

Kastom Gaden Association

# ICT4D Learning Event Workshop Report

January 2026





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**Report by:** Tony Jansen, Fracise Muriel and Hayato Ogushi

**Prepared for:** Kastom Garden Association (KGA)

The project was delivered by KGA in partnership with the TerraCircle, One Point Five Degrees, SBC4D, LIFAD, Pacific Farmer Organisations, DFAT — Australian Aid.



one  
point five  
degrees



Australian  
Aid 





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# Executive summary

This report summarises learning from the ICT4D Learning Event held in Honiara in November 2025, which brought together:

- farmer representatives
- extension staff
- civil society organisations, government partners, and
- regional stakeholders

to reflect on implementation experience from the ICT4D Solomon Islands project.

The project was designed to strengthen Kastom Gaden Association's (KGA) capacity to manage farmer data, improve two-way communication with members, and test inclusive, low-cost digital approaches to supporting food security, seed systems, and farmer networks, rather than to deploy complex or high-tech solutions.

Implementation experience demonstrates that basic, inclusive ICT tools—particularly SMS, voice messaging, and radio—can strengthen agricultural service delivery when combined with field-based engagement and strong organisational systems. The project improved the quality and coverage of farmer data within the Planting Material Network (PMN), increased communication reach and response rates, and supported more effective coordination of seed distribution and farmer engagement activities. Evidence of these changes is reflected in PMN membership data, which shows a marked acceleration in recorded membership growth during 2024 and 2025 (Figure X), associated with targeted outreach and improved data capture processes.

At the same time, the learning event highlighted persistent constraints affecting digital agriculture in Solomon Islands, including uneven mobile phone access, limited smartphone and data use, gender disparities in phone ownership and control, literacy barriers, and connectivity challenges in remote areas.

These factors reinforce the importance of designing ICT4D interventions that are

basic-phone-first, gender-responsive, and embedded within trusted farmer organisations and extension networks, rather than relying on stand-alone digital platforms.

Taken together, the learning from the ICT4D Solomon Islands project highlights the potential role of the KGA initiative as a practical test case for farmer-led digital services in low-connectivity contexts. Beyond documenting a learning event, this report synthesises implementation experience and emerging evidence to inform future consideration of digital agriculture approaches by IFAD.

It outlines potential next steps focused on consolidating recent gains in data quality and farmer engagement, strengthening organisational systems for sustained service delivery in Solomon Islands, and selectively adapting proven elements of the approach through regional farmer organisations where conditions are appropriate.



**ICT4D Learning Event held in Honiara in November 2025**

# Project results and emerging impact

Over the implementation period, KGA developed and operationalised a custom-built, integrated communication platform directly linked to its PMN member database.

Between February and December, the platform supported 126 targeted communication activities involving PMN members using:

- SMS
- missed calls
- radio-linked campaigns, and
- WhatsApp.

These generated more than 1,400 farmer responses—predominantly via missed calls and SMS—demonstrating strong engagement with low-cost, accessible communication channels. Importantly, the system also received over 300 inbound messages from non-members, indicating demand beyond KGA’s immediate membership base, including in remote areas where conventional extension reach is limited.

These digital campaigns contributed to significant growth in PMN membership and renewals. Between September 2024 and December 2025, the PMN recorded 1,545 new applications, including:

- 852 women (55%)
- 568 men (37%), and
- 125 group registrations (8%).

This demonstrated the effect of the role of ICT-enabled communication as a practical tool for sustaining farmer engagement with core services.

The project also delivered concrete improvements to KGA’s seed systems. KGA consolidated its active seed portfolio to approximately 70 well-managed open



pollinated varieties of seeds available to member farmers, supported by strengthened accession management, low-tech seed bank protocols, and systematic germination testing.

Seed production and distribution records are now digitally linked to the member database, improving traceability, quality assurance, and alignment between communication campaigns and seed availability.

This integration demonstrates how ICT4D tools can directly strengthen agricultural service delivery rather than operate as standalone information products.

A critical learning from both implementation and the learning event concerns gender-differentiated access to ICTs. Women farmers face specific constraints related to:

- phone ownership
- access to phone credit and data
- time burdens, literacy, and
- household norms governing phone use.

While women expressed strong interest in ICT-enabled services, the findings underscore the need for explicitly gender-responsive design, outreach, and monitoring, and caution against assumptions of uniform access or benefit.

