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Systemic Capacity in Food System Governance in the Solomon Islands: “It’s More than Just Training”

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Abstract: Food security and malnutrition are leading health and development issues in the Pacific Island region. The food system scholarship points to the need for capacity building across multiple levels of governance to improve food system outcomes in the Pacific Island Countries and Territories. This paper aims to identify the strengths and weaknesses of systemic capacity in the food system governance of the Solomon Islands and identify opportunities for capacity building. A theoretically informed, empirical policy analysis was undertaken, informed by qualitative semistructured key informant interviews. Challenges related to capacity included slow information flows, inadequate human resourcing, and skill gaps at all levels of government. Opportunities for capacity building span workload, personal, performance, supervisory, role, systems, and structural capacities. These include the improvement of coordination between food system actors through the establishment of a multisectoral food system platform or agency, and increasing the involvement of vulnerable populations in policy planning and decision making. The current food system governance of the Solomon Islands shows important strengths in systemic capacity across multiple capacity types at national, provincial, and community levels. Our analysis provides insights for future capacity building efforts that build on these strengths to improve social, environmental, and economic outcomes.

Keywords: capacity building; food systems; nutrition; governance; Solomon Islands; multisectoral coordination



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1. Introduction

Malnutrition and food as well as nutrition security have emerged as dominant global health challenges of the 21st century. In 2022, nearly one billion people were affected by hunger, exacerbated by the outbreak of COVID-19, climate change, and economic crises [1]. Progress towards Sustainable Development Goal (SDG) 2—zero hunger—has stalled, and the world is not on track to meet the set target for 2030 [1,2]. Additionally, the prevalence of non-communicable diseases (NCDs) is increasing, accounting for 74 percent of all deaths globally. Of these, 77 percent are in low- and middle-income countries [3].

Increasing attention has been drawn to creating healthy and environmentally sustainable food systems to address these issues. A food system “... gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, distribution, preparation and consumption of food, and the output of these activities, including socio-economic and environmental outcomes” [4].

Food systems are critical for ensuring the health of humans and the natural environment. Ensuring sustainable and healthy food systems at the global, regional, and local level is crucial to addressing rising rates of malnutrition and NCDs.

Food systems in the Pacific Island Countries and Territories (PICTs) are particularly vulnerable to climate change and external shocks due to their small land size, growing populations, geographic isolation, increasing urbanization, imported food dependence, and disproportionately high exposure to natural disasters [5]. This vulnerability was highlighted recently by the COVID-19 pandemic in addition to the global food and energy crisis driven by the war in Ukraine [5]. As with many Pacific Island countries, the Solomon Islands is transitioning away from traditional diets based on locally produced vegetables and fruit, seafood, nuts, and starchy root crops to diets based on processed foods high in fat, refined sugar, and salt, particularly in urban areas [6–8]. Food production is heavily dependent on natural resources in the Solomon Islands, which makes it vulnerable to extreme weather events and environmental degradation [9]. The country is also reliant on imported foods, which exacerbates food system vulnerabilities to external shocks [8,9]. With the majority of people living in rural areas, many of whom rely on locally grown and sourced plant-based foods and fresh fish, and with 25 percent of the population living below the poverty threshold [10], these environmental issues have major implications for food and nutrition security [8]. The combination of these factors has contributed to the high prevalence of undernutrition, non-communicable diseases, and micronutrient deficiencies in the Solomon Islands [6,9].

The Solomon Islands Government has shown commitment to addressing both nutritional and environmental challenges through multiple regional and global commitments. From these, the Solomon Islands have developed a set of policy priorities for transforming food systems, which focuses on traditional knowledge and expertise, strengthening ocean and coastal marine resource governance, and reorienting trade systems to promote health and environmental outcomes [11,12]; however, efforts to integrate considerations of nutrition and the environment into food system policies have remained challenging, in the Solomon Islands as well as regionally [13]. There is an emerging consensus that broader and integrated policy interventions are required to address the environmental and social changes that have contributed to the poor food system outcomes [14–17].

