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Title	Regional Collaboration in Plant Genetic Resources: Insights from the 2023 PAPGREN Meeting
Action	For Information
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Background

1. The Pacific Agricultural Plant Genetic Resources Network (PAPGREN) was established in 2001 by the Pacific Community (SPC), with the endorsement of the Pacific Heads of Agriculture and Forestry. This initiative, supported initially by funding from the New Zealand Government, the Australian Centre for International Agricultural Research (ACIAR), and SPC, was crucial for the effective preservation and utilisation of plant genetic resources (PGR) across the Pacific islands, ensuring regional agricultural resilience and sustainability.
2. PAPGREN's founding followed the earlier establishment of the Centre for Pacific Crops and Trees (CePaCT) in 1998, which serves as the region's gene bank. CePaCT has been pivotal in managing an extensive collection of over 2,300 accessions, of which approximately 68% are from the Pacific, significantly contributing to regional food security, nutrition, and environmental sustainability.
3. PAPGREN members have played a critical role in identifying, collecting, characterising, and depositing these materials into CePaCT for long-term conservation. This collaborative effort has been instrumental amid global climate changes and socio-economic challenges.
4. The strategic review by [Lebot et al. \(2023\)](#) underscores the unique challenges and opportunities in the Pacific region regarding the conservation and utilisation of PGR. The review highlights that despite the geographical isolation and small economies of the Pacific islands, coordinated efforts such as those facilitated by PAPGREN are

essential. These efforts leverage regional strengths to manage PGR effectively, which are crucial for food security and adapting to climate vulnerabilities. The review points out that conventional breeding and coordinated regional management of PGR have not been prioritised to their full potential despite their critical role in strengthening agricultural systems against climatic changes.

5. Key achievements of PAPGREN include enhancing regional capacity for plant genetic resource management, facilitating the development of regional policies for genetic resources, and supporting member countries in meeting international obligations such as the International Treaty on Plant Genetic Resources for Food and Agriculture. These efforts underscore the strategic importance and value of PAPGREN, which continues to warrant robust support from its members, especially as new leaders come to appreciate its longstanding contributions to regional agricultural resilience.
6. Despite the cessation of direct funding in 2009, PAPGREN has continued to support national and regional programs through various donor-funded projects. The network has faced significant challenges, including a decline in coordination and operational funding, necessitating reliance on loosely arranged collaborative efforts with its members and partners.
7. The 2018 Pacific Seed for Life (PS4L) workshop represented a pivotal moment in the network's evolution, focusing on drafting and finalizing the Pacific Seed Systems Roadmap and the governance structure of PAPGREN. This effort aimed to establish a formal governance framework through the adoption of the PAPGREN Charter, providing clear and strategic leadership to ensure the network's sustainability and enhancing its capacity to support its member countries in managing their plant genetic resources more effectively. The PS4L initiative further underscored the need for a comprehensive approach to enhancing seed systems to ensure resilience, livelihood, and food and nutritional security across the Pacific.
8. The 2023 meeting aims to solidify the groundwork laid by past efforts by finalising the PAPGREN Charter and endorsing the Pacific Seed Systems Roadmap. These documents will formalise the governance structure of the network and set clear frameworks for future conservation and utilisation efforts, ensuring that PAPGREN continues to serve as a vital resource for its member countries.

Purpose of this paper

9. This information Paper articulates and conveys the key objectives of the 2023 PAPGREN meeting, held in alignment with the ongoing efforts to strengthen the network's operational and governance frameworks. This meeting serves as a crucial juncture for PAPGREN, aiming to address the challenges highlighted in the past and capitalise on the groundwork laid to propel the network forward.
10. The key objectives of this paper, in alignment with the 2023 PAPGREN meeting objectives, are as follows:
 - a) **Finalization of the PAPGREN Charter:** To provide an update on the progress made in the finalisation of the draft PAPGREN Charter recommended for development by SPC LRD in previous Pacific Seed Forum (Fiji, 2018). This charter provides the formal governance structure that will provide clear and strategic leadership, enhancing the network's ability to effectively manage and utilize plant genetic resources across the Pacific.
 - b) **Endorsement of the Pacific Seed Systems Roadmap:** To provide an update on the progress in finalising of the Pacific Seeds System Roadmap recommended for development by SPC LRD in previous Pacific Seed Forum (Fiji, 2018). This roadmap serves as the regional framework that will guide PAPGREN's activities in enhancing seed systems, through the effective management of PGR thereby ensuring agricultural resilience, food security, and nutritional improvements across member countries.
 - c) **Strengthening Regional Collaboration and Support:** To reaffirm and enhance the collaborative ties within the network, ensuring robust support and engagement from all member countries and partners, particularly addressing the needs of new heads of agriculture and forestry who are pivotal to the network's future.
 - d) **Identifying Priorities for PGR Work:** To set clear priorities for plant genetic resource work over the next five years, focusing on critical areas such as climate change adaptation, crop improvement, and biodiversity conservation. This objective aims to strategically direct efforts and resources towards the most impactful areas of PGR work in the Pacific.