The learning event also confirmed that it is premature to assume ICT tools alone can directly broker market access or income opportunities for small farmers in the Pacific. Farmer organisations and extension providers require time to build institutional capacity and confidence in managing digital services, while farmers themselves need repeated exposure and trust-building to engage effectively with two-way systems. ICT4D tools should therefore be understood as foundational service infrastructure rather than immediate market instruments, particularly in contexts of low digital readiness that was found in Solomon Islands.

Taken together, the learning from the ICT4D Solomon Islands project highlights the potential role of the KGA initiative as a practical test case for farmer-led digital services in low-connectivity contexts.

The experience demonstrates how low-cost, inclusive ICT tools can strengthen agricultural service delivery when combined with appropriate institutional, social, and infrastructural investments.

Beyond documenting a learning event, this report synthesises implementation experience and emerging evidence to inform future consideration of digital agriculture approaches by IFAD. It outlines potential next steps focused on consolidating recent gains in data quality and farmer engagement, strengthening organisational systems for sustained service delivery in Solomon Islands, and selectively adapting proven elements of the approach through regional farmer organisations where conditions are appropriate.

# 1.0 Introduction

The ICT4D Learning Event brought together:

- KGA staff
- farmer representative
- development partner
- telecommunications providers
- private sector and
- government stakeholders.

to assess progress in the ICT4D initiative and explore practical pathways for strengthening digital information services that support:

- agriculture
- food security, and
- climate-change resilience in Solomon Islands.

The learning event was initiated by KGA and aimed to share the learning from the IFAD support to KGA funded by DFAT under the project ICT4D Solomon Islands with the objective to strengthen ICT4D systems to improve:

- communication
- services, and
- market linkages

for rural smallholder farmers in the PMN.

The learning event program combined presentations, demonstrations, panel discussions, and participatory working groups using the World Café method.

The objectives were to:

- review the effectiveness of different communication channels and digital tools; examine strengthened seed information and production systems;
- share experiences from other organisations using ICT for early warning, digital payments and extension;
- identify opportunities and barriers for ICT4D across rural communities; and develop practical insights to shape future programming.

While structured around a single learning event, the findings presented here draw on implementation data, monitoring results, and reflective discussion across the full project period.

## 1.1 Overview of the ICT4D project

The ICT4D project was designed to strengthen how KGA connects with and supports farmers across Solomon Islands. Rather than introducing new or complex technologies, the project focused on:

- improving the quality of farmer data
- strengthening two-way communication, and
- enabling KGA to deliver information and services more effectively and inclusively.

The project recognised that while mobile phone access is widespread, many farmers—particularly women and people in remote areas—face barriers to reliable digital access. As a result, the project prioritised basic, low-cost communication tools such as SMS and voice messaging, combined with field-based engagement through farmer groups and extension networks.

The PMN was a central platform for this work, linking farmers to planting material, information, and training. Overall, the project aimed to build a stronger foundation for future digital services by improving data systems, communication practices, and organisational capacity, rather than treating technology as a standalone solution.

## 1.2 Summary of presentation: ICT4D learning and context

The presentation framed the ICT4D learning event by situating the project within broader global lessons on digital agriculture and contrasting these with the practical realities of implementation in rural Solomon Islands.

Globally, ICT4D initiatives are often driven by high expectations that digital tools will rapidly transform agricultural extension and market access. However, experience increasingly shows that high levels of mobile phone ownership do not automatically translate into effective digital access.

Barriers such as:

- literacy
- language diversity
- affordability
- handset and
- SIM turnover
- unreliable connectivity, and
- gender gaps.

limit the reach and sustainability of many digital solutions.

Simple tools such as:

- SMS
- voice messaging, and
- Radio.

particularly when embedded within trusted human networks—often outperform more complex, app-based approaches, especially where two-way communication is enabled.

The presentation then focused on the Solomon Islands context, where most of the population depends on agriculture and faces increasing climate and market pressures, while formal extension services remain constrained by geography and cost.

As of early 2025, there were approximately **547,000 active mobile connections**, equivalent to **around 66% of the total population**, indicating substantial potential reach for basic voice and SMS services.

However, mobile connection figures overstate individual ownership, as many people hold multiple SIM cards. The 2019 national census reported that **fewer than half of people aged 12 years and older owned a mobile phone**, highlighting persistent access gaps.

Internet access remains more limited, with **around 42% of the population using the internet**, and significant gender disparities persist in phone ownership, control, and access to data. These realities underscore the need for ICT4D approaches that are basic-phone-first, gender-responsive, and closely integrated with field-based engagement.

