE energy programmes
<b>Circum Pacific Council (CPC)</b>	Cooperation on the WGGC Project Initiative on Powering the Rim Supported the RIMSIM Training, the organization of the RIMSIM exercise and Seminar on Disaster Risk Management with Asian Disaster Preparedness Center
<b>Economic and Social Commission for Asia and the Pacific (ESCAP)</b>	Information exchange and discussion, cooperation on technical activities particularly on water resources management as well as organizing workshops and conferences were continued Report to the UN-ESCAP Commission Session
<b>International Union of Geological Sciences (IUGS)</b>	On-going discussion of cooperation on International Year of Planet Earth and support to CCOP activities
<b>United Nations Educational, Scientific &amp; Cultural Organization (UNESCO)</b>	Support to the organization of the SANGIS Asian Multilingual Thesaurus Project Support for technical visits of CIFEG experts to Member Countries and participation to UNESCO activities Information exchange, discussion and cooperation on CCOP technical activities were continued



## Technical Activities with Cooperating Countries and Organizations

The Technical Secretariat has met most of its planned targets under the following three sectors. A record number of twenty-three (23) seminars, technical meetings/workshops and trainings were held and attended by 583 participants from the CCOP Member Countries. Aiming at technology transfer, these activities were highly appreciated by the participants. Visits to Member Countries were made by CCOP experts to provide advisory services.

Sector	No. of activities	No. of participants
1. Geo-resources	18(*4)	493 (*231)
2. Geo-environment	2	35
3. Geo-information	3	55
<b>TOTAL</b>	<b>23</b>	<b>583</b>

\*CCOP-PETRAD Seminars

\*\*Participants to the technical activities of Dr. Fontaine not included

## GEO-RESOURCES SECTOR

All of us depend, to varying extents, on the earth's supply of natural resources to support, maintain and improve our lives. Many of these resources, vital to our national life-support systems, are geology dependent. Properly executed geoscientific 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, conservation and development.

## GEO-RESOURCES SECTOR: MINERALS PROGRAMME

The Mineral Programme is geared towards enhancement of the capability of Member Countries in the assessment, exploration and sustainable and environmentally sound management of mineral resources in their national territories.

### 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 are planned for the CCOP Member Countries between 2003 and 2007.

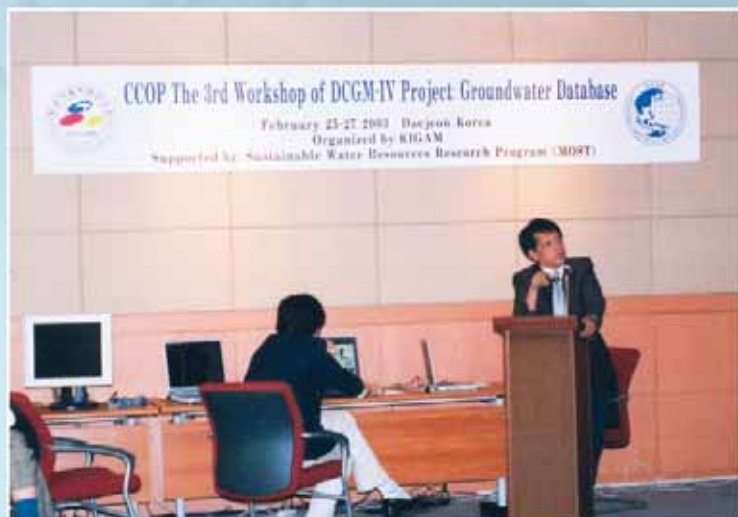
The 1<sup>st</sup> Workshop on "Quantitative Mineral Resource Assessment of Southeast Asia" 10-13 February 2003, Bangkok, Thailand was attended by 14 participants from China, Indonesia, Japan, Korea, Malaysia, Philippines, Thailand, Vietnam, the USGS and CCOP Technical Secretariat. Subsequently, the Working Group communicated the progress of their activities and made consultation and update on the inventory of current known non-fuel mineral resources in the CCOP region and their implication for regional and global mineral supply.



## 2. Digital Compilation of Geoscientific Maps (DCGM) Phase IV

The DCGM Phase IV Project is being supported by the Japanese Government through the Japan-ESCAP Cooperation Fund and the Geological Survey of Japan, AIST. Dr. Eizo Yamada, the DCGM Project Coordinator has completed his term in the CCOP TS. Project Coordination of DCGM IV is now being done by Dr. Yasukuni Okubo at GSJ-AIST in Japan and the CCOP TS.

The groundwater database compilation is being done and is planned to have a link to each of the Member Country's database upon the confirmation of the Member Countries. The web-based groundwater database is now available on-line, with protected password and uploading of data is underway. (<http://www.groundwater.jp/ccop/index.html>) The geothermal database includes an inventory of geothermal resources available in CCOP Member Countries and will be drawn in geologic maps compiled in earlier phases of the project using GIS. Several workshops on groundwater and on geothermal database were held as given below:



- ♦ The 3<sup>rd</sup> Workshop of DCGM Phase IV Project - Groundwater Database was held from 25-27 February 2003 in Daejeon, Republic of Korea in cooperation with Korea Institute of Geoscience and Mineral Resources (KIGAM) and Geological Survey of Japan GSJ-AIST with 10 participants from the Member Countries.
- ♦ In cooperation with the Department of Mineral Resources (DMR) Thailand and GSJ-AIST, Japan, the DCGM IV 4<sup>th</sup> Workshop on Geothermal Database on 5-7 March 2003 was held at the DMR Computer Center, Bangkok, Thailand with 12 participants.
- ♦ The 5<sup>th</sup> Workshop of the DCGM IV Project-Current Status and Geoinformation Network was held in Kuala Lumpur, Malaysia on 7-8 October 2003 with 33 participants from the Member Countries. Experts from the British Geological Survey also participated.

