LIST OF 2025 PNRI PROJECT BENEFICIARIES

As of March 15, 2025

PROJECT TITLE	STATUS	BENEFICIARIES
1. Application of Environmental Isotopes in Tracing the Origin of Saltwater Intrusion and Potentially Toxic Elements in Groundwater of Coastal Areas: A case in the Mining Town of Jose Panganiban, Camarines Norte	Expected to be completed in 2025	a. Jose Panganiban, Camarines Norte LGU b. Environmental Management Bureau
2. Application of Ionometallurgy for Recovery and Extraction of copper from copper ore and Artisanal copper-Gold Tailings (i-REACT)	Expected to be completed in 2025	a. Residents within SSGM b. Companies that are mining copper skarn deposits c. LGU concerned d. MGB especially the regional office concerned
3. Assessment of heavy metal concentrations in Manila Bay sediments	Expected to be completed in 2025	a. Environmental Managers / Planners b. General Public
4. Capacity Building to Utilize the Philippine Research Reactor-1 (PRR-1) TRIGA Fuel in a Sub-Critical Assembly: Reactor Operation and Utilization (Modification of SATER to accommodate neutron generator for TRIGA Accelerator Driven (TRIAD) SATER)	Expected to be completed in 2025	a. PNRI b. Research and Academic Institutions
5. Development of radiation-processed products of carboxymethyl hyaluronic acid (CMHA) for cosmetic and biomedical applications	Expected to be completed in 2025	a. Cosmetic and pharmaceutical industries b. General public
6. Evaluation of using a low-intensity neutron beam for neutron radiography	Expected to be completed in 2025	a. PNRI b. Academe c. Aerospace d. Nuclear reactor facilities e. National defense f. Electronics industry g. Medical h. Biological research i. Cultural heritage preservation
7. Fabrication of construction materials from recycled plastics by post-radiation reactive extrusion	Expected to be completed in 2025	a. Recycling facilities b. Plastic manufacturing companies c. General public
8. IAEA TC PHI1023 “Enhancing Nuclear Research Capabilities through the Development of the PRR-1 TRIGA-Fueled Accelerator-Driven (TRIAD) Subcritical Assembly for Training, Education, and Research (SATER)”	Expected to be completed in 2025	a. PNRI b. Research and Academic Institutions

As of March 15, 2025

PROJECT TITLE	STATUS	BENEFICIARIES
9. Improvement of Adlay (*Coix lacryma-jobi* L.) Through Gamma Irradiation (Phase II)	Expected to be completed in 2025	a. Agriculture Sector
10. Irradiation, Sterilization, and Quality Control of *Aedes aegypti* in the Philippines	Expected to be completed in 2025	a. Researchers b. Health workers
11. Luzon Arsenic Source Tracing and Extent Mapping with Risk Mitigation and Engineering Intervention (LASER)	Expected to be completed in 2025	a. Water districts and LGU b. Government agencies (MGB) c. Academe
12. Micro-scale Continuous Extraction System for the Recovery of Uranium from Philippine Wet Phosphoric Acid	Expected to be completed in 2025	a. Philippine government b. Fertilizer/mining/mineral industry c. Public d. Academe
13. NEAT-ORE: Novel Extraction of Au and other critical metals in Artisanal Tailings and Low-Grade Ores using organic solvents (Phase 1)	Expected to be completed in 2025	a. Miners and residents of gold deposits and those living within the small-scale gold mining community, including the owners and workers of the small-scale processing facilities
14. NEPHCO (NEutron PHoton COnverter): A Compact, Multilayered Neutron-to-Photon Converter for Long-Term, Sustainable High-Energy Gamma-Rays (Phase I)	Expected to be completed in 2025	a. DOST-PNRI b. Higher Education and Research Institutions c. National Dosimetry and Medical Industries d. Mining e. Materials Processing and Cultural Heritage Sectors
15. PROMT: Philippines Remediation of Mine Tailings (Large Grant)	Expected to be completed in 2025	a. Local communities in mining areas b. Mining Companies c. LGU and National Government d. Academe
16. Application of the Single-laboratory validated radio-receptor assay to support Environmental Risk Assessment (ERA) on Ciguatera Poisoning	Ongoing until 2026	a. BFAR Central Office b. BFAR Region VI
17. Development of a GAmma Computed Tomography Imaging Device for Industrial Applications (GAIA)	Ongoing until 2026	a. Energy Development Corporation (EDC)- industry partner b. PNRI c. NIP-UPD (Academe) d. NDT sector

