

Regional Meeting on National Planning, Selection and Design of IAEA TC Projects

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ISSUES AND CHALLENGES FOR RCA PROGRAMME

**Dr Razley Mohd Nordin,
Malaysian Institute for Technology Research (MINT)**

Outline of Presentation

- **Background**
- **SWOT analysis**
- **Needs**
- **Procedures**
- **Roles and responsibilities of stakeholders**
- **2007 – 2008 Programme**

BACKGROUND

- Member States
- Vision and Mission
- Basic Principles
- Stakeholders

What is RCA?

RCA - Regional Cooperative Agreement for Research, Development and Training for South Asia, South East Asia and the Pacific or the Far East Region.

RCA is an intergovernmental agreement established under the auspices of the IAEA.

RCA Logo



17 RCA Member States



Australia
Bangladesh
People's Republic of China
India
Indonesia
Japan
Republic of Korea
Malaysia
Mongolia
Myanmar
New Zealand
Pakistan
Philippines
Singapore
Sri Lanka
Thailand
Vietnam

RCA Vision

**THE RCA SHALL STRIVE TO BECOME A
RESPECTED REGIONAL RESOURCE COMMUNITY
IN NUCLEAR SCIENCE AND TECHNOLOGY,
COMPETENT AND COST EFFECTIVE IN
PROVIDING HIGH IMPACT SOLUTIONS ON A
SUSTAINABLE BASIS TO SOCIO-ECONOMIC
DEVELOPMENT PROBLEMS FOR IDENTIFIED
END-USERS WITHIN THE REGION AND MEMBER
STATES**

RCA Mission

THE GOVERNMENTS PARTY TO THE RCA AGREEMENT UNDERTAKE, IN COOPERATION WITH EACH OTHER AND THE AGENCY, TO PROMOTE AND COORDINATE COOPERATIVE RESEARCH, DEVELOPMENT AND TRAINING IN NUCLEAR SCIENCE AND TECHNOLOGY THROUGH THEIR APPROPRIATE NATIONAL INSTITUTIONS.

Basic Principles

The implementation of the RCA Agreement shall be governed by the following principles:

(a) The responsibility of formulating the RCA programme lies with the Member States;

(b) Member States have full responsibility and autonomy to agree on their priorities and the projects to be included in the programme;

(c) Member States parties to this Agreement have equal rights in the decision-making process of the RCA programme;

Basic Principles

- (d) Each Member State shall use the assistance provided to it under the RCA Agreement solely for peaceful purposes;**
- (e) In accordance with its applicable laws and regulations, each Member State shall ensure that the IAEA's safety standards and measures are applied;**
- (f) Activities undertaken in the framework of the RCA Agreement shall promote Technical Cooperation among Developing Countries (TCDC);**
- (g) The formulation, design and implementation of the RCA programme and projects shall maximise the use of available regional expertise and existing infrastructural facilities.**

Objectives

The objective of the programme is the promotion and coordination of cooperative research, development and training projects in nuclear science and technology.

It covers subjects in the fields of isotope and radiation applications in agriculture, human health, industry, hydrology, terrestrial and marine environments, and radiation safety, waste management, nuclear energy, and nuclear safety.

Roles and Obligations of RCA Member States

- (a) Make available to the RCA programme such physical infrastructure and personnel;**
- (b) Take the necessary measures to ensure that personnel from other participating Member States are able to participate effectively in the activities carried out on its territory, and also to ensure that its own nationals are able to take part in activities that are to be carried out in other Member States;**
- (c) Contribute financially;**
- (d) Submit an annual report on all aspects of the activities it has carried out in the framework of the RCA programme;**

Roles and Obligations of RCA Member States

- (e) Decide upon the internal organisation that will best enable it to execute its part of the cooperative projects:**
 - **A National RCA Representative;**
 - **National RCA Support Staff who shall assist the National RCA Representative; and**
 - **A National RCA Project Coordinator for each cooperative project;**