## GEO-RESOURCES SECTOR: ENERGY PROGRAMME

The production of fossil fuels - oil, natural gas and coal or lignite is a very significant revenue earner in a number of the CCOP member countries and the region as a whole is both an important producer and consumer of such products. CCOP programmes in the energy sector has 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. In addition, important projects continue in relation to geothermal energy resources, which are a significant geological source of energy in several CCOP Member Countries.

## 1. Resource Evaluation and Planning Phase II (REP-II) - Exploration Promotion Forum (CCOP-EPF2002)

The REP-II Project is supported by the Government of Norway through NORAD, aiming at technology transfer and human resource development for the oil industries in CCOP Member Countries. The project, which has a total financial support of USD1,660,053.30 is now completed with the submission of the final project report to NORAD in August 2003. The following were achieved:

- ◆ Six workshops dealing with various models and systems of resource management and environment protection for the CCOP Member Countries.
- ◆ Two bilateral training sessions for Cambodia and Vietnam on full cycle analysis of prospects with the use of the GeoX software.
- ◆ Four PETRAD seminars, one each for the Government sector and the National Oil Corporation, dealing with petroleum management specially designed and adapted to the conditions in Vietnam and Cambodia.
- ◆ One Team Building seminar for the CCOP Technical Secretariat.
- ◆ The CCOP Petroleum Resource Classification System and the CCOP Guidelines on Risk Assessment of Petroleum Prospects were developed and published.
- ◆ Holding of the Exploration Promotion Forum (EPF) in Offshore Northern Seas Exhibition, Conference and Festival (ONS2002) in Stavanger, Norway. The CCOP-EPF website was also developed and a dedicated August 2002 issue of the PetroMin Magazine was also published on the petroleum industry of the CCOP region with write-ups for individual Member Countries. A CD-ROM of the CCOP-EPF activities was also published. Under the Project, information and communication facilities in the CCOP TS were upgraded which contributed to efficient dissemination of information and communication.



Overall the Resource Evaluation and Planning project has achieved the objectives. Significant impacts were made by the project activities through providing the governments with techniques of assessing petroleum resources, value and risk assessment and at the same time enhancing the technical expertise and capabilities of personnel in Member Countries through the series of workshops and working groups meetings. The goals of the REP II - EPF have largely been met. Participation to ONS 2002, provided the experience to both the CCOP TS and the Member Countries personnel to handle similar activity to the same level of success or even higher in the future.

In further support to the promotion of the Member Countries' oil and gas industry, CCOP made arrangements for some Member Countries, Malaysia, Philippines, Thailand and Vietnam to participate in the PetroMin Deepwater Technology Conference held in Kuala Lumpur, Malaysia on 14-17 July 2003.

The homepage on Exploration Promotion Forum for CCOP Member Countries <http://www.ccop.or.th/epf> was updated with information provided by the Member Countries.

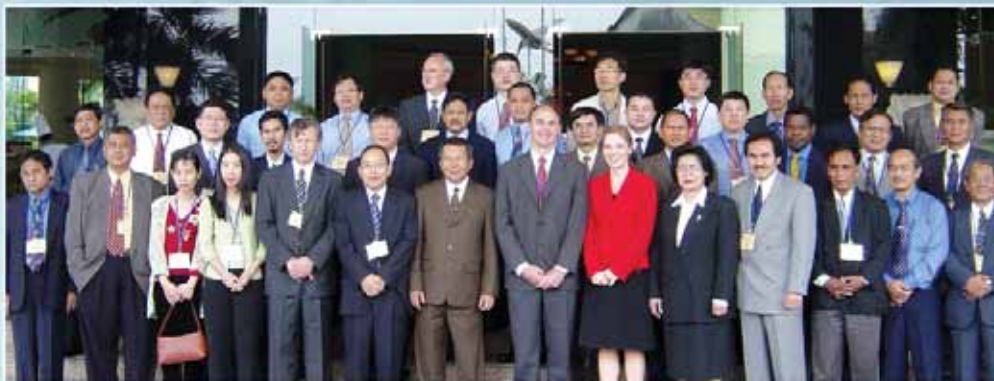
## 2. Petroleum Policy and Management Project (PPM)

The Petroleum Policy and Management (PPM) Project is being supported by the Government of the Kingdom of Norway through NORAD. Mr. Gunnar V. Soiland, a senior geologist with the Norwegian Petroleum Directorate (NPD) is the Project Coordinator. Mr. Simplicio Caluyong, Regional Project Coordinator was recruited from the Philippines in April 2003. After two years, the Regional Project Coordinator will fully assume the responsibility of coordinating the project as part of the project's technology transfer strategy. The PPM Project is now at full implementation. Details of the project can be accessed at the project's homepage at <http://www.ccop.or.th/projects/PPM.html>



