

Project Performance Report on RAS6100

Strengthening Clinical Application
of Hypofractionated Radiotherapy



Ministry of Science and ICT



- **Objective**

- To enhance cancer treatment in the RCA region through the application of hypofractionated radiotherapy

- **Outcome**

The project has made significant progress by

- Forming the national project team
- The First Coordination Meeting(Q1 2022)
- Mid-Term Review Meeting(Q3 2024)
- Submission of the NPCs' progress reports
- The 1st Regional Training Course, virtually at Q4 2022
- The 1st Expert Mission in Vietnam at Q2 2023
- The 2nd Regional Training Course in Pakistan at Q4 2023
- The 2nd Expert Mission in Malaysia at Q4 2024.

- This project strengthens cancer management programs in GPs, by providing training for radiation oncologists, medical physicists, and technologists
- It aims to enhance the application of hypofractionated radiotherapy in the RCA region through a comprehensive approach, integrating both clinical and medical physics aspects into the entire treatment process.
- It also focuses on evidence-based hypofractionated treatments, not necessarily SBRT, to provide treatment for a broader range of applications, such as breast, prostate, etc.

No.	Activity	Scheduled for	Host Period	Output
1	First Coordination Meeting (Republic of Korea)	Q1 2022	Q1 2022	First coordination meeting was held virtually by ROK
2	1 st RTC on Basic Science and Clinical Applications of Hypofractionated Radiotherapy (Republic of Korea)	Q3 2022	Q4 2022	Virtual regional training course on basic science and clinical applications of hypofractionated radiotherapy was held virtually by ROK
3	2 nd RTC on Mild to Moderate HFRT: Basics to Clinical Application for Curative Treatment of Malignancies (Pakistan)	Q4 2023	October Q4 2023	Regional training course on basics to clinical application for curative treatment of malignancies was implemented in Pakistan Lahore.
4	1 st Expert Mission to Strengthen Clinical Application of HFRT (Vietnam)	Q2 2023	May Q2 2023	Strengthened clinical application of HFRT in rectal, prostate and breast cancer in Vietnam and quality audit/dosimetry technology.

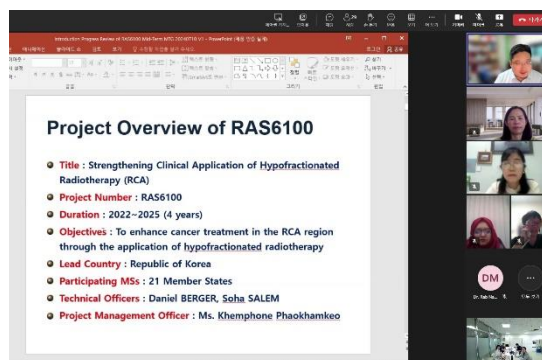
No.	Activity	Scheduled for	Host Period	Output
5	Mid-Term Review Meeting (Republic of Korea)	Q1 2024	July Q3 2024	The Mid-Term Review Meeting, hosted virtually by ROK, focused on progress assessment and future directions
6	2 nd Expert Mission to Stereotactic Body Radiotherapy (SBRT) of Lung (Malaysia)	Q4 2024	December Q4 2024	Participants from radiotherapy centres in Malaysian Ministry of Health (MOH) hospitals have gained confidence in performing Lung SBRT
7	3 rd RTC on Hypofractionated Radiotherapy and Radiosurgery for Brain and Spine Metastases (India)	Q3 2024	Scheduled for July Q3 2025	To improve outcomes in brain and spine metastases through HFRT and radiosurgery, the RTC will be hosted virtually by India
8	4 th RTC on Adopting Ultra-Hypofractionated Radiotherapy as a Standard of Care (Malaysia)	Q2 2025	Scheduled for August Q3 2025	To enhance knowledge and understanding of ultra-HFRT and gain the expertise to integrate this into standard clinical care practice, the RTC will be hosted by Malaysia

