

## RCARO 2015 Work Performance

	Target	Activities	Milestone				Performance Indicators	Status
			QT 1	QT 2	QT 3	QT 4		
1	Increasing the awareness of the RCA	1.1. Publicity activities for increasing RCA's awareness	—————				1.1.1. Publication of the 6 <sup>th</sup> batch of RCA success stories	On-going - Drafts will be presented at the 38 <sup>th</sup> NRM
			—————				1.1.2. Updating RCA promotional video	Done - Updated video was presented at the 37 <sup>th</sup> NRM. A short version was also produced and uploaded on YouTube and the RCA website
		1.2. Enhanced RCA information service through the RCA website	—————				1.2.1. Enhanced web service with improved access system	Done - Held an expert meeting on 15-16 June 2015 in Busan Korea, inviting 11 participants
			—————				1.2.2. Updating data on RCA and RCA projects	Done - Updated data on RCA meetings and projects



3	Implementation of RCA/UNDP partnership project on nuclear imaging technology	3.1. Monitoring and submission of progress report	■	■	■	3.1.1. Preparation and submission of progress report to the GPs and the UNDP	Partly done - Unable to monitor the progress in full scale due to limited information received from the participated countries
4	Implementation of RCA/UNDP partnership projects on electron beam (EB) applications	4.1. Conducting a Regional Training Course (RTC) on environmental remediation	■			4.1.1. Conducting a RTC of electron beam applications on environmental remediation	Done - Held on 11-22 May, training 23 participants
		4.2. Holding a final review meeting			■	4.2.1. Holding a final review meeting	Done - Held on 28-29 Oct in Siem Reap, Cambodia, inviting 21 participants
		4.3. Monitoring and submission of progress report	■	■	■	4.3.1. Preparation and submission of the progress/annual and financial reports to the UNDP and UNOPS	Done - Submitted the reports to the UNDP and UNOPS
		4.4. Publication of a final report			■	4.4.1. Publication and distribution of a final report of the project	On-going - Final report will be published in early 2016.

5	Enhancing and exploring partnerships with regional/ international organizations	5.1. Participation in the PEMSEA meeting  5.2. Participation in the 16 <sup>th</sup> FNCA Coordinators meeting				■	5.1.1. Participation in the PEMSEA/EAS Congress meeting  5.2.1. Participation in the 16 <sup>th</sup> FNCA Coordinators meeting	Postponed - Not being able to attend due to tight schedule and limited resource  Done - Participated in the meeting on 4-5 March in Tokyo, Japan
6	Assisting the GPs in addressing regional and national needs	6.1. RCARO/KAIST Nuclear Engineering Master's Degree Course  6.2. RCARO/ARCCNM training course  6.3. RCARO/KAERI regional training workshop	■	■	■	■	6.1.1. Supporting the RCARO/KAIST Master's Degree Course  6.2.1. Holding the RCARO/ARCCNM training course  6.3.1. Holding the RCARO/KAERI regional training workshop	Done - Supported 2 students from INS and MYA  Done - Supported the training course held on 31 Oct to 4 Nov, in Jeju, Korea  Done - Supported 15 trainees in the workshop held on 12-23 Oct
7	Increased interaction between the	7.1. RCARO Fellowship Programme	■	■	■	■	7.1.1. Inviting temporary staff from the GPs to the RCARO	Done - Two were invited from MON, BGD.

	GPs and the RCARO	7.2. Holding a workshop on enhancing RCARO interactions with GPs	■			7.2.1. Holding a workshop on enhancing RCARO interactions with GPs	Done - Replaced by the 2 <sup>nd</sup> Working Group Meeting on the RCARO's future role
8	RCARO's future role	8.1. Holding working group meeting(s) on RCARO's future role	■			8.1.1. Holding WG meeting(s) to discuss further in line with outcomes of the 1 <sup>st</sup> WG meeting	Done - Held the 2 <sup>nd</sup> Working Group Meeting on the RCARO's future role on 20-22 January, inviting 20 participants
9	Other activities	9.1. Participation in the RCA policy related meetings	■	■		9.1.1. Participation in the 37 <sup>th</sup> NRM and 44 <sup>th</sup> GCM	Done - Participated in the 37 <sup>th</sup> NRM and 44 <sup>th</sup> GCM
		9.2. Participation in an expert meeting on RCA	■			9.2.1. Participation in the meeting on RCA MTS 2018-2023	Done - Participated in the meeting on 16-23 Feb. in Vienna, Austria
		9.3. Extra-Budgetary(EB) contribution of the RCARO to the IAEA			■	9.3.1. EB contribution of the RCARO to the IAEA	Done - Contributed USD210,000 to support RAS6083