Limited capacity is a global challenge for strengthening food system policy making and implementation, and is common in small, developing island states, including in the Pacific [18–22]. However, capacity in this context often receives a limited meaning: it tends to refer to human and financial capacity. In contrast, Potter and Brough [23] argue that to cover all dimensions of a complex sociocultural situation, it is more useful to recognize a hierarchy of capacity needs. A more nuanced understanding of the types of capacity that need to be strengthened is required to better support efforts to improve food system governance in PICTs and, more specifically, in the Solomon Islands.

The aims of this paper are twofold: first, to identify the strengths and weaknesses of food system capacities, i.e., systemic capacities, in the Solomon Islands; second, to identify opportunities for capacity building for better food system outcomes. Analyzing the Solomon Islands, where capacity has previously been highlighted as a challenge in food policy making [9,12], as a case study will help inform sustainable and healthy food system policy change across the Pacific Island region, as well as in other low- and middle-income countries (LMICs).

2. Methods

We used a theory-informed, empirical, and qualitative case study design informed by expert interviews. To guide our analysis of systemic capacities in food systems in the Solomon Islands, we drew from Potter and Brough's [23] systemic capacity building framework.

2.1. Theoretical Perspectives

To help investigate systemic capacity across three government levels—national, provincial, and community—we developed a conceptual framework adapted from Potter and Brough [23] (Figure 1). The Systemic Capacity Building framework provides a nuanced approach to analyzing capacity needs across nine interconnected levels of capacity types: performance, personal, workload, supervisory, facility, support service, systems, structural, and role capacity [23]. To effectively build capacity types at higher levels (e.g., personal capacity, by providing technical skill training), the lower levels of capacities first need to be addressed (e.g., structural capacity, by establishing multisectoral coordination committees). Understanding this hierarchy of capacity needs can help us investigate the current strengths and weaknesses of capacity in the Solomon Islands food system, as well as identify opportunities for more holistic and effective capacity building.

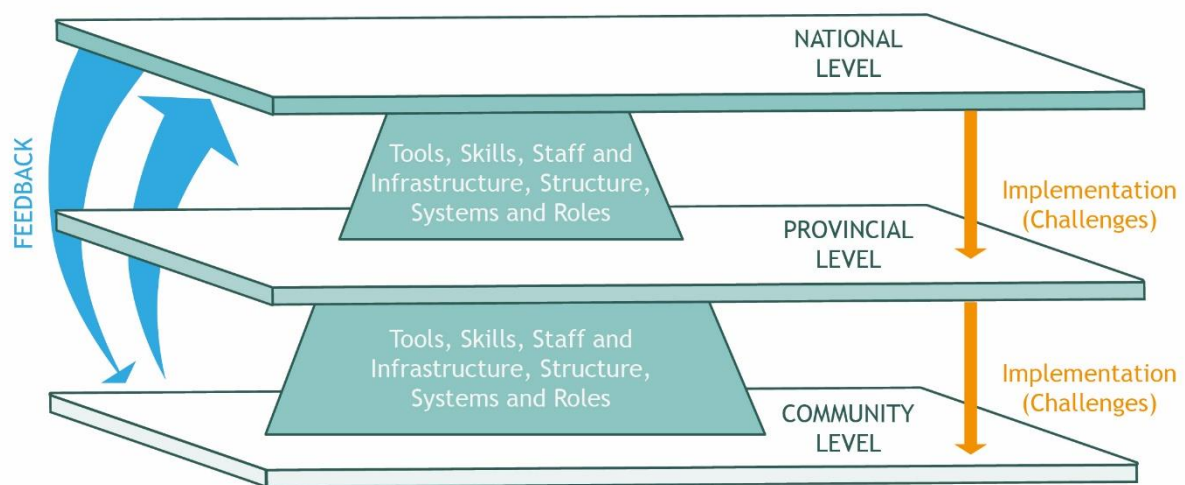


Figure 1. Capacity types examined in the study, adapted from the Potter and Brough (2004) [23] capacity pyramid.

For the purpose of this study, we adopted the following capacity types from the systemic capacity building framework: performance, personal, workload, supervisory, systems, role, and structural capacity [23] (Table 1). We selected these seven capacity types because these are the most relevant to the governance regimes at the study site.

