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Policy drivers for Public-Private Partnerships in Pacific Organics: Improving Extension Policy through an Evidence-based approach

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Contents

| | | |
|-----------|--|-----------|
| 1 | Acknowledgments | 5 |
| 2 | Executive summary | 6 |
| 3 | Introduction..... | 8 |
| 4 | Objectives | 10 |
| 5 | Literature review summary | 11 |
| 6 | Case studies research summary..... | 14 |
| 7 | Policy workshops summary | 20 |
| 8 | Outcomes and Outputs..... | 23 |
| 9 | Discussion | 26 |
| 10 | Proposed future research project..... | 29 |
| 11 | Conclusions and recommendations | 30 |
| 11.1 | Conclusions..... | 30 |
| 11.2 | Recommendations | 30 |
| 12 | References | 32 |
| 12.1 | References cited in report..... | 32 |
| 12.2 | List of publications produced by project..... | 33 |
| 13 | Appendices | 34 |
| 13.1 | Appendix 1: Literature review | 34 |
| | Introduction..... | 34 |
| | Introduction to the organic sector and its importance in the Pacific Islands | 34 |
| | Organic sector markets and regulation | 35 |
| | Considerations in developing the organics sector, including the potential roles for public private partnerships and improved extension | 36 |
| | Potential policy interventions for expanding the organic sector..... | 38 |
| | Public-private partnership models in agriculture | 41 |
| | Public private partnerships, extension and the development of agriculture for export in the Pacific Islands | 43 |
| | Pacific Islands organic and extension policy, issues and options..... | 46 |
| | References | 56 |

| | | |
|------|--|----|
| 13.2 | Appendix 2: Case studies research | 59 |
| 13.3 | Appendix 3: Workshop participants | 60 |
| 13.4 | Appendix 4: Draft organic action plan (Fiji)..... | 63 |
| 13.5 | Appendix 5: Organic Working Group Meeting – Cabinet Drafting Minutes | 70 |
| 13.6 | Appendix 6: Draft organic action plan (Vanuatu) – relevant sections..... | 75 |

1 Acknowledgments

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2 Executive summary

The global organic market is growing, and Pacific Island farmers have a high potential to have greater involvement. Organic agriculture offers the possibility of higher premiums and market access but can require higher labour and certification costs and potential costs during the time of transition to organic production. Various Participatory Guarantee System (PGS) schemes seek to reduce these problems for more traditional, smallholder farmers in developing countries. However, for greater uptake of these schemes, improved extension of technical knowledge and coordination is a key need in the Pacific Islands, particularly around input use, pest, weed and disease management, and storage, handling, transporting and processing to meet organic requirements.

The public service has traditionally provided extension services. However, the private sector can help provide information and access to standards, market intelligence, and contracting for export supply, although it faces challenges and needs economic and policy stability. Additionally, farmer organisations have a key role to play in effective coordination and reach with members. Public-private partnerships with clear role definition can help to overcome perceived dependency as well as funding-constraints. The *Pacific Islands Extension Strategy* was developed in 2014/2015 and launched in 2018. One of its purposes was to provide a framework for advisory services with clear roles and responsibilities that would streamline investment and institutional support.

This research was an SRA (Small Research Activity) funded by ACIAR to analyse partnerships in extension and policy changes required to support multi-stakeholder extension in Fiji and Vanuatu. The research objectives were to:

- conduct a review of the literature around partnerships and policy, particularly Pacific Islands policy and programs to identify actions that might enhance partnerships;
- conduct case studies based on interviews with stakeholders in ginger, turmeric, coconut, coffee and cassava supply chains to better understand extension service provision partnerships, including PGS and third party systems; and
- hold policy forums to share case study findings and partnership experiences.

The policy review showed that extension requires consideration of the nature of the farm (based on wealth, education and literacy), the links with farmer organisations, and appropriate technical and market information to meet stringent certification (or conversion) requirements, third party certification and market equivalence of standards used elsewhere. Certification in the Pacific is not required but does exist via the IFOAM (International Federation of Organic Agriculture Movements) accredited Pacific Organic Standard, under the trademark Organic Pasifika, and delivered through a PGS peer audits. The PGS system is relatively inexpensive and suits small-scale farmers. Exports to regulated markets require third party certification of produce to a fixed standard or equivalent. POETCom (The Pacific Islands Organic and Ethical Trade Community) developed a Regional Pacific Organic Policy Toolkit to guide government involvement in organics that includes push, pull, enabling and barrier removal activities such as subsidies, agreements and networked extension.

Partnership-based extension needs consideration of the different stages of the whole supply chain and the multiple roles of the network participants. For example, a farmer may be a producer, NGO member, trainer, and/or certifier. Specific needs in Vanuatu and Fiji include infrastructure, transport and quarantine needs for export; the need for subsidies, loans and elimination of duties; information on the viability of organic farming; funding for policy interventions including targeted extension; tailored to the diversity of farmers and islands; specific help for compost knowledge and diffusion; and the role of each stakeholder including farmer organisations. The establishment of national groups may support the development of information-sharing networks, link governance and supply

chains, raise the profile of organics nationally and internationally, and provide a means of collating data and engaging with producers.

Key findings from the five case studies research revealed:

- partnerships are not a fixed model but evolve within different contexts;
- not all information and training needs are being met;
- value chain conflicts exist between meeting business objectives, organic objectives, and social justice/community development objectives;
- the whole of value chain understanding varies greatly with stakeholders, with many understanding their own component in the value chain, but not the specifics of others;
- third party certification requires more widespread training of recording skills, including a long-term approach where skills can be taught in schools;
- fluid processes between PGS and third-party certification need to be developed;
- partnerships need to address wider value chain impacts, better market chain access, and help in higher-risk situations along the value chain;
- farmers would benefit from an overall organic management plan;
- organic farming criteria are not always met or considered;
- organic farming and food markets are primarily chosen for market access, health, and sustainability reasons, and not to gain a premium;
- organic farming and food markets may help address climate change impacts and build resilience along the value chain from farming families to consumers; and
- organic farming and markets can address women and young people's inclusion across the entire value chain, not just at the farming end of the value chain.

The online policy forums revealed important commonalities in Vanuatu and Fiji in that there was a need to coordinate supply chain-based extension (through either a delegated officer or research coordinator), a need for specifically targeted extension, and an additional need for economic analysis of costs and benefits of producing organically throughout the organic chain with consideration for different crops, islands and the nature of farms and markets.

Policies need to include public-private partnership extension that considers differences for subsistence growers, local commercial growers and export growers and the specialist expertise that each may require concerning technical needs (including different crops, soil types etc.) and market needs. Interventions such as support and subsidies and roles/responsibilities/delivery need to be clear about what is delivered by the government, the private sector, NGOs, and PGS and local farmer organisations.

To effectively coordinate the diverse farms, targeted knowledge, and roles and responsibilities across a whole-of-supply chain approach, strong governance is needed to work across different countries and their varying regulatory regimes and cropping/environmental characteristics. Appropriate processes need to be designed that include all stakeholders, understand their needs and where they fit in the value-chain, their specific barriers and constraints, and provide different benefits for each. There is no singular approach or benefit that should be encouraged. Instead, appropriate processes to work with each crop should be promoted and coordinated effectively. These processes also need to explore how to train others, including the use of organisations and a facilitator for farmer-to-farmer learning, and then a process to scale up and out across the diverse Pacific region.

3 Introduction

The global organic market grew in value to US\$97 billion in 2017, with 69.8 million hectares, including land undergoing conversion, under organic production (Willer et al., 2019). The region of Oceania has half of the world's organic farmland at 35.9 million hectares (Willer et al., 2019), meaning there is potential for a larger, high-value organic market for Pacific Island farmers. The most impoverished farmers are often organic by default, following traditional practices without chemicals or artificial fertilisers. There are also moderately wealthy farms with strong social networks, high access to information, high literacy and small-moderate sized farms; and even wealthier farms with older household heads, large farms and low off-farm income but lower education levels.

In general, organic produce can attract higher premiums. However, labour needs are higher, wages generally lower, and there are additional costs for certification and costs for the transition to organic methods – at a time when production is lower than conventional agriculture and farmers cannot realise these premiums. Premiums also depend on the willingness to pay, which relates to marketing (Wheeler, 2011). The benefit to cost ratio varies with the particular crop, being lowest for vegetables, while the distance between farmers and markets also affects all farmers' net income in Pacific Island Countries (PICs). International trade in organics requires effective marketing and supply chain networks.

Extension service provision includes relevant technical knowledge and processes for sharing knowledge effectively, including co-ordination across supply chains. Improved extension service provision is recognised as a critical gap in agricultural development in the Pacific Islands. Conversion to organics means farmers need new skills in input use, pest, weed and disease management, and storage, handling, transporting and processing of produce to meet organic requirements.

Appropriate knowledge and extension services are often absent in the public sector, and the private sector is filling this gap, albeit with limited capacity and funding. A complimentary private sector role can provide standards, market intelligence, and access and contracting for export supply. However, the private sector's extension provision faces challenges of legitimacy, accountability, and dependency (Valente and Crane 2010), particularly in funding-constrained contexts and where specialist knowledge to support a diversity of cropping is required. The private sector requires incentives such as macro-economic stability, predictable policy, effective coordination of information flows, low risk, and sufficient technical and market information. Government enforcement of contract management is seen as crucial for effective service provision.

The IFAD (2013) identifies three types of PPPs:

- formal contractual arrangements, such as contract farming – forming a long-term commercial relationship;
- delegating specific value chain functions to producer organisations, e.g. extension or management of processing centres; and
- joint ventures between private companies and producers' groups, e.g. farmer organisations and private sector ownership of an enterprise.

A recent review (IFAD 2019) emphasised the addition of a fourth P – 'Producer' – to ensure effectiveness within a value chain. Private service providers may also be embedded in public service, a co-operative, or a not-for-profit (NFP) organisation. Further, NFPs and development partners might replace the role of the government in the funder component.

The *Pacific Islands Extension Strategy* was developed in 2014/2015 and launched in 2018 after approval by HOAFS (SPC 2015). One of its purposes was to provide a framework for

advisory services with clear roles and responsibilities that would streamline investment and institutional support. The strategy outlines the potential contribution of public-private partnerships where government capacity is constrained.

POETCom administers an organic certification standard (the Pacific Organic Standard), but some international markets (e.g. the U.S.A.) require additional certification. Further growth of the sector is based on the ability to maintain and expand these services.

Policy responses can support farmers to address organic challenges. Key policies related to the organic sector development in Fiji and Vanuatu include the:

- Vanuatu Agriculture Sector Policy (2015-2030);
- Vanuatu Organic Agriculture Sector Policy;
- Fiji 2020 Agriculture Sector Policy Agenda (2014); and the
- draft Fiji National Organic Policy (draft 2020).

This research analyses the policy drivers (and interventions) that seek to improve extension to organic farmers in Fiji and Vanuatu. It explores how policy drivers and interventions might better enable public-private partnerships in extension delivery and ultimately benefit organic farmers in the Pacific.

4 Objectives

This project aims to understand how government and non-government actors can work together to improve extension services and enhance organic production. It focuses on policy mechanisms for supporting partnership-based extension service provision across Vanuatu and Fiji's organic supply chains. The objectives of the research are:

- a policy review of international and Pacific Islands literature, and Pacific Islands policies and programs to identify policy actions that address extension challenges and enhance opportunities for partnerships in the sector;
- case studies of Ginger, Turmeric, Coconut, Coffee and Cassava supply chains in Fiji and Vanuatu to better understand extension service provision across these supply chains and how partnerships are working to support sector growth; and
- policy forums with government, NGOs, consultants and others actively involved in the organic sector to share case study findings, experiences on different partnerships models (including funding), and understanding of the various roles in organic extension that will improve collaboration and grow the sector.

This project helped advance knowledge on the potential impact of agricultural policy in the niche market of organic produce and aimed to help detail how extension services could be best provided for these markets. This new knowledge is therefore relevant to the development of other specialty agriculture products.

5 Literature review summary

One of this research's objectives was to conduct a literature review (provided in Appendix 1), which is summarised in this section. Organic policy, including any extension intervention, needs to be cognisant of producers' diversity (based on wealth, education and literacy) who may identify organics as part or all of their livelihood and/or may be part of a farmer organisation/network to scale to export supply. Access to technical and market information is also critical for producers given stringent certification requirements and needs to be cover conversion risk, third party certification and market equivalence of standards. Organic production occurs throughout the entire supply chain, including input choices (fertiliser, agrochemicals, seed), production methods, transport, quarantine and marketing of produce (Andererg 2020, IFAD 2015, Jouzi et al., 2017, McGregor and Stice 2014, Wheeler 2011).

The organics market can be unregulated (no certification required), partially regulated (not to a specific standard) or regulated (to a fixed standard or equivalent with another standard). Certification in the Pacific is not required but does exist via the IFOAM (International Federation of Organic Agriculture Movements) accredited Pacific Organic Standard, under the trademark Organic Pasifika, and delivered through a Participatory Guarantee System (PGS) that certifies operators through peer audits. The PGS system is relatively inexpensive and suits small-scale farmers. Exports to regulated markets require third party certification of a product to a fixed standard or equivalent.

POETCom developed a Regional Pacific Organic Policy Toolkit to guide government involvement in organics: <http://www.organicpasifika.com/pasifikapolicytoolkit/>. The toolkit includes push, pull, enabling and barrier removal activities to build momentum, such as:

- subsidies for some organic inputs (e.g. equipment, fertiliser) and/or removal of subsidies for conventional farming;
- subsidies for regulated markets (or for conversion) which provide benefits to the government through later taxes on premium produce;
- purchasing agreements (by the government) to help address certification/conversion risk, the specific nature of the farm, and scaling up production (Reynaldo 2019, IFAD 2015);
- bilateral trade agreements for certification equivalence;
- farmer organisations for learning, awareness-raising, extension and training, and for supply chain coordination, including in purchasing, storage and marketing; and
- networked extension using information tailored to producer-consumer networks.

Policy interventions generally might include private sector engagement and extension vouchers or subsidies for farmers to purchase particular expertise, low-cost loans for conversion, and contract farming where tenure is insecure. Tariffs, branding, infrastructure capital, competitive funding, private sector co-financing, and regulating against genetically modified organisms are additional considerations.

Some of these interventions can only be offered by the government, but others can operate through partnerships. Extension services in organics often develop in the private sector (including NGOs), given the limited funds and skills in the public sector (Jouzi et al., 2017, Ayuya et al., 2015, McGregor and Stice 2014). However, private provision of extension may not be lucrative for providers given the numbers of producers and their willingness to pay for extension services which are seen as a public good (Poulton and Macartney 2011, Reynaldo 2019). Largely absent from the literature is a discussion of infrastructure provision to meet export markets (e.g. storage), value-added organic processing, and export phyto-sanitation and quarantine procedures. The extent to which

these factors are differentiated in organics vis-à-vis conventional markets is unclear; however, they need to be factored into Pacific context considerations (McGregor 2007).

Wongtschowski et al. (2013: 24) suggests options for extension service provision include free services (paid by a donor, government, or companies), subsidised services (part-payment by farmers or cooperatives) and fully paid services (paid directly by the client or embedded in another transaction price). Fully privatised extension service provision can result in services reaching medium to large scale farmers rather than smallholders (Labarthe and Laurent 2013) and are thus a poor fit for many organic farmers in a development context. Although increased farmer satisfaction with services and increased crop production has been reported, there are challenges reinforcing existing patronage networks and sometimes contract payments without the corresponding service providers.

Innovative extension approaches include extension agents recognising multiple stakeholder interests and acting as a conduit within stakeholder networks throughout a supply chain (Chowdry et al., 2014, Roling et al., 2014). Partnerships have been important for Fiji red papaya's development and Vanuatu pepper and cocoa supply chains (McGregor and Stice 2014). In these cases, the private sector has been engaged in funding high temperature forced air (HTFA) equipment for organic quarantine, donor-funded extension in papaya, and supporting farmer organisations and networks in producing spices. The specifics about partnership arrangements are unclear, that is, whether they are formalised through contracts or are informal, or whether they involve funds transfer for specific activities or more general contributions towards activities of mutual interest to farmer groups, development partners and government (e.g. payment of workshops/meeting costs, resources for demonstration projects or farmer visits).

In a second example, NGIP Agmark is a Papua New Guinean cocoa export co-operative with an aligned input supplier that has specifically embedded agriculturalists providing extensionist services in branches, and running training programs, as evidenced in ACIAR project reports (ASEM/2012/072). The business models and funding mechanisms are also unclear (i.e. private sector, donor research funding), as is government engagement.

Agrana Fruit (Fiji) Ltd is a commercial food processor in Fiji, with third-party (Australian) organic certification for some of its production. In this case, costs associated with third-party organic certification auditing are supported. They operate using contract farming to reduce up-front inputs (e.g. they can pay the costs with associated planting materials) and transport.