# **RCARO 2015 Work Performance**

## **1. Increasing the awareness of RCA**

### **1.1. Publicity activities for increasing RCA's awareness**

#### **1.1.1. Publication of the 6<sup>th</sup> batch of RCA success stories**

Since 2007, RCARO has published 5 batches of RCA Success Stories with the aim of increasing the visibility of RCA under its mandate: a total of 19 including 3 leaflets for agriculture, 5 leaflets and 2 booklets for environment, 2 leaflets and 1 booklet for health, 3 leaflets for industry, 2 leaflets for energy and 1 leaflet for radiation protection.

Based on the revised mechanism and procedure approved by the 37<sup>th</sup> NRM in 2015, information on candidate projects which had been successfully completed between 2013 and 2014 was provided by RCA-FP to the SAC members for prioritization. The 21<sup>st</sup> SAC and the 44<sup>th</sup> GCM endorsed that two success stories be published from industry and medical sector: one success story from RAS 1012, and one combined success story from RAS 6064 and RAS 6066.

According to the procedure, drafts were prepared by the relevant LCCs and are in the process of revision by RCARO in cooperation with the LCCs. A revised version will be circulated to NRs, RCA-FP, RCA experts for comments. Reflecting comments received, a final version will be prepared and presented to the 38<sup>th</sup> NRM for the endorsement.

#### **1.1.2 Updating RCA promotional video**

Since its production in 2011, the RCA promotional video has been used effectively at the regional/international events to promote the RCA and its activities and also in the Government Parties (GPs) for their promotional uses at national level.

RCARO made an overall update and upgrade of the video to reflect changes of National Representatives and introduce new Government Parties and RCA projects. The updated video was presented at the 20<sup>th</sup> SAC and the 37<sup>th</sup> NRM for their consideration.

In addition, according to the suggestion of the 20<sup>th</sup> SAC to consider producing a 3 minute long video to be uploaded on the website of the Government Parties and IAEA as well as on the social network websites, RCARO has produced a short version that contains only core part of the original version. Finalized videos in full and short versions were uploaded on YouTube and the RCA website.

Below are the links to the RCA promotional videos on YouTube:

- Full version: <https://www.youtube.com/watch?v=4bh5kWGKTzc>
- Short version : <https://www.youtube.com/watch?v=peCWkR7vkAM>

## **1.2 Enhanced RCA information service through the RCA Website**

RCARO has continued to enhance the RCA information service through maintaining and updating the information on RCA and its activities on the RCA website.

### **1.2.1 Enhanced web service with improved access system**

Since its renewal in July 2011, RCARO has provided RCA information service through the RCA website, providing up-to-date information on RCA and a platform for communication and information sharing among users.

With more than 3 years of its experience of the website operation, RCARO presented a working paper on the enhancement of the RCA web information service to review and identify means to improve the current RCA information service at the 37<sup>th</sup> NRM for consideration of the NRs. The 37<sup>th</sup> NRM approved the working paper to improve RCA website information service including making a public version of RCA Annual Report to be uploaded on the RCA website through formulation of guidelines by the SAC.