We added three levels of governance to the framework to reflect the need for adequate capacity of different types at each level of governance in order to ensure that the next governance level is effective in delivering desirable outcomes. For example, national government agencies make monetary decisions, develop policy frameworks, and allocate financial resources to provincial offices for policy implementation (systems capacity). However, if (a) there are not enough officers (low workload capacity) with the necessary skills and expertise (low personal capacity), (b) existing performance management (monitoring and evaluation) mechanisms are weak (low supervisory capacity), or (c) the necessary tools (e.g., software, the Internet) are not available (low performance capacity), then there will be a significant delay in the flow of information and resources (low systems capacity).

Ethics approval was obtained from the University of Wollongong (2020/078), the University of Sydney Human Research Ethics Committee (#2021_528), the Solomon Islands Health Research and Ethics Review Board (HRE013), and the Solomon Islands Ministry of Education and Human Resource Development Research Committee (12/20).

Table 1. The definitions of the capacity types assessed in this study [after 23].

Capacity Type	Definition
Workload capacity	Are there adequate staff across the three levels of government with sufficient skills to cope with the workload?
Personal capacity	Are the staff equipped with the relevant knowledge and skills to perform their roles. Do they have broad experience, and have motivation? Are they lacking the relevant technical skills, managerial skills, interpersonal specific role-related skills.
Performance capacity	Do the staff have the resources (i.e tools, money, equipment, consumables etc.) available to perform their respective roles.
Supervisory capacity	Are there reporting and monitoring mechanisms in place? Are there clear lines to physically monitor the staff under them?
Systems capacity	Are the flows of information, money and managerial decisions timely, to avoid the lengthy delays for authorization?
Role capacity	This applies to individuals and structures such as committees. These bodies are given the authority and responsibility to make decisions essential to effective performance.
Structural capacity	Are the structures (e.g., committees) where discussions between the sectors may occur and the Minister’s decisions are made? This is where records are kept, and individuals are called to account for non-performance.

2.2. Data Collection

Data were collected through semistructured key informant interviews, based on an interview guide developed in line with our analytical framework. Participants were selected using purposive sampling by researchers based in Solomon Islands with expertise and contacts across food system governance (Table 2). Ten participants were not able to participate in the study due to time constraints, and nine declined or did not respond. Eighteen interviews were conducted with representatives from government (oceans/fisheries, health, land/agriculture, environment, economy/finance, and trade/industry), development partners (i.e., intergovernmental and donor organizations), non-government organizations (NGOs), and private sector actors. We also applied snowball sampling until we achieved an adequate number and data reached saturation (i.e., when no new data emerged from the interviews). Interviews took place on Zoom between June and November 2022. Three interviews were conducted in Solomon Islands Pijin and translated into English; the rest of the interviews were in English.

Table 2. Participant characteristics.

		Number of Participants (<i>n</i> = 18)
Area of expertise	Oceans/fisheries	3
	Health	8
	Land/agriculture	3
	Environment	0
	Economy/finance	1
	Trade/industry	3
Institutional representation	Government agency	14
	Development partners and NGOs	2
	Private sector	2

Note: Some participants represented more than one sector, so the total does not add to fifteen.

2.3. Data Analysis

Interviews were transcribed and thematically coded in NVivo™. To inform the analysis, a codebook was developed based on the theoretical perspectives (Table 3), together with codes to gather information on other characteristics of the policy process. The codebook was piloted and revised three times by four members of the research team in response to the interview findings as they emerged.

Table 3. Study codebook.

Nodes	Subnodes
Challenges	Production
	Food distribution, exchange, processing
	Retail, markets, international food trade
	Consumers
Capacity of health and agriculture policy actors to facilitate coordination and communication to agrifood transformation	Institutional capacities
	Individual capacities
	Forums for coordination and communication
Capacity to implement policies related to food systems	Leadership (operational), championship (high level, inspirational), decision-making
	Performance, Personal, Workload, Supervisory, Systems and Role-specific capacities
Policy	Current policies and frameworks in place
	Future policies that could resolve issues
Interests	Interests and priorities
Regional platforms	Engagement with regional policy

We coded all data against the framework, then reviewed the coded data for trends, inconsistencies, and gaps, discussing key findings against each type of capacity among three members of the authorship team. Rigor was optimized through the application of two triangulation methods: (1) source triangulation—interviewing multiple participants on similar questions, and (2) analyst triangulation, via multiple researchers coding, reviewing, and analyzing the data [24].