Kaiming Agro Processing Ltd, Fiji, is a ginger exporter valued at \$500,000FJD with third-party (Australian) certification; it also exports other non-organic produce. They have worked in partnership with the SPC and the Ministry of Primary Industries to provide training on land preparation, harvest and storage, funded by EU donors (2012/3). ACIAR projects have also previously supplied disease-free ginger seed. Kaiming has extension agents who provide quality assurance along the value chain. Niche market entry was considered easier for organics than conventional agriculture, given the relatively small number of actors. Storage, preservation, transport and distribution remain as challenges.

Venui Vanilla Ltd is Biogro New Zealand certified for vanilla and pepper. The company has been supported by the Farm Support Association, representing private-private collaboration for extension delivery supported by donor funds. Noted issues include certification cost, the difficulties in obtaining duty exemption, the need for more extension and limited premiums in the regional market.

A survey of POETCom membership (Cotton 2017) identified that formal education, field schools and farm visits were under-accessible and that internet and video resources were over accessible. The key technical information needs were for soil quality, certification and pest control. Public-private partnerships or farmer organisations/community groups were identified as most effective in providing extension services. This reflects the multiple roles of participants within the network – farmers as NGO members and farmers, NGOs and trainers as certifiers.

Specific policy needs in Vanuatu include an export/quarantine focus, information on the economic viability of organic farming, conversion subsidies, certification subsidies, input subsidies, farmer organisations, low-cost loans/credit access, and the elimination of duties on inputs. The specific mechanisms by which some policy interventions could be funded (e.g. farmer associations, subsidies) need attention if they are effectively implemented to deliver sectoral benefits. Similarly, PPPs' specific mechanisms that could be operationalised are not identified, e.g., service and management contracts, contract farming, and functional delegation. Specific needs in Fiji include infrastructure, transport, and quarantine needs associated with export market development (for either organic or conventional markets), careful consideration of target farmers, including promoting organic agriculture for outer islands, and land tenure security (particularly for credit access). Partnership-based approaches need recognition of the private and public sectors' role, including the specific ways in which non-government funding might support sector growth is needed. Further attention is needed to incentives for private sector engagement, particularly if financing is private.

In general, there is limited attention to quarantine and transport considerations and limited information on the economic viability of organic farming. The low prevalence of conventional agriculture in the past, it is assumed, confers an advantage. However, ease of conversion is countered by higher costs for transporting produce and imported inputs, limited quarantine facilities and the unknown durability of existing and potential organic export products. The establishment of national groups could support the development of information-sharing networks, raise the profile of organics nationally and internationally, and provide a means of collating data and engaging with producers.

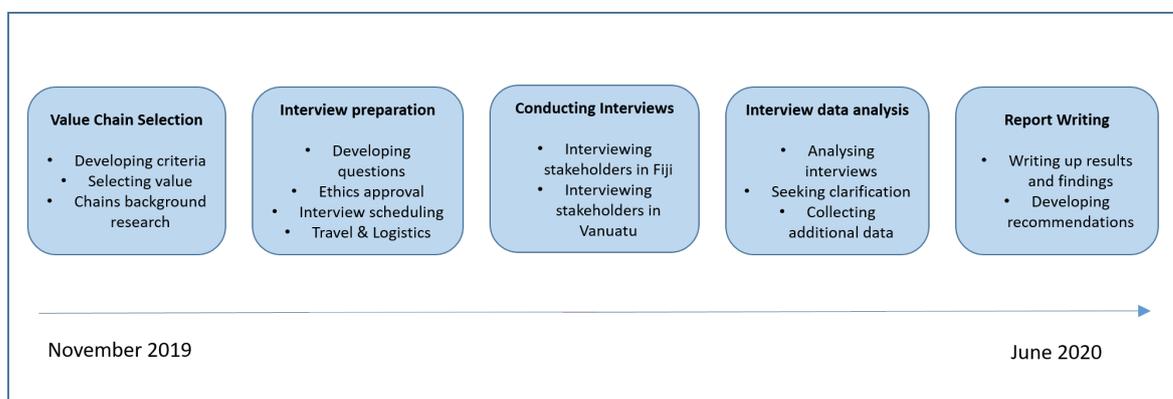
The current shift towards extension that emphasises supply chains and links between governance levels must support innovative export-oriented market development (echoing the *Pacific Islands Extension Strategy*). Understanding and coordinating extension needs at different stages of the supply chain is important, as is a discussion about who is currently providing these services, the strengths and limitations of existing extension models in the context of scaling and further developing export markets, and the potential roles of different groups in their future provision.

6 Case studies research summary

Interviews with stakeholders across five value chains in Fiji and Vanuatu were conducted in early 2020. Interviews were analysed and combined with other relevant information from media and desktop searches and scholarly literature to present case studies that met organic standards through either PGS or third-party certification. For each of the value chains, a variety of information was collated, including:

- organic industry metrics (e.g., industry worth, annual harvest areas, yield, production tonnes, per cent organic, and export);
- developments in the industry over the past 5-10 years;
- seasonal calendar (including land preparation, planting, growing, harvesting) and associated issues across at different times;
- the value chain (input suppliers, growers such as smallholder farmers, cooperatives, plantations, different markets, and different products);
- market price and cost along the chain for producers, transporters, processors, exporters, and retailers;
- the partnerships at the different stages along the chain (i.e., partnerships occurring at production, harvesting, processing, exporting and retailing), and
- types of partnerships, value chain locations and different partnership purpose [using the partnership categorisation by Rankin et al., (2016) that includes]:
 - partnerships for value chain development (VCD PPPs) of which there are two types - meso-VCD PPPs and micro-VCD PPPs;
 - partnerships for joint research, innovation and technology transfer (ITT PPPs); and
 - partnerships for developing agricultural market infrastructure (MI PPPs); and
 - partnerships for delivering agribusiness development services (BDS PPPs).

The five case studies on ginger, turmeric and coconuts in Fiji and coffee and cassava in Vanuatu were chosen to represent a diversity of partnership models. Each of these differs in terms of complexity/size (e.g. short-chain vs long-chain), maturity (e.g. new to the market, well established), farmer engagement (e.g. cooperatives, individual farmers, associations), and both PGS and third-party certification value chains (see Appendix 2 for detailed information).



The following 13 key findings emerged from the case study research and highlighted the needs for future extension policy (and practice) for PPPs. It should be noted that partnerships are dynamic, changing over time and through the value-chain. For this reason, the findings are distilled from those partners who were working with the value-chain at the time of the research (and also noting that not all partners were available for interview at that time).

1. The partnerships required along a value chain are not a ‘fixed’ model but an evolving process to be managed within a specific context. That is, they change over time with the maturity of a value chain.

Observations: Our studies showed that POETCom had played a key role in the initial connection of stakeholders along the value chain and then played a key role in coordinating the establishment of the chain with these key stakeholders. As these value chains became more mature and successful, and stakeholders along the value chain became more profitable, then these stakeholders could bring in relationships with private providers to address specific issues as they arose. The importance of partnerships remained high, but whom the partnerships were with changed.

2. Although partnerships exist between the public and private sector, not all information and training needs are being met, and services need to be expanded.

Observations: Training by the private sector is for more mature value chains in the area of certification procedures and recording information, as well as at an advisory level, in terms of plant diseases and pests. The government has also carried out some training on technical issues, for example, soils, but these are not specifically organic focused. POETCom has provided PGS training and co-facilitated training with other organisations and stakeholders to meet needs along the value chain and coordinate this training. While input is being provided, these providers are not always working in partnership with each other. There were some examples where they did work well together.

3. Value chain conflicts exist between meeting business objectives, organic objectives, and social justice/community development objectives.

Observations: Our studies identified some wider system issues that showed some conflict between different objectives. For example, concern was expressed for the impacts on local families supplying produce that have either replaced their family food gardens with the commodity they are supplying (as demand increases), resulting in lower family nutrition, and local families replacing their traditional diets with ‘western’ high sugar and high carbohydrate diets.

Observations: There needs to be increased awareness of how different value chains (including high-value markets) impact vulnerable groups and what effective strategies and policies are needed for different market-based interventions (e.g. smallholder access to high-value markets). Assessments can also be made on what different stakeholders can and cannot contribute in a given market context, for example, by asking how do value chains benefit vulnerable groups? Strong monitoring processes can also be introduced that evaluate potential risks to nutrition. Most third-party certified farms rely on distant export markets to cover certification costs. This means that these products are often not available to local consumers (and sometimes not even families).

4. Whole of value chain understanding varies greatly with stakeholders, with many stakeholders understanding their own component in the value chain, but not the specifics of other components or the issues within these components. Larger value chains are more difficult to understand than smaller value chains.

Observations: There is a need for transparency of both public and private roles in the value chain and the policy process, and any conflicts of interest. There is a need to

improve whole value chains involving both the private and public sector to improve, for example, infrastructure, market coordination, communication, opportunities for trade, and financial, technical and social innovations, and policies that support innovation development.

5. Third-party certification requires more widespread training of recording skills, including a long-term approach to start as early as education in schools. PGS certification requires additional training in PGS coordination and greater awareness of the time required to undertake PGS.

Observations: One of the key problem areas identified with third-party certification is the need for improved recording skills. Given the oral tradition, recording information required for third party certification has presented a challenge. However, some stakeholders are very organised and doing this very well, and as such, have become role models for their certification processes. Recording skills are still required for PGS but are not as complex, as PGS has been set up for farmers that cannot necessarily read and write. The main issue with PGS has been the coordination and time required for recording. Establishing PGS is complex and requires commitment, additional time, and more work, especially from farmers.

6. Fluid processes between PGS and third-party certification need to be identified and developed, providing easy transition mechanisms (including technology) to move between each.

Observations: A number of interviewees expressed the need for easy-to-use transition processes between PGS and third-party certification; this process is quite difficult at the moment. It was also expressed that the certification process needs to be fit for purpose and not just assume that everyone starts with PGS and then moves to third party certification. Streamlining or enabling movement between the two is more difficult than what many assume, as there are differences in ownership, what is tracked (i.e. extent of flow of products), and what is certified (e.g. whole-farm vs product), and whom transparency serves (e.g. PGS requires transparency to a range of external stakeholders).

Observations: Transition from PGS to the third-party is easy for farmer organisation than for an individual farmer. Policies and processes are required to help PGS, and third-party certifiers negotiate with each other and agree on commonalities. Opportunities should be looked at for third party certification representatives to be involved in PGS in situations where the transition from PGS to the third-party is anticipated.

7. Public-private partnerships are needed to ensure wider value chain impacts are being addressed, better market chain access, and help in situations along the value chain with higher risk levels.

Observations: Although the private sector is filling some gaps in knowledge and extension services, public good considerations need to be considered that are unlikely to be addressed by the private sector. Therefore, the public sector is well placed to provide an overall coordination role (e.g. POETCom is proving successful) and wider value chain issues, such as gender, impact assessments, and social justice issues. Ideally, there needs to be an overall organic management plan across the entire value chain and initial discussions on roles and revisiting these over time as needs change. There is need to promote role of PPPs in leveraging public & private delivery of specific services required across the value chain – research can do this.

8. Although farmers (and other stakeholders along the value chain) have criteria that they aim to meet for certification requirements, farmers would benefit from an overall organic management plan.

Observations: Farmers tended to focus on eliminating chemical use and then making changes to farming practices to manage those crops' pests and diseases. However, a whole of system approach was limited with very little knowledge about understanding and how to adapt the whole agro-ecological system in terms of organic conversion.

9. Organic farmers predominantly aim to meet the organic standards in terms of no chemical use, but other organic farming criteria are not always met or considered.

Observations: One of the criteria of organic farming is to continue to revitalise the soil. We found that in many situations, limited mulching or fallow was being implemented. If fallow was being implemented, then these were often very small time-frames. There was also a demand for more knowledge on mulching and fallow (e.g. macuna being used as a cover crop).

10. Organic farming and organic food markets are primarily chosen for market access, health, and sustainability reasons and not to gain a premium.

Observations: Based on current trends, the Pacific Islands' total population is predicted to increase by 50% by 2030 (SPC, 2008). Almost all of the countries are experiencing massive rural-urban migration flows. Governments are currently seeking to reverse this trend by investing in rural infrastructure and promoting employment opportunities in agriculture. The Pacific Region faces several region-wide challenges, including the effects of climate change, degradation of ecosystems, an urgent need to generate livelihoods, and populations that are increasingly consuming imported, highly refined foods, accompanied by decreased local food production and consumption. The result is a looming public health crisis, as well as risks for environmental collapse.

Observations: One solution to addressing the wide-spread problem of nutrition-related diseases (e.g. diabetes, cardio-vascular problems) is a revival of traditional food and promotion of diversified diets. Diversification of farming systems also provides more resilience to climate variability and the increasing incidence of natural disasters.

Observations: The lifestyle and diet of the rapidly growing urban populations in the Pacific are driving the increase in imports of energy-dense, nutritionally poor foods. These imports replace traditional foods for several reasons, including low cost and convenience, rural people migrating to towns, lack of access to land for growing food, increases in disposable income of urban dwellers, and lack of awareness of the consequences of poor nutrition.

11. Organic farming and organic food markets may help address climate change impacts and build the value chain's resilience, from farming families to consumers.

Observations: Agriculture is the basis of food security where there is a solid foundation for food availability through the self-sufficient production of staple and other food crops and export earnings generated from agriculture products. Improving soil health and crop diversity, also important components of traditional farming systems, can make a significant contribution to resilience and at the same time enhance the resilience and adaptive capacity of the system as a whole, to better manage future challenges.

Observations: Climate-smart agriculture (CSA) is defined as an integrated approach to managing cropland, livestock, forests and fisheries that aims to support food security under the new realities of climate change through sustainable and equitable transitions for agricultural systems and livelihoods across scales. When implemented in an island context, CSA can also support benefits to the coastal ecosystem (e.g., by reducing sediment into the coastal zone through taro swamps, reducing pressure on wild-caught fisheries, reducing pollutants from fertilisers).

12. Organic farming and organic food markets are required to help address the inclusion of women and young people across the entire value chain, and not just at the farming end of the value chain, assessing their participation in decision making, from practice through to policy, and whether value chain initiatives are 'doing to', 'doing for' or 'doing with'.

Observations: More detailed understanding of how women, youth and other marginalised groups are included in partnerships is needed, including understanding how they benefit,

what these benefits are, and the long-term impact of these benefits. There is also a need to understand the long-term impacts of not being included.

13. Future extension for the development of PPPs needs to focus on building capacity across the value chain in terms of how to engage with different stakeholders (and not just government engaging private and community), as well as focusing on recording skills, whole of systems thinking, and understanding wider system issues. These are areas for public extension staff and can be led by POETCom.

Observations: Extension is focused on training in PGS or 3rd Party Certification. POETCom helps farmers transition to organic farming, conducts training in Participatory Guarantee System (PGS), and makes connections across the value chain. They are also instrumental in helping establish farmer cooperatives and organisations to manage certification management requirements. There is also a key role for POETCom in enhancing extension skills in both the public and private sectors in terms of training in extension itself (i.e. the process of extension and alternative methodologies and methods) as this is not being focused on enough by the public or private sector. This is also the case with monitoring and evaluation processes and methods. In terms of the inclusion of women, youth and climate change, the case studies showed that POETCom has the skills to lead in this area.

Qualities of successful partnerships were distilled as follows:

- shared vision, mission and purpose and shared ownership of objectives, methods and direction.
- good understanding of each partner's skills, knowledge and expertise to inform the development of clear roles and responsibilities.
- good consultation and participatory processes with all stakeholders and end-users during planning and implementation, and evaluation.
- good governance mechanisms (e.g., institutional and regulatory frameworks; transparent decision-making and financial processes).
- capacity building of stakeholders (e.g., smallholders) by public partners (e.g. NGOs) to ensure inclusive and collective action and equitable partnerships.
- negotiation and development of partnership agreements which outline each partner's incentives, benefits and contributions
- risk management mechanisms, including risk-sharing and allocation (i.e., depending on who is best to manage the risk); with risk distribution at different times.
- quality and improvement processes built into partnerships based on good monitoring and evaluation procedures.

Risk management in partnerships might involve:

- examples where commercial risks are reduced for the private sector by providing fiscal incentives to reduce transaction costs (e.g., exclusive purchase rights, farmer groups);
- risk reduced by free public and private extension services, as well as the use of government facilities;
- the production risks often shared by farm family/farmer organisation, or by the farmer and public partner with market risk often carried by the private partner; and
- risks distributed among partners differently at different stages depending on which partner can best manage the risk during that stage.