As a follow up, RCARO held an expert meeting on “Establishment of Guidelines for Enhancement of the RCA Information Service” on 15-16 June 2015 in Busan, Korea, inviting experts and relevant stakeholders from MAL, PAK, PHI and SRL. The meeting consisted of the following four sessions:

- Session I: Review of the RCARO’s Working Paper on Enhancement of the RCA Website information Service

- Session II: Guideline on Designation of a RCA Website Administrator (RWA) in Each GP
- Session III: Discussion on Efficient Provision of RCA Information by the IAEA and GPs
- Session IV: Discussion on a Public Version of RCA Annual Report

Through discussions and deliberations of each agenda item, the meeting made recommendation on efficient provision of the RCA information by the GPs and IAEA and guidelines on designation of RWA and on a public version of the RCA Annual Report together with an example report. In line with the conclusions and recommendations, the meeting also set up follow-up action plan for designation of RWA, publication of the public version of RCA Annual Report and development of a RWA's administration webpage and its manual. The report was presented to the 44<sup>th</sup> GCM and approved by the NRs.

Upon approval, RCARO will make necessary arrangements for implementation of the follow-up activities accordingly.

### **1.2.2 Updating data on the RCA and RCA projects**

RCARO has updated information on the RCA and RCA projects; policy meetings (NRM, GCM), RCA projects, news of the Government Parties and related policy documents on the website.

### **1.2.3 Updating data on RCA stakeholders and end-users by the Government Parties**

Assisted by the temporary staff, RCARO updated the data of the Government Parties and related stakeholders on the RCA website.

## **1.3 Participation in regional/international events and support for the promotion of RCA activities**

RCARO has made its efforts to promote the RCA and its activities to target audiences in the beneficial application of nuclear science and technology and to further explore partnerships with regional and international organizations.

### **1.3.1. Presentation and exhibition on RCA/RCARO activities to target audiences**

Upon the approval of the 43<sup>rd</sup> GCM, RCARO has participated in the following conferences. The RCA brochure, Success Stories and promotional video were used for promotional purposes in

those events:

- 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto, Japan
- International NDT Conference and Exhibition, 23-25 November 2015, Kuala Lumpur, Malaysia

For effective promotion, local experts in the related field were arranged by the NR of JPN and MAL to support RCARO at the above conferences. Their technical contribution proved to be highly beneficial and effective for promotion of the RCA to the related experts and local community.

With regards to the Applied Isotope Geochemistry Conference held on 21- 25 September 2015 in Orléans, France, RCARO was not able to participate in the event due to a tight schedule and limited resource of the RCARO.

There were also promotional activities by the NR of AUL and NZE, for which RCARO supplied RCA promotional materials to support their promotional activities. They displayed RCA poster and distributed RCA brochures and relevant Success Stories to the participants of the following conferences:

- Australasian Environmental Isotope Conference held on 8-10 July 2015 in Sydney, Australia (by NZE)
- The 11th Australian Nuclear Association (ANA) Conference, 9 October 2015, Sydney, Australia (by AUL)

For the 2016 plan, according to the recommendation of the 18th SAC to conduct a survey and present its results on possible conferences at the SAC before the GCM in the year before the conferences will be held, RCARO conducted a survey of NRs and IAEA and collected information on 17 conferences from CPR, NZE, THA and VIE including its own survey done by RCARO.

Amongst the 17 events, the 44<sup>th</sup> GCM approved the two conferences below for RCARO's participation in 2016:

- The 20th Pacific Basin Nuclear Conference , 5-9 April 2016, Beijing, China
- 2016 International Nuclear Science and Technology, August 2016, Bangkok, Thailand

In consideration of its budget availability and schedule, RCARO will make necessary arrangements for its participation to the conferences.

### **1.3.2. Support RCA experts for increasing awareness and promotion of RCA**

RCARO has provided support for RCA experts in their activities which could enhance awareness of the RCA and its activities.

For the cycle from September 2014 to August 2015, RCARO successfully supported selectees from CPR and INS for their participation and RCA promotional activities at the international conferences held in April and June 2015 respectively.

With regards to the cycle from September 2015 to August 2016, RCARO invited the Government Parties for nominations of appropriate RCA experts and received a total of 15 nominations from 6 countries (AUL, BGD, INS, SRL, THA and VIE). According to the guideline, RCARO selected 4 selectees from AUL, INS, SRL and VIE in consultation with the SAC.

Selectees from AUL and SRL were supported for their RCA promotional activities at the international conferences held in November and December 2015 respectively.

The other two from INS and VIE will be supported in the first half of 2016 accordingly.