3. Results

Eighteen participants, representing government, development partners, NGOs, and private sector actors working in food systems, were interviewed. Overall, the interviewees identified several strengths, as well as weaknesses, across different capacity types in food system governance in the Solomon Islands (Table 4). The perceived capacity limitations explain the challenges faced by government agencies in designing and implementing effective and coordinated policies for food systems. Specific challenges related to capacity included slow information flows, inadequate human resourcing, and skill gaps at all levels of government (Figure 2). However, interviewees highlighted significant opportunity for capacity building to strengthen food system governance in the Solomon Islands, spanning workload, personal, performance, supervisory, role, systems, and structural capacity.

Table 4. Summary of key findings by capacity type.

Capacity Type	Key Findings
Workload capacity	Strength: NGO and development partner support. Weakness: Not enough officials are employed in relevant government agencies at the national and provincial levels. Opportunity: Increasing staff numbers and tightening collaboration with NGOs and development partners.
Personal capacity	Strengths: Traditional knowledge and existing food production skills are strong at the community level. Weakness: There are not enough officials with the necessary skills and experience employed at the national and provincial levels. Skill development at the community level among food system actors is also needed. Opportunity: Development partners and regional initiatives strengthening personal capacity across government levels.
Performance capacity	Strengths: Existing processes to attract funding. Weakness: There are not enough funds allocated to implement all food system policies. Opportunity: Government agencies to strategically align their food system programs with high-level strategic and national policies and plans to attract funding.
Supervisory capacity	Strengths: Monitoring and accountability mechanisms are developed and endorsed. Weakness: These mechanisms are often not implemented or used adequately. Opportunity: Strengthening workload, personal, and performance capacity so that government agencies have enough resources to implement these mechanisms.
Role capacity	Strength: Government agencies follow the legal and policy documents that define their roles and responsibilities. Weakness: There are not enough legal documents in place that would clearly define the mandates and responsibilities of relevant actors in implementing food system policies. Opportunity: Adopting already-developed policies or plans that provide clear guidelines in food system governance.
Systems capacity	Strength: Well developed policy-making and legislative processes are in place. Weakness: The flow of information and funds is slow from the national to community level because these administrative procedures are either too complicated or there are not enough staff, resources, or supervision to implement them in a timely manner.
Structural capacity	Strength: There are some multisectoral coordination mechanisms that help food system actors to coordinate their activities. Weakness: The current mechanisms do not bring all relevant actors together because of the weaknesses in their design or implementation. Opportunity: Establishing a multisectoral food system governance platform or agency.

In the following sections we present the findings on the weaknesses and strengths by capacity type and present opportunities for capacity building.

3.1. Workload Capacity

Interviewees identified NGO and development partners' support to government efforts as a strength in workload capacity, specifically by implementing agriculture programs at the community level that target farmers; however, the participants believed that long-term sustainability could become an issue once NGOs withdrew from implementation at the end of their projects.

Overall, government officials' workload capacity at the national and provincial levels of food system governance emerged as a major capacity challenge. The interviewees highlighted that workload capacity is low in food system governance in the Solomon Islands across all relevant sectors: there are not enough people employed in the relevant national-level government agencies to carry out all necessary tasks. As a participant explained: "Adequate staffing was one of the challenges" (#S3_economy_govt). Provincial officers described an ongoing challenge where a responsible officer is assigned multiple

roles and responsibilities, leaving limited time and resources to implement specific food system policies.