## Workshops

- ♦ The 1<sup>st</sup> workshop of the Khmer Basin case study, attended by 21 participants, was held in Phnom Penh, Cambodia on February 23 to March 4. Mr. Yang Dengwei from Sinopec lectured on resource classification, resource assessment and risk assessment. A training on the GeoX software- Risk, Resource and Economic Value Assessment tool was also conducted.
- ♦ The 1<sup>st</sup> workshop of the Sulu Sea case study was held in Manila, Philippines on March 13 to March 18 attended by 31 participants. As part of its aim in using local experts as resource persons for the project, all lectures and training were performed by the Philippines' Department of Energy staff on the following topics: Resource classification, Resource assessment, Risk assessment and GeoX software.
- ♦ The first workshop of the Kutei Basin Case study held in Yogyakarta and Cepu, Indonesia on 21-26 July 2003 attended by 29 participants.
- ♦ The second workshop of the Khmer Basin case study attended by 26 participants was held in Sihanoukville, Cambodia on 25-29 August 2003.
- ♦ The first workshop of the Western Depression of the Sichuan Basin Case study was held in Chengdu, China on 20-25 October 2003 attended by 23 participants.



## Expert Visits/Training Courses

- ♦ As part of the PPM Philippines Case Study, a two-day course on Introduction to Petroleum Economics was organized for the DOE on 22-23 May 2003 in Pasig City, Philippines, attended by 23 participants.
- ♦ IT-training for 3 Cambodian National Petroleum Authority (CNPA) staff was conducted on July 3-4, 2003 on PC hardware and software maintenance, and includes virus control, managing email and web-programs.
- ♦ Petroleum Geology Data Interpretation Course on evaluation and analysis of petroleum data that would lead to an efficient assessment of Cambodia's petroleum resources, was organized for 7 CNPA personnel on 13-15 August 2003.
- ♦ Volumetrics, mapping and digitizing software training for 4 CNPA personnel on 21-23 August 2003 was held.



The 2<sup>nd</sup> PPM Project Seminar was held on 22-25 September 2003 in Pattaya, Thailand. The seminar was attended by 26 participants and covered presentations from the four case studies, exchange of experience, knowledge gained and solving common problems.

Information and communication technology equipment were provided to CNPA Cambodia as assistance for the implementation of the Cambodia case study. CCOP also entered into new maintenance agreement for 4 licenses of GeoX, Risk, Resource and Economic value assessment tool for CNPA-Cambodia, Sinopec-China, Lemigas-Indonesia and CCOP TS.

### 3. CCOP/ASCOPE/PETRAD Programmes

With the technical and financial support of Norway, CCOP/ASCOPE/PETRAD cooperation to undertake activities at the request of CCOP Member Countries remained active and successful. Continued efforts are being exerted and Petrad had been particularly resourceful in soliciting support for the seminars that are being requested by the Member Countries. The CCOP TS is now compiling a list of topics provided by the Member Countries which will serve as the basis to request for support from the government of Norway.

#### During the reporting period, the following seminars were held:

- ◆ 6 February 2003, Workshop on National Competence Requirement in Drilling and Well Technology for the Department of Mineral Fuels (DMF), Thailand in Bangkok, Thailand with 47 participants.
- ◆ 5-6 March 2003, Seminar on Life Cycle Management of Oil/Gas Fields, Sarawak, Malaysia with 57 participants.
- ◆ 2-4 April 2003, Seminar on Risk Management in Shanghai, China with 83 participants.
- ◆ 25-27 June 2003, Seminar on CO<sub>2</sub>, Gas Conservation Effort Towards "Zero Flaring" Target, in Langkawi, Malaysia attended by 44 participants.



*Seminar on Risk Management  
Shanghai, China, April 2-4, 2003*



### 4. CCOP/CPGDP Project on Geological Correlation (WGGC)

Data compilation is on-going in the framework of the Working Group on Geological Correlation (WGGC) Project. Maps and charts for publication are now under review by the compilers and Member Countries before final printing. The Biostratigraphic Zonation Chart of East and Southeast Asia has been published and exhibited at the 20<sup>th</sup> Pacific Science Congress held in Bangkok, Thailand in March 2003.



# GEO-ENVIRONMENT SECTOR

The earth provides us with both the natural resources essential to our development and the basic environment within which all of us will spend our lives. In using the earth's resources to supplying and constructing the requirements of modern civilization we must ensure that we do not compromise the welfare of our population by imposing unacceptable stress and damage on the world that they occupy. In this endeavour, geoscientific knowledge and its application plays a vital role and concern for the environment is an attitude that we must bring to all sectors of CCOP's strategic objectives.

## 1. Development of Techniques on Landslide Hazards Assessment Project

With the support of the Government of the Republic of Korea through the Ministry of Science and Technology, Republic of Korea, 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 1<sup>st</sup> Workshop on development of techniques on landslide hazards assessment using GIS and remote sensing was organized by CCOP and KIGAM from 10-12 March 2003 in Daejeon, Republic of Korea with 15 participants. The Project Coordinator, Dr. Saro Lee of KIGAM, made expert visits to Japan, Indonesia, Malaysia, the Philippines and Thailand. The second phase of the project, August 2003 to July 2004 has started with planning for the 2<sup>nd</sup> Workshop as well as the expert visits to Member Countries.