Within this context, the PMN was presented as a critical platform for outreach and service delivery. While the PMN has substantial reach through individual and group memberships, gaps in data quality and contactability limit its effectiveness.

The ICT4D project was therefore designed as a foundational investment to strengthen KGA's farmer database, improve two-way communication, and test inclusive, scalable service models—positioning ICT as a practical support to extension rather than a substitute for it.

### 1.3 Demonstration of the KGA ICT tools platform

A demonstration was made on the operation of the ICT communication platform developed for KGA under the Project showing how messages can be sent / received and its link to the KGA member database.

The demo successfully outlined the process for creating and sending a message(s) using the communication system.

**Begin by signing in** to the communication system homepage, navigating to the Communication Tool, and creating a new communication activity, which involves filling in details such as the title, description, start/end dates, and selecting the communication channel.

For this demonstration, WhatsApp was used, with the message content (e.g., 'seed training #demo2222') typed in and saved.

**Next**, participants were selected by going to 'Manage participants' and 'Add participants', then searching the PMN member database using specific criteria to attach seven selected members, including KGA staff and farmers from the ICT4D learning event.

**The message was then sent** by pressing 'Launch activity'.

**Post-launch**, the system provided immediate feedback on delivery and engagement: a green highlight indicated a member had seen the message and responded (one member sent 'hello'), while a red highlight showed that a member had not yet viewed the message, likely because they were offline or lacked data.

#### demo222

#### demo222

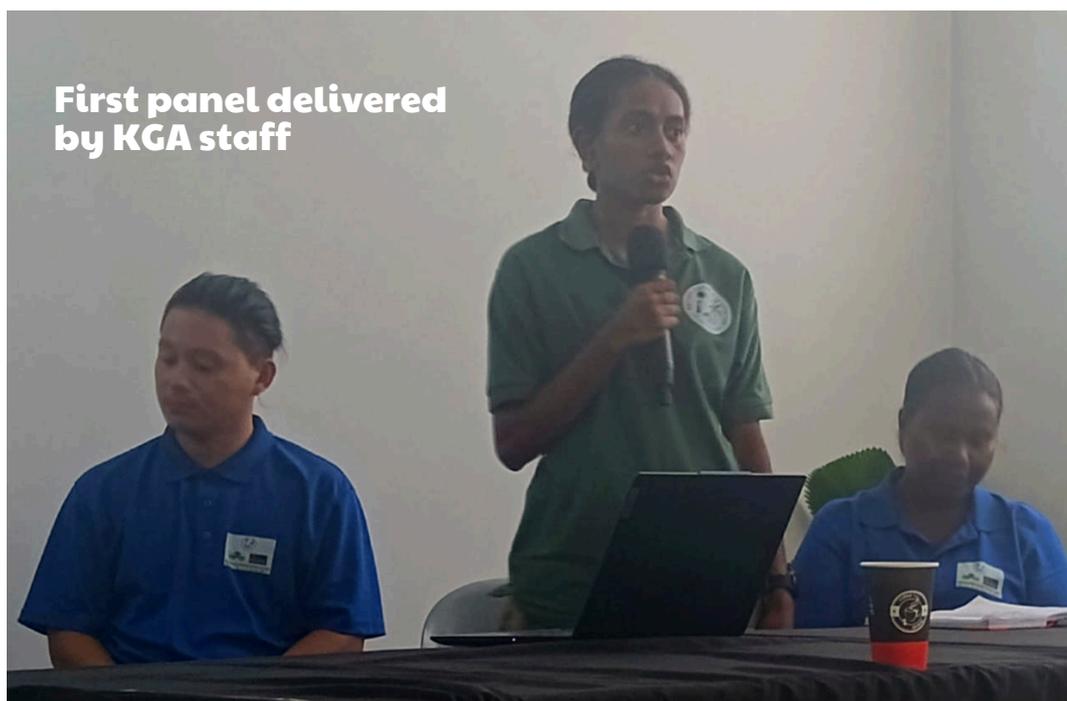
Member No	Member Family name	Channel	Status	Answer	Action
2	Roselyn Kabu	The user can access the message through whatsapp bot only	Message not sent	No answer/comment provided	
56	Tony Jansen	Whatsapp	Message read	<a href="#">View Content</a>	
5521	Mary Timothy	Cannot be contacted directly on whatsapp. Last contact: 2025-03-03 07:50:10	Message not sent	No answer/comment provided	
9000	Hayato Ogushi	Cannot be contacted directly on whatsapp. Last contact: 2025-11-26 23:38:01	Message not sent	No answer/comment provided	
9010	Crystal Koale	The user can access the message through whatsapp bot only	Message not sent	No answer/comment provided	
9014	Tikai Pitakia	Cannot be contacted directly on whatsapp. Last contact: 2025-05-15 05:35:46	Message not sent	No answer/comment provided	
9117	Jean Uwesi	Cannot be contacted directly on whatsapp	Message not sent	No answer/comment provided	