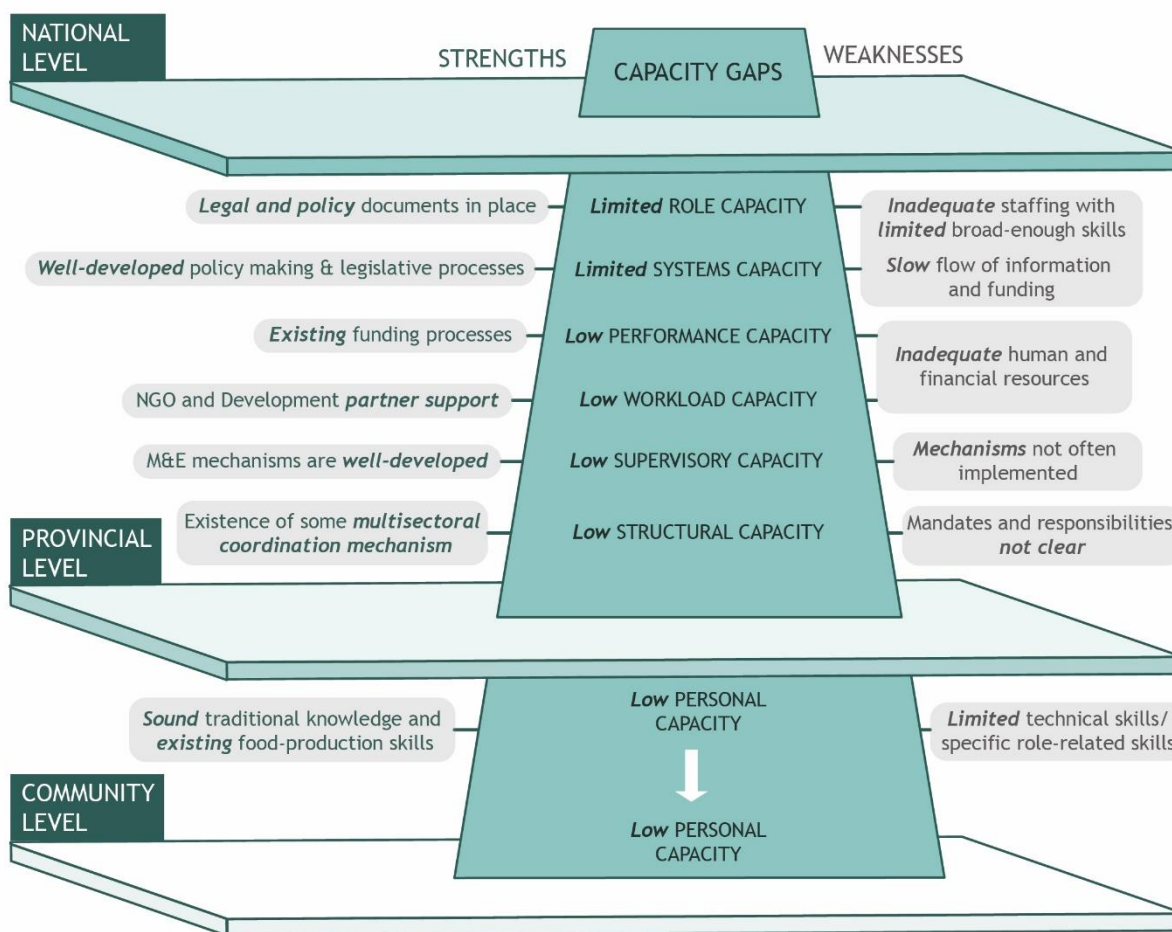


Figure 2. Summary of the key findings.

Interviewees indicated that a key opportunity to strengthen capacity was employing more staff dedicated to implementing specific food system activities. They saw great potential in this opportunity for implementation and coordination.

At the Provincial level, we do not deal with one area but also respond to other areas, so if we have someone who's specific role is to look after the [food system] program, it would be really good. (#S5_agriculture_govt)

Participants also identified an opportunity to address the sustainability of interventions (related to the concerns regarding NGO- and development-partner-led implementation) through closer collaboration between state and non-state actors throughout implementation, which would enable government agencies to gradually build up their workload capacity.

[NGOs] should collaborate with government who are responsible for that area, [...] to improve their implementation of respective programs, because it seems that their activities are similar to ours. They've tried to improve our offices, for example, to implement rural agriculture programs. (#S2_agriculture_govt)

3.2. Personal Capacity

Personal capacity was identified by the participants as critical for effective innovation to adapt to food system challenges. A government official explained the importance of adequate personal capacity to implement policy successfully as follows:

Even if it's one of the best policies, if you don't have the technical capacity to actually implement and carry out the policy... Having the policy in place, having the right people, the technical capacity [...]... all of these things will be very important too for policy at the country level. (#S3_economy_govt)

Many participants identified existing capacities at the community level, while also highlighting the need to strengthen personal capacity among a range of community actors. For example:

From the rural level right up to regional level, there are many players there, who are involved in food system. . . . Whatever community I am looking at, learning and training are very important. [...