## **2. Implementation of Pilot Project**

### **2.1 Finalizing project documents for the RCA Programme Cycle 2016-2017**

As decided at the 43<sup>rd</sup> GCM, RCARO, as the LCC, will initiate a pilot project entitled “Improving patient care and enhancing Government Parties capacity in nuclear medicine programs in RCA region” from the RCA Programme Cycle 2016-2017.

According to the decision of the 37th NRM on finalizing project documents, RCARO finalized the project documents in consultation with the PMO and relevant experts and submitted them to the RCA Chair through the NR of ROK in due course.

### **3. Implementation of RCA/ UNDP partnership project on nuclear imaging technology**

#### **3.1 Monitoring and submission of progress report**

The RCA/UNDP partnership project on nuclear imaging technology had been implemented successfully for three years in 2011~2013. As recommended by the 17<sup>th</sup> SAC to monitor the impact and sustainability of the project for 2 years after its completion, RCARO requested NPCs of the project for submission of the progress reports. However, only 3 out of 13 countries submitted reports to RCARO.

Due to limited information from the participated countries, RCARO was not able to monitor the impact of the project in full scale but partly in 2015.

According to the reports from MON, PAK, and PHI, a total of 16 national activities such as training courses, workshops and scientific meetings were carried out engaging approximately 770 local participants to transfer knowledge and skills and promote nuclear imaging technologies. Mongolia set up a plan to establish a PET/CT. Pakistan actively implemented training programmes for young physicians in cooperation with local universities and it's reported that there was a success story on accurate diagnosis of a 67 year old cancer patient with bone pain and fractures in the Philippines.

### **4. Implementation of RCA/ UNDP partnership project on Electron Beam (EB) applications**

#### **4.1 Conducting a Regional Training Course (RTC) on environmental remediation**

According to the 2015 Work Plan, one RTC on basic and advanced knowledge and hands-on experiment on electron beam applications for degradation of environmental pollutants in the Asia Pacific region was conducted on 11-22 May 2015, inviting 23 participants from 12 participating countries. The training course provided trainees with not only the relevant techniques but also new ideas on how to use and apply those techniques in the field. The hands-on experiments designed in the RTCs provided an excellent platform for researchers to improve their skill and advanced knowledge.

#### **4.2 Holding a Final Review Meeting**

As decided at the annual review meeting in 2014 and upon the confirmation of the Government of Cambodia for its hosting the event, the Final Review Meeting was held on 28-29 October in Siem Reap, Cambodia, inviting total of 21 participants including LCC, Regional Coordinator of the United Nations Office for South South Cooperation (UNOSSC), and NPCs from participating Government Parties.

NPCs presented final report of their national activities and outcomes during the implementation period of the project. The meeting reviewed and evaluated the overall outcomes and outputs of the project. Also, the meeting discussed follow-up actions for further distribution and development of the EB technology after completion of the project. Opinions on the extension of the project were raised, considering the increase in the establishment of EB facilities and in the use of the EB technology. The meeting also drafted the final progress report which would be finalized and distributed to relevant stakeholders in the due course.

#### **4.3 Monitoring and submission of the progress/annual and financial reports**

In 2015, involving around 1,013 participants, 14 participating countries conducted national activities such as R&D activities, training courses, workshops, seminars, and meetings to disseminate the gained knowledge and skills to their local institutes and industries.

Conforming to the UNDP rules and regulations, 2015 Progress/Annual Reports and Financial Reports of the project were submitted to the UNDP and UNOPS in July and December 2015.

#### **4.4 Publication of a final report**

Upon completion of the project, RCARO is in the process of publishing a final report on the activities, outcomes and achievements of the project in cooperation with LCC and NPCs. The report will be distributed to the related stakeholders such as Government Parties, UNDP, IAEA, etc.

## **5. Enhancing and exploring partnerships with regional/international organizations**

### **5.1 Participation in the PEMSEA meeting**

As part of its effort to explore partnerships, RCARO planned to participate in the PEMSEA East Asian Seas (EAS) Congress in November, Danang, Vietnam to seek possibility to build a partnership with the PEMSEA through project development and/or information sharing on relevant issues for feasible partnerships.