## 2.0 Key messages from the learning event

### 2.1 Panel Session One: KGA ICT4D implementation and seed system improvements

The first panel was delivered by three KGA staff members, who shared detailed implementation experience from the ICT4D project. They outlined the range of communication campaigns and application of new ICT tools trialled to date and the varied levels of engagement achieved.

Early SMS campaigns achieved modest response rates, influenced by message content, timing, and the cost of mobile credit for farmers. Radio call-in programs also performed poorly with only limited listener engagement.



Questions were raised that the project could not definitively answer during its short period including the level of farmers who listen to radio programs and the drivers for responding to a program with their phones. More recent approaches—such as carefully scripted radio spots designed to prompt ‘missed calls’ which do not need the farmer to have any phone credit — generated significantly higher participation. Likewise, improved message targeting and clearer prompts contributed to better outcomes in later SMS campaigns.

In terms of overall campaign results, the communication system has been used to create 126 activities between February and December. These activities focus on providing information about training events, seed availability, the importance of seeds, and other general updates.

So far, the system has successfully generated over 1400 responses across all channels:

- including 687 from missed calls
- 274 via SMS, and
- 39 through WhatsApp.

And also for non-members that have a response system that has received over 300 messages (SMS, whatsapp, miscall).

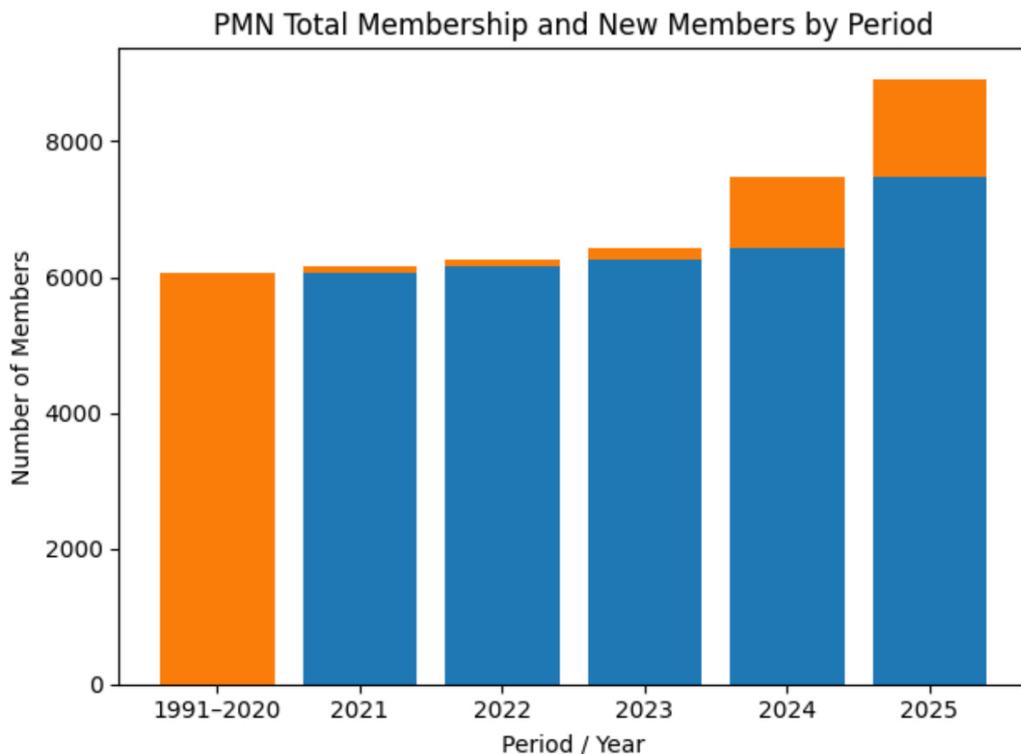
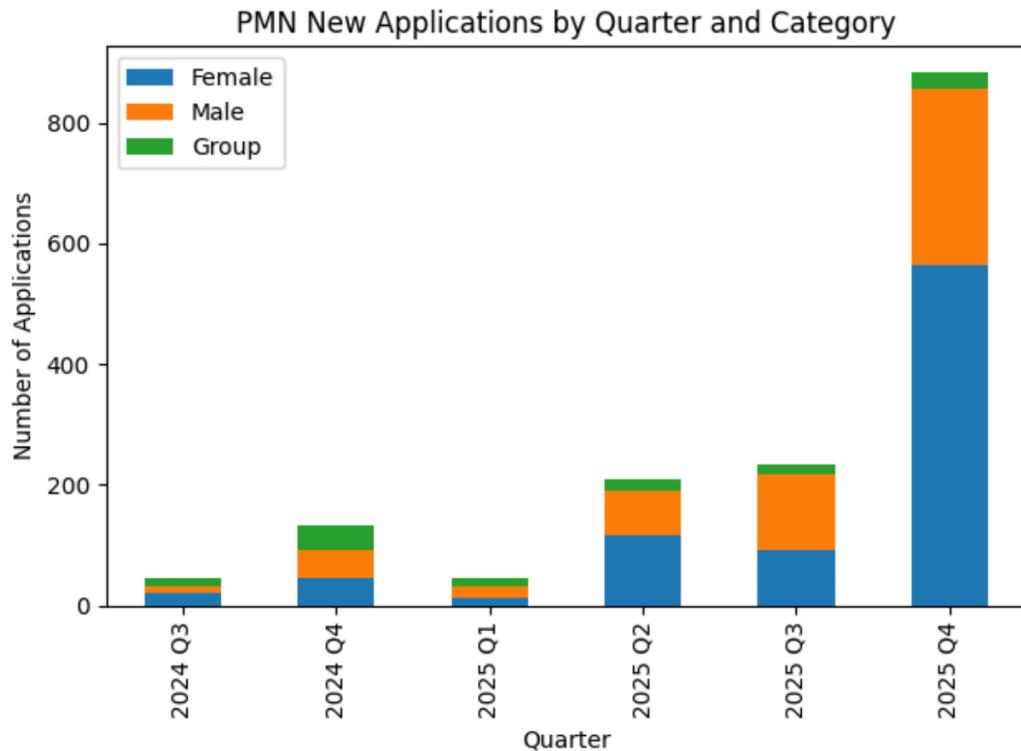
The use of ICT tools to reach farmers has had a clear impact on growth in membership of the KGA’s PMN and renewals. During the period of the project (October 2024 to December 2025) there was steady and accelerating growth in membership and renewals (see graphs on the next page). Seen in the context of overall members the PMN has started to grow since the project introduced ICT tools.