- (f) Participation in the RCA cooperative projects.**

RCA Stakeholders

- NATIONAL REPRESENTATIVES
- THEMATIC SECTOR LCCS
- PROJECT LCCS
- NATIONAL PROJECT COORDINATORS
- PROJECT TEAMS
- RCA CHAIRPERSON
- RCARO
- RCA COORDINATOR

Thematic Sectors

	Sector	Lead Country
1.	Agriculture	China
2.	Energy	Rep. of Korea
3.	Environment	New Zealand
4.	Human Health	Japan
5.	Industry	India
6.	Radiation Protection	Australia
7.	Research Reactor Utilization	Rep. of Korea
8.	Electronic Networking and Outreach	Malaysia

RCA OTHER INFRA STRUCTURES

- RCA REGIONAL OFFICE – ROK
- REGIONAL RESOURCE UNITS (RRUs)
- WEBSITES: Members only
 Public Access
 Regional
- REPOSITORY OF DOCUMENTS

SWOT ANALYSIS

STRENGTH

- WELL ESTABLISHED NETWORK OF SCIENTISTS TRAINED IN THE APPLICATION OF NUCLEAR TECHNOLOGY, WHO HAVE ACCESS TO INFRASTRUCTURAL FACILITIES NEEDED TO APPLY NUCLEAR TECHNOLOGY

WEAKNESS

- HIGH DEGREE OF DEPENDENCE ON THE TECHNICAL COOPERATION FUND OF THE IAEA (80%)
- NEED TO INCREASE ALTERNATIVE SOURCES OF FUNDING THROUGH ESTABLISHMENT OF PARTNERSHIPS

OPPORTUNITIES

- MOST OF THE MEMBER STATES ARE DEVELOPING COUNTRIES
- THE OPPORTUNITY TO CONTRIBUTE TO SOLVING DEVELOPMENT ISSUES IN THE MEMBER STATES

THREAT

- FULFILLMENT OF THE RCA VISION
- ENSURING THE FINANCIAL SUSTAINABILITY OF THE PROGRAMME

NEEDS

- STRENGTHENING THE ABILITY TO IDENTIFY PROJECTS LEADING TO HIGH SOCIO-ECONOMIC IMPACT
- STRENGTHENING THE CAPABILITY TO PROVIDE SOLUTIONS TO DEVELOPMENT PROBLEMS
- EARNING RECOGNITION AS A PARTNER IN DEVELOPMENT

STRENGTHENING THE ABILITY TO IDENTIFY PROJECTS LEADING TO HIGH SOCIO-ECONOMIC IMPACT

PROCEDURE FOR SELECTION OF RCA PROJECTS

SHOULD ENSURE:

- THE PROJECTS ARE BASED ON DEVELOPMENT NEEDS AND NOT TECHNOLOGY DRIVEN
- WILL LEAD TO SOCIO-ECONOMIC BENEFITS
- ARE SUSTAINABLE
- CAN BE IMPLEMENTED WITH THE AVAILABLE RESOURCES
- SELECTION OF A LIMITED NUMBER OF HIGH IMPACT PROJECTS.

STRENGTHENING THE CAPABILITY TO PROVIDE SOLUTIONS TO DEVELOPMENT PROBLEMS

PROJECT IMPLEMENTATION AND MONITORING

- NEED FOR NATIONAL WORK PLANS LINKED TO THE REGIONAL WORK PLAN
- APPOINTMENT OF PROJECT TEAMS
- PROGRESS MONITORING
- PREPARATION OF PROJECT ACHIEVEMENT REPORTS

EARNING RECOGNITION AS A PARTNER IN DEVELOPMENT

- EARNING RECOGNITION THROUGH
PUBLICIZING RCA SUCCESS STORIES
- ATTRACTING NEW FUNDING SOURCES
- RESPONSIBILITY - RCARO

PROCEDURE FOR SELECTION OF PROJECTS

- SUBMISSION OF CONCEPT PAPERS
- APPROVAL BY THE REGIONAL NRM BASED ON THE RECOMMENDATION OF THEMATIC SECTOR LCCS
- DEVELOPMENT OF DETAILED PROJECT PROPOSALS BY THE PROJECT LCCS
- APPROVAL BY THE NRS AT THE GC MEETING WITH RECOMMENDATION OF THEMATIC LCCS
- SUBMISSION TO DONOR AGENCIES

