Nius

Newsletter of the PNG National Agricultural Research Institute
Volume 28, Issue 2 March to April, 2025

28 YEARS
of Dedicated
Agricultural Research for
Sustainable Development

ISSN 1608-6554

Welcome to the 2nd edition of NARI Nius for 2025. If you have any comments or contributions please drop us a line at: ***naripng@nari.gov.pg*** *for an e-copy.*

NARI Act 1996 Review – Stakeholder Meeting



Relevant stakeholder participants to the NARI Act 1996,Review Workshop.

The findings of a recent external assessment and review of the National Agricultural Research Institute (NARI) has indicated that the institute needs to do better as a national entity to reach stakeholders throughout the country not only with technological but also institutional and policy innovations.

This has prompted the institute to review its Act of 1996 to ensure that its core business reflects and aligns well with the government's emerging policy directions in the agriculture and economic sectors of the country. The current government's vision is to make the agro-food systems in PNG more market-driven and commercially orientated.

The review of the 1996 Act will include the development and management of value chains, downstream processing of agricultural raw products in-country, diversification of rural on-and-off-farm employment opportunities, requiring a major transformation of rural communities in attitudes, knowledge, skills and aspirations.

To drive the government's vision forward, NARI engaged an international reviewer Dr. Adiel Mbabu who is an internationally recognised expert with extensive experience in international public policy, leadership and management to conduct the review with PNG counterparts Dr. Eric Omuru and Dr. Miok Komolong.

NARI has done well over the past 28 years of existence by supporting small holder farmers with improved technology. One of its success stories is the Waghi Besta Sweet Potato (Kaukau) which is sold and eaten in most PNG households.

Despite the success stories, the institute must now ensure that the need for this expanded role is also reflected in the NARI Act so that necessary resourcing needs are legislated and can be realised.

The findings of this report emphasises the need to entrench institutional and policy innovations as integral components of agricultural transformation in PNG.

The Act 1996 Review was passed by the NARI Council in 2024 in consultation with the Minister for Agriculture and Livestock.



A call for the establishment of gene bank in PNG. Story on page 3

A case study on how rice farmers are benefiting from using weather information through the short message service (SMS) in Kainantu/Obura Wanenara District, Eastern Highlands. A detailed story on page 4.

Inside this issue

NARI Signs Security Agreement with Muruk L Security Services



NARI has signed a Memorandum of Agreement (MoA) with Muruk L Security Services (MLSS) to enhance the protection of its facilities. The agreement, effective immediately for a period of twelve months, covers the Southern Regional Centre – Laloki, and the Professor John Kola Chemistry Laboratory at Kilakila in the National Capital District.

The MOA was formalized at the NARI's headquarters, between NARI Director General Dr. Nelson Simbiken, and MLSS Managing Director Mr. Rodney Kalunda. This partnership underscores NARI's commitment to securing its vital research infrastructure and ensuring the safety of its operations.



Visit from plant breeder, Dr Stefania Grando (second from right), and Regina Malie, a national consultant who are part of ADB team for ADB upstream study for the PNG Fresh food marketing system project.

Call for an establishment of a gene bank for PGR



Workshop participants.

In recent discussions at a workshop held at the NARI Head Quarters, Lae, Morobe Province, key stakeholders in the agriculture sector have acknowledged the importance of establishing a National Gene Bank for Papua New Guinea's indigenous Plant Genetic Resources (PGR). At present, PNG stores its PGR in international facilities, such as the Pacific Community's Centre for Pacific Crops and Trees (CePaCT) in Suva, Fiji. Some of the resources are even kept in the Svalbard Global Seed Vault in Norway, the world's largest and most secure backup facility for crop diversity. While these facilities are valuable, having a national repository within the country itself would ensure greater accessibility, security, and the ability to more effectively utilize these invaluable resources.

One of the primary points discussed at the workshop was the ease of access to plant genetic resources. A national gene bank would make it easier for local researchers to access PGR materials.

Dr. Birte Komolong, the Strategic Planner for NARI, while taking note of the resolution, emphasized the importance of continued collaboration between the National Department of Agriculture and other key stakeholders in refining policies related to biodiversity in the country. This collaboration, Dr. Komolong noted, will be critical in ensuring that the gene bank, if established, aligns with the needs and priorities of the agricultural sector.

It is noted that establishing a Gene Bank is more than just a matter of preserving genetic material. It represents a critical step in safeguarding the future of PNG's agriculture. As global challenges continue to evolve, the ability to protect and access local genetic resources is essential for ensuring food security, supporting local livelihoods, and promoting sustainable agricultural practices. With the support of key stakeholders, PNG can take a significant step toward becoming a leader in PGR conservation and use.

Study opportunity for female researchers



Team from the Royal Melbourne Institute of Technology (RMIT), under APEP arrangement to discuss needs for training in research for female

A case study: Rice farmers benefit from using weather information

A Climate Smart Agriculture project with the support of the Australian Centre for International Agricultural Research involved partners such as NARI; through the use of weather information are also supporting rice farmers in Kainantu, Eastern Highlands.