**The panel then presented on seed accessions, seed information management, and improvements to the seed production system.** Historically, KGA managed over 500 varieties through its seed bank. Many had since been distributed to farmers— consistent with KGA’s role as a clearinghouse—while others had not been continually maintained. Currently, around 70 varieties are in active management, either growing in the garden or held as seed and as a result of the project data on status and distribution to members is being recorded.

The seed curator demonstrated KGA’s strengthened low-tech seed bank processes, including the accession system, drying and storage protocols, and systematic germination testing before seed packets are distributed.

Recent germination test results, many near 100%, illustrated the high quality of seed now being produced. Participants commended the team for these improvements and for integrating seed production records into the digital information system.

The panel concluded with a discussion about what influences farmer response rates, the role of literacy and network access, and how improved data systems can support more effective and better-targeted communication. KGA was commended for the pioneering work they are doing on establishing ICT4D services relevant to farmers.



## 2.2 Panel Session Two: experiences from external organisations

The second panel broadened the dialogue to practices and innovations from other organisations working in ICT4D.

**Oxfam** shared lessons from their disaster preparedness and response work, describing how SMS alerts and early-warning systems can rapidly mobilise communities. They highlighted the value of KGA's farmer database and saw strong potential for further innovation in message delivery and farmer engagement.



**Solomon Telekom** presented their MSILEN mobile money transfer service and shared insights into bulk SMS operations, response tracking, and rural digital payments. They outlined opportunities for integrating MSILEN into the Custom Garden platform—particularly for membership-fee payments—and introduced new services under development such as a crop index-based insurance product. Telekom encouraged KGA to explore toll-free call-in numbers as an accessible channel for rural engagement.