Barriers and constraints to successful partnerships were distilled as follows:

- capacity building for different stakeholders (e.g., entrepreneurial skills in service providers/farmers, monitoring and evaluation frameworks in governments);
- the time required for partnerships (e.g., partnerships take time and commitment by all stakeholders when it can seem quicker to do things independently);
- traditional roles and responsibilities (e.g., requiring flexibility of roles and responsibilities and new ways of working to address complexity and uncertainty);
- including the poorest of the poor (i.e., using public services to provide public goods) and being able to see/evaluate systemic impacts; and
- lack of understanding of each other's interests and needs, and local experience in managing and maintaining complex partnerships.

7 Policy workshops summary

Online all-day policy workshops were held in Fiji on 18th and 19 November and Vanuatu on 20th November 2020. The purpose of these policy workshops was to share the findings of the case studies research and practical experiences about successful characteristics of private-public partnerships and their barriers and constraints. Findings were validated and combined, and updated based on participant feedback. A list of participants at each workshop is provided in Appendix 3.

The *National Organic Policy of Fiji* was yet to be endorsed by the government at the time of the workshops in November 2020, and these workshops helped to provide additional insights for this policy document and associated action plan (Appendix 4) at the workshop. Appendix 5 further gives the minutes of a meeting of the Organic Working Group to draft a Cabinet submission of the Fiji Organic Policy. The *Vanuatu National Organic Policy* was launched in 2019, and findings from this workshop were used as input to the action plan (Appendix 6) for 2021 onwards. Both policies had been through extensive national stakeholder consultations, and thus only a shortlist of participants who were decision-makers were invited.

Findings from the case studies research were presented via 'Zoom' software. After this, small group teams met 'offline' to formulate characteristics of successful partnerships (Section 8) that can be integrated into policy and research and presented to the plenary group with a final list amalgamated. The same process was used to develop constraints and barriers to successful partnerships (Section 8) and key recommendations (below) to inform policy mechanisms, recommendations and actions.

Key discussions and recommendations from the Fiji workshop are summarised as follows:

- finalise the existing draft of the Organic National Policy and Action Plan;
- seek Fiji Government approval on the National Organic Policy;
- delegate an officer within the Ministry of Agriculture to handle organic matters on a full-time basis situating the position within the Extension Division (Eastern Section) as the basis of an Organic Unit who can lead the Fiji Organic Task Force;
- formally recognise the Pacific Organic Standard, third-party and PGS as a viable organic certification approach for Fiji;
- establish germplasm and seed banks as a source of organic planting materials (seeds/vegetative/traditional varieties) and link these to their nutritional values along with a GMO watchdog role;
- provide ways of assisting organic farmers during natural disasters/pandemic;
- organic pest management and waste management are very important and need more extension;
- explore options in systems approaches/intercropping/rotation/trap cropping/physical structures/floating row;
- soil amendment and soil health are very important and need more extension/research, along with more scientific measurement of data relating to organic soils;
- establishment of a national organic database (which relates to soil analysis/land use classification for the potential area) would be very useful;
- market access work in understanding markets and economics would be useful;

- assistance for the wet zone where off-season production of vegetables and other crops is critical in terms of what can be done, including protected structure cultivation/greenhouses; and
- recommend the Fiji Organic Federation be formally established with human and funding support as follows:
 - Name: Organic Fiji
 - Governance: an Executive Committee
 - Role: coordination and management of the PGS system in Fiji
 - Funding: a secretariat funded by the government
 - Purpose: Government and NGOs/trade working together.

The Stakeholder group in the workshops approached the exercise by trying to identify the role of the Ministries, which would include assistance through:

- a 'where to go website' with basic organic information in different languages (Fiji, Hindi, Rotuman);
- the type of information in a directory of registered organic groups/companies, third-party and PGS groups/ farmers and suppliers; and
- government funding/subsidies for a secretariat and operational budgets used for strengthening the Fiji Organic Task Force, including identifying where the task force will be situated (e.g., the MoAg or the Fiji Crop and Livestock Council).

Key discussions from the Vanuatu workshop are summarised as follows:

- appoint a research coordinator to coordinate the entire organic activities and incentives through the value chain, and link to extension officers to implement and distribute research, funding, model farms;
- value-adding of high-value crops for local export is very important, and there needs to be more economic analysis of the benefits and costs of producing organically, as compared with conventional produce (with a suggested focus on vegetables);
- decentralise all products according to islands, including identifying island products based on which is most suitable, and ensuring they are valuable with access to resources, so there is the geographic origin of products for marketing purposes;
- lead production based on demand;
- there is a need to define the stakeholder responsibilities in detail (who manages the groundwork, certification, research, etc.);
- there is a need to define each partner capacity and skills;
- there is a need to identify and engage partners for them to participate;
- there is a need to identify funds to work;
- there is a need to start by working on the foundation activities and working slowly up to other activities;
- strengthen the governance system structure, then engage the private sector to help push organic priorities;
- ensure compliance of the partnership through reporting back on the progress of activities which can be a challenge. There is a need for a standard template to

report back to all partners. This highlights the importance of data collection to make decisions and capture lessons learned; and

- have a list of ‘lessons learned’ from partnerships.

Further, future research priorities were brainstormed to elicit gaps, limitations, and areas for knowledge creation to take these findings forward. This future research direction was brainstormed by formulating a list of research topics, then grouping these topics under ‘higher order’ research questions that amalgamated several topics. The final recommended research direction is detailed in Section 10.

8 Outcomes and Outputs

The literature review was developed into a concise policy brief for higher-level policymakers at the Pacific Islands Regional Advisory Services Network to Heads of Agriculture and Forestry organisations. Key discussions about successful partnerships and their application to the organic policy held during the policy workshop/forums are in Table 1 below.

Table 1: Key discussions held during the policy workshops about successful partnerships and their application to organic policy.

| QUALITIES OF SUCCESSFUL PARTNERSHIPS AND THEIR BARRIERS AND CONSTRAINTS | |
|---|---|
| FIJI | VANUATU |
| <p>There are logistical barriers such as distance between isolated islands</p> <p>Cultural barriers include stakeholder need to understand requirements for village-level permission council approvals for visiting and their protocols</p> <p>There may be insufficient produce/supply for stakeholders</p> <p>Added costs such as travel to market or certification costs which may not be understood, meaning the organics may be less affordable than thought</p> <p>Market protection is needed due to a lack of understanding that selling organics requires certification through the value chain erodes consumer trust</p> <p>Lack of continuity when people leave PGS groups, so knowledge of standards and communication flows need to be built again</p> <p>Consistent leadership, expertise and support systems (e.g. knowledge, inputs) is required</p> <p>There is a lack of understanding of supply and demand needs, including the need for consistent quality and quantity, and who would help with this partnership.</p> <p>Identifying the correct entry points, e.g. the Ministry of Education is the correct entry point on one island.</p> <p>Lack of access to markets</p> <p>Absence of appropriate structures, e.g. farmers need to know which</p> | <p>Define every stakeholder's communication and responsibility to strengthen implementation, including who audits what parts of the value chain and the capacity and responsibilities of each stakeholder.</p> <p>Identify partners and support their needs for engagement, possibly through an MOU.</p> <p>Allocate resources for funding partnerships, e.g. through business plans or approaching funding bodies or partners.</p> <p>Start with a few small value chains, get these working well first, and then move to larger chains.</p> <p>Use a governing structure and strong legal framework, then invest in the private sector.</p> <p>Include health and appropriate bodies.</p> <p>Ensure compliance reporting, including funding through a standard reporting template, so information is available at the contract end to improve decisions.</p> <p>Have a list of 'lessons learnt' at the end of each project.</p> <p>Think holistically about partnerships related to purpose.</p> <p>Have a database system for farmers.</p> |

| | |
|--|---|
| <p>government department or business does what. Equally, they need to know which farmers are producing what crop.</p> <p>Costs need to be agreed in a partnership, e.g. transport costs vary</p> <p>Financial literacy is needed through banks and institutional partnerships</p> | |
| <p>APPLICATION OF FINDINGS TO ORGANIC POLICY</p> | |
| <p style="text-align: center;">FIJI</p> <p>Strengthen coordination between all partners –communities, farmers, government including policymakers, NGO, schools etc. work toward organic</p> <p>Organic training in the curriculum, increasing in-depth knowledge over time, perhaps through majoring in the area at university.</p> <p>Subsidise good practices, including costs of production (e.g. fertilisers), as farmers cannot afford these</p> <p>Protect the marketing by spreading awareness of the need for certification, perhaps use disincentives</p> <p>Have agreements (e.g. SPC and PGS) with groups reporting back against a framework.</p> <p>Have peer-to-peer learning and community networks, so the group is self-governing and certifies its members (SPC doesn't have the funds to certify groups).</p> <p>Extension officers need to understand organic requirements and may have a role in collecting data for analysis, so there is more 'on-the-ground' knowledge and tailored solutions.</p> <p>Increasing communication and information translation, particularly by extension officers, is a bridge between government, scientists, and communities.</p> <p>Use the membership's capacity, including farmer partners, e.g. a farmer has a quarter of an acre of compost.</p> | <p style="text-align: center;">VANUATU</p> <p>There is a significant demand for technical assistance for new skills, market information and resources.</p> <p>Access to appropriate facilities/equipment is needed.</p> <p>Implementing agencies are needed for training (and how to train) and capacity.</p> <p>Training depends on importing and exporting countries, so initial training should focus on production.</p> <p>Link up the existing partnership agreements and co-financing (including in-kind inputs such as time or technical inputs), including the committee that meets to link farmers to a market and informal/cultural relationships and practices.</p> <p>Including curriculum and student inspections.</p> <p>Provide farmer incentives according to government priorities, e.g. minister buys organic fertiliser and distributes it at national events.</p> <p>Explore the potential for agreements at different levels and short- and long-term agreements, e.g. through providing common understandings and services.</p> <p>Review and amend agreements – including the Vanuatu government's financial regulations to allow service delivery that is fair and inclusive, including for the private sector (e.g. advertise service and then donor funding justified).</p> <p>Seek agreement to certify farmers and costs of PGS certification for existing</p> |

| | |
|---|---|
| <p>Seek to have Pacific Standard better recognised through equivalence agreements with certifying bodies.</p> | <p>outstanding farmers, and negotiate to keep certification costs down</p> <p>Grow domestic markets and then third party certification.</p> <p>Establish a trial for third party certification and then regulate the two systems and link to extension needs.</p> <p>A dedicated research officer is needed for organic products and marketing along the value chain.</p> <p>Use crops that are resilient against climate change and cyclones, such as root crops and high value crops and fruit and vegetables.</p> <p>Encourage farmers to use their seed and open-pollinated varieties.</p> <p>Adopt innovative ideas such as hydroponics and integrated approaches that look at what has already been done on projects.</p> |
|---|---|

The Strategic Plan in Fiji was launched at the end of the Fiji workshop, linking this project with DFAT priorities.

9 Discussion

The challenges facing public-private partnerships for organic agriculture extension, and their support requirements within the policy, are many and complex.

Coordination of partnerships

The literature review of public-private extension partnerships suggested that policy recommendations for public-private partnership extension models ought to consider differences between subsistence growers, local commercial growers, and export growers. This means that effective partnerships firstly require the capacity to identify the most appropriate partners for the farm's particular nature and then establish and agree on the role of these diverse stakeholders at different stages in the value chain. These stakeholders will vary with the particular value-chain. Representatives at the policy workshops in our research also agreed that a shared vision and objectives of all partners and an understanding of each stakeholder role in the partnership from the outset would help bring about the expected benefits of conversion to organics each partner. Such a role requires effective coordination across various farm types, partners and value-chains.

Similarly, the possible policy support/subsidies that might be used need to be agreed on and delivered by what partner (i.e., government, the private sector, NGOs, and PGS and local farmer organisations). Effective stakeholder engagement and appropriate policy support for the different partnerships must be negotiated and delivered by extension agents. Agreement on the type of extension approach and who delivers it (i.e., government officers, the private sector, farmer organisations) will vary with the value-chain and at different stages. Again, effective coordination of extension information, delivery mode and value-chain is required.

Whole-of-value chain organic certification trials and expansion in a system-scale approach

Similarly, the processes by which organic farm conversion, management and certification to market standards can be agreed, established and rolled out is a challenging task tailored to different supply chains and partners. Our research showed clear differences between various value-chain stakeholder priorities (e.g. scientists, ministry and NGO representatives attended workshops with various recommendations about crop and soil health and management and/or marketing reflecting their perspectives on improvements to organic policy).

Policy workshop representatives in Fiji and Vanuatu agreed that a systems-approach to expanding organic agriculture is required to cover all aspects of conversion to organics, from production methods (e.g. intercropping, rotation and physical equipment/structures) to market access and export. Some supply chains are already well-established (e.g. turmeric, ginger, coconuts, noni, peanuts, coffee, cocoa, cassava flour, locally marketed vegetables and root crops, and coconuts for export and value-adding). Introducing third-party certification trials in these mature value-chains will be a good start for increased organic production.

Mature value-chain trials

Such mature value-chain trials would include a cost-benefit analysis of policy supports such as subsidies for good practice, loans, and elimination of duties in each of the various value-chains under trial. These policy interventions would be tailored to the value-chain to engage both private sector stakeholders and farmers, e.g., extension vouchers or subsidies for farmers to purchase particular extension expertise, low cost loans for

conversion, and contract farming particular components of the value-chain. The trials would also include economic analysis of the costs and benefits in the viability of organic farming choices (e.g., fertiliser, agrochemicals, seed, production methods, transport, quarantine, marketing of produce, including value-adding). Economic analysis can be compared with the same stages of the value-chain in conventional value-chains.

The trials also need policy supports to help streamline movement between PGS and third-party certification, including tracing of product, ownership and details of what has been certified, which is easier with farmer organisation involvement. These processes need to be overseen by strong governance to effectively link the private sector [with some criteria and standards, market intelligence, purchase and trade agreements, contracting, and costs, e.g. extension or auditing (Wongtschowski et al., 2013: 24)] and to coordinate all information across different value-chains.

Capacity building and extension

Each partner in various value-chain trials will require specialist expertise with respect to technical needs (including different crops, inputs, soil health, diseases) and market needs (e.g. appropriate storage, access to equipment/facilities, transport and processing especially for export, as well as certification requirements, market information). The case studies and policy workshops in this research showed that farmers had little knowledge about converting their entire agro-ecological system to organic production. More capacity building was needed; however, there was a need to coordinate such diverse but tailored extension content. Our case study research showed that private-sector training tends to happen when value chains are more mature. In contrast, bodies like POETCom can also provide training or its facilitation, again showing the need to design effective processes inclusive of government, the private sector, farmer organisations and non-government organisations from the outset.

Trials would also need to assess the effectiveness of the extension content and delivery for each value-chain. In particular, there is a need for formal education, field schools, and farm visits instead of the existing internet and video resources (Cotton 2017). This research revealed that organic learning in Fiji and Vanuatu had been that of 'learning by doing', as there had been no formal extension to organic farmers because extension effort is directed to conventional agriculture. This means a key role for the government is to spread awareness, particularly around the economic cost-benefit analyses and certification requirements through each value-chain. Such capacity building would include exploring how POETCom could train others, such as through farmer-to-farmer (peer-to-peer) learning and community networks, the use of organisation members, and an extension facilitator for farmer-to-farmer learning.

Information gathered on the economics of different choices and the effectiveness of extension need to be combined into a national database of organic farming information that can be updated as trials are completed. Then lessons learnt can be transferred to new supply chains and regions. There is a crucial need for an organic curriculum to be developed from the information gathered from trials of mature value chains and a directory of organic organisations and lessons learnt. The establishment of national groups might build information-sharing networks, raise the profile of organics nationally and internationally, and provide a means of collating more data.

Finally, the process by which to scale learning across the region, for example, the Solomon Islands, Palau and Tonga, is then required. Extension needs to be tailored to the geographic diversity of the Pacific Islands to best enable public-private partnerships. Each island is environmentally and socially unique, with different implications for future research. For example, on-ground demonstrations may work best in some places and web-based technical applications in others where the internet is more available and accessible. As such, individual, organisational and institutional capacity building around

the economics of organics and best practice extension is required to build capacity. This can enable organisations to link with strong governance for innovative export-oriented market development (echoing the *Pacific Islands Extension Strategy*).

Strong governance of extension partnerships

Therefore, effective governance is also crucial to link the diverse farm types, value-chains, policy supports, and specific extension advice and negotiate roles and responsibilities before driving organics expansion throughout the Pacific region. Policy workshop representatives agreed that a funded government officer or research coordinator in an innovative and effective extension role would link the multiple stakeholder interests and value-chains and act as a conduit between stakeholders and other networks when coordinating partner roles, responsibilities, policy supports and extension requirements (Chowdry et al., 2014, Roling et al., 2014).

A governance structure can play a crucial role in coordinating and considering the wider impacts of conversion to organic agriculture. Our case study research and policy workshops showed that food imports could replace subsistence farming during/after conversion to organic export crops (to cover costs of conversion, certification etc.), so wider monitoring of nutrition risks is required to protect vulnerable groups. A governance structure would have a key role in collating and sharing data through information sharing networks. The research officer/coordinator's role would be to establish a website with information and a directory of organic companies, certifiers and farmers/suppliers. This would include information on which government/agency does what, including who audits what, and which farmers produce what crops. Our case study research and policy workshops also revealed that some farmers collect data but may not have high literacy levels, so the coordination of data collection is required.