## 2. RIMSIM and Seminar on Disaster Risk Management

CCOP in cooperation with the Circum Pacific Council (CPC) and Asian Disaster Preparedness Center (ADPC) organized the RimSim simulation and Seminar on Disaster Risk Management on 19-20 November 2003 at Thamassart University, Thailand. RimSim is a conflict negotiation simulation exercise that reflects realistic conditions and events. Given a specific scenario of one natural disaster followed shortly by another, RimSim players are encouraged to explore the problem of dealing with critical and complex issues with others from diverse professional background that might have competing interests, and collaborate in disaster recovery and develop a process for natural disaster mitigation and risk reduction.



A total of 56 attendees from various countries: Azerbaijan, Bangladesh, Bhutan, Cambodia, China, El Salvador, Fiji, Hong Kong, India, Indonesia, Korea, Malaysia, Nepal, Nigeria, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand, USA, and Vietnam participated in this exercise. Prior to the conduct of the exercise, a two-day facilitators training was conducted for 9 local persons from ADPC, CCOP and DMR by resource persons from USA: Drs. David Howell, Bob Barrett and Susan Carpenter.

The RimSim exercise was followed by a one-day seminar on Disaster Risk Management. The participants listened to presentations by resource persons regarding the different issues of disaster risk management covering the pre-disaster, during disaster and post-disaster activities and responses.



# GEO-INFORMATION SECTOR

The systematic collection of geological data leading to the establishment of national geoscience databases and information systems is undertaken by all the Member Countries of CCOP. The knowledge that flows from these activities can make a vital contribution to the objectives for sustainable development within the region. The effective use of the accumulated data, information and knowledge, however, will only be achieved in attaining these objectives if it is archived, processed and communicated to the potential users in ways that are appropriate to their requirements. By further encouraging this trend through training, regional co-operation, sharing of experience, CCOP seeks to stimulate, encourage and support sustainability by placing geoscience information and knowledge as a factor in all regulatory, planning and development decisions which have a potential impact on the environment and societal welfare within the region.

## 1. SANGIS Programme

### *CCOP-CIFEG-ESCAP-UNESCO SANGIS Training: Bibliographic Phase*

During the 1<sup>st</sup> Quarter of 2003, technical visits were made by a CIFEG expert to CCOP Member Countries, Philippines and Papua New Guinea and the implementation and use of the SANGIS Application was discussed. Some of the Member Countries had already forwarded some of their data which were subsequently uploaded to the SANGIS Website.

### *CCOP-CIFEG- UNESCO Workshop on Asian Multilingual Thesaurus*

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 separate electronic thesaurus is also another product under this phase.

After planning and consultation for the Asian Multilingual Thesaurus Programme was conducted by CIFEG and the CCOP TS, the 1<sup>st</sup> Workshop of the SANGIS Asian Multilingual Thesaurus on Geosciences was held in Bangkok Thailand on 26-27 August 2003. The workshop was attended by 9 participants from Cambodia, China, Indonesia, Japan, Korea, Malaysia, Thailand, Vietnam, and Lao PDR.



## 2. 2<sup>nd</sup> International Workshop on CCOP Metadata and Geoinformation

CCOP, GSJ-AIST and KIGAM organized the 2<sup>nd</sup> International Workshop for Geoinformation and CCOP Metadata from 10-12 March, 2003 in Daejeon, Republic of Korea. It was attended by 19 participants from the CCOP Member Countries, as well as Laos. Also present were the representatives from BGS of UK, CIFEG of France and other participants from USA.

Discussions were focused on the implementation of the CCOP Metadata that includes the CCOP metadata format for Geological Maps, metadata input where Member Countries committed to forward an agreed number of metadata records, and the CCOP Metadata clearinghouse prototype which will be demonstrated later to the Member Countries.



## 3. BGS KaR Metadata Dissemination Seminar

CCOP in cooperation with the British Geological Survey organized the Knowledge and Research (KaR) Metadata Project Dissemination Seminar from 9-10 October 2003 in Kuala Lumpur, Malaysia. The seminar was attended by 27 participants from the Member Countries. The participants were familiarized with the Metadata Toolkit developed by the British Geological Survey, which can be customized for use by geoscience organizations. The experts from the British Geological Survey, Drs. John Laxton, Keith Holmes and Emma Bee, served as resource persons of the seminar.



## 4. GRIDNET Programme

The GRIDNET Programme (Geoscience Report and Information Dissemination Network) aims to ensure that information, reports and other products from Cooperating Country and Organisation'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 can be seen in the CCOP Homepage.

## 5. CCOP IT Improvement Plan

Actions have been taken by the Technical Secretariat for the implementation of the CCOP IT Plan. Under the REP-II Project-Exploration Promotion Forum, development of EPF Website and some of the activities in the IT improvement plan had been supported. A new CCOP website was also under development and was nearing completion by the end of the year.



## FELLOWSHIPS AND GRANTS

One of the strategic focuses of CCOP is to contribute in the continued human resource development and institutional capacity building of its Member Countries. In support of this strategic focus, CCOP in cooperation with its Cooperating Countries and Organizations is providing fellowships and research grants to technical personnel in the Member Countries.

