

An Overview of the *RCA Programme Implementation in 2020*

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Active RCA Projects in 2020



<i>No.</i>	<i>Project Code</i>	<i>Project Title</i>	<i>Project Duration</i>
<i>1</i>	<i>RAS0086</i>	<i>Enhancing the Management and Implementation of Activities under the Framework (RCA)</i>	<i>2020-2021</i>
<i>2</i>	<i>RAS1022</i>	<i>Strengthening Regional Capacity in Non-Destructive Testing and Examination Using Nuclear and Related Techniques for Safer, Reliable, More Efficient and Sustainable Industries Including Civil Engineering (RCA)</i>	<i>2019-2022</i>

Active RCA Projects in 2020



3	<i>RAS5077</i>	<i>Promoting the Application of Mutation Techniques and Related Biotechnologies for the Development of Green Crop Varieties (RCA)</i>	<i>2017-2020</i>
4	<i>RAS5081</i>	<i>Enhancing Food Safety and Supporting Regional Authentication of Foodstuffs through Implementation of Nuclear Techniques</i>	<i>2018-2021</i>

Active RCA Projects in 2020



5	<i>RAS5084</i>	<i>Assessing and Improving Soil and Water Quality to Minimize Land Degradation and Enhance Crop Productivity Using Nuclear Techniques</i>	<i>2018-2021</i>
6	<i>RAS5087</i>	<i>Promoting Food Irradiation by Electron Beam and X Ray Technology to Enhance Food Safety, Security and Trade (RCA)</i>	<i>2020-2023</i>

Active RCA Projects in 2020



7	<i>RAS6086</i>	<i>Strengthening Cancer Management Programmes in Government Parties through Collaboration with National and Regional Radiation Oncology Societies</i>	<i>2018-2021</i>
8	<i>RAS6087</i>	<i>Enhancing Medical Physics Services to Develop Government Parties through Regional Leadership in Standards and Education and Training Support</i>	<i>2018-2021</i>
9	<i>RAS6093</i>	<i>Strengthening Capacity to Manage Non-Communicable Diseases Using Imaging Modalities in Radiology and Nuclear Medicine (RCA)</i>	<i>2019-2022</i>

Active RCA Projects in 2020



<i>10</i>	<i>RAS6096</i>	<i>Empowering Regional Collaboration among Radiotherapy Professionals through Online Clinical Networks (RCA)</i>	<i>2020-2023</i>
<i>11</i>	<i>RAS6097</i>	<i>Enhancing Capacity and Capability for the Production of Cyclotron-Based Radiopharmaceuticals (RCA)</i>	<i>2020-2023</i>

Active RCA Projects in 2020



12	RAS7028	<i>Enhancing Regional Capabilities for Marine Radioactivity Monitoring and Assessment of the Potential Impact of Radioactive Releases from Nuclear Facilities in Asia-Pacific Marine Ecosystems (RCA)</i>	2017-2020
13	RAS7031	<i>Assessing the Vulnerability of Coastal Landscapes and Ecosystems to Sea-Level Rise and Climate Change (RCA)</i>	2019-2022

Active RCA Projects in 2020



14	RAS7035	<i>Enhancing Regional Capability for the Effective Management of Ground Water Resources Using Isotopic Techniques (RCA)</i>	2020-2023
15	RAS7037	<i>Enhancing Wetland Management and Sustainable Conservation Planning (RCA)</i>	2020-2023

Active RCA Projects in 2020



16	RAS9092	<i>Strengthening the Capacity to Respond to Radiological Emergencies of Category II and III Facilities (RCA)</i>	2020-2023
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➤ *There were 16 active projects in 2020:*

- *5 projects in human health;*
- *4 projects in food and agriculture;*
- *3 projects in relation to environment management;*



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- *1 project in relation to groundwater management;*
- *1 project in the field of industrial application;*
- *1 project in relation to emergency preparedness and response; and*
- *1 project in support of the RCA management.*