Lastly, effective governance would enable the expansion of best practice organics conversion, management and certification to other supply chains and other Pacific regions in the longer-term. Our research found a need to decentralise products to suit island states' particular environmental conditions and geography – with targeted extension and information and appropriate partners. In particular effective governance is needed to work across different countries and specifics of value-chains, given the particular geography of island nations with respect to varying regulatory regimes and crop/environmental characteristics. The structure would design governance arrangements and effective processes that link, communicate, share and enact organic policy actions. Such a governance structure can seek/link business investment, for example, to ensure a smooth transition between PGS and third-party certification and market access and supply. Effective governance would require the development of a management plan for expanding beyond the initial value-chain trials. The policy workshops in Fiji and Vanuatu recommended an initial federation of organic stakeholders with an Executive Committee to coordinate and manage, initially, PGS and then third-party certification of some trial exemplar supply chains (see below). The government would fund a secretariat to facilitate their work with private and NGO companies.

10 Proposed future research project

Participants at both workshops brainstormed future research needs and were then asked to prioritise these. A key research proposal was developed at the Fiji policy workshop to group all the suggestions, and similar key research needs emanated from the policy workshop in Vanuatu. The final research question that applied to both policy workshops was: What are the costs and benefits of applying integrated, sustainable organic value-chain systems?

Such research would need to incorporate economic exploration of one or more selected case study value chains and analyse the changes over time, e.g., knowing baseline income and financial implications of conversion to organics. The three areas that were seen as important to research in terms of holistic system changes were (i) changes through soil amendment, (ii) market access and pricing with control measures, and (iii) wider impacts on health, the environment, social equity and food security. The case studies could be compared with another region/supply chain where there is no organic intervention. The project must focus on an area with a crop under certification and value chains for export and food security to be feasible. Examples of existing organic value chains are turmeric, ginger, coconuts, noni, peanuts, coffee, cocoa, cassava flower, or locally marketed vegetables and root crops, and then coconuts for export value-adding. The final choice of produce would be according to the following selection criteria:

- includes social, economic, and environmental/ecological benefit research;
- includes POETCom's focus on selected partnerships and how they operate within each of the selected Pacific Island Countries and Territories where there are advanced members and some very limited capacity;
- explores what a multi-stakeholder partnership requires to be meaningful and practical;
- has the ability to explore the detail of the value chain through analysis of gender and other social and environmental components;
- includes highly scientific agronomic research;
- includes land use capability of sites in selected countries;
- explores the effects of organic farming on biodiversity above and below ground;
- includes soil health as a vital component;
- includes health links to pesticides;
- includes research and market facility/access;
- explores the real benefit of both PGS and third-party organic certification in terms of cost-benefit/social/environmental/gender etc. components;
- has formal training linkages with Australian universities and Pacific tertiary institutions;
- includes value adding such as dehydrating for food security; and
- explores financial support for organics with research into models of how Pacific Development Banks can provide this and how to do it.

11 Conclusions and recommendations

11.1 Conclusions

This research explored policy interventions that would best support public-private partnership organic extension in Fiji and Vanuatu. Literature suggests that support for public-private partnership extension needs to consider differences for subsistence growers, local commercial growers and export growers and the specialist technical and market expertise that each may require. Policy support interventions such as subsidies and clear partner roles/responsibilities/delivery need to be available to all at the outset, including what is delivered by the government, the private sector, NGOs, and PGS and local farmer organisations, the most appropriate extension delivery format, and with information tailored to different value-chains.

Additionally, partnership-based extension needs consideration of the different stages of the whole supply chain and participants' multiple roles. Appropriate processes need to be designed that include all relevant stakeholders in each value-chain trial approach to understanding their needs and constraints, their place in the value-chain, and how to provide different benefits for each effectively. There is no singular approach or benefit that should be encouraged. Rather, there needs to be appropriate processes/benefits specific to diverse farms and stakeholders.

Our five case studies across Fiji and Vanuatu showed that partnerships evolve, and fluid processes between PGS and third-party certification are needed. Value chain conflicts occur between business, organic, and community objectives and not all information and training needs are met. Similarly, stakeholders tend to understand their component in the supply chain but not that of others. Frequently not all organic criteria are met or considered across the entire value-chain. Information needs to be gathered through value-chain trials based on in-depth economic analysis of the various policy supports and input choices and their benefits or costs to each partner. More widespread information and training is required, for example, through an information database and school curricula. Partnerships for extension delivery need to explore and evaluate how to train others, including the use of members of organisations and a facilitator for farmer-to-farmer learning and the effectiveness of different extension delivery types at different parts of the value-chain and different crops and regions. Partnerships also need to address wider value chain impacts such as food security risks, climate change impacts, resilience and social equity throughout the value chain.

To effectively coordinate the diverse farms, targeted knowledge, and roles and responsibilities across a whole-of-supply chain approach, dedicated personnel and strong governance are needed to work across different value chains and farm types and scale-out to different countries and their varying regulatory regimes and cropping/environmental characteristics. A regional task force could help take forward key parts of each country's draft action plans once formalised.

11.2 Recommendations

Recommendations that arise from this study for the organic sector in the Pacific are:

- adopt a systems approach to organic farm conversion from production methods to market access and export;
- initiate trials of mature value-chains for cost-benefit analyses of policy interventions to different partners at various stages;

- conduct cost-benefit analyses of various production and marketing choices specific to these value-chains;
- ensure effective coordination of the diverse range of partnerships needed for various farm types and crops;
- design appropriate processes that establish and agree on the role of diverse stakeholders at different stages in the value chain, including policy supports and what is delivered by whom;
- compare such whole-of-value chain costs and benefits in case studies with conventional agricultural systems of the same crop type;
- design supports to streamline movement between PGS and third-party certification;
- coordinate the diverse extension content from the cost-benefit analyses of different support mechanisms, farmer choices and market arrangements within a national database of organic information;
- build individual, organisational and institutional capacity for effective extension delivery of these costs and benefits;
- design effective extension curriculum with clear information about the various policy supports and which type of extension approach is best for different farms, value-chains, partners, and regions;
- design tailored extension delivery with different extension formats, wherein the supply chain this mode of delivery occurs, to whom and by whom (i.e., government officers, the private sector, farmer organisations);
- tailor extension advice on production and marketing to specific value-chains in each trial;
- assess the effectiveness of the extension content and its delivery format in each value-chain;
- scale-out learnings from trial value-chains to the different cropping environments of Pacific nations;
- establish a governance structure to work across different countries, and their varying regulatory regimes and cropping/environmental characteristics; and
- ensure monitoring of organic roll-outs such as nutrition risks (with crop replacement) and impacts on vulnerable groups.

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12.2 List of publications produced by project

Carter, J, Hazelman, S, King, C, Wheeler S. (2021). The past and the future? Organics and extension services in the Pacific. *Institute of Australian Geographers and New Zealand Geographic Society Joint Conference*, Sydney, July.

Potential paper for *Geographical Research* journal, pending feedback on the above.

King, C., Hazelman, S., Wheeler, S., Pierce, J. and Carter, J. (2021). Research for Development Impact Network Conference 2021. Pathways through disruption – the future of sustainable development and recovery in the Pacific and Southeast Asia, July.

Paper from above.

13 Appendices

13.1 Appendix 1: Literature review

Report on Public-Private Partnerships (PPP) in Pacific agriculture and the influence of policy on the potential success of organic industry development

Introduction

This report forms part of the project 'Policy drivers for public-private partnerships in Pacific organics'. The project aims to understand how government and non-government actors can work together to deliver extension so that organic farmers can capitalise on export demand. The project considers extension in its broadest sense, including information and support needed to enhance agricultural development, rather than being limited to transfer of specific technology.

This interpretation is supported by the Pacific Islands Extension Strategy (SPC 2018). This report contributes to objective 1: Review current policies, programs and approaches that influence extension partnerships in the organics sector. The remainder of this report is structured as follows:

- a. Introduction to the organic sector and its importance in the Pacific Islands
- b. Organic sector markets and their regulation
- c. Considerations in developing the organics sector, including the potential roles for public private partnerships and improved extension services
- d. Potential policy interventions for expanding the sector, including the potential roles for public private partnerships and extension
- e. Public-private partnership models in agriculture
- f. Public private partnerships, extension and the development of agriculture for export in the Pacific Islands region and beyond
- g. Pacific Islands organic and extension policy, issues and research opportunities

The first two sections provide context for the sector. The third and fourth provide context to sector development with specific attention to extension and partnerships. The fifth and sixth are focused on experiences and opportunities that exist in the pacific.

Introduction to the organic sector and its importance in the Pacific Islands

Organic agriculture production offers multiple benefits. These include: environmental benefits (reduced pesticides, herbicide, fungicide, and fertiliser use, improved soils supporting more resilient agriculture in the face of environmental change); potential health benefits (reduced contamination from production inputs and improved nutrient quality); social benefits (through farmer organisation implementation, engagement of women); and potential economic benefits (from market premiums, enhanced production benefit cost ratio and reduced risk of crop failure) (Jouzi et al. 2017). Economic benefits are realised through certification. Organic certification sometimes occurs in addition to certification for other purposes such as fair-trade certification, that may provide additional market leverage (e.g. coffee, chocolate, tea). Organic agriculture certification provides an

opportunity for value-added agriculture production, including processed agriculture products.

The global organic market grew from \$15b to \$80b USD between 1996 and 2016 (Willer and Lernoud 2017). Total land area grew from 0.7% in 2007 to 1.1% in 2015 (Willer and Lernoud 2017) including 22.8% growth over 2007-2015 in Oceania, with 43.4% from wild collection. In 2015, 85% of global consumption was in North America and Europe (Willer and Lernoud 2017). The growth in organic market value, the under-engagement of producers from countries with lower labour costs, and the natural advantage of PICTs presents a significant potential market opportunity.

Current organic production in PICTs accounts for 2.8% of agriculture land, with a four-fold increase between 2008 and 2014 (Mapasua 2016). It accounts for 37.6% agriculture land production in Samoa, 3.9% in Fiji and unknown share of agriculture lands in Vanuatu; this compares to 8.8% of Australian agriculture land, and 2.5% of land in Europe (IFOAM 2019, Willer and Lernoud 2017). The current area of PGS certified production covers 3,874ha including 2127 certified producers in 12 groups in Fiji, Vanuatu, French Polynesia, Cook Islands, Solomon Islands, New Caledonia and Samoa) and 3171 producers in total (i.e., around 1/3 are undertaking certification including a group in Kiribati). 56 third party certification licensees exist, in Cook Islands, Fiji, French Polynesia, New Caledonia, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu), covering 15096 growers in 25 groups and 110 processors, with a total 152,361ha of land and an additional 63,361ha in conversion.

The Benefit cost ratio of organics is unknown, likewise the market competitiveness, although we know that transport and infrastructure can add 12% to total production costs for PICT agriculture (Coates et al. 2010). Support for organic production is specifically recognised in Pacific Islands agriculture sector policies, for example the Vanuatu Agriculture Sector Policy (2015-2030) objective 8.3, and the Fiji 2020 Agriculture Sector Policy (2014) strategic action A – as part of ‘modern’ agriculture.

Organic sector markets and regulation

The development of organics industries requires an understanding of the organics market. Markets can be (i) unregulated, where certification is not required but can exist, (ii) partially regulated i.e. products must be certified but not to a specific standard, or (iii) regulated, where certification with a fixed standard or equivalence with it is required. Regulation can apply to raw or processed produce, or both. Certification standards exist that include: farm production; handling and processing, and transport (i.e. not mixing organic and non-organic products); ingredients in products; and labelling.

Examples of important unregulated markets for current and future export from the PICTs include New Zealand, Australia, Philippines, Thailand and Indonesia, although some have indicated potential shift towards regulation. The Pacific is an example of an unregulated market where certification is not required but does exist, with local certification via the IFOAM (International Federation of Organic Agriculture Movements) accredited Pacific Organic Standard.

The Pacific Organic Standard is the third regional organic standard produced worldwide, with the trademark Organic Pasifika. The Pacific Organic Standard covers organic production and processing and is appropriate for the unique social, cultural, environmental and agricultural conditions of Pacific Island countries and territories. The development of this Standard has included an intensive regional consultation process. Feedback from these consultations, and technical comparisons with international organic standards, informed the work of the Regional Organic Task Force – a highly successful public-private sector partnership comprising representatives of national organic movements, government bodies, organic businesses and regional NGOs.

The Pacific Organic Standard is delivered through a Participatory Guarantee Systems (PGS). A PGS is a locally focused quality assurance system that certifies operators based

on peer audits and active participation built on a foundation of trust, social networks and knowledge exchange. In this context, it is a system for assuring meeting of a standard.

PGS is specifically adapted to local markets and short supply chains. PGS opens up opportunities for small-scale farmers who cannot always afford third party certification. IFOAM explicitly support PGS to increase the uptake of organic agriculture and also improve the livelihoods of small-scale farmers.

Pacific organic products are sold in local, regional and international markets. A lack of knowledge exists about the volume of locally grown produce being sold that has or might meet the standard, i.e. unlabelled organic sales. Further, a lack of understanding exists about the willingness to pay for organic produce at an economically viable rate, or the market ability to absorb organic produce within the region and beyond. In Uganda, this has resulted in the sale of organic pineapples in conventional markets, and a need for framers to produce both organic and conventional crops (Kyomugisha et al. 2019). The sale of organic produce in conventional markets and the forgoing of market premiums has also been noted in the Cook Islands (Cotton 2017).

Regional and un-regulated markets, accessible with Pacific Organic System certification are a focus for organic production. Some un-regulated markets are in transition. For example, the New Zealand Organic Products Bill aims to set mandatory standards around organic labelling to increase purchaser confidence and business and trade certainty. This enables product specific organic standards (without a singular all encompassing standard). Examples of important regulated markets include USA, Canada, Japan, China, South Korea, Taiwan, Mexico, Argentina, Chile, Brazil and the European Union. The top ten largest consumers of organics are in regulated markets (Willer and Lernoud 2017). Exports to regulated markets occur via two mechanisms. The first is third party certification of a product, i.e. where production is deemed to meet the specific standard. The Second is by equivalence with another standard that the product has been certified for. For example, Japan has accepted equivalence with USA, EU, NZ and Australian certification. The New Zealand Bill also enables standard equivalence on application. Access to both un-regulated and regulated markets is important to growing export organic agriculture.

Considerations in developing the organics sector, including the potential roles for public private partnerships and improved extension

To identify issues in developing the organics sector and potential solutions, a google scholar search was conducted using combinations of the words 'organic agriculture' or 'certification' (i.e. accounting for either organic or alternative certification types), and 'development' or 'smallholder' or 'policy' focussing on publications within the last 10 years. This section of the review focusses on key issues identified.

Economic viability

Many economic analyses have been conducted that assess the premiums paid for certified organic produce. In some cases these are significantly higher, e.g. 27% premium for organic cotton in Krgystan (Anderberg 2020) but in some cases they are minimally higher, e.g. 5% for coffee in Mexico (Anderberg 2020). A systematic review (Oya et al. 2017) found an 11% higher production income. However, wages are generally lower in the sector (Oya et al. 2017), labour needs are higher, and yields are sometimes lower (Jouzi et al. 2017); additional costs are incurred for certification and during conversion periods where production uses organic methods but crops cannot be sold as 'organic'. Crowder and Reganold (2015) identified that the benefit to cost ratio (i.e. economic viability in comparison to conventional farming) varies depending on crop and is lowest for vegetables, with a 5-7% premium required to 'break even'. Premiums depend on willingness to pay, which also relates to marketing. Labelling about the effect of pesticide use on yams in Guadalupe improved returns to viable levels, whereas organic labelling

alone did not (Barlange et al. 2015). For developing smallholders, organic production is often a mix of organic and conventional production, and produce may not always be sold as such or farmers may switch between conventional and organic markets depending on relative premiums, as evidenced with pineapple in Uganda (Kyomushida 2019) and other organic produce in Latin America (Bennett and Fanzel 2013). Organics is seldom thought to be sufficient for whole household income (Oja et al. 2016, Anderberg 2020), but in combination with other certification schemes (e.g. fair trade), it may have co-benefits or be less risky (Anderberg 2020). Economic viability can influence producer willingness to engage and remain engaged in organic market expansion and development, and it may be more reasonable to expect organics to be one solution in a mix of approaches to household livelihood development.