But due to overlapped schedule with the International NDT Conference and Exhibition in Malaysia for which the SAC recommended to participate for promotional activities, RCARO was not able to attend the Congress. Although RCARO could not materialize the idea of developing partnership with the PEMSEA this time, RCARO will continue to put its efforts in seeking opportunities for partnership with the PEMSEA in future.

### **5.2 Participation in the 16<sup>th</sup> FNCA Coordinators meeting**

On behalf of the RCA, the Director of RCARO has participated in the 16<sup>th</sup> FNCA Coordinators Meeting held on 4-5 March 2015 in Tokyo, Japan and presented the RCA achievements and discussed cooperative activities with the FNCA done in 2014.

## **6. Assisting the Government Parties in addressing regional and national needs**

### **6.1 RCARO/KAIST Nuclear Engineering Master's Degree Course**

With the aim of assisting the GPs in capacity building related to nuclear science and technology, Nuclear Engineering Master's Degree Course was initiated by the RCARO in cooperation with the Korea Advanced Institute of Science and Technology (KAIST). As carried out in the past years, RCARO has continued to support students from INS and MYA in 2015.

### **6.2 RCARO/ARCCNM training course**

Since 2008, RCARO has been supporting the RCARO/ARCCNM training course to educate nuclear medicine physicians and scientists in developing and less developed Asian countries and further foster regional cooperation to promote nuclear medicine in those countries.

In 2015, RCARO continued to support the concerned training course held from 31 October to 4 November in Jeju, Korea.

### **6.3 RCARO/KAERI regional training workshop**

Since 2008, RCARO has been hosting a regional training workshop in cooperation with the Korea Atomic Energy Research Institute (KAERI). In 2015, a regional training workshop on radiation technology and its application was held on 12-23 October, inviting 15 trainees from 13 countries upon the nomination by the RCA NRs.

## **7. Increased Interaction between the Government Parties and the RCARO**

### **7.1 RCARO Fellowship Programme**

Three fellows from NEP, MON and BGD were selected in 2015, but due to a heavy earthquake, a fellow from NEP was not able to join the programme. From the beginning of August, fellows from MON and BGD have joined the programme successively. The fellows have contributed to updating stakeholder/end-user database on RCA website; collecting information on regional and international events; and implementing RCA/UNDP partnership project.

### **7.2 Holding a workshop on enhancing RCARO interactions with the Government Parties**

Recognizing the importance of interactions between the Government Parties and RCARO, RCARO hosts annual workshops to discuss ways to enhance interactions with and to accommodate the needs of the Government Parties. This year, the workshop was replaced by the 2<sup>nd</sup> Meeting of Working Group on the RCARO's future role.

## **8. RCARO's Future Role**

### **8.1 Holding working group meeting(s) on RCARO's future role**

The Working Group (WG) for the RCARO's future role was formed to consider the future role of the RCARO, including the issues raised in the Strategic Paper reported by the Director of the RCARO at the 36th NRM. The eight WG members are Dr. John Easey (Chair), Dir-RCARO and appointees from CPR, JPN, NZE, PAK, PHI and ROK.

Followed by the 1<sup>st</sup> WGM in June 2014, the 43<sup>rd</sup> GCM endorsed continuation of the WG and approved to have the 2<sup>nd</sup> WGM to progress the activities discussed at the 1<sup>st</sup> WGM. The 2<sup>nd</sup> WGM was held on 20-22 January 2015 in Jeju, Korea to discuss and identify specific criteria and mechanism for implementation of possible future roles of the RCARO. The Meeting was attended by 20 participants including the WG members, a representative of the IAEA and relevant stakeholders from ROK. It consisted of the following six sessions:

- Session I: Implementation of Supplementary Projects (SPs)
- Session II: Implementation of Research Projects (RPs)
- Session III: Implementation of ad hoc Training Projects (TPs)
- Session IV: Funding Model and Resources
- Session V: Revision of the RCARO Mandate and Other Matters
- Session VI: Action Plans and Future Activities of the WG

Prior to discussion of the sessions, there were discussions on several issues such as IAEA's current situation related to financial and administrative issues, characteristics of the TC Programme in 2-year planning cycle and trend towards larger and fewer projects and role of the IAEA for projects not funded by the TC Funding.