Key Updates from the 2023 PAPGREN Meeting

11. In alignment with its goal to enhance operational and governance frameworks, the 2023 PAPGREN meeting, held at The Pearl South Pacific Resort in Suva, Fiji, focused on leveraging past initiatives and tackling ongoing challenges in the management of plant genetic resources. Hosted by the SPC LRD, this meeting drew participation from 15 Pacific Island Countries and Territories (PICTs), and featured contributions from key international partners such as the Global Crop Diversity Trust, CGIAR, the International Coconut Community, and representatives of the International Treaty on Plant Genetic Resources for Food and Agriculture. Representatives from relevant regional bodies such as the Breadfruit people online, the Breadfruit Institute of Hawaii and the Pacific Island Farmers Organisation Network (PIFON) also made contributions. This update delves into the four strategic objectives pursued during the meeting, offering vital insights and actions for the Pacific Heads of Agriculture and Forestry Services to consider, ensuring that PAPGREN continues to effectively guide regional efforts in agricultural sustainability and genetic resource conservation.

A. Finalization and endorsement of the PAPGREN Charter:

A. The finalization of the PAPGREN Charter was a major milestone achieved during the 2023 meeting of PAPGREN. This important document underwent a rigorous and inclusive development process, engaging a wide array of stakeholders from various Pacific Island Countries and Territories (PICTs) through a participatory approach. These stakeholders contributed their insights and expertise, ensuring that the Charter would be comprehensive and reflective of the diverse needs and strategic objectives of the network.

13. Throughout the development phase, the Charter was carefully crafted to establish a formal governance structure capable of providing clear and strategic leadership, which is essential for the effective management and utilization of plant genetic resources across the Pacific. The structure of the Charter includes:

13.1. A Governance Structure that sets up a Steering Committee to oversee the network's activities, ensuring strategic alignment and effective management of resources. The Steering committee will comprise of 2 key representatives from each sub-region of Micronesia, Polynesia and Melanesia. The SPC CePaCT team will provide secretariat support the work of the Steering Committee and PAPGREN members.

13.2. Membership is open to all Pacific Island countries and territories. Other countries or partners can become members or observers through a decision of the PAPGREN membership and Steering Committee.

- 13.3. Roles and Responsibilities that delineate the functions and duties of member countries and other stakeholders within the network, enhancing clarity and coordination in the management of plant genetic resources.
 - 13.4. Strategic Objectives that outline the long-term goals of PAPGREN, focusing on conservation, sustainable use, and equitable sharing of benefits arising from plant genetic resources.
14. The meeting concluded with the formal adoption of the amended Charter, affirming the commitment of all members to implement a governance structure that enhances coordination and streamlines efforts toward sustainable agricultural practices and resource management. The unanimous support from decision-makers was pivotal, ensuring that PAPGREN is well-equipped to lead regional efforts in genetic resource management, thereby enhancing agricultural sustainability and ecological resilience across the Pacific. For more information, please see the charter on this [link](#) or as attached.

B. Finalisation and endorsement of the Pacific Seeds Systems Roadmap

15. The finalization of the Pacific Seed Systems Roadmap was a significant achievement during the 2023 meeting of the Pacific Agricultural Plant Genetic Resources Network (PAPGREN). This comprehensive framework underwent an extensive development process, facilitated through collaborative regional workshops involving stakeholders from various Pacific Island Countries and Territories (PICTs). The inclusive nature of the process ensured that the roadmap would address the diverse needs and challenges faced by member countries in enhancing seed systems across the region.
16. The development of the roadmap focused on identifying key actions and strategies to improve seed management, availability, and quality, recognizing the critical role of seed systems in ensuring agricultural resilience, food security, and nutritional improvements across member countries. The roadmap emphasizes the need for modernized agricultural infrastructure and practices to address contemporary challenges effectively, thereby enhancing agricultural outcomes and promoting sustainable development across the Pacific.
17. The meeting concluded with the endorsement of the Pacific Seed Systems Roadmap, signalling the collective commitment of all members to implement the outlined strategies and initiatives. The roadmap provides a guiding framework for regional efforts in strengthening seed systems, aligning with the overarching goals of PAPGREN to enhance agricultural sustainability and genetic resource management in the Pacific. For more information, please refer to the roadmap on this [link](#) or as attached.