Understanding who organic farmers are and where they are located

Organic farmers represent a subset of farmers in the global south - developing countries – and are therefore predominantly small holders. Kamau and colleagues (2018) conducted a multi-variate analysis of Kenyan smallholders, of which organic farmers were represented in three of five groupings. They identified that the poorest of farmers are organic by default. The second grouping included moderately wealthy farms with strong social networks, high access to information, high literacy and small-moderate sized farms. The third group included wealthy farms with older household heads, large farms and low off-farm income, but less education. Ayuya and colleagues (2015) identified that certified farms were more likely to be female headed households who were better educated and trained than conventional farmers, and with more assets and off-farm livelihoods.

The smallholder nature of organic farmers in Brazil meant that supply base to meet EU markets needed to be addressed through the establishment of co-operatives, further engaging the ‘private’ sector in supply chains (Reynaldo 2019), although this can make regulation more difficult when farmers are geographically dispersed (Lambin 2014). Higher distances between farms and markets is an issue affecting the likelihood of engagement in organics, given that it affects produce transport costs and subsequently, the economic viability of organic farming (Ayuya et al. 2015, Kyomugisha 2019, Malek et al. 2009). This issue is a broader issue for all (organic and conventional) farmers in the Pacific Islands who endeavour to enter the export market (McGregor 2007). Thus, organic policy and extension interventions need to be cognisant of potentially diverse nature (wealth, education and literacy) of organic producers, who may identify organics as part or all of their livelihood and may be part of a farmer organisation/network to scale to export supply.

Certification and market regulation

The global governance of organic certification (whether it be in regulated or unregulated markets) provides an example of a transnational alternative agri-food network (Hatakana 2010) that has developed independently of but subsequently been incorporated within government regulatory function. The private sector has always been active in the growth of organic production that meets the needs of consumers, including supply chain inputs, engagement of farmers in production, extension, certification, export and marketing (Henson and Humphrey 2010). This is best evidenced through the IFOAM network – the International Federation of Organic Agriculture Movements.

Global governance also affects engagement in organic markets. Certification and consumer orientation results in informal and formal partnerships between ‘southern’ producers, and ‘northern’ consumers, with issues around certification standard adherence and producer engagement resulting from perceived imbalances in standard ownership, local knowledge incorporation, and distribution of work and responsibility and associated costs to producers, i.e. the north pay but sometimes insufficiently so as to cover costs (Hatakana 2010, Henson and Humphrey 2010). Certification is also expensive, especially for poor farmers, and can act as a barrier to engagement (Liliana and Kharkiv 2019, Jouzi et al. 2017, Malek et al. 2009), and can result in financial risk during conversion, as has

been demonstrated in Indonesia and Brazil (Reynaldo 2019). As part of globalised food system, organic premiums can also support farmers when erosion of conventional trade preferences occurs, e.g. sugar cane in the Dominican Republic (IFOAM 2000).

Extension support

Access to technical and market information is critical for organics, given the certified nature of production systems and the inherent rules associated with it. Organic production affects the entire supply chain, including input choices (fertiliser, agrochemicals, seed), production methods, transport, quarantine and actual marketing of produce (Andererg 2020, IFAD 2015, Jouzi et al. 2017, Liliana and Kharkiv 2019, McGregor and Stice 2014). Extension services in organics often develop in the private sector (including by NGOs), given the limited funds and skills in the public sector (Jouzi et al. 2017, Ayuya et al. 2015, McGregor and Stice 2014). Private provision of extension may not be lucrative for providers given the numbers of producers and their willingness to pay for extension that is seen as a public good (Poulton and Macartney 2011, Reynaldo 2020). In combination, these factors can affect the sustainability and scalability of service provision (Bennett and Fanzel 2013).

Other concerns

Largely absent from the literature is discussion of infrastructure provision to meet export markets (e.g. storage), value added organic processing, and export phyto-sanitation and quarantine procedures. The extent to which these factors are differentiated in organic vis-à-vis conventional markets is unclear. However, they need to be factored into pacific context considerations (McGregor 2007).

Potential policy interventions for expanding the organic sector

In this project, policy is interpreted to include formal policies, in addition to the mechanisms by which they are operationalised, through financial expenditure, memorandums, projects and other initiatives. An important consideration is that any policy interventions aimed at sector expansion can address push factors (i.e. those associated with production within the Pacific Islands), rather than the consumer market itself. Key issues for consideration in policy interventions identified in section 4 include: economic viability, particularly labelling and production to scale of consumer market; the nature of organic small holding, particularly moderate to wealthy farmers with mixed education levels; certification, including conversion risk and third party certification and market equivalence of standards; and extension, including consideration of supply chain, and the sustainability and scalability of private sector engagement.

POETCom has its own organic policy toolkit (Pacific Toolkit) designed to build the capacity of governments in organics and to build momentum in the sector, especially given that there is no training offered by major universities in the region. The toolkit takes a policy and program emphasis, and includes strategies related to push, pull, enabling and barrier removal activities. This section incorporates suggested opportunities specific to market growth and extension under relevant issues

Purchasing agreement - direct acquisition into local markets

This is included in the Pacific Toolkit as a pull factor under 'public procurement'. In Brazil, India and China, Government purchasing of organic produce has helped to address issues associated with certification (conversion risk), the nature of farmers (smallholders) and economic viability (production to scale) (Reynaldo 2019, IFAD 2015). This has involved purchasing agreements for organic produce for use in national food security programs (i.e. school feeding) and preferred purchasing arrangements with government. In Brazil, the aim was to support conversion towards at a scale that enabled third party certification and export to the EU (Reynaldo 2019).

Floor price

These are not included in the Pacific Toolkit, although they are similar to a purchasing agreement. They provide a minimum price guarantee, and have been prominent in Fair Trade certification, where they are used to address economic viability concerns by absorbing the risk of changes in farmgate values (Oya et al. 2017). In combination with organic certification, they increase organic premiums.

Subsidies for certification and or conversion (third-party and PGS)

These are included in the Pacific Toolkit as ‘push’ actions. The provision of subsidies for certification has been suggested for the Asia Pacific region (Mukherjee and Kapoor 2018, IFAD 2015) and is already occurring in Philippines, China, Samoa, Tonga and Nuie (Pacific Toolkit), and is available through some regulated markets.

Alternatively, subsidies could be provided for conversion (e.g. tax subsidies) (IFAD 2015) – see Policy Toolkit ‘tax breaks’ and ‘subsidies based on area payments’. These types of subsidies address costs of organic conversion, and the lag between conversion and organic product premiums. The benefits to government are clear through taxes associated with premium on production. However, the rate and timeframe for subsidy that are sufficient to support conversion, and the funding sources for subsidies is unclear (including the timeframe to return on investment for private enterprise provision).

Subsidies considerations should cater to both Third party certification and PGS certification. Third party certification for export markets has stringent reporting needs in addition to biosecurity concerns. Participatory Guarantee System (PGS) groups typically target local, regional and the unregulated organic markets. The focus on local markets in countries like Fiji, Vanuatu, Samoa, PNG, Solomon Islands etc is important to cater for the growing middle class and tourists. In these markets, economic benefits of organic vis-à-vis regular production are even less clear.

Trade bilateral

Bilateral trade agreements enable standard equivalence and remove barriers to market entry. The negotiation of equivalence in regulated market standards can also enhance market value, e.g. the \$599,400USD/year or 9.3% market growth that occurred with equivalence between USA and EU standards (Demko and Jaenicke 2016) and is being prioritised in Asia (Mukherjee and Kapoor 2018). This is incorporated in the Policy Toolkit as a ‘pull’ factor under market promotion.

Farmer organisations

Farmer organisations address numerous challenges with conversion to organic agriculture. They are particularly relevant for small-holder agriculture, and address issues associated with the nature of smallholding, provide an opportunity to enhance extension through modern extension approaches including peer-to-peer learning, and are useful points at which to address supply chain issues (Reynaldo 2019, IFAD 2015). In China and India, co-operatives have been actively engaged in input purchasing, product storage and marketing (IFAD 2015). Farmer organisations are already recognised in the Pacific Islands countries and territories, and therefore are a logical mechanism for promoting organic practices. Their potential relevance includes support for PGS, providing links between government and private sector, providing a clear means to articulate research and extension needs and to deliver extension services, training and raise awareness of organic agriculture.

Input availability, subsidies and taxes (enforcement, lifting)

These ideas are addressed in the ‘removing negative impacts’ strategies in the Pacific Toolkit. Subsidies or tax exemptions are sometimes provided to agricultural inputs for conventional farming (e.g. pesticide, herbicide, fertiliser, machinery, fuel, warehouse building). However, these do not always apply equally to organic inputs, as was identified in the Cook Islands (Cotton 2017). Options for promoting organic agriculture include the introduction of specific subsidies for organic inputs and or the removal of subsidies on for

conventional farming given the environmental co-benefits of organic farming, e.g. Iran, Egypt, China, India (IFAD 2015, FAO 2000). These address economic feasibility issues associated with organic vis-à-vis conventional farming and support a transition to scaled production. One mechanism for subsidising inputs is through micro-credit, with the potential to include extension services with input distribution. However, experience demonstrates mixed success with micro-credit repayment in such contexts (Wongtschowski et al. 2013).

Private sector engagement in extension

This idea is not addressed in the Policy Toolkit, although the toolkit does emphasise training, support for companies and research extension. Given the limited technical expertise on organic farming previously identified within government advisory services, another option is to provide extension subsidies or vouchers that enable the right kind of expertise and experience to reach farmers (IFAD 2015). The use of subsidies reflects the public good nature of knowledge, and the limited ability to commercialise knowledge already publicly available and therefore for the public to pay for private extension services directly. In Chile, vouchers were used with sliding subsidy, but after 25 years, 80% of costs of delivery were still borne by the government, quality decreased, and collusion occurred between farmers and service providers (Poulton and Macartney 2011). Private sector engagement in conventional agriculture is much more varied, as outlined in section 6.

Networked extension

This idea is partly addressed in the push strategy ‘supply chain’ in the Policy Toolkit. Investment in extension service provision specifically targeted to producer-consumer networks needed to expand production is one mechanism where advisory services could be extended to supply information, contacts and networks needed by organic producers. This addresses extension issues in organic production.

Low cost loans

This idea is not addressed in the Policy Toolkit. Thailand has promoted the use of low-cost loans to cover conversion costs, addressing economic viability. This provides a low-cost mechanism for sector development, particularly in countries with high interest rates and MFI prominence (e.g. Southeast Asia). However, it needs to be counteracted with considerations of land tenure security and collateral considerations.

Contract farming

This idea is not addressed in the Policy Toolkit, although it would address land tenure security issues that are common in Pacific Island countries and nations. Contract farming is becoming increasingly common in agriculture. This suggestion provides a purchase and price guarantee, although careful consideration of production losses would be needed. In other countries (e.g. Cambodia), contract agreements (e.g. informal purchasing contract with input supplier) is sometimes seen as a means of ‘cheating’ farmers, especially when the farmgate price paid is lowered at production and the farmer has no alternative but to sell (Jacobson, unpublished data).

Other mechanisms

- The notion of tariffs is raised dubiously, given that trade agreements may prevent it. However, it does provide a potential mechanism for protection of local markets during sectoral establishment / growth.
- Local/regional branding and marketing may increase demand for some products (see Torres and Momsen’s analysis [2011] of tourism and organic certification linkages in Italy, California and the UK). This could potentially remove the need to export to regulated markets and the requirement for third party certification.
- Consideration could be given to capital requirement (storage facilities, quarantine) to support export (Poulton and Macartney 2011) and enhance economic viability.

- Private entities can engage in co-financing proposals for development or government funds that are allocated on a competitive basis to drive innovation (FAO 2016), relevant across all issues identified.
- Regulating against genetically modified organisms – this support organic certification.

The Pacific Toolkit also contains broader activities for raising awareness of the organic sector (e.g. in schools, through branding, through export promotion, through urban agriculture and use of public lands).

While many of these interventions can only be conducted by government, many require working partnerships between government and non-government sectors. This suits the ethos of organic development, which has typically been driven by the private sphere given a lack of awareness and technical knowledge of government about organics. Working in partnership also provides avenues for scaling the sector, and can provide a mechanism for building common understanding, support for organics to leverage development opportunities and for government to appreciate potential opportunities in the organic sector.

Public-private partnership models in agriculture

Public-private partnerships (PPPs) address issues around regulation, service provision and capacity within the public sphere (Glasebergen 2011). The private sector role can be substitutive (e.g. provision of standards), complementary (e.g. provision of additional extension) to government, or government can be antagonistic towards the sector (e.g. where government supports weak standards or enforcement, or is a direct competitor with private sector service provision) (Lambin 2014). The substitutive role is considered ideal if supported by a strong value proposition, but faces challenges of perceived legitimacy, accommodation of public agenda (Valente and Crane 2010), and the risk of corruptions/collusion. The complementary role is considered a good model for times of urgency, but challenges remain in ensuring accountability and averting dependency (Valente and Crane 2010). The engagement of the private sector requires appropriate incentives. In Africa, Poulton and Macartney (2011) identify the following needs: stable macro-economic environment and predictable policy; effective co-ordination including symmetric flows of information; low fixed costs and risk; and sufficient technical knowledge and market information. Government enforcement of commitment and effective contract management is also identified as critical to building trust and effective service provision.

PPPs are common in agriculture, including for the delivery of extension services for example in IFAD projects (IFAD 2013). The provision of free services by the public sector in a funding constrained environment is problematic when staff lack the breadth and depth of knowledge required to support diversification, where services require high levels of recurrent funding (e.g. where there is high producer and market growth) and where services do not meet farmers' information needs or learning preferences. In many cases, farmer groups can be part of contract allocation assessment, addressing a lack of government knowledge in the sector (Poulton and Macartney 2011).

IFAD (2013) identifies three types of PPPs:

1. Formal contractual arrangements, such as contract farming – and form a long-term commercial relationship with them.
2. Delegation specific value chain function to producers' organisations e.g. extension or management of processing centres by producers' organizations.
3. Joint ventures between private companies and producers' groups, e.g. farmer organisation and private sector ownership of enterprise.

FAO (2016) further identifies roles for PPPs in certification partnerships, co-financing of development funding proposals, and roles for farmer organisation in production and post-harvest management, and in storage, input supply, and trade negotiation.

A recent review (IFAD 2019) emphasised the addition of a fourth P – ‘Producer’ – to ensure effectiveness within a value chain. The emphasis on value chains forms part of the innovation systems approach to extension (Chowdry et al. 2014, Roling et al. 2014) that recognise an expanded role for extension agents, including recognising the interests of stakeholders at multiple levels and acting as a conduit to network development to improve knowledge sharing and build connections between stakeholders across supply chains. This can include roles for private sector (for profit or non-for profit) in market intelligence, market access, and contracting for export supply.

Table 1: Options for extension service provision (Wongtschowski et al. 2013: 24)

| Cluster | Business model | Description | Funder | Service provider | Clients |
|---------------------------------|----------------|---|---|-------------------------|---|
| A Free services | A1 | Largely free services | Donor, government | Public or private | Farmers, small enterprises, other service providers |
| | A2 | Paid by companies, delivered to farmers | Companies | Private | Farmers, small enterprises |
| | A3 | Voucher | Government, donor | Private | Farmers, cooperatives |
| B Subsidized services | B1 | Part-payment by farmers | Government, donor Fees, in-kind contributions | Private | Farmers (group) |
| | B2 | Subsidized cooperative services for members | Government, donor Membership fees | Cooperative | Cooperative members |
| C Fully paid services | C1 | Paid by client | Paid by client | Private | Entrepreneurs, cooperatives |
| | C2 | Embedded services | Client: embedded in price paid for other transactions | Input or output company | Farmers |

Wongtschowski and colleagues (2013) reviewed models for PPP extension service provision in Africa (see table 1). In many instances, the private service provider may also be embedded in public service, a co-operative, or a not-for-profit (NFP). Further, NFPs and development partners could replace the role of the government in the funder component. Thus, numerous options exist for PPP engagement in extension service supply. In Rwanda, provision of services by a co-operative (type B2) resulted in higher farmer satisfaction with services provided and a two-fold increase in production for targeted crops. However, in Zambia it reinforced existing patronage networks and sometimes resulted in contract payments without actual service provision (ibid). Fully privatised extension service provision (Table 1, C1) can result in services reaching medium to large scale farmers, and as a consequence, research and development may

fail to consider smallholders (Labarthe and Laurent 2013). Thus, fully privatised service provision is a poor fit given knowledge about the types of organic farmers within a development context (as previously outlined).

Public private partnerships, extension and the development of agriculture for export in the Pacific Islands

This section provides context to previous and existing initiatives in the PICTs agriculture sector, including extension, and the roles of public and private partnerships in agriculture development.

Public-Private-Partnerships in Pacific agricultural development

PPPs have been promoted across the Pacific Islands for service and management contracts, concessions, leases, and design/build/operate and transfers, for example in roading and shipping development (ADB 2005). However, there are few analyses of PPPs specific to agriculture, with limited reflection on models, strength and limitations.