**The Ministry of Agriculture and Livestock (MAL)** Information Unit described its mandate to deliver government-approved agricultural information. Although not yet using ICT tools extensively, the Unit expressed keen interest in the project and in exploring future collaborations.

The final presentation, drawing on **experience from West Africa**, illustrated how trusted local voices, vernacular languages, and interactive radio programming can be combined with digital tools to deliver high-value services. Examples included a market-price information system led by women intermediaries who submitted daily prices via a mobile app and were paid through mobile money, and a missed-call-based platform for crowdsourcing crop failure and disaster reports. These examples demonstrated how simple tools can support diverse use-cases when grounded in local context and realistic application of the ICT tools into wider services for rural populations.

This panel generated strong interest, particularly regarding MSILEN, digital payments, early-warning systems and voice-based information delivery. Participants explored how these approaches might complement or integrate with KGA's digital platform.

## 3.0 Project results and emerging impact

### 3.1 Working Group Sessions: World Café Method

Participants then joined three rotating working groups—one composed of institutional stakeholders, one made up of women farmers, and one mixed group. Each group examined a guiding question, generating the insights summarised below.

Following on from the discussions working groups discussed a number of themes to share group experiences and observations.

#### 3.1.1 Working Group 1: preparing Solomon Islanders to engage with ICT tools

Participants emphasised both the high potential and the practical constraints shaping rural ICT uptake.

#### Ways forward

- conduct community awareness and short digital-literacy trainings
- establish a free toll number and use ‘missed-call’ methods for engagement
- encourage regular updating of farmer phone numbers
- use targeted radio service messages to encourage participation
- integrate ICT concepts into school curricular
- provide phone-use awareness through vendors and service providers
- train community leaders and lead farmers as ICT focal points
- use trusted networks—churches, schools, NGOs—for communication
- position extension officers in each province to support ICT engagement.

#### Key barriers

- network gaps, high credit costs, limited electricity and devices
- digital illiteracy and English-language barriers



*Farmers' registration and seed distribution highlight from Zaru, North Choiseul.*



*On this trip, the KGA team started at Pangoe, north of Choiseul, the team ran a workshop on the project in the village field stage which took a whole day and the turn out was excellent.*

- limited community engagement and trust issues around phone use
- gendered constraints: time burdens on women, cultural norms, household dynamics
- need for cybersecurity awareness and device-maintenance support
- inclusion gaps for people with disabilities.

Overall theme: A foundation of digital readiness, trust, and affordability is essential before ICT tools can be used at scale.

### 3.1.2 Working Group 2: opportunities for ICT4D in agriculture, food security and climate change

Participants identified many practical opportunities for digital tools to support farming and climate resilience.

#### Key Opportunities

- agronomic guidance: pest management, composting, soil improvement
- seed and planting-material availability updates
- weather warnings, seasonal calendars, planting calendars
- farm management systems and digital record keeping
- market information and buyer linkages
- propagation of local vines and food crops
- new crop varieties, livestock feed information, soil management advice
- food processing and packaging tips
- short videos to overcome literacy barriers
- partnerships with MAL and other agencies
- spaces for communities to share information.

Overall theme: There is strong demand for timely, simple, actionable agricultural and climate information that supports daily decision-making.

### 3.1.3 Working Group 3 – information farmers want to receive and send via SMS/WhatsApp

Participants described a strong preference for two-way communication systems.

#### Information they want to receive

- pest management and soil improvement guidance
- seed and planting material availability
- weather alerts, planting calendars, seasonal forecasts
- seed saving, new varieties, market information
- food security alerts and farm management tips
- short instructional videos
- updates on KGA projects and staff.

## Information they want to send back

- seed availability and seed-sharing information
- local vines and crop availability
- production data and local observations
- questions, feedback, community updates.