### *1. 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 Asia to candidates from the Member Country hosting the CCOP Annual Session. For 2003, the recipient of the award was Ms. Marilah Sarman, a PhD student at the Institute of the Environment and Development, LESTARI, Universiti Kebangsaan Malaysia for her research work entitled "Geological Heritage Resources Database for Conservation and Sustainable Use : The Case of Langkawi Islands". Dr. Ric Terman awarded the grant to Ms. Sarman during the 42<sup>nd</sup> Steering Committee meeting held on 13 October 2003 in Kuala Lumpur, Malaysia.

### *2. 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. Under this programme TAMU will provide 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. She is scheduled to pursue her Master of Science Degree in Petroleum Geology in 2004.

## Mission to Member and Cooperating Countries

Taking the opportunity of the visit to attend the CCOP-NPD (Stavanger, 12 May 2003) and CCOP-NORAD Petroleum Policy and Management Meeting (Oslo, 13 May 2003), the Director of the CCOP Technical Secretariat made a mission to Denmark, France, Belgium, the Netherlands, United Kingdom and Germany, Cooperating Countries of CCOP, from 14-22 May 2003. The Mission involved a short visit to each of the Cooperating Countries. During the visit to Belgium, meetings were held with officials of the EuroGeoSurveys and the European Commission. The meetings have been most fruitful and has provided good information about development assistance to CCOP as well as to its Member Countries. Discussions were also held which presented some good opportunities that can be explored for developing projects and activities. The trip also served to cement closer ties between the CCOP and the Cooperating Countries.

The Director, on behalf of CCOP, would like to thank the Representatives of the Cooperating Countries and their staff for the excellent arrangement and the fine programme made for the visit. They have accorded the warmest of hospitality, close cooperation and assistance that had facilitated greatly the successful completion of the mission.



# Publications

Thirteen newsletters, proceedings and reports were published during the reporting period. The Proceedings of the major project on Petroleum Policy and Management workshops and seminars were published in the PPM Website.

## **CCOP Newsletter Vol. 27 No. 3&4 (July-Dec. 2002)**

Presents highlights of activities for the period July-December 2002.

## **CCOP Newsletter Vol. 28 No. 1&2 (Jan-June. 2003)**

Presents highlights of activities for the period January-June 2003.

## **CCOP Annual Report for year 2002**

Presents a summary of all the activities of CCOP for the year 2002.

## **Proceedings 39<sup>th</sup> CCOP Annual Session Part 1**

Proceedings of the 39<sup>th</sup> CCOP Annual Session Part 1, documentation of the 39<sup>th</sup> CCOP Annual Session Meeting (in CD-ROM).

## **Proceedings of the 39<sup>th</sup> CCOP Annual Session (Part II)**

Special Thematic Session on "Policy and Geoscientific Issues for the Sustainable Development of Geo-Resources; Energy, Minerals and Groundwater" 22-25 October 2002, Yogyakarta, Indonesia (in CD-ROM).

## **Report of the 41<sup>st</sup> Steering Committee Meeting**

A report on the Steering Committee Meeting held in Koh Samui, Thailand on 27-28 March 2003.

## **Report of the 42<sup>nd</sup> Steering Committee Meeting**

A report on the Steering Committee Meeting held in Kuala Lumpur, Malaysia on 13-14 October 2003.

## **Proceedings of DCGM IV Training Course on Groundwater Data Management**

This is a documentation of the DCGM IV Training Course on Groundwater Data Management held on 19-22 November 2002, in Bangkok Thailand (in CD-ROM).

## **Proceedings of the 4<sup>th</sup> Workshop of DCGM IV Project: Geothermal Database**

A documentation of the 4<sup>th</sup> Workshop of DCGM IV Project: Geothermal Database, 5-7 March, 2003 held in Bangkok Thailand (in CD-ROM).

## **CCOP-EPF 2002, Stavanger, Norway**

The CD-ROM include the CCOP-Exploration Promotion Forum for CCOP Member Countries.

## **Proceedings of the 1<sup>st</sup> Seminar of CCOP-USGS Global Mineral Resource Assessment Project**

This is a documentation of the 1<sup>st</sup> Seminar of CCOP-USGS Global Mineral Resource Assessment Project held on 10-13 February 2003, in Bangkok Thailand (in CD-ROM).

## **Report on Petrad Seminar on Life Cycle Management of Gas/Oil Fields**

A documentation of the Petrad Seminar on Life Cycle Management of Gas/Oil Fields held in Miri, Sarawak, Malaysia on 5-6 March 2003 (in CD-ROM).

## **Report on Petrad Seminar on Gas Conservation Efforts Towards "Zero Flaring" Target**

A documentation of the Petrad Seminar on Gas Conservation Efforts Towards "Zero Flaring" Target held in Langkawi, Malaysia on 25-27 June 2003 (in CD-ROM).