Supply chain analyses (McGregor and Stice 2014) indicate that partnerships have been important for the development of organic value chains for Fiji Red Papaya, and pepper and cocoa from Vanuatu. In these cases, the private sector has been engaged in funding a high temperature forced air (HTFA) equipment for organic quarantine, for donor funded extension in papaya, and in supporting farmer organisations and networks for the production of spices. The specifics about partnership arrangements are unclear, i.e. whether they are formalised through contracts or are informal, or whether they involve funds transfer for specific activities, or (we expect) more general contributions towards activities of mutual interest to farmer groups, development partners and government (e.g. payment of workshops/meeting costs, resources for demonstration projects or farmer visits).

In a second example, NGIP Agmark is a Papua New Guinean cocoa export co-operative with an aligned input supplier that has specifically embedded agriculturalists providing extensionist services in branches, and run training programs, as evidenced in ACIAR project reports (ASEM/2012/072). However, the business models and funding mechanisms are unclear (i.e. private sector, donor of research funding), as is government engagement.

ACIAR's PARDI2 reviewed issues in success of agribusiness (PARDI2 2019). Included were a selection of organic related businesses. Agrana Fruit (Fiji) Ltd is a commercial food processor in Fiji, with third party (Australian) organic certification for some of its production. In this case, they support costs associated with third party organic certification auditing given that certification is sometimes prohibitively expensive. They also operate using contract farming to reduce up-front inputs (e.g. can pay the costs associated planting materials) and transport. Noted issues include a lack of local market interest from Tourism sector. This is a case of a private-private supply chain partnership.

Kaiming Agro Processing Ltd, Fiji, is a ginger exporter valued at \$500,000FJD with third party (Australian) certification; the company also exports other non-organic produce. They have worked in partnership with SPC and the Ministry of Primary Industries to provide training on land preparation, harvest and storage, funded by EU donors (2012/3). ACIAR projects have also previously supplied disease-free ginger seed. Kaiming has its own extension agents whom provide quality assurance along the value chain. Niche market entry was considered easier for organics than conventional agriculture given there are fewer actors. Storage, preservation, transport and distribution issues.

Venui Vanilla Ltd is Biogro NZ certified for vanilla and pepper. The company has been supported by the Farm Support Association, representing private-private collaboration for extension delivery supported by donor funds. Noted issues include certification cost, the difficulties in obtaining duty exemption, the need for more extension and limited premium in regional market.

The PARDI2 report provides other examples of ‘organic’ producers without certification, including Kava House (Vanuatu), Lapita Café, Vanuatu (Port Villa and Santos) and Tupu’anaga Coffee (Tonga). Related recommendations include:

- Better clearing of organic fertilizer and packing materials by government;
- Improved messaging about non-organic contamination;
- Private sector engagement in training;
- Multi-sector discussion on topics (e.g. organics) to address inconsistent government policy and policy barriers;
- Improved support for farmer organisation;
- Improved training for extension; and
- Further research on organic pest control.

Partnerships are clearly evident in various development partner project approaches. For example:

- DFAT’s Market Development Facility (MDF), working in Fiji, PNG, Timor-Leste, Sri Lanka and Pakistan, which networks producers with private enterprises to support growth. In Fiji, the facility targets tourism and agriculture, including high value agriculture, while in PNG it works with coffee, input, and horticultural business partnerships; it has worked specifically with organic producers in Sri Lanka. This is an example of a supplementary engagement of the private sector, where specific PPPs form for specific transactions.
- DFAT’s The Difference Incubator (TDI), a market accelerator working in Vanuatu, Tonga, Fiji and Samoa, supporting enterprises to become investor ready and in approaching investors (including their own investment pool).
- DFAT’s Pacific Horticultural Market Access Programme (PHAMA), value chain analysis and strategic actions, including Kava and root crops in Fiji, and Kava and Cocoa in Vanuatu, working with actors across the supply chain.
- EU’s Coconut Industry Development for the Pacific programme (CIDP), providing support to community-based producer groups adding value to coconut.
- IFAD’s Leveraging the Development of Local Food Crops and Fisheries Value Chains for Improved Nutrition and Sustainable Food Systems in the Pacific Islands, which aims to promote innovative, pro-poor approaches and technologies with the potential to be scaled up for greater impact including value chain studies.

In effect, the projects themselves are acting as private sector players performing a complementary service provision of networked expert linking producers, the private sector and government to work together.

Extension

The Pacific Islands Extension Strategy was developed in 2014/2015 and launched in 2018 after approval by HOAFS (SPC 2015). Among the purposes was to provide a framework for coherent advisory service provision in alignment with common opportunities, including clarity on roles and responsibilities to ensure effectiveness and to advocate for and streamline investment in services, including institutional support (country specific). To these ends, the strategy specifically highlights the potential contribution of public-private

partnerships where government capacity is constrained, where co-ordination of stakeholders is important, and where complementary skills exist.

The strategy builds from earlier analyses that highlights the slow withdrawal of government support - a gap since partially filled by NGO and private sector - but recognised as impacting on export and commercial sector growth (FAO 2001).

A key objective arising from the strategy is to develop training and communication modules including the skills of networking and partnership management. Further, the strategy recognises the need to differentiate advisory services specific to agricultural subsectors (i.e. organics). A subsequent analysis was undertaken on formal training provided in the Pacific, and a Pacific Islands needs analysis was conducted alongside GFRAS annual meeting (Jacobson and King, unpublished data). The review did not identify any courses directly related to organic agriculture. It also identified limited provision of extension courses in process and practice (e.g. engagement and partnership building, evidence-based practice, advocacy and governance).

A 2015 workshop on strengthening agriculture and forestry research and extension in Apia hosted by SPC and with over 100 attendees from government and farmer organisations identified that stakeholders rated the following extension models highest:

- Farmer organisation contracted to provide services, with funds from a/multiple source (e.g. farmers, development partner, government). Challenges identified include the need for oversight of selection processes if a government contract, organisational monitoring to limit abuse by members, and start-up funds. (Rated 8/10)
- Contracted service provision could improve the quality and consistency of advice, but consideration is needed about performance monitoring and the expenses associated with contract management. (Rated 8/10)
- Extension provided along with input purchases through co-operative, perhaps for premium. Challenges identified include price control by input provider, limited value chain linkages / networking, potential conflicts of interest by provider and also knowledge of the individual provider of the sector. (Rated 7.5/10)
- Fee based government service provision, to support more specific and targeted service provision. (Rated 1/10 for smallholders but 9/10 for commercial farmers on the basis of affordability).

There is a precedent for private provision of extension services where the private sector was provided with a service contract for extension provision in coffee, cocoa, and palm oil in Papua New Guinea, with contracts managed at the provincial scale. Funding was provided through ADB development grant, with co-financing from local government, but with limited sustainability of service provision beyond the project life (ADB 2013). Sustainable funding sources for alternative approaches to extension is clearly an issue for government if extension-based PPPs are to be supported.

A survey of Pacific and Organic Ethical Trade Community membership (Cotton 2017) identified organic specific needs. However, caution is advised given that respondents included farmers who have already converted to organics, and government, non-government FP and NFP extension providers were included in the sample. The survey highlighted the need for technical training (80% respondents), in addition to support and advocacy (both between 20 and 40% of respondents). In comparison to usefulness, it identified that formal education, field schools and farm visits were under-accessible, and that internet and video resources were over accessible. The largest technical information needs were for soil quality, certification and pest control. Either public-private partnerships, or farmer organisations/community groups were identified as most effective in providing extension services. This reflects the multiple roles of participants within the network – farmers are NGO members as (77% and 59% respectively), and farmers, NGOs and trainers as certifiers (69%, 75% and 69% respectively). These results reflect international experience in the organic sector, where 71% of NGOs and 71% of

companies in Africa are involved in extension provision, and 56% of producer organisations in Latin America are involved – significantly higher than the government sector (14%, 0% respectively); government sector is only more involved than NGO in extension provision is the Asian region, but by much less (47% compared to 40%) (Bennett and Fanzel 2013).

Pacific Islands organic and extension policy, issues and options

In this project, policy is interpreted to include formal policies, in addition to the mechanisms by which they are operationalised, through financial expenditure, memorandums, projects and other initiatives. Key policies related to the organic sector development in Fiji and Vanuatu include:

- Vanuatu Agriculture Sector Policy (2015-2030) - VASP
- Vanuatu Organic Agriculture Sector Policy VOASP
- Fiji 2020 Agriculture Sector Policy Agenda (2014) FASPA
- Draft Fiji National Organic Policy (Draft 2020) FNOP

Policy orientation

The Vanuatu agricultural vision is “Agricultural food and cash crops of Vanuatu are sustainably and profitably management, contributing to sustainable development for the wellbeing of all people in Vanuatu by 2030”. Support for organic production is specifically recognised in objective 8.3 – “Incorporate organic production in all agricultural practices” – including regional and international markets. Relevant goals of the organic sector policy include (i) Vanuatu people eating 90% local, organic foods, (ii) Vanuatu organic products are nationally and internationally recognised and demanded, and organic exports have doubled by 2030.

The Fijian agricultural Vision is to “Establish a diversified and economically and environmentally sustainable agriculture economy in Fiji”. Organics sector development is explicitly recognised under action A – “Build modern agriculture in Fiji as an organised system of producing, processing, and marketing crops, livestock, and aquaculture products”, and emphasises outer Island production where there has, as yet, been limited exposure to commercial agriculture (assumedly based on limited conversion or behaviour change requirements), and the coconut industry given the associated linkages with carbon storage and forest cover, and associated emphasis on copra production. The draft National Organic Policy has the vision of “Fiji organic farming is a major contributor to prosperous, healthy and sustainable living” with the relevant goal of “Fiji organic products are nationally and internationally recognized and demanded. Organic exports have become 70% of total food exports by 2030”.

Given this support for organic agriculture the objective of this policy analysis is to: **Identify what more could be done to support value chains that benefit organic producers and timely deliver the quality, quantity product that meets export market demand.**

On the basis of literature review, the following questions are posed to address this:

a. To what extent is current policy oriented towards regional and export markets?

This question reflects the potential economic benefits from organic trade, and the need for certification to different markets.

b. To what extent are considerations in organic sector development reflected within policy?

This question recognizes constraints to market production including economic viability associated with organic conversion, the smallholder nature of farmers in the Pacific, and extension support needs.

c. *Is there scope for policy interventions that support organic market development?*

This question recognizes the various policy mechanisms that have been used to promote organic production internationally.

d. *Is there scope for operationalising policy in ways that support private sector engagement and partnership-based approaches?*

This question reflects the existing roles of private for profit and non-for-profit actors within value chain development, including their existing roles within advisory services in PICTs, especially within organic extension service provision.

Vanuatu

Agriculture is Vanuatu's primary economic sector, and 75% is subsistence based, by default organic. 15% is semi-commercial. Key concerns in sector development include the cost of shipping, limited infrastructure, low government support, low private sector support, lack of central export promotion, limited access for credit, and declining interest in agriculture (VOASP 2018). Neither domestic nor export product sales data are collated for organic production, nor does an organic sector organisation exist.

Certification is a significant factor affecting access to markets, with similar concerns about the inaccessibility of third-party certification (cost and administration) as have been raised internationally as barriers. Likewise, concerns about transport, technical assistance, market information, input access (particularly seeds, equipment, processing and storage) were raised. Identified opportunities include:

- a. Linkages with policy goals in other sectors, including specific financial support for organic agriculture finance and investment within the VASP
- b. Brand Vanuatu organic specifically to support export market
- c. Scale production to market via smallholder groups

Table 2 provides a summary of related policy objectives against each of the analysis questions.

To what extent is current policy oriented towards regional and export markets?

The VASP addresses needs for export orientation including procedures and infrastructure. Support for certification is clearly recognized, establishing the regional standard as national standard, and promoting third party certification. *Export market orientation could better reflect quarantine needs of organics, as these have not been recognized.*

To what extent are considerations in organic sector development reflected within policy?

The needs of organic producers are recognized in policy. These include small holders, extension service needs and the benefits of farmer organisations. Further, the limited funding environment for extension is recognized, as is the role of the private sector. The availability of seeds and management tools are a specific sectoral concern. *A gap exists in acknowledging the potential limited economic viability of the organic sector despite attention to these issues.*

Is there scope for policy interventions that support organic market development?

Identifiable policy intervention mechanisms that could support the industry include conversion subsidies, certification subsidies, input subsidies, farmer organisations, and low-cost loans / credit access. Specific reference to the elimination of duties on inputs within the VOASP reflects broader commitments within the VASP. However, the indicative investment incentive threshold is likely to be too high for those engaged in the organic sector, limiting its effectiveness. *The specific mechanisms by which some interventions could be funded (e.g. farmer associations, subsidies) needs attention if they are to be effectively implemented to deliver sectoral benefits.*

Is there scope for operationalising policy in ways that support private sector engagement and partnership-based approaches? The VASP recognises the strength of the private sector, particularly in relation to the provision of extension services. It also aims to create an enabling environment for joint ventures. However, the specific mechanisms by which PPPs could be operationalized are not identified, e.g. service and management contracts, contract farming, and functional delegation. The private sector is recognized in remarks regarding responsibilities within the VOASP, but no specific mention is made of partnerships. *Thus, significant opportunities exist for considering how both VASP and VOASP objectives could be operationalized.*

Table 2: Vanuatu policy analysis

| Question | Vanuatu |
|---|--|
| <p><i>To what extent is current policy oriented towards regional and export markets?</i></p> | <p>VASP</p> <p>5.2.4 Review and improve procedures and protocols for agriculture internal and external trade</p> <p>5.3.1 Provide a tax holiday for investment of 50 million vatu (\$430kUSD) for 3-10 years</p> <p>5.4.1 Prioritize investment in ...storage facilities to strengthen supply chains</p> <p>8.3.1 Promote organic farming through... certification</p> <p>8.3.3 Market position organic products regionally and internationally</p> <p>9.4.3 Competitively position agricultural produce and products locally and globally</p> <p>9.4.4 Create market information systems to provide information to stakeholders</p> <p>VOASP</p> <p>8.1.2 The POS are the referenced system for Vanuatu organic agriculture [Pacific Islands certification scheme]</p> <p>8.2.3 Farmers have access to appropriate certification (local or third party)</p> |
| <p><i>To what extent are considerations in organic sector development reflected within policy?</i></p> | <p>VASP</p> <p>1.1.8 Establish and strengthen training providers to deliver training responsive to the needs of the sector</p> <p>2.1 Train all workforces in the agriculture sector</p> <p>2.2 Provide adequate funding for training</p> <p>9.1.1 Promote farmer associations, industries and private sector to sustain production</p> <p>VOASP</p> <p>8.1.1 Relevant government policies take organic agriculture into account</p> <p>8.2.1 Governments have expertise and capacity to support organic extension</p> <p>8.2.2 Farmers have capacity to implement practices</p> <p>8.2.5 Seed supplies meet the needs of farmers</p> |

| Question | Vanuatu |
|---|--|
| | 8.2.6 Farmers have access to quality management tools |
| <p><i>Is there scope for policy interventions that support organic market development?</i></p> | <p>VASP</p> <p>1.1.6 Promote the establishment of marketing enterprises</p> <p>1.2.1 Develop policies, procedures and protocols to administer the sector</p> <p>1.2.2 Enact legislation, regulation and orders to enforce the sector</p> <p>3.1.1 Assist farmers and local investors in securing agricultural credit</p> <p>5.3.1 Provide a tax holiday for investment of 50 million vatu (\$430kUSD) for 3-10 years</p> <p>5.3.2 Exempt all taxes and duties on agricultural inputs</p> <p>5.3.4 Review and establish appropriate pricing structures for transporting agricultural produce</p> <p>9.1.1 Promote farmer associations, industries and private sector to sustain production</p> <p>9.4.6 Promote supply and value chain studies for the purposes of identifying issues and interventions</p> <p>VOASP</p> <p>8.2.3.1 Establish subsidies for third-party certification (subsidized or cost-sharing for certification)</p> <p>8.2.2.1 Establish reduced rate loans of investment credits for certified or transitioning farmers</p> <p>8.2.2.1 Eliminate duties on inputs for organic operators [reflected in VASP]</p> |
| <p><i>Is there scope for operationalising policy in ways that support private sector engagement and partnership-based approaches?</i></p> | <p>VASP</p> <p>1.1.4 Strengthen institutions and individuals responsible for agriculture production</p> <p>2.1.9 Promote and encourage the contribution of provincial authorities and private sector in training agric. workers</p> <p>2.4.1 Strengthen the role of private sector in extension services</p> <p>5.1.2 Enact policies, legislations supporting joint-venture investment opportunities</p> <p>9.1.1 Promote farmer associations, industries and private sector to sustain production</p> <p>VOASP</p> |

| Question | Vanuatu |
|----------|--|
| | 8.4.2 Systems/structures are in place to enable the organic sector to further develop itself |

Fiji

In Fiji, 61% of households are engaged in agriculture, and like Vanuatu, the majority are subsistent farmers. Agriculture contributed to 9.2% of Fiji's GDP in 2012, and its contribution is declining as other sectors (e.g. tourism) grow; historically more prevalent sugar cane sector still accounts for about one third of the agriculture sector GDP. Since 1989, the sector has been deregulating, exposing domestic firms to international competition in local markets. However, untapped export potential is recognized, especially in organic produce, with quality and consistency and volume of supply recognized as limitations. McGregor (2007) note that transport, freight, marketing and quarantine are also issues in export market development, although Fiji scored highest of Pacific Islands Countries and Nations in assessment of opportunities and capabilities.