Also, there was a strong opinion of CPR and JPN on the new project modalities being introduced on SPs, RPs and TPs which will be funded and managed outside of the IAEA framework. Their point was that the presence of the IAEA should be a basic condition whenever RCA projects are implemented in accordance with the RCA Agreement.

In this regard, the meeting recommended that IAEA be requested to clarify the Secretariat role of IAEA in relation to the RCA Agreement and whether the involvement of IAEA in RCA projects not funded by/through IAEA is a requirement and the IAEA response be considered at the 37<sup>th</sup> NRM in conjunction with the report of this WG.

Below is the summary of each session and conclusions and recommendations:

During Session I, II and III, WG members in charge of each session made presentations outlining their proposals regarding the specific criteria for application and operation of the SPs,

RPs and TPs as parts of future role of the RCARO. Followed by the presentations, there were extensive discussions on the mechanisms by which SPs, RPs and TPs would be developed and evaluated. Through discussions and deliberations, the meeting established the guidelines and criteria on each item.

During the session IV, there were discussions on possible options to secure necessary fund to implement the new projects.

It was concluded that:

- The RCA GPs should continue to take more responsibility for the management and implementation of the RCA Programme and part of this would require continued expansion of their contribution to support the financial and resource requirements.
- It was agreed that additional modalities should be explored for increasing the extrabudgetary funding in support for the RCA projects across the RCA Programme generally and specifically whether it would be advantageous to have a dedicated fund specifically for general use across the RCA Programme such as “RCA Fund”.
- The use of "cost free" experts had been a valuable contribution to the support of the RCA Programme in the past but this support had not been forthcoming recently. GPs should examine their potential to provide "cost free" experts in support of the RCA Programme.
- The WG recognized valuable contribution by the RCARO to the RCA Programme and noted the strong support of the ROK government to its operation.

During the session V, the meeting discussed the revision of the current GOR to define the expanded role of the RCARO. Issues related to the provision of additional managerial support for implementation of the RCA Programme were also discussed.

It was concluded that the Roles and Responsibilities of the RCARO as set out in section 4.5 of the RCA Guidelines and Operating Rules should be amended to include an additional point (g) – “manage/implement RCA projects as approved by the GPs” so that there was no ambiguity about whether the RCARO might be able to take on expanded roles such as managing outsourced RCA projects.

The meeting recommended that the NRs are encouraged to explore further means to support the RCARO in its efforts in mobilizing new funding resources for the RCA Programme and enhancing the profile of the RCA Programme within the region.

In line with the conclusions and recommendations of each session, the meeting set up an action plan with timeline and future activities of the WG to further develop the initiatives. The meeting report was presented to the 37<sup>th</sup> NRM for NRs' consideration and discussion.

Taking consideration of several legal issues on the future role of the RCARO and the advice from the Office of Legal Affairs of IAEA regarding the IAEA's role in the RCA, the 37<sup>th</sup> NRM approved another WGM for further discussion of these issues.

## **9. Other activities**

### **9.1 Participation in the RCA policy related meetings**

RCARO participated in the RCA policy meetings: the 37<sup>th</sup> NRM in March and the 44<sup>th</sup> GCM in September. The Director of the RCARO delivered presentations on RCARO activities. RCARO also served as a secretariat for the SAC meetings prior to the meetings above.

### **9.2 Participation in an expert meeting on the RCA**

The 36<sup>th</sup> NRM approved the concept paper on the RCA Medium Term Strategy (MTS) and Strategic Priorities for 2018-2023 which was submitted by the WG for developing the RCA MTS and Strategic Priorities for 2018-2023. As a 2<sup>nd</sup> phase, an expert meeting was organized on 16-20 February 2015 to render expert assistance in formulating priorities of the RCA for 2018-2023 which could address regional concerns and needs. On the WG's request, Director of RCARO participated in the meeting and shared views on the issues discussed.

### **9.3 Extra-Budgetary (EB) contribution of the RCARO to the IAEA**

RCARO made an extra-budgetary contribution of US \$210,000 to support RAS6083 in which the RCARO takes the role of LCC.