Output	Indicator and Target	Status of Achievement
Output 1 Project management team operational	1. Number of GPs that have established a project management structure by 4Q 2022 2. 21 GPs that have prepared national work plans	18 GPs appointed National Project Teams and prepared National Work Plans
Output 2 Professionals trained in hypofractionated radiotherapy at regional and national level	1. Radiation oncologists, medical physicists, and radiation therapists trained on regional training course and functional as national trainers by 4Q 2025. 2. 21 national training activities by 4Q 2025.	The 1st RTC on the basic science and clinical applications of hypofractionated radiotherapy was successfully conducted virtually through MS Teams, with support from the IAEA and KIRAMS. The 2nd RTC, focusing on mild to moderate HFRT for the curative treatment of malignancies took place in Lahore, Pakistan, to continue regional training efforts in this critical field.
Output 3 Safety and quality of hypofractionated radiotherapy improved	1. A package of practical information provided to implement hypofractionated radiotherapy by 4Q 2025. 2. Implementation of QA/QC programs in counterpart institutions for hypofractionated radiotherapy by 4Q 2025. 3. Collecting, sharing and distributing information on hypofractionated radiotherapy by using established IT resources by 4Q 2025.	Baseline information for a package of practical information and QA/QC program was initially collected and further updated from the NPC of GPs through surveys. Over the past 3-years, 2 MTGs, 2 RTCs, 2 EMs, and procurement of necessary items were carried out, along with preparations for the practical information package and QA/QC programs.

Resources Provided

Participating GP	Expert services	Laboratory services	Hosting of RTCs	Comments
Bangladesh, Cambodia, India, Indonesia, Japan, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippine, Republic of Korea(Host), Singapore, Thailand, Vietnam	10 lecturers supported by KIRAMS, Republic of Korea(Host)	<ul style="list-style-type: none"> - Virtual regional training course - E-learning modules 	From 14 th to 17 th March 2022 by KIRAMS, Republic of Korea	N/A
Republic of Korea(Host), Vietnam	The lectures and consultations were delivered by Dr. Won Il Jang and Dr. Kum Bae Kim of KIRAMS as IAEA experts.	<ul style="list-style-type: none"> - In person expert mission 	From 16 th to 19 th May 2023 by KIRAMS, Republic of Korea	N/A
Cambodia, Indonesia, Malaysia, Myanmar, Pakistan(Host), Republic of Korea, Thailand, and Vietnam,	21 lecturers supported by INMOL, Pakistan(Host). 3 experts supported by IAEA. Dr. Won Il Jang of KIRAMS delivered an introductory lecture on the project as the LCC.	<ul style="list-style-type: none"> - In person regional training course 	From 23 rd to 27 th October 2023 by Pakistan	N/A
Bangladesh, Cambodia, China, India, Indonesia, Japan, Malaysia, Mongolia, Myanmar, New Zealand, Pakistan, the Philippines, Republic of Korea(Host), Sri Lanka, Thailand, and Vietnam	The meeting was led by Dr. Won Il Jang of KIRAMS, Republic of Korea(Host) as the LCC.	<ul style="list-style-type: none"> - Virtual meeting - E-learning modules 	From 10 th to 12 th July 2024 by KIRAMS, Republic of Korea	N/A
On progress	On progress	<ul style="list-style-type: none"> - Virtual regional training course 	Scheduled for July Q3 2025, by India	Will be implemented
On progress	On progress	<ul style="list-style-type: none"> - In person regional training course 	Scheduled for August Q3 2025, by Malaysia	Will be implemented

- The Mid-Term Review Meeting of RAS6100 was held via Webex from 10 to 12 July 2024, with 16 countries in attendance.
- The meeting reviewed the RAS6100 project's progress, focusing on the work plan, expert missions, and country reports.
- The LCC led the meeting, overseeing agenda development, coordination of country reports, and facilitation. KIRAMS also announced the launch of www.icorams.com and dosimetry audit manuals, alongside key updates on trained professionals and improvements in hypofractionated radiotherapy.



Host Country	Schedule	Event
India	Q3 2025	3 rd RTC for radiation oncologists and medical physicists (Virtual)
Malaysia	Q3 2025	4 th RTC for radiation oncologists and medical physicists (In-person)
Republic of Korea	Q4 2025	Final progress review meeting (Virtual)

- Due to various issues, some of the planned events have been delayed or rescheduled. Internal resource constraints and government approval processes in each GP have presented challenges that are difficult to address directly. Nevertheless, these issues have been managed appropriately, and continuous efforts are being made to achieve the project's objectives.
- To facilitate smooth communication and project implementation with NPCs and GPs, **an online platform is needed** that can automatically send data requests, manage uploads and downloads, and include a system for sending group notifications. It is recommended that these features be incorporated into the existing PCMF/IAEA system or added to the RCA Regional Office website.