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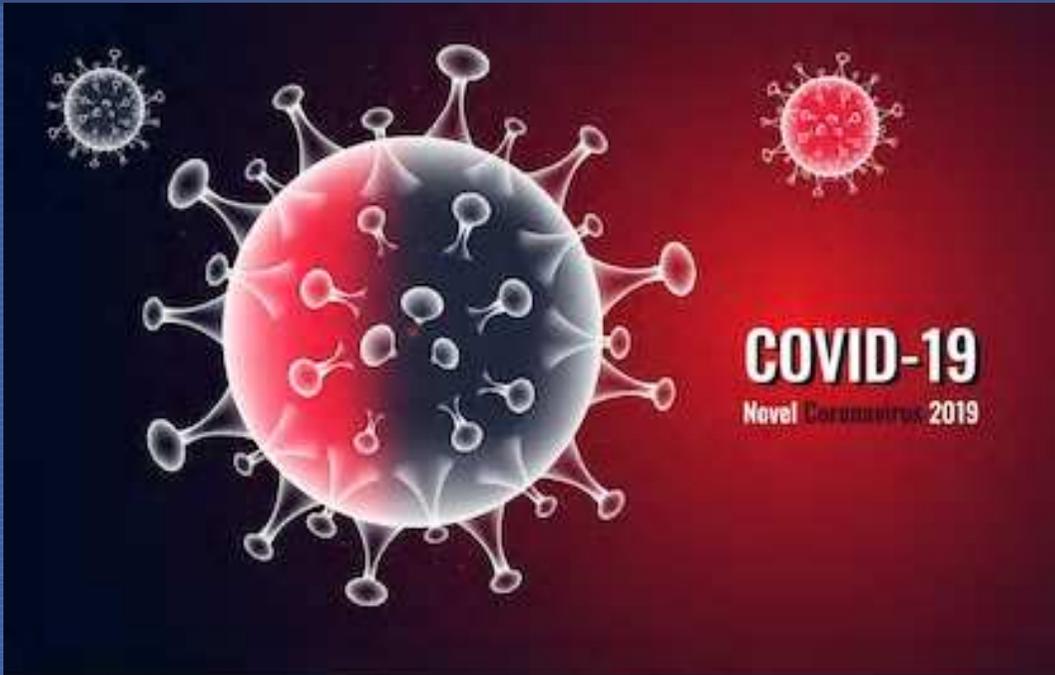
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- *Workplans for 2020 were well prepared from Q4/2019*
- *However, due to the outbreak of Covid-19 pandemic, workplans for 2020 were changed dramatically.*



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12/04/2021

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In the light of the 42nd RCA NRM on 23 Apr. 2021, the RCA pioneered, took the initiative and responded timely and effectively to the challenges caused by the Covid-19 pandemic. As a result:



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➤ *22 meetings/workshops:*

■ *474 participants*

➤ *1 RTC:*

■ *16 participants*



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➤ *28 home-based assignments.*

➤ *2 expert missions; and*



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➤ *TC Fund Allocated for 2020:* **€1.827 million**

➤ *Delivered:* **€1.763 million**

➤ *The Implementation Rate is 96.5% compared to 93.96% in 2019.*



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➤ *The EBT contributions received in 2020:*

- *China: 77,479*
- *Korea: 53,760*
- *Malaysia: 10,000*
- *Philippines: 4,550*
- *USA 84,400*

Total: €110,668



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➤ *The total amount of “In-kind” contributions made by the RCA GPs in 2020: Not available*



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RAS5077 – “Promoting the Application of Mutation Techniques and Related Biotechnologies for the Development of Green Crop Varieties”, and

RAS7028 – “Enhancing Regional Capabilities for Marine Radioactivity Monitoring and Assessment of the Potential Impact of Radioactive Releases from Nuclear Facilities in Asia-Pacific Marine Ecosystems”

were scheduled to close in 2020.



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However, due to the Covid-19 pandemic, they have been extended until the end of 2021 to complete some necessary activities, including final project review meetings.