ROLES AND RESPONSIBILITIES OF THEMATIC SECTOR LCCS

- **ENSURE PROJECT PROPOSALS COMPLY WITH RCA STRATEGIC OBJECTIVES AND MEET THE REQUIREMENTS OF FUNDING AGENCIES**
- **ASSIST PROJECT LCCS TO PREPARE PROJECT PROPOSALS**
- **MONITOR IMPLEMENTATION OF THE PROJECTS IN EACH THEMATIC AREA THROUGH REPORTS OF PROJECT LCCS**
- **SUBMIT ANNUALLY A PROGRESS REPORT OF PROJECTS IN EACH THEMATIC SECTOR FOR CONSIDERATION OF NATIONAL RCA REPRESENTATIVES**
- **ADVISE NATIONAL RCA REPRESENTATIVES ON THE MANAGEMENT ASPECTS OF THE THEMATIC SECTOR PROGRAMME**
- **PARTICIPATE IN LCC MEETINGS**

OBJECTIVES OF THE LCC MEETING

- REVIEW OF THE ONGOING PROJECTS
- IDENTIFICATION OF PRIORITY AREAS FOR EACH THEMATIC SECTOR
- REVIEW AND REVISE WORK PLANS TO ENSURE MEETING OF PROJECT OBJECTIVES

Projects approved by RCA NRM for 2007 - 2008

Agriculture

1. Agr 5: Improvement of Crop Quality and Stress Tolerance for Sustainable Crop Production by Mutation Techniques and Biotechnology
2. Agr 8: Novel Applications of Food Irradiation Technology for Improving Socio-economic Development
3. Agr 6: Characterization of Small Ruminant Genetic Resources to Improve Their Productivity and Disease Resistance in RCA Countries

Projects approved by RCA NRM for 2007 - 2008

Health Care

1. HH5: Application of high-precision 3D. radiotherapy for predominant cancers in the RCA region
2. HH1: Upgrading Nuclear Medicine Technologist Training –Australia
3. HH6: Strengthening Medical Physics through Education and Training
4. HH3: Development of precursors and development of fast chemical synthesis
5. HH4: PET and PET/CT Quality Control and Physician, Technologists and Chemist Training Course
6. HH7: Developing advanced radio-diagnostic techniques to evaluate post-treatment response to chemotherapy, tumour apoptosis, and extension of FDG PET studies as a successful mode for screening epileptic patients and also for tumour studies in paediatric patients
(The three proposals to be combined)

Projects approved by RCA NRM for 2007 - 2008

Industry

1. IND4: New Applications of Nucleonic Analysis Systems (NAS) in Minerals and Resources Industries
2. IND10: Development and Applications of Advanced Industrial Radiography and Tomography Techniques
3. IND5: Radiation Processing applications for Health and Environment
4. IND7: Intensification of Industrial Productivity and Improving Environment Using Radiotracer and Sealed Source Technologies

Projects approved by RCA NRM for 2007 - 2008

Environment

1. ENV2: Characterization and source identification of Air Particulate Pollution in the Asian Region and its trans-boundary, visibility, climate change, and health impacts and consequences
2. ENV1: Establishing a benchmark for assessing the radiological impact of nuclear power activities on the marine environment in the Asia-Pacific region
3. Env 5: Assessment of trends in freshwater quality using environmental isotopes and chemical techniques for improved resource management
4. ENV3: Impact of heavy-elements on water pollution in the Asian Region"

Projects approved by RCA NRM for 2007 - 2008

Research Reactors

1. RR3 – Increase of Material Value by Neutron Irradiation
2. RR2 - Advances in Probabilistic Safety Assessment of Research Reactors and their Application (Revised)
3. RR1 – Severe core damage analysis code development for research reactor with flat plate fuels