Farmer George Mosinokave. from Eastern Highlands..

Since 2019, the CSA project was able to work with farming communities in Eastern Highlands, East New Britain and Morobe, with the objective of improving agricultural food production, and resilience among vulnerable communities to negative climate change effects.

As part of activities to see how weather information including farm management options and weather forecast can effectively influence farmers' decision, a short message service (SMS) was created and piloted in Eastern Highlands.

Among the SMS recipients was DAL Kainantu & Obura/Wonenara District Manager Maureen Kauente who expressed gratitude during the end-of-project review workshop that weather information and advisory received helped in guiding rice farmers make informed decisions.



Kainantu/Obura Wonenara DAL District Manager Maureen Kauente

Ms Kauente says most rice farmers in the district lacked the capacity in properly managing their rice fields resulting in very low rice yields. In her feedback during the project review workshop, she expressed that after receiving the seasonal farm advisory via SMS, she was able to provide this information to farmers and realise good rice yields.

She says receiving the SMS advisory enabled her to carry out her role effectively and thanked NARI and other project partners in providing farmers the opportunity to explore options by using weather information when farming.

George Mosinokave is a vegetable farmer who had lost a considerable amount of money when he planted cabbages which were damaged during a dry period and wanted to give up until he received the SMS advisory.

He has regained confidence by replanting cabbages and carrots which were sold in Port Moresby and make additional money to sustain his family.

Testimonies by Ms Kauente and Mr Mosinokave is a positive outcome in using weather information and best farming management practices which is in line with the project's objective to enable farmers improve agricultural food production and resilience in light of the negative effects of climate change.

The end of the project review workshop also acknowledged the overwhelming participation by project partners; NARI, PNG National Weather Service, Goroka University's Centre for Social and Creative Media, Sustineo, Australian National University, including funding support by ACIAR.

Discussions from the review workshop indicated enormous potential displayed through the enthusiasm of participating project partners and try to figure out a way take the project forward.



Potato Rooted Apical Cuttings (RAC) refers to rooted seedlings which are produced in a screen house using tissue-cultured plantlets. Instead of using a single tissue culture plant to yield about 10 mini-tubers, up to 50 apical cuttings can produce about 500 Generation 1 seeds when transplanted. At Aiyura's Highlands Regional Centre, the RAC are grown using potting mix containing top soil, sand and fertilizer before they are transplanted in the field as seed planting material. This trial is an ongoing activity that is under observation to see how well this method will perform in increasing potato planting seed materials. ***Picture insert:*** Apical cuttings are potted using a mixture of top soil, sand and fertilizer before being transplanted to the field for seed breeding.



A new open back land cruiser vehicle was commissioned and officially handed over by Deputy Director General Dr Gendua (*left*) to the Momase Regional Centre Manager James Maima, flanked by Ian Nabo (*right*) to support mainly research and outreach activities. Some senior NARI staff were present including Pastor Sam Mepa of St Barnabas Lutheran Parish to bless and witness the official commissioning of the new vehicle. Other senior officers shared similar thoughts as Dr Gendua and urged to ensure that the new vehicle is looked after and used for its intended purpose. ***Photo Insert***: New vehicle

Laboratory Services offered by NARI

The Professor John Kola Chemistry Laboratory offers a wide range of analytical and diagnostic testing services. We are a national chemical testing laboratory and have been operating for over 30 years.

Our laboratory is accredited to ISO/IEC 17025 which is a general requirement set by the International Organisation for Standardization (ISO) and International Electrotechnical Commision (IEC) for the competence in testing laboratories.

It certifies a laboratory as an Accredited Chemical Testing Laboratory under the ISO/IEC 17025:2005 Guidelines.

Prof John Kola Chemistry can perform chemical testing and all methods used are recommended by American Public Health Association (water), Australasia Soil and Plant Analysis Council (soil and plant), Association of Official Analytical Chemist (food and natural products).

Prof John Kola Chemistry Laboratory Kilakila

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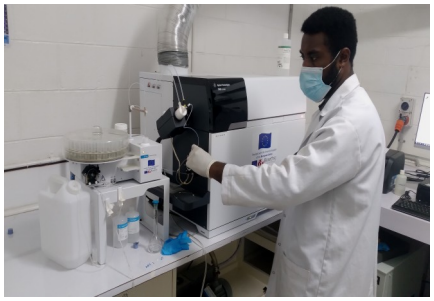


Aquatek Analyser for measuring Ammonium in water

What we test for in the laboratory in pictures



Quality Control Chemist, carrying out food testing on the Fat extraction equipment



Test to determine mineral elements such as Calcium, Magnesium, Potassium, etc and mainly used for water and environmental samples.



A high throughput & inexpensive analytical technique used to primarily test for major elements such as Calcium, Magnesium etc in food, beverage, water, plant and soils.