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Some Salient Achievements of RAS5077



<i>No.</i>	<i>Crop species</i>	<i>Number of mutant lines on multi-location test for release (2017-2020)</i>	<i>Number of mutant lines (M4 and above) (2017-2020)</i>
<i>1</i>	<i>Rice</i>	<i>168</i>	<i>1511</i>
<i>2</i>	<i>Wheat</i>	<i>668</i>	<i>5118</i>

Some Salient Achievements of RAS5077



<i>3</i>	<i>Sorghum</i>	<i>250</i>	<i>1700</i>
<i>4</i>	<i>Maize</i>	<i>20</i>	<i>180</i>
<i>5</i>	<i>Oat</i>	<i>226</i>	<i>259</i>

Some Salient Achievements of RAS5077



<i>6</i>	<i>Soybean</i>	<i>305</i>	<i>3595</i>
<i>7</i>	<i>Mungbean</i>	<i>21</i>	<i>503</i>
<i>8</i>	<i>Blackgram</i>	<i>50</i>	<i>490</i>



Some Salient Achievements of RAS5077



<i>9</i>	<i>Chickpea</i>	<i>55</i>	<i>242</i>
<i>10</i>	<i>Banana</i>	<i>2</i>	<i>10</i>
<i>11</i>	<i>Groundnut/Peanut</i>	<i>#</i>	<i>15</i>
<i>12</i>	<i>Barley</i>	<i>#</i>	<i>99</i>

Some Salient Achievements

RAS5077

- *Screening Protocols for Target Green Traits in Selected Crops have been developed and circulated to GPs*



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Some Salient Achievements

RAS5077

- *Regional capacity and capabilities to apply mutation techniques and related biotechnologies for the development of crop varieties have been significantly enhanced through RTCs (107 trainees) and experience sharing at 4 meetings/ workshops (78 participants).*



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Some Salient Achievements

RAS7028

“Enhancing Regional Capabilities for Marine Radioactivity Monitoring and Assessment of the Potential Impact of Radioactive Releases from Nuclear Facilities in Asia-Pacific Marine Ecosystems”



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Some Salient Achievements

RAS7028

- *More than 255 trainees have been trained in various topics such as sampling plan, sampling, basic analytical techniques, analysis of Sr-90 and H-3 in seawater, radiochemical analysis of marine environmental samples, rapid assessment of radionuclides in the marine environment, gamma-ray spectrometry, radiological dose assessment and risk analysis modelling, quality management systems.*



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Some Salient Achievements

RAS7028

- *“Guidelines for the Sampling, Preparation and Radio-Analysis of Marine Matrices” has been developed and circulated to participating countries for reference. The document provides guidance on the establishment of a monitoring program and includes a set of recommended methodologies on:*



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Some Salient Achievements

RAS7028

- *Sample collection and sample preparation,*
- *Radio-analytical methods of analysis,*
- *Quality management, and*
- *Data reporting and analysis.*



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Some Salient Achievements

RAS7028

- *More than 40,690 data points have been submitted to Asia and Pacific Marine Radioactivity Database (ASPAMARD). This data will be shared with Marine Radioactivity Information System (MARIS) and will be available to scientists and researchers, and will enable future scientists, to look for changes and dynamics in the marine system.*



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Some Salient Achievements

RAS7028

- *Proficiency tests for Radionuclides in marine environmental samples were conducted annually in 2017, 2018, 2019 and 2020, which is considered as a valuable tool for quality control.*



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Some Salient Achievements

RAS7028

- *35 scientific publications arising from RAS028 activities*
- *As a result, regional capacity of the marine environmental radioactivity monitoring has been significantly enhanced.*



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Highlights for Other Projects in 2020
(Presented in Section 2 – Details of the
Technical Programme in Annual Report 2020)



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➤ *100% PPARs submitted timely on*

<https://tcreports.iaea.org>



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Conclusion:

- *In view of the outbreak of the Covid-19 pandemic, it can be said that RCA Projects in 2020 were well implemented (details of project activities are presented in RCA Annual Report 2020).*



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“Individual talents get magnified many times over through the collective lens of an effective team.”

Dalal Haldeman



Thank you for your attention!



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