C. Strengthening Regional Collaboration and Support

18. The 2023 PAPGREN meeting was critical in reinforcing collaborative ties across the Pacific, particularly in the management of plant genetic resources (PGR). Here are the key highlights:

18.1. *Strengthening Collaborative Ties:* The meeting underscored the commitment to fostering regional cooperation in addressing agricultural and ecological challenges, with a central focus on the management and conservation of plant genetic resources (PGR). Partnerships with organizations such as the Crop Trust, CGIAR, and International Coconut Community were emphasized for their invaluable contributions to advancing PGR initiatives across the Pacific. These collaborations are vital for enhancing the exchange of PGR-related knowledge, resources, and expertise, ultimately strengthening the region's capacity for sustainable agricultural development and biodiversity conservation.

18.2 *International Engagement:* Discussions emphasized the importance of engagement with global fora, such as the International Treaty on Plant Genetic Resources for Food and Agriculture. The expressed interest of the Solomon Islands to join the Treaty reflects the network's dedication to international collaboration. Furthermore, the PNG representative emphasized that issues discussed in these global forums affect all members as owners of PGR. Given the limited representation of Pacific voices in such discussions, it is crucial for countries to be aware and united. This includes concerns regarding the fair and equitable sharing of benefits derived from Digital Sequence Information (DSI) associated with Pacific PGR. Without proper safeguards, there is a risk of exploitation by larger countries or entities. Therefore, active participation in discussions on DSI is crucial to safeguard the interests of Pacific countries and ensure fair benefit-sharing.

18.3 *Regional Consensus Building:* PNG stressed the need for PAPGREN to play a more active role in discussing important matters relevant to PGR on global platforms. This includes topics like Digital Sequence Information, where regional consensus is crucial for representing the Pacific effectively. As small island states, Pacific voices are often marginalized in global discussions. Having a united stand through PAPGREN ensures that countries are not exploited and can make informed decisions collectively.

Identifying Priorities for PGR Work

19. Across the Pacific region, countries are demonstrating a shared commitment to conserving and utilizing PGR to enhance food security, economic stability, and sustainability. Fiji has made notable advancements in PGR infrastructure, particularly

with advanced tissue culture labs, while also focusing on breeding and improving key crops like taro, cassava, yams, and coconuts. Papua New Guinea's National Agriculture Research Institute (NARI) leads efforts in crop diversity conservation, participatory varietal selection, and plant breeding, with a focus on market access and climate resilience. Vanuatu Agricultural Research & Technical Centre (VARTC) faces challenges but is dedicated to strengthening food and cash crop research and infrastructure. Despite past challenges, Solomon Islands prioritize rebuilding germplasm collections for improved livelihoods and food security.

20. Samoa emphasizes PGR conservation, although limited capacity and funding hinder active breeding programs. Tonga is focused on long-term storage of crops like yams, sweet potato, and bananas, and aims to bolster research capabilities and international commitments to PGRs. Tuvalu's projects include coconut replanting and innovative agricultural systems to combat saltwater intrusion and drought. Kiribati concentrates on conserving drought-resistant crop varieties to address food security challenges. Nauru seeks solutions to prolonged droughts impacting local food production, while the Federated States of Micronesia enhances PGR management capacity with yam, taro, and cinnamon as priority crops. New Caledonia aims to enhance agrobiodiversity knowledge and evaluate species or varieties for environmental stress tolerance, and French Polynesia supports food security through seed crop conservation and nursery production enhancement.
21. Additionally, member countries in the PAPGREN meeting identified priority crops for CePaCT, the Centre for Pacific Crops and Trees, to focus on, alongside other key support on technical and scientific advice. These priority crops include taro, cassava, yams, coconuts, bananas, sweet potatoes, and citrus varieties. CePaCT's efforts in conserving and providing access to these crops are vital for ensuring food security and resilience across the region.
22. For more information, please see this [link](#) for the full PAPGREN meeting Report.

Recommendations:

23. The PHOAFS are invited to:
 - a) **Acknowledge and note** the progress made by PAPGREN in developing the Charter and Roadmap. Support for PAPGREN's decisions is vital for advancing regional collaboration in genetic resource management and agricultural sustainability.
 - b) **Endorse** the efforts of PAPGREN and support the decisions made regarding the adoption of the PAPGREN Charter and the Pacific Seed Systems Roadmap, including the nomination of PAPGREN focal points from each country to serve on the network. Following the PHOAFS meeting, PAPGREN will prioritize identifying focal points, with subsequent approval by heads of agriculture. Once all nominations are approved, SPC

will facilitate a virtual meeting for the approved PAPGREN members to nominate the six steering committee members.

- c) **Support** further actions going forward, including the development of clear actions and priorities for the network. Following the endorsement of the Charter and Roadmap, SPC will organize a physical meeting for the PAPGREN Steering Committee to develop these clear actions and identify priorities for the network's collaborative efforts. PHOAFS' support in this regard is essential for ensuring the effectiveness and sustainability of PAPGREN initiatives.