# Financial Highlights



## MEMBER COUNTRIES' CASH CONTRIBUTIONS

For the year ended December 31, 2003

(amount in US Dollars)

Member Country	Received in the year 2003		Expected to receive in the year 2004		
	Arrears of 2001-2002 Contribution	2003 Contribution	Arrears of 2001-2002 Contribution	Arrears of 2003 Contribution	2004 Contribution
Cambodia		5,000.00			5,000.00
China	50,000.00			50,000.00	50,000.00
Indonesia 1)			50,000.00	25,000.00	25,000.00
Japan					-
Korea				60,000.00	60,000.00
Malaysia		50,000.00			50,000.00
Papua New Guinea 2)				10,000.00	10,000.00
Philippines 3)	36,524.91	38,656.05	3,475.09	1,343.95	40,000.00
Singapore					-
Thailand		40,000.00			40,000.00
Vietnam		15,000.00			15,000.00
<b>Total</b>	<b>86,524.91</b>	<b>148,656.05</b>	<b>53,475.09</b>	<b>146,343.95</b>	<b>295,000.00</b>

## OTHER CONTRIBUTIONS

Member Country	Amount	Remarks
Thailand	35,000.00	Provision of CCOP Technical Secretariat Premise

1) Contribution for 2001 - 2003 were received after December 2003

2) Contribution for 2003 received after December 2003

3) Partial Contribution received for 2002 and 2003





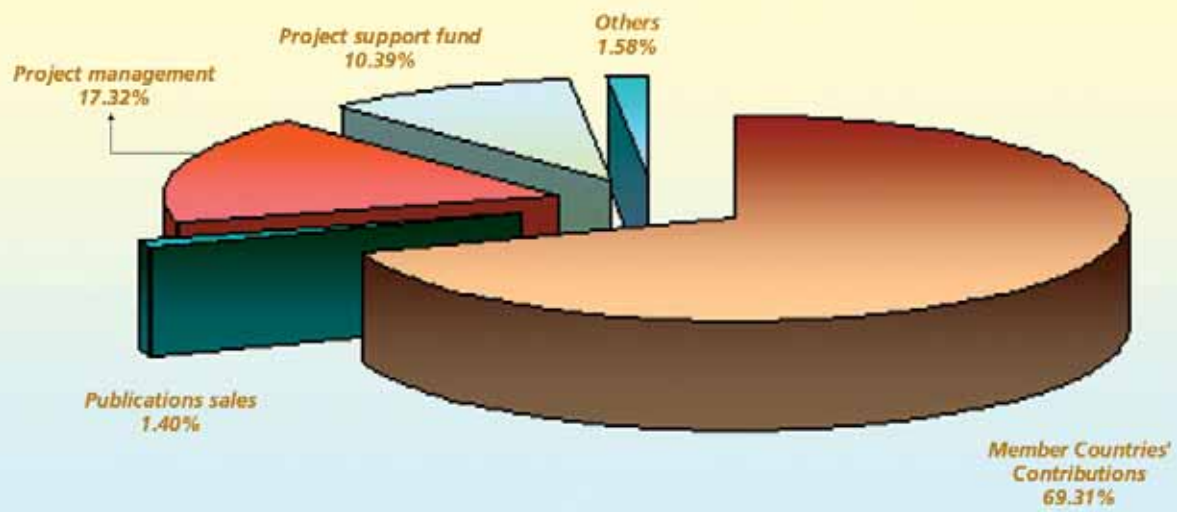
## CCOP FINANCIAL STATEMENT

For the year ended December 31, 2003

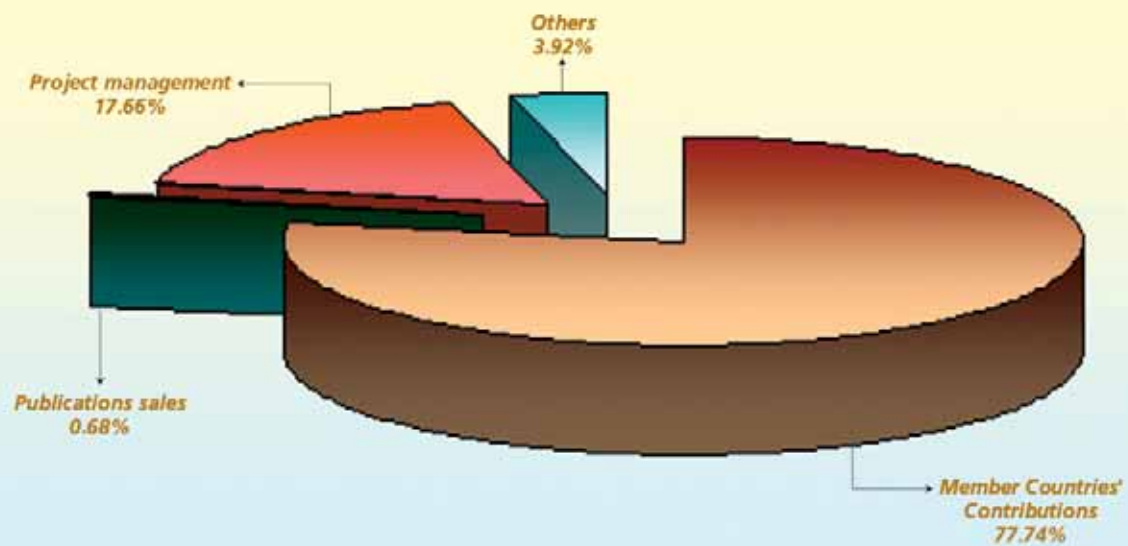
(amount in US Dollars)