As of March 15, 2025

PROJECT TITLE	STATUS	BENEFICIARIES
18. Development of Sterile Insect Technique for the Control of Dengue Mosquito, *Aedes aegypti*	Ongoing until 2026	a. Researchers b. Health workers c. Communities who live in urban and semi-urban areas
19. Direct Comparison of Gamma and Electron Beam Irradiation Effects on Raw Polymer Materials Used and Final Products of Single-Use Catheter Devices	Ongoing until 2026	a. Biomedical Industries b. Radiation Processing Industries c. RDIs d. Academe
20. Electron Beam Processing to Improve Safety and Quality of Insect-Based Food Products and to Promote Earth-Friendly and Nutritious Non-Meat Substitute (CRP IAEA Contract No. 24363)	Ongoing until 2026	a. Potential industry taker b. General public c. Academe
21. Establishment of Nuclear Plant Simulator and Analyzer Facility for R&D and Capacity-building for the Philippine Nuclear Energy Program (NuSIM)	Ongoing until 2026	a. PNRI b. Utility c. Research d. Regulators e. Policy makers f. Academic Institutions
22. Front-End: Nuclear Materials Exploration and Recovery (NuMER)	Ongoing until 2026	a. Population around the radioactive localities b. Nuclear Regulatory Agencies c. Academe and Research Institutions d. General Public
23. HYDROGEN SEEP: Sustainable rock-derived Energy Exploration in the Philippines	Ongoing until 2026	a. Mines and Geosciences Bureau Region III b. Manleluag Spring Protected Landscape - Protected Area Management Board, Pangasinan c. Local Government of Iba, Zambales d. Lamont-Doherty Earth Observatory, Columbia University e. ETH Zurich (Swiss Federal Institute of Technology - Zurich)
24. Improvement of Mass-rearing Method of *Aedes aegypti*	Ongoing until 2026	a. Researchers b. Health workers
25. Nuclear Reactor Technology Assessment and Development (NuRAD) Component 2: Accelerator Driven Subcritical Nuclear Reactor (ADSuN)	Ongoing until 2026	a. PNRI b. Research and Academic Institutions

As of March 15, 2025

PROJECT TITLE	STATUS	BENEFICIARIES
26. Nuclear Reactor Technology Assessment and Development (NuRAD) Component 3: Reactor Technology Assessment (RTA)	Ongoing until 2026	a. PNRI b. DOE c. NEP-IAC d. Academe e. Decision-makers
27. Nuclear Reactor Technology Assessment and Development (NuRAD): Radiological Environmental Impact Assessment (REIA)	Ongoing until 2026	a. NEP-IAC b. DOST-PNRI c. DENR-EMB
28. Radiation-Engineered Hemostatic Agents as Life-Saving Devices - Clinical Investigations of Safety and Efficacy in the Management of Traumatic Bleeding in Hospital Emergency Settings	Ongoing until 2026	a. Health Sector b. Defense Sector c. Emergency Response Service Providers d. Healthcare Industry e. General public
29. Streamlined wastewater Treatment of Nutrient Pollutants using environment-friendly solutions from radiation technology (STEP Nutrient)	Ongoing until 2026	a. Water treatment facilities b. DENR and relevant government offices tasked in water quality and resource preservation c. General public
30. Genetic Conservation and Management of PNRI Radiation-Induced Mutants and its Wild-type Species	Ongoing until 2027	a. Agriculture sector
31. Irradiated AquaBlocks Biofilm Carriers	Ongoing until 2027	a. MSMEs in the food industry
32. Development of Animal Model for Use in Radiation Research and Establishment of the Radiation Research Center: Core Facility for Radiobiological Research – Phase 2	Ongoing until 2028	a. Cancer patients b. Patients undergoing radiotherapy c. Radiation and nuclear workers d. Radiation researchers e. Radiation oncologists and other medical practitioners f. Nuclear researchers and research students
33. Environmental Radioactivity Measurement, Research, and Monitoring in the Philippines	Ongoing until 2028	a. Filipino Public and the Environment
34. Exploring Caenorhabditis elegans for Radiation Protection, Injury, and Therapy Using 3Ms: Metabolites, Microbiome, and Metal Complexes	Ongoing until 2028	a. Cancer researchers b. Academe
35. Sustainable Food Systems through Radiation Technology: Food Safety and Functionalization R&D	Ongoing until 2028	a. Potential industry taker b. General public c. Academe

PROJECT TITLE	STATUS	BENEFICIARIES
36. A Multi-modal Approach to Assessing Radiosensitivity: Advancing National Security and Precision Radiotherapy through Cytogenetics, Biospectroscopy, and Artificial Intelligence	Ongoing until 2030	a. Cancer patients b. Radiation workers c. General public
37. Innovating Nuclear Medicine Research and Services: Development of Emerging PET Radiopharmaceuticals for Early Cancer Staging and Assessment of Biologic Functions in Cancer Cells	Ongoing until 2030	a. Hospitals with Nuclear Medicine Department/ Section b. Nuclear Medicine Practitioners c. Patients d. Commercial Distributors for Nuclear Medicine Use
38. Innovating Nuclear Medicine Research and Services: Development of Emerging PET Radiopharmaceuticals for Early Cancer Staging and Assessment of Biologic Functions in Cancer Cells	Ongoing until 2030	a. Hospitals with Nuclear Medicine Department/ Section b. Nuclear Medicine Practitioners c. Patients d. Commercial Distributors for Nuclear Medicine Use
39. Innovations in Biomedical Devices and Biomaterials through Radiation Processing	Ongoing until 2030	a. General public b. Health industry

NOTHING FOLLOWS