The organic sector currently includes a range of produce including but not limited to ginger, spices, coffee, fruit and vegetables and including value added production in coconut products, root flours and sweets; organic land area growth of 170% per annum between 2013 and 2016 (Loving Islands 2018). As per Vanuatu, neither domestic nor export product sales data are collated for organic production, nor does an organic sector organization exist. Economic viability, lack of parity with incentives for conventional agriculture, declining production linked to soil fertility, infrastructure, absence of domestic price premium, sectoral co-ordination, extension service accessibility, and lack of land registration (hindering certification) are identified as concerns for the sector. Identified opportunities include:

- a. Opportunities for partnerships for extension provision
- b. 3rd party certification (support required)
- c. Address other barriers associated with economic viability.

Table 3 provides a summary of related policy objectives against each of the analysis questions. It is worth noting here that the FASPA includes just 5 strategic actions, without specific sub-actions. This makes it difficult to assess in a specified manner as per the VASP. Subsidiary policy also mentions organic agriculture, e.g. the Green Growth Framework (2014) supports the provision of incentives for organic farming (without providing detail), the National Sustainable Development Plan (2017-2036) supports the promotion of organic agriculture production and the Ministry of Industry, Trade and Tourism Poly Strategic Plan (2018-2023) makes reference to the launch of a Fijian Organic Brand. There is no mention of organic production within the National Crop Strategy (2018-2022).

To what extent is current policy oriented towards regional and export markets?

Certification and export market development are recognized within the organic policy and the FASPA. However, the FASPA fails to make reference to infrastructure, transport and quarantine needs associated with export market development, for either organic or conventional markets. This suggests limited consideration for how to expand export growth, perhaps reflecting the comparably lower value of the agriculture sector at the national scale. *The lack of specificity in policy may created an uncertain policy environment, and potentially disincentivize investment, despite broad support for the organic sector and brand in subsidiary policy.*

To what extent are considerations in organic sector development reflected within policy?

The FNOP emphasizes considerations specific to organic sector development, emphasizing economic viability and extension needs, in addition to co-ordination of the sector. Likewise, extension support is emphasized within the FASPA, including a preferred networked extension approach, and formalized training needs. However, the promotion of organic agriculture for outer islands means producers and likely to be poor,

with significantly more economic viability considerations; these are not typical of producers engaged in the organic sector in other developing countries. It is also unclear if farmers from inner islands will be equally supported in development. *Careful consideration of target farmers and the support they require, including appropriately pitched extension training is therefore warranted, particularly for export market development.*

Is there scope for policy interventions that support organic market development?

Very limited consideration was given in either policy to the types of interventions that could support organic market development, other than credit access, and crop insurance. Land tenure security could be a significant issue in credit access, particularly if organic development is focused on outer islands where banking services and tenure security (for the purposes of loan collateral) are likely to be more limited. *The operationalizability of market development, as per policy goals deserves significantly more attention.*

Is there scope for operationalising policy in ways that support private sector engagement and partnership-based approaches?

Partnership based approaches are explicitly mentioned, demonstrating recognition of the role of the private sector in agricultural development. However, clarity around roles, including the specific ways in which non-government funding might support sector growth is needed. *Further attention is needed to incentives for private sector engagement in FASPA promoted regional transformation centres, and exactly what role the government will have if the initiative is its own, but finance is expected to be private, as indicated in strategic actions*

Table 3: Fiji policy analysis

| Question | Fiji |
|---|--|
| <p><i>To what extent is current policy oriented towards regional and export markets?</i></p> | <p><i>FASPA</i></p> <p>Action B “develop integrated production, processing, energy and transport infrastructure support system for agriculture” includes specific reference to food parks, processing and marketing systems. No mention is made of transport or processing infrastructure despite it being included in the action wording.</p> <p>Action D includes mention of the need to improve agricultural marketing internationally at the responsibility of the Agricultural Marketing Authority of Fiji.</p> <p><i>FNOP</i></p> <p>1.3 Farmers have access to appropriate organic certification</p> <p>2.2 Systems are in place to develop local and export markets for organic products</p> |
| <p><i>To what extent are considerations in organic sector development reflected within policy?</i></p> | <p><i>FASPA</i></p> <p>Under action A: “Building modern agriculture in Fiji as an organized system of producing, processing and marketing” organic agriculture is promoted for the outer islands, presumably because of a lack of previous input-intensive agriculture (e.g. sugar cane) that would affect conversion.</p> <p>Under action C: “Improve delivery of agriculture support services”, regional transformation centres are expected to support extension through farmer field schools, with balanced emphasis on domestic and export markets. Post-harvest handling losses, valued added production, processing and marketing are also identified as issues</p> |

| Question | Fiji |
|--|---|
| | <p>to be resolved in these centres. Local and Pacific Universities are identified as key components in extension training.</p> <p>FNOP</p> <p>1.1.3 Establish and promote alignment between traditional and organic methods</p> <p>1.1.4 Develop capacity to foster farms and enterprises</p> <p>1.2 Farmers provided with knowledge and support for conversion and to achieve optimal levels of production and profitability</p> <p>1.3 Support organic postharvest operators and input providers</p> <p>3.1 Organisational structures are in place to manage the orderly development of the sector</p> <p>3.1.3 Encourage the establishment of farmer groups</p> |
| <p><i>Is there scope for policy interventions that support organic market development?</i></p> | <p>FASPA</p> <p>Credit access is recommended in the form of bank-based overdraft facilities, and crop insurance schemes (Action C)</p> <p>FNOP</p> <p>None specifically mentioned</p> |
| <p><i>Is there scope for operationalising policy in ways that support private sector engagement and partnership-based approaches?</i></p> | <p>FASPA</p> <p>A desire for partnerships in creating regional transformation centres is made explicitly under action A: building modern agriculture, although it is also described as “the main initiative of the government”.</p> <p>Action D: “Enhance capabilities to generate funding and secure investment” makes explicit mention of public private partnership as an innovative business arrangement, and is defined as the use of private finance to fund service provider contracts</p> <p>FNOP</p> <p>4.1.1 Non-government funding support [no specific detail]</p> |

Summary of opportunities

Takeaway messages from the Fiji and Vanuatu analyses present opportunities that could be further explored and addressed through subsequent project phases. These include:

- **Lack of data on production.** This information gap could be addressed as part of agricultural statistics data collection in both countries. Alternatively, development partner projects such as the 30X2050 Data to End Hunger initiative may me appropriate avenues for addressing these issues.
- **Certification.** Certification is perceived as essential for the expansion of markets although the type of certification depends on the demand (importing country). Both regional markets and international markets appear as targets. Regional markets are

unregulated, although understanding about consumption demand is unclear. There is concern over the cost related to third party certification required for some international markets. However, depending on the target country, third party certification may not be needed.

- **Export orientation.** Both countries have clear export orientation for organics, particularly Vanuatu. However, limited attention has been given to quarantine and transport considerations for bringing produce to market.
- **Economic viability.** Limited information exists on the economic viability of organic farming in the Pacific Islands. An assertion is evident in policy that a natural advantage exists in many areas due to low levels of conventional agriculture in the past. However, ease of conversion is countered by higher costs for produce transport, higher costs of imported inputs, limited quarantine facilities and unknown durability of existing and potential organic export products.
- **Lack of national groups for organics.** In both countries, the establishment of national groups could support the development of information sharing networks, raise the profile of organics nationally and internationally, provide a means of collating data, and provide a simpler means of engaging with producers. Further considerations could include the costs and benefits of targeting sectoral growth initiatives to different farmer demographic groups.
- **Extension.** Extension is a critical information gap identified in both countries, reflecting broader considerations about the need to build capacity of government advisory services, as outlined in the Pacific Islands Extension Strategy. Clearly, the decline of service provision over the years and niche market of organics mean the public sector has been engaged in this role, and its role is clearly valued. It is great to see a shift towards more modern approaches to extension that emphasis who supply chains and links between governance levels required to support innovative export-oriented market development (echoing the Pacific Islands Extension Strategy). Understanding extension needs at different stages of the supply chain is important, as is a discussion about whom is currently providing these services, the strengths and limitations of existing extension models in the context of scaling and further developing export markets, and the potential roles of different groups in their future provision. Potential training in formal format (e.g. VET or universities) could be explored, although current extension training is already limited.
- **Private-public partnerships.** The role of the private sector is clearly recognized in both draft organic policies. However, clearer consideration of mechanisms for supporting partnerships and the feasibility of these is important, particularly in the context of supporting extension service provision. Understanding who is best situated to provide particular services at different stages in the supply chain, potential benefits and challenges of formalized PPP provision under different policy intervention strategies, and the potential avenues for funding these remain unexplored.
- **Alignment with donor development programs.** The importance of donor funding in the Pacific cannot be overstated. POETCom (the group that led and implement the Pacific Organic Guarantee standard) receives EU funding and support for private public partnerships for agricultural product markets (organic and non-organic) has been engaged in DFAT programs such as Pacific Horticultural and Agricultural Market Access Plus program (PHAMA Plus). PHAMA Plus objective is to promote sustainable

economic growth through promoting exports of primary and value-added products. Its approach is to develop strong public-private partnerships between government sector and the private sector by helping to establish Market Access Working Groups (MAWGs) and in some cases Industry Working Groups (IWGs) that bring together members of the public and private sector to discuss market access challenges. Project such as PHAMA Plus, DFAT's The Difference Incubator and DFAT's Market Development Facility provide opportunity for further enhancing the success of semi-scaled organics initiatives, and therefore are important groups when considering policy interventions that engage private sector. In this way, export market development could be considered as a series of segmented development pathways dependent on the capacity, nature and potential viability of different organic products.

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13.2 Appendix 2: Case studies research

Provided in separate document.

13.3 Appendix 3: Workshop participants

Fiji workshop

| Name | Organisation |
|---------------------------|---|
| 1. Tekini Nakidakida | Chairman |
| 2. Amena Banuve | Agronomy |
| 3. Ratu Tolo Vasuidreketi | Plant Protection |
| 4. Esava Tuimoala | SAO Tailevu-Cocoa Organic |
| 5. Una Remudu | SAO Rewa- |
| 6. Mr Celua Lutunauga - | Nasau Youth –Nacocolevu |
| 7. Mr Robert Hay | Bacterim Culture |
| 8. Apenisa Sailo | Plant Protection |
| 9. Sauliga Mataki | Lands Development LRPD |
| 10. Kavaia Veigati | Lands Development LRPD |
| 11. Vio. Veretawatini | Secretariat |
| 12. Mr Tevita Natasiwai | Organic Certification |
| 13. Akuila Nacoke | Policy & Economic |
| 14. Kasanita – | Extension Division- |
| 15. Achal Kumar | Policy & Economic -\ |
| 16.. Unise R Druavesi - | Senior Economist MITT |
| 17. Kartik Pratap | Director Economics MITT |
| 18. Pio Mike | (Economic Planning Officer). MITT |
| 19. Fred Fuakilau | Chairman – Fiji Organic Federation Fungs Farm |
| 20. Veresa Fung | Fungs Farm |
| 21. Colin Philp | Leluvia Island Resort Member Fiji Organic Federation |
| 22. Eliko Lesione | Gen Organics Member Fiji Organic Federation |
| 23. Neil Sharma | Member Fiji Organic Federation |
| 24. Lavenia Vuadreu | Member Fiji Organic Federation |
| 25. Stanley Simpson | Mai Tv Member Fiji Organic Federation |
| 26. Isikeli Karikaritu | Cicia Organic Monitoring Agency (Coma Member Fiji Organic Federation |
| 27. Rayawa Law | Member Fiji Organic Federation |
| 28. Rupeni Navukitu | Loving Islands |
| 29. Monica Raghwan | Fiji Organic Queen Association |

| Name | Organisation |
|------------------------------------|--|
| 30. Sashi Kirin | FRIEND Member Fiji Organic Federation |
| 31. Petero Ratucove | COMA |
| 32. Alfred Wiliame - | Itaukei Trust Fund |
| 32. Patricia Bibi | PARDI |
| 33. Elisha Mala | MOA |
| 34. Susana Levula | MOA |
| 35. Sera Bose – Chief Economist | MOA |
| 36. Adi Siteri Dali Lisione | Gen Organics |
| 37. Karen Mapusua | SPC LRD Director |
| 38. Dr Viliami Kami | SPC LRD Program Manager – Markets for Livelihood |
| 39. Jim Pierce | SPC LRD POETCom Coordinator |
| 40. Neema Nand | SPC LRD POETCom |
| 41. Nileshni Devi | SPC LRD POETCom |
| 42. Sandhya Devi | SPC LRD POETCom |
| 43. Lore Cocker | SPC LRD POETCom |
| 44. Flavia Ciribello | SPC LRD POETCom |
| 45. Stephen Hazelman | SPC LRD POETCom |
| 46. Jalesi Mataboto | SPC LRD – Sustainable Forest and Landscape Manager |

Vanuatu workshop

| N# | First Name | Last Name | Organisation/Community represented |
|----|-------------|---------------|--|
| 1 | Nambo | Moses | POETcom Chairman and Department of Livestock |
| 2 | Ruddy | Nabourbong | Department of Agriculture and Rural Development |
| 3 | Justin | Rihu | Department of Agriculture and Rural Development |
| 4 | Michel | Raikataboum | VOrganic |
| 5 | Hinton | Nixon | Ministry of Agriculture Livestock Forestry Fisheries and Biosecurity |
| 6 | Lonny | Bong | Department of Livestock |
| 7 | Ravo | Antoine | Department of Agriculture and Rural Development |
| 8 | Boulehouran | Sylvie | Department of Agriculture and Rural Development |
| 9 | Heggar | Molisa | Department of Agriculture and Rural Development |
| 10 | Anne Marie | Sarisets | Department of Forestry |
| 11 | Michel | Tabi | Department of Forestry |
| 12 | Presley | Dovo | Department of Forestry |
| 13 | Pierre | Leoirke | STAP Limited Consultant |
| 14 | Peter | Kwari | Department of Agriculture and Rural Development |
| 15 | Judy | Daing-Kalotap | Department of Forestry |
| 16 | Toufau | Kalsakau | Department of Forestry |
| 17 | Malvirlani | Gino | Department of Agriculture and Rural Development |
| 18 | Simeon | Alain | Ministry of Agriculture Livestock Forestry Fisheries and Biosecurity |
| 19 | Sam | Naliko | Department of Agriculture and Rural Development |
| 20 | Phyllis | Kamasteia | Department of Forestry |
| 21 | Simon | Naupa | Department of Forestry |
| 22 | Oliver | Iato | Farm Support Association |
| 23 | Joseph | Kaoh | Farm Support Association |
| 24 | Linette | Rogers | Farm Support Association |
| 25 | Julie | Beierlein | Farm Support Association |

13.4 Appendix 4: Draft organic action plan (Fiji)

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person |
|--|---|---------------|-------------------|---|---|---|--|
| Strategy 1. Support Organic Production | 1.1- Knowledge | R&D | Research Programs | Production systems (conventional, GAP, organic) | comparability study on organic, GAP & existing production system | Fruits and Veg (pineapple , capsicum) | Horticulture - Manoa, Dr Tekini |
| | Root Crops, Tree crops (Dalo, Sweet potato) | | | | | Agronomy - Savenaca, Dr Tekini | |
| | | | | Organic Pesticides, weed control technology | Management of local waste (eg.brewery waste) to produce insect repelants and to formulate biofert | Production and testing of replants or bait | Dr Tekini - Agronomy, Anare - PP & Kemueli - Chemistry |
| | | | | | | Mixed with bacterium culture for composting and test by applying to soil/crop | |
| | | | | Landuse | | Land use- sustainable land management practices | Solo & Sauliga - Land Use |
| | | | | Livestock - Feeding, Pasture management | Evaluate performance regarding animal performance | juncao grass - high in protein, good feed for ivestock, animal feed with juncao grass compared with normal pasture, etc | AH&P - Eroni (Vatuwaqa) |
| | | | | Slurry from digester for manure | | Bio gas - Dairy / Piggery | AH&P - Roneel (KRS) |
| | | | | | Digester | | |