Projects approved by RCA NRM for 2007 - 2008

Radiation Protection

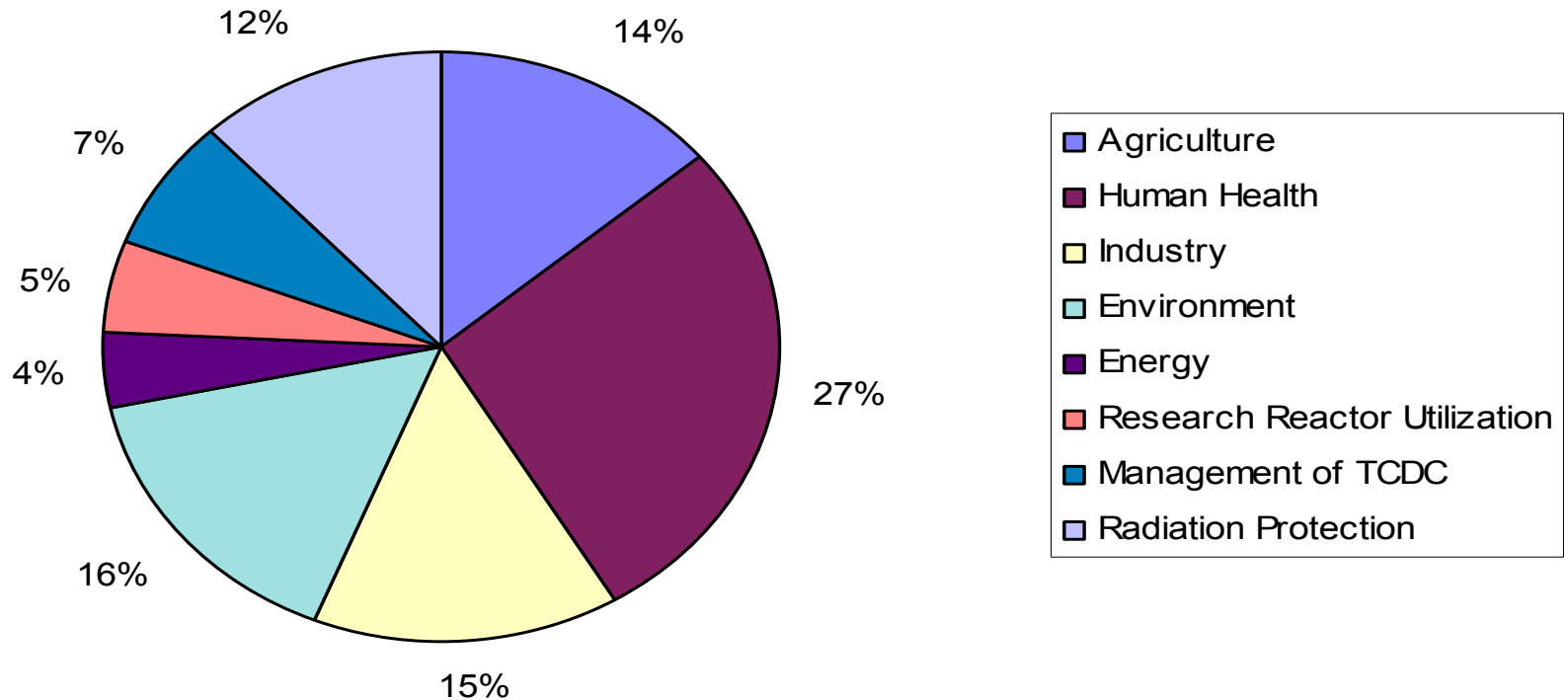
1. RP1-Sustainability of Regional Radiation Protection Infrastructure

Energy

1. Eng 1 - Formulation of Sustainable Energy Development Strategies under Framework of Climate Changes

FUNDS ALLOCATION IN 2005

ALLOCATION OF FUNDS BY SECTOR



**THANK YOU
FOR
YOUR ATTENTION**