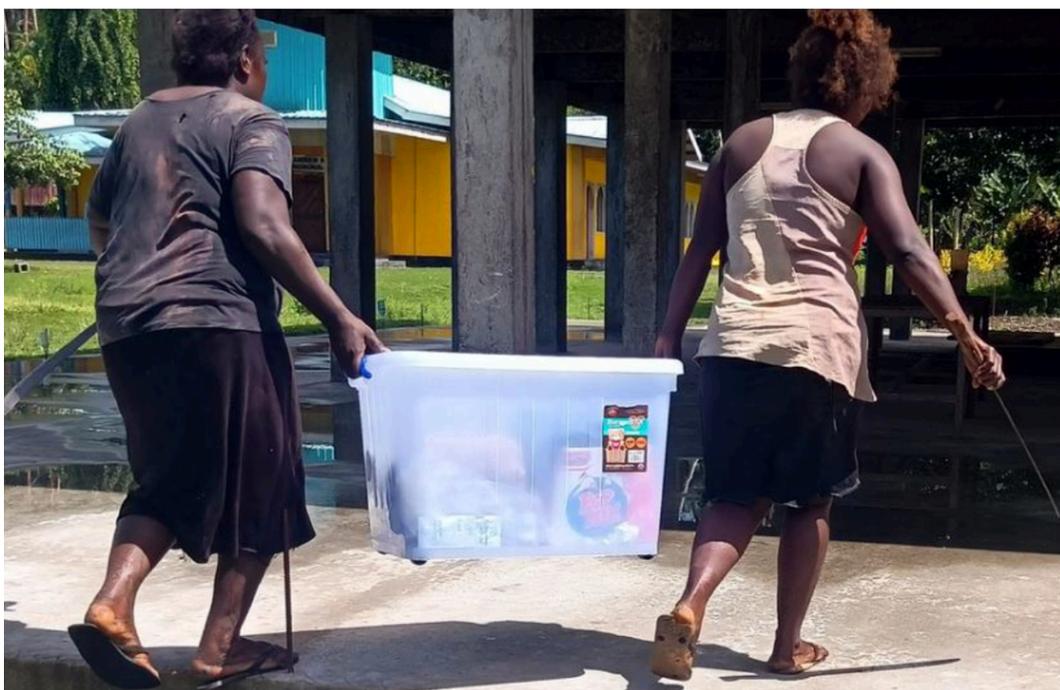
**Overall theme:** Farmers want a practical, mobile-first, two-way system supporting both information delivery and farmer-generated insights.

## 3.2 Closing remarks

The workshop concluded with remarks from IFAD representative Selina Sanga, who acknowledged the collaborative partnership between IFAD, DFAT and Kastom Gaden in delivering the ICT4D project. She commended KGA for its role as an executing agency capable of piloting innovative approaches to farmer communication and information management.

Selina noted that the project demonstrated both creativity and rigor in testing new methods for reaching and supporting smallholder farmers, and that the sharing of experiences through this forum illustrated KGA's leadership in pioneering digital extension approaches in the Solomon Islands.

She also emphasised that while gaps and needs remain, IFAD looks forward to continuing to work closely with KGA and the wider group of stakeholders to advance inclusive, effective ICT4D solutions in the years ahead.



*Sepa women in action helping carry the seeds to be distributed.*

## 4.0 Conclusions and next steps

The ICT4D Solomon Islands project demonstrates that farmer-led digital communication systems can play a meaningful and practical role in strengthening agricultural service delivery when they are grounded in rural realities and embedded within trusted farmer organisations.

The project confirms that relatively simple, low-cost tools—SMS, missed calls, targeted radio messaging, and WhatsApp—can generate sustained farmer engagement when message design, timing, and call-to-action are adapted to local literacy levels, access constraints, and social norms.

The experience of KGA's PMN illustrates that ICT4D tools are most effective when tightly integrated with core services, rather than deployed as standalone communication products.

**Linking digital communication directly to seed availability, training schedules, and membership services strengthened both operational efficiency and farmer trust, contribution to increased membership engagement and renewals.** Parallel improvements in seed accession management, germination testing, and digital record keeping further demonstrate how ICT systems can reinforce agricultural quality assurance and traceability.

The project also highlights critical constraints that must be addressed for inclusive scale.

**Gender-differentiated access to phones, data, time, and literacy remains a major limiting factor, particularly for women farmers. Similarly, network coverage, cost of credit, and digital literacy continue to shape who can participate and how.**

These findings reinforce the need for **explicit investment in digital readiness, gender-responsive design, and community-level capacity building** alongside any expansion of ICT-enabled services.

Finally, the project confirms that ICT4D tools should be understood as enabling infrastructure rather than immediate market instruments. While there is strong interest in market information, mobile money, and financial services, both institutions and farmers require time to build familiarity, trust, and operational confidence before such functions can be deployed effectively and responsibly.

## 4.1 Way forward and potential next phase

Building on the learning and results of the ICT4D Solomon Islands project, two complementary pathways emerge for future investment that build on demonstrated strengths while recognising institutional and contextual constraints.