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person |
|--|-----------|---------------|-------------|--|---|---|---|
| | | | | Bio fertilizer | | Bacterium Culture (free supply) - established | Dr Tekini - Agronomy, Kemueli - Chemistry |
| | | | | Bokashi Fertiliser | natural soil amendment by using local food | Found in community-Survey first for fermented fertiliser | Nasau Youth Training Centre-Celua Lutunauga |
| | | | | Liquid fertiliser | our range of organic fish fertiliser and blood and bone liquid fertilisers provides a balanced range of clean and safe nutrients. | 2 types molasses and liquid mixed together-feed the soil well using poultry waste etc | |
| | | | | Grass Compost | | | |
| | | | | Green Waste Compost | spell of dumping site is due to food waste | decopost waste from Sigatoka Municipal market/sodass/poultry manure added at the dump | |
| | | | | Veve Compost | 4 years of research and study | | |
| | | | | Pesticide control | | | |
| | | | | Nursery Management | Better care of younger plants as it is easy to look after nursery in small area against pathogenic infection, pests and weeds | | |
| | | | | Effective Microorganism | mixed cultures of beneficial naturally-occurring organisms that can be applied as inoculants to increase the microbial diversity of soil ecosystem. | | |
| | | | | Fruit and Vegetable Farming | Kumala,Pawpaw, Tomatoes ,Cucumber, Passionfruit,Lemon Grass, | Rourou | Vees Farm-Vitila Vuniwaqa |
| | | | | Private Stakeholders consulted and coordinated | | Existing organic fertilizer available commercially | |
| | | | | | Organic Farm- Vanilla, Yaqona, Pawpaw, Herbal Medicine, Pineapple,Kumala,Bele, | | Rise beyond the Reef -Mr Semi Lotawa |

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person | |
|--|---|---------------|--|---------------|----------------------------------|---|--------------------|---|
| | | | | | Agchem | AcTeVator Compost,Carbon Mineral,Combined Mineral,Pro Phosphate,Pro Tech,Pro Tech Sea Trace,AgLime | Agchem Limited | |
| | | | | | | Reddoxx - bio- fertilizer, RamSami organic fertilizer, Flower Power, etc | | |
| | 1.2- Stakeholder Awareness and knowledge development | | Extension Programs | | | Demo plots, Farmer field schools | Extension | |
| | | | | | Demo plot | | | |
| | | | | | Training | | | Whole of Systems' knowledge development |
| | | | | | Reporting Systems | | | Alternative recording practices (based on oral tradition) as well as building skills in recording (starting school age) |
| | | | | | Farm support technical advice | | | |
| | | | | | | | Ranadi Plantation | |
| | | | | | | | Guy Jakobi | |
| | 1.3- Impact Assessment | | Development and Implementation of Impact Assessment that accounts for wider system impacts (e.g.environmental, community nutrition, | environmental | | | | |

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person |
|--------------------------------|-------------------------|---|--|---|---|---|-------------------------------------|
| | | | climate change impacts) | | | | |
| | | | | nutrition | | | |
| | 1.3-Post Harvest | | | climate change | | Product Development Unit | Tawake Plant - Chemistry Lab |
| | 1.4- Certification | 3rd Party | Certification of Farmers/Exporter | 30 ginger/tumeric farmers that supplies to Kaiming Agro processor | 10 cicia, 10 Namosi Serua, 10 Ra | Control Union-Certifying Body and The Earth Care Agency | Vio - AgTrade/Extension |
| Consultancy Work | | | | Certification of 3rd Party Certification | | Litia Kirwin -Loving Islands | |
| Consultancy Work | | | | | | Jodie Smith-The Earth Care Agency | |
| | | | | | | | |
| | | PGS | | | | | Stephen Hazelman-POETcom |
| | 1.5- Curriculum | FNU | Organic courses and Engineering | | survey - status of organic farmers - comparison - existing to GAP | (Courses Developed AG108, AG207, AG304) | FNU |
| | | USP | | | Publication - published information regarding Organic- Conventional | | |
| | | | | | Full time - Organic research staff | | |
| | | | Courses on Systems Understanding and Organic Systems | | | | |
| | 1.6-Support | New programme - Organic support service | Assit farmers during transition period phase- | Transition period - 2 years (\$800,000 per year) | Project paper proposal | Subsidy | Extension and EP&S, Investment Fiji |
| | | | | | | input supply | |
| | | | | | | mechanical | |
| Strategy 2. Growing the market | 2.1- Consumer Awareness | Branding | certified organic & companies licensed | | | | |

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person |
|------------------------------------|---|---|--|--------------------|-----------------|--|--------------------------------------|
| for Organic product | | Health Awareness | Benefits of organic local food | | | | MOA (EP&S), MITT, Investment Fiji |
| | 2.2- develop new or expand existing markets | Local Market Development | Target Fiji Tourism Market & Encourage procurement | | | | |
| | | Export Market Development | Promotes, establish and explore private sectors of organic products. | | | | |
| | 2.3 Training in developing partnerships for organic markets | Existing partnerships in organic markets | Collect existing case studies of successful organic market partnerships | | | | |
| | | Develop new partnerships | Develop, Implement and Evaluate training with potential partners | | | | |
| Strategy 3. Structures and systems | 3.1- Organization Structure to manage the development of Organic sector | Provide implementation of sector policy | Provides mandates to Fiji Organic Association and Establish Organic Advisory Board | | | | Dr Tekini, Vio |
| | 3.2- Link relevant ministries | Establishment of National Agricultural Development Council & MOA Research Council | Establish on the National Agricultural Development Council & MOA Research Council | | | Consultation meetings with MITT, MOA, MOH, MOEnv | |
| | 3.3- establish organic groups and societies | Encourage the establishment of farmer & marketing of | Facilitate organic production, processing and marketing | | | | MOA Extension, Existing stakeholders |

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person |
|-----------------------------------|---|---|---|-------------|----------|--------------|--------------------|
| | | organic products | | | | | |
| | 3.4- Improve market access | | | | | | |
| | 3.5- Market Information Systems | | | | | | |
| Strategy 4. Policy Management | 4.1 - Resource to fund implementation of policy | Responsibilities identified and budget and support provided | The study of organic policy agenda & funding of implementation of National Government Allocation. | | | | |
| | 4.2- Implementation of National Organic Policy | Approval Process & Timeline | Draft policy reviewed and present to the Fiji Government for approval | | | | |
| | 4.3 Evaluation of National Organic Policy | | Evaluation process developed | | | | |
| | | | Evaluation implemented with criteria (e.g. action, change) | | | | |
| 4.4 Policy Adaptation | | Ensure Policy is adapted based on 4.3 | | | | | |
| Strategy 5. Policy and governance | 5.1 - ethical use of organic emblem | Annual review of policy | Implementation and adaptations of policy is made. | | | | MOA, MITT |
| | 5.2- Policy Governance | Policy Governance Framework | Develop framework for management (e.g. board) in which to make decisions | | | | |

| | Component | Sub-Component | Description | Description | Activity | Sub-Activity | Responsible person |
|--|------------------|----------------------|---|--------------------|-----------------|---------------------|---------------------------|
| | | | including responsibilities, permissions, restrictions and delegations, etc. | | | | |

13.5 Appendix 5: Organic Working Group Meeting – Cabinet Drafting Minutes

Organic Working Group Meeting- Cabinet Drafting

19th February, 2021

Tanoa Plaza Hotel



1.0. Present

Dr. Tekini Nakidakida – Chairman, Organic Working Group

Mr. Joe Taoi – Farmer Representative

Ms. Shashi Kiran – FRIEND Fiji

Mr. Stephen Hazelman – POETCom (SPC)

Mr. Amena Banuve – PRO – Agronomy

Mr. Vio Veretawatini – Policy & IR (MoA)

Ms. Tavaita Tamani - Policy & IR (MoA)

Mr. Timoci Toga – Crop Extension (Eastern Division)

Mr. Jeremaia - Land Resources Unit (MoA)

Ms. Achal Kumar – AgTrade Unit (MoA)

Mr. Timoci Bogidua – AgTrade Unit (MoA)

2.0. Purpose/ Objective of the Meeting

The objective of the meeting was to draft a Cabinet submission of the Fiji Organic Policy.

3.0. Introduction and Welcome

The second meeting of the Fiji Organic Working Group (FOWG) was held at the Tanoa Plaza hotel and was attended by members of the FOWG members. The meeting was jointly coordinated by the Ministry of Agriculture and POETCom.

While awaiting the Chair, Mr. Stephan Hazelman welcomed the members for attending the meeting. While members were requested to introduce themselves, Mr. Jo Taoi, a farmer and exporter provide his experienced in relation to organic farming.

Mr. Taoi stressed that it is important to note why we need to push for organic because only then we will be able to understand the need to drive towards Organic agriculture. He added that a drive towards organic implies that we have been conducting things that are not normal and there is a need to change. Introduction of organic will involves changing the mindset and livelihood of the society and everyone along the value chain.

While referring to the market opportunities on turmeric, Mr. Taoi stressed that despite landing in the US market, Fiji turmeric is not capturing premium price. He also stressed that getting full accreditation is a complex and painful process as obtaining organic accreditation requires a lot of commitment and funding assistance.

Similar sentiments were shared by the chair of the Organic Working Group, Dr. Tekini Nakidakida where he stated that achieving organic requires commitment along the entire value chain. He also stated that there had been rumors that the some have been selling organic coconut from the islands but there are no difference between the prices of organic and those coconut that are produce conventionally. This is because there has been little assurance on the presence of market opportunities for organic products.

On the development of the Organic Policy process, Mr. Stephen Hazelman stated that a Pacific Organic Movement was initiated and during its establishment, some of the private companies have already been involved in organic work. However, there had been little interest from government in the Pacific and the Movement suggested that the only way to approach government is by developing a Policy and a Pacific Organic Toolkit first created.

The development of an Organic Policy started with Vanuatu with Fiji proposed to be the second Pacific country to develop its Organic Policy.

On Fiji's context, Mr. Hazelman also stated that a situation analysis on Organic for Fiji was conducted by Ms. Litia Kirwin of Loving Islands before the draft Organic Policy was developed and introduced to the Ministry of Agriculture.

4.0. Discussion

Following the introduction, Mr. Stephen stated that the major item for discussion in the meeting is the drafting of the Cabinet paper.

4.1. The Organic Strategic Action Plan

- 4.1.1. Before briefing the members on the draft strategic action plan for the Organic Policy, Dr. Tekini Nakidakida briefed the members of the initiation of the Fiji Organic Working Group which started a year ago. He stated that the Permanent Secretary for Agriculture would like a Policy that is brief and is workable for Organic in Fiji.
- 4.1.2. The team had also drafted an action plan that will operationalize the Organic Policy. The draft action plan is its 8th edition which will be put to the members for further comments. The draft action plan have included comments from the meeting in Narere. He added that the team had received comments on the timeline that is set in the Policy which are seem to be ambitious. The Action Plan will be annexed to the Policy when submitted to Cabinet.
- 4.1.3. The draft Action Plan have four (4) Strategies which are; i.) Support to Organic Production; ii.) Growing the Market for Organic Product; iii.) Structures and Systems; iv.) Policy Management.
- 4.1.4. The first strategic action on support to Organic Production comprises components on Knowledge, Awareness, Extension, Post-Harvest, School Curriculum inclusion, Pasture management, waste management, Research & Development, certification processes and market. The Support Strategy is inclusive of the entire organic process.
- 4.1.5. Dr. Nakidakida stated that there have been comments that the timelines have been ambitious and there is a need to relax the timeline further.
- 4.1.6. While stating the current work on Organic, Dr. Nakidakida stated that the Ministry of Agriculture is currently conducting bacterium culture which is done to enhance decomposition. This will be given to farmers at no cost.
- 4.1.7. On Sustainable Land Use Management, Mr. Hazelman also stated that some certification bodies also considers the concept of sustainable use the natural resources before issuing certificates. Hence, the strategic action plan must include sustainable land use. Ms. Shashi Kiran suggested if the Department of Environment could be part of the group.
- 4.1.8. She added that there are few other organization that are doing research work on Organic and how their work could be captured. She also suggested the inclusion of Mr. Jo Taoi to the group as a representative of farmers and exporters. Mr. Jo Taoi is a fully certified organic farmer and will be able to bring a wealth of experience to the group.
- 4.1.9. While referring to the numerous suppliers of organic inputs, Ms. Kiran suggested if there could be a way to harmonize and certify all allowable organic inputs through a body such as a Fiji Organic Movement. This body will test trial, confirm, standardize and approve the availability of organic inputs in Fiji.
- 4.1.10. **Protection of the word “Organic”**

Ms. Shashi Kiran stated that there is a need to protect the word “organic”. A number of company are using organic but do not have organic certification. It is therefore important that comprehensive awareness on the importance of using the Organic due to the credibility of the product being labelled as organic. The protection of the word organic must be applied in all aspect of the supply chain system and also on every Strategic action items. Chair, Dr. Nakidakida suggested a new strategic action item could be included as the Governance component.

4.1.11. While introducing PGS to the new member representatives, Mr. Hazelman stated that the Participatory Guarantee System (PGS) was introduced as an alternative to third party and is aimed at assisting small holder farmers in the Pacific.

4.1.12. In regards to training, Ms. Kiran suggested if there could be a training committee on organic. She added if the Ministry of Agriculture could identify an officer that will work with FRIEND Fiji on conducting training. While FRIEND Fiji conducts its own training, Mr. Hazelman suggested if the Ministry staff could accompany this training so they could have on-hands training.

4.2. Drafting the Cabinet Paper

4.2.1. While presenting a draft Cabinet paper, Mr. Vio Veretawatini stated that the components of the paper have been extracted from the draft Organic Policy paper.

4.2.2. The draft paper followed the format of the Ministry Cabinet paper submissions and had the following components- Purpose; what is organic; background; Importance of Organic Policy in Fiji; the Fiji Organic Working Group (FOWG); Role of the FOWG, Composition of the FOWG members; and Recommendation.

4.2.3. Mr. Veretawatini presented the draft cabinet document for members to comment and amend during the meeting. A number of comments were received from the member and changes were made accordingly. All these changes were noted by the secretariat.

5.0. Other Matters.

5.1. Chair, Dr. Nakidakida stressed the importance of the Organic Policy to the members. He stated that a consultation within the Ministry will be undertaken in order to socialize and let every agriculture officers understand the rightful concept of Organic.

5.2. Once the secretariat has completed amending the Cabinet paper, Dr. Nakidakida stated that the paper will be circulated to members for further comments.

5.3. Mr. Hazelman requested if the team can formalize the Organic Working Group. He added if the Working Group could be look into the Organic Value Chain as part of its work on Organic in its future plans.

- 5.4. Ms. Kiran suggested that there is a need review the selection of members of the Organic Working Group. She added that there can be few representative of the interim Organic Federation which can be coordinated by FRIEND Fiji.
- 5.5. Ms. Kiran stated that the Ministry's Farmers Crop Guide has a list of synthetic fertilizer, pesticides and weedicide for individual crops but it does not reflect the side effects, health effects and any organic alternative. She suggested if the Ministry could note these suggestion on including organic alternative agro inputs.
- 5.6. Ms. Kiran reiterated the need to have capacity building of Ministry of Agriculture officers so that they are fully aware of the whole organic concept. She added if other Ministry of Forestry officers too on the land use management.
- 5.7. To push the organic agenda, Ms. Kiran stated that FRIEND Fiji is ready to assist Organic Working Group to push the work on Organic in Fiji.

6.0. Closing

With no other matters for discussion, Chair thanked all the members that were present at the meeting for their contribution and comments on the Cabinet paper discussion.

Meeting Ends 12.50pm

13.6 Appendix 6: Draft organic action plan (Vanuatu) – relevant sections

Page 19 – Monitoring and Evaluation 4.1 & 4.2–

| Objective | Action | Indicators | Agencies | Cost | Timeframe |
|--|---|--|---------------|----------|------------|
| Government extension staff have expertise and capacity to support organic production in Vanuatu, and Vanuatu farmers have the understanding of how to implement the concept of best practice organic farming | 4.1 Train all extension staff on how to train the public on organic production methods | Creation of information about organic certification, organic standards in Vanuatu and general organic best practice management. Training on how to provide training on organics run in every province. Development of organic farming demonstration sites in each province | MALFFB, VARTC | Moderate | Short Term |
| | 4.2 Provide direction to NGOs working in production capacity-building to enable their instructions to align with government priorities. | | | | |

Page 20 – Monitoring and Evaluation 5.1–

| Objective | Action | Indicators | Agencies | Cost | Timeframe |
|---|---|--|----------------------------|------|-------------|
| Increase in the number of farmers who use organic practices at all levels of production | 5.1 All farmers in Vanuatu have access to knowledge on best practice organic farming, and are implementing the principals | At least 50% of subsistence farmers adopting the principals of organic farming, as indicated by the number of Organic Farmers' Associations and the number of farmers attending the training events held by extension staff and NGOs | MALFFB, FSA, NGOs, Farmers | High | Medium Term |