	2002	2003
	USD	USD
<b>Fund Balance</b>	<b>359,500.96</b>	<b>390,531.03</b>
<b>Income:</b>		
Member Countries' Contributions	245,589.00	235,180.96
Publications sales	4,969.42	2,044.03
Project management	61,368.96	53,408.27
Project support fund	36,828.32	-
Others	5,601.11	11,866.15
<b>Total Income</b>	<b>354,356.81</b>	<b>302,499.41</b>
<b>Expenditures :</b>		
Personnel expenses	234,170.96	252,432.12
Meeting / travel expenses	43,570.76	47,703.65
General administrative expenses	27,696.19	23,891.44
Publications	9,542.95	6,741.49
Technical activity support	-	100.00
Special expenditures	9,628.93	11,536.07
Others	-	-
<b>Total Expenditure</b>	<b>324,609.79</b>	<b>342,404.77</b>
<b>Income over/(under) expenses</b>	<b>29,747.02</b>	<b>(39,905.36)</b>
<b>Total Fund Balance before adjustment</b>	<b>389,247.98</b>	<b>350,625.67</b>
<b>Adjusting entries</b>		
Unrealized gain/(loss) on exchange rate for Retained Earning	1,283.05	(6,048.85)
Tax payable	-	-
<b>Year-end Balance</b>	<b>390,531.03</b>	<b>344,576.82</b>
<b>Adjustment to reflect actual cash inflow/(outflow) :</b>		
Receivables & Advance	(12,428.65)	(4,877.46)
Office equipment (net)	(31,507.58)	(32,339.55)
Unrealized gain/(loss) on exchange rate from fund transfer	-	-
Account payable	-	-
Tax deductible	442.89	638.03
<b>Year-end Cash Balance</b>	<b>347,037.69</b>	<b>307,997.84</b>