### Regional replication through Pacific farmer organisations

One opportunity is to leverage the KGA ICT4D platform and implementation experience as the basis for a regional farmer-led digital services model, working through Pacific Farmers Organisation Network (PIFON). Rather than immediate large-scale rollout, this pathway would focus on structured replication and adaptation to the specific needs and opportunities of each member Farmer Organisation and their country and farmers context.

An initial step would involve packaging the core elements of the Solomon Islands model, including the:

- communication platform architecture
- message design principles
- radio–digital integration approaches
- data governance protocols, and
- gender-responsive engagement practices.

These materials would be designed to support adoption by other farmer organisations while allowing for contextual tailoring.

Following this, a small number of national farmer organisations across the Pacific could be supported to pilot the approach, with technical accompaniment and peer learning facilitated through PIFON.

This phased approach would allow IFAD to test scalability, cost-effectiveness, and institutional readiness across diverse contexts while maximising the value of existing investments.

Parallel strengthening of PIFON's facilitative role would position it as a regional backbone for farmer-led ICT4D learning and gradual expansion.

## Deepening and expanding the Solomon Islands platform

A second pathway focuses on consolidating and expanding the Solomon Islands platform to increase both its value to members and its overall impact. A Phase II investment could prioritise increasing active use and service relevance rather than simply expanding message volume.

Key areas for further development include:

- integration of agriculture-relevant weather and early-warning information
- expansion of remote extension services using two-way messaging
- selective testing of voice- based or vernacular-language services to address literacy constraints and
- structured community-level digital readiness activities, including training of lead farmers or community-based ICT focal points.

This pathway would also provide space to deepen gender-responsive approaches by explicitly addressing barriers to women’s participation, monitoring differential uptake and benefit, and designing outreach strategies that account for household dynamics and time constraints.

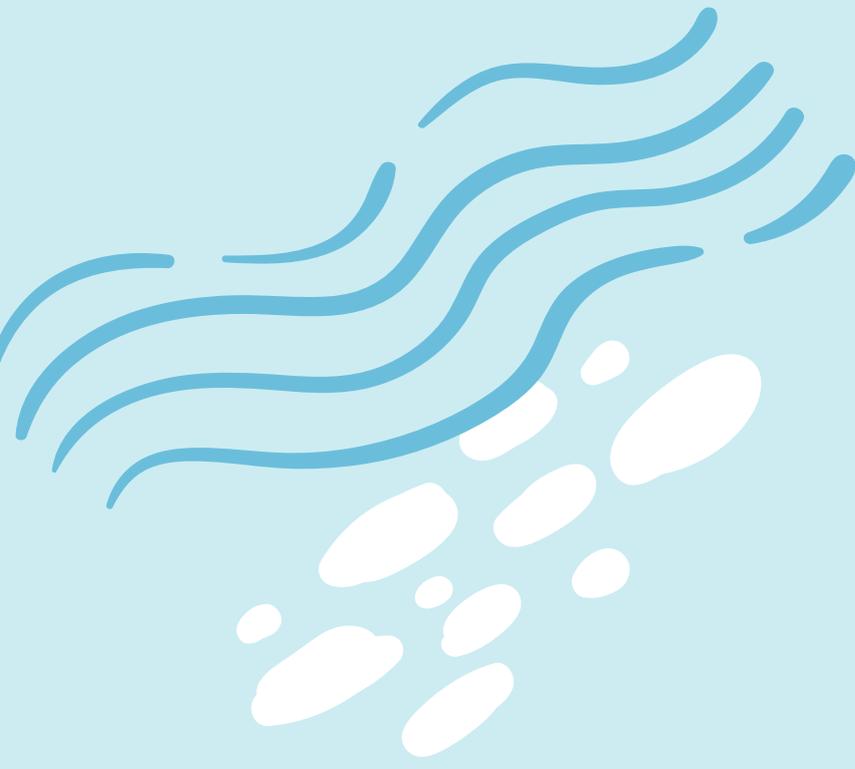
As in the pilot phase, ICT tools would remain positioned as complementary to face-to-face and farmer-to-farmer extension, reinforcing rather than replacing existing systems.

Together, these pathways provide a realistic and sequenced basis for future ICT4D investment that builds on demonstrated results, strengthens farmer organisations as service providers, and aligns digital innovation with inclusive agricultural and climate-resilient development.









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