Project Performance Report on RAS0092

Enhancing the Strategic Management of the Programme
under the Regional Cooperative Agreement of Research,
Development and Training Related to Nuclear Science and
Technology for Asia and the Pacific



Ministry of Science and ICT



KOREA NUCLEAR INTERNATIONAL
COOPERATION FOUNDATION

Project title	Enhancing the Strategic Management of the Programme under the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific (RCA)
Project number	RAS0092
Thematic area/ Field	Others / (01) Capacity establishment, programme knowledge management and facilitation of cooperation among Member States
Lead country	Republic of Korea
Phase of implementation	Second year (24/25 cycle for 4 years)
Date of presentation	May 2025
Budget allocation	TCF 19,687.50 / EB from GPs (AUS, CHN, JPN, KOR, MYS, PHL)
Sustainable Development Goal	17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development
Project Objective	To ensure the effective and efficient operation and management of the RCA programme to support the RCA mechanism to achieve its vision.
Intended Outcome	Enhanced RCA management capacity in the promotion and application of nuclear technologies in the region.

- Facilitating policy forums and meetings throughout the year



46th NRM

14-17 May, Beijing



53rd GCM

13 September, Vienna



Introductory Workshop for New NRs

22-25 July, Seoul



RCA Side-event

17 September, Vienna

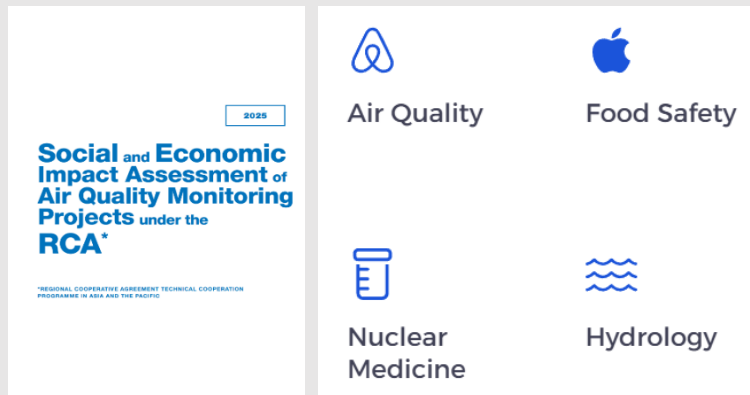


Special Exhibition

26-28 November, Vienna



- RCA Social and Economic Impact Assessments on



- Official Kick-Off Meeting, 14 June, Virtual Meeting



	Output	Indicator and baseline	Targets	Status of achievement on each target
1	Revised and amended policies, processes and procedures such as GoR, MTS and RPF	Adoption of the document by the NRs	Not applicable	On track <ul style="list-style-type: none"> Working Group
2	Formulated sustainable HRD strategies for applying nuclear technology	Adequate human resource capability for implementing nuclear technology application	At least one partnership for nuclear technology application	Should be discussed further
3	Developed strategy for resource mobilization to attract financial resources available for the RCA	RCA GPs succeed in attracting funds from new sources	At least one new source per project cycle	On track <ul style="list-style-type: none"> EB Contribution RCARO Partnerships
4	Facilitated knowledge-sharing and technology diffusion for uptake of the technology by end-users	Number of technologies being presented for adoption	One in every thematic sector	On track <ul style="list-style-type: none"> S&E Impact Assessments RCARO Outreach activities



Regular Reviews

LCC and RCA Focal Person conduct regular management assessments



- **Kick-off meeting (June, 2024)**

Four priority areas identified



- **Coordination meeting (June, 2025)**

Review workplans aimed at achieving intended outputs




- Potential risk could be related to

- Insufficient funds to support proposed activities

- Unclear workplans to achieve proposed outputs



Hold Coordination Meeting after 47th NRM to elaborate the workplans on

-  Formulating sustainable HRD strategies
-  Developing strategy for resource mobilization
-  Facilitating knowledge-sharing and technology diffusion

Compile reports from NPCs and IAEA at the end of the year to reflect the GPs' opinions on the PPAR

Thank you for your attention.