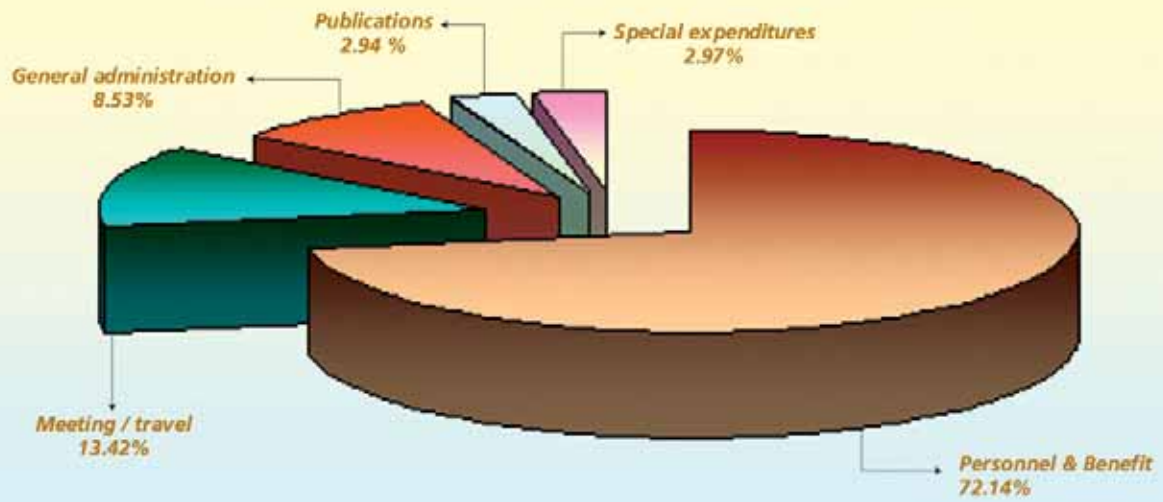
## Income for the year 2002



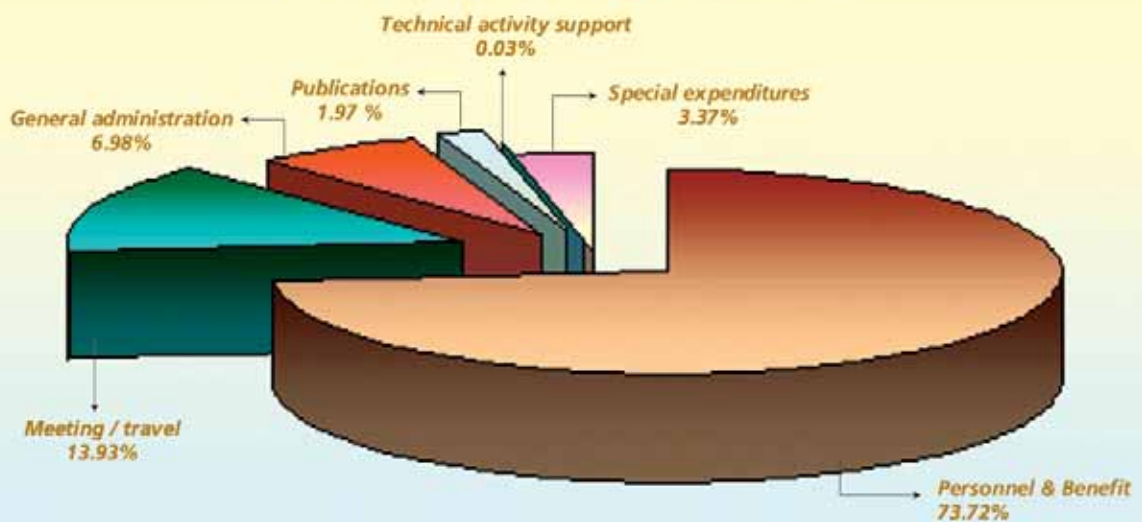
## Income for the year 2003



## Expenditure for the year 2002



## Expenditure for the year 2003





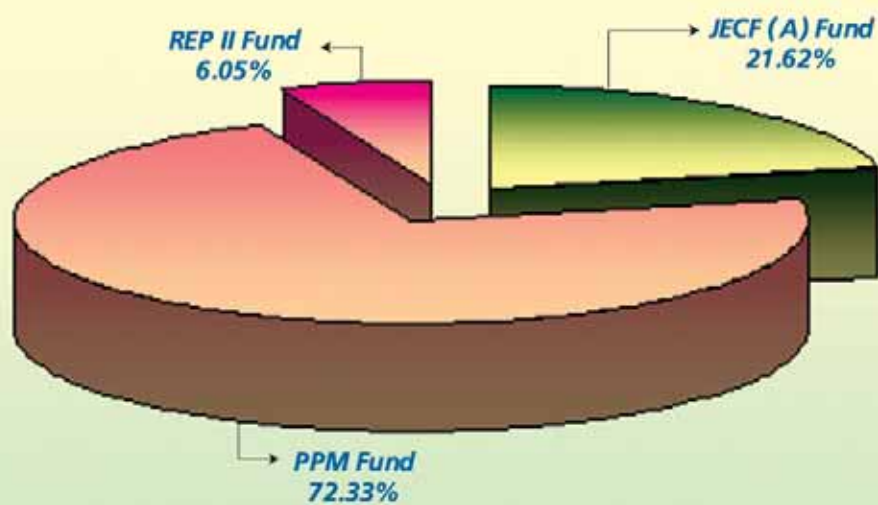
## CCOP PROJECTS FINANCIAL STATEMENT

For the year ended December 31, 2003

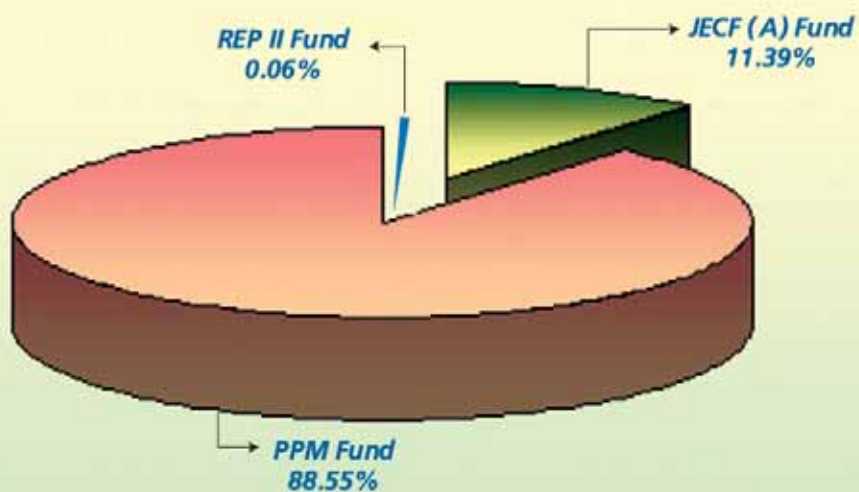
(amount in US Dollars)

	JECF (A) Fund		PPM Fund		REP II Fund	
	2002	2003	2002	2003	2002	2003
<b>Fund Balance</b>	58,154.74	84,207.24	-	323,272.94	173,386.23	23,118.91
<b>Income :</b>						
Received from Fund	58,499.12	-	610,697.06	443,877.65	39,947.00	-
Others	837.15	2,398.00	629.55	8,936.15	8,756.51	278.49
<b>Total Income</b>	<b>59,336.27</b>	<b>2,398.00</b>	<b>611,326.61</b>	<b>452,813.80</b>	<b>48,703.51</b>	<b>278.49</b>
<b>Expenditures :</b>						
Technical Activities Expenses	33,183.63	54,898.74	290,197.72	490,549.37	201,428.50	23,231.95
<b>Total Expenditure</b>	<b>33,183.63</b>	<b>54,898.74</b>	<b>290,197.72</b>	<b>490,549.37</b>	<b>201,428.50</b>	<b>23,231.95</b>
<b>Income over/(under) expenses</b>	<b>26,152.64</b>	<b>(52,500.74)</b>	<b>321,128.89</b>	<b>(37,735.57)</b>	<b>(152,724.99)</b>	<b>(22,953.46)</b>
<b>Adjusting entries :</b>						
Unrealized gain/(loss) on exchange rate for Retained Earning	(100.14)	(1,671.89)	2,144.05	(7,770.07)	2,457.67	3.47
<b>Year-end Balance</b>	<b>84,207.24</b>	<b>30,034.61</b>	<b>323,272.94</b>	<b>277,767.30</b>	<b>23,118.91</b>	<b>168.92</b>
<b>Adjustment to reflect actual cash inflow/(outflow):</b>						
Tax deductible	-	-	74.31	-	312.17	-
Advance	-	-	(43,208.88)	(44,252.79)	-	-
Remittance to CCOP General Fund	-	-	-	-	-	-
Office equipment (net)	(447.31)	(0.05)	-	80.23	-	-
<b>Year-end Cash Balance</b>	<b>83,759.93</b>	<b>30,034.56</b>	<b>280,138.37</b>	<b>233,594.74</b>	<b>23,431.08</b>	<b>168.92</b>

## Project Cash Balance for the year 2002



## Project Cash Balance for the year 2003



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--

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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.*

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