Extraction technique to extract from crushed, dried or ground samples with the aid of heating & refluxing to determine fats in dried nuts, grains, etc



Unit used to determine nitrogen (crude protein) content in soil, plants, food and natural products.



This is a purification system which eliminates bacteria using ultra violet radiation and provides chemical reactive water for the laboratory's daily use.

guesthouse ENQUIRIES



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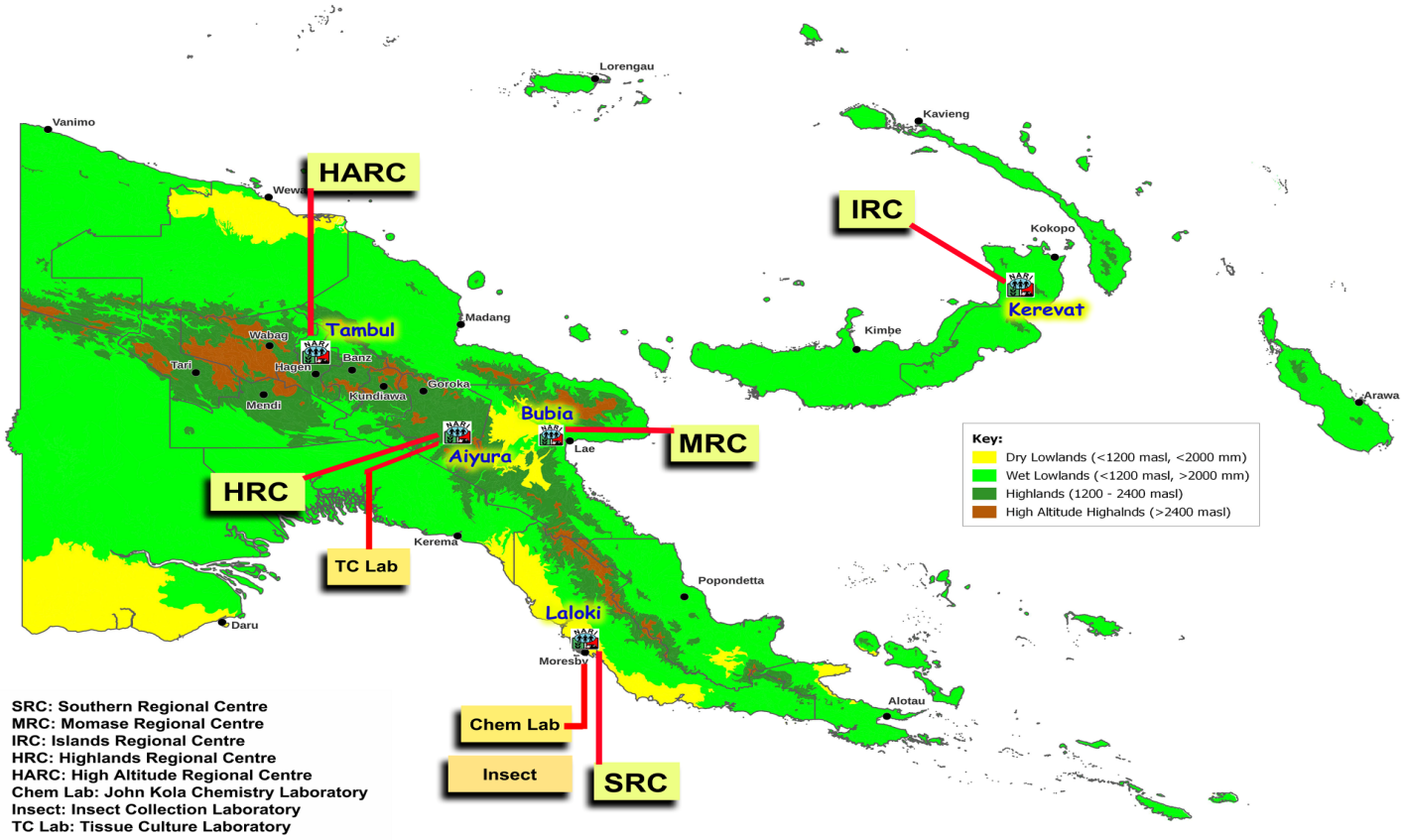


To make your stay a ***'Home Away from Home'*** , we have guesthouses conveniently located in Lae, Eastern Highlands and East New Britain.

The next time you visit any of these locations, be sure to call in and make the most of your stay.

For more information

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The National Agricultural Research Institute (NARI) was established by an Act of National Parliament of Papua New Guinea (PNG) in July 1996 as a public funded, statutory research organisation, to conduct and foster applied and adaptive research into:

i) any branch of biological, physical and natural sciences related to agriculture;

ii) cultural and socioeconomic aspects of the agricultural sector, especially of the smallholder agriculture; and

iii) matters relating to rural development. and of relevance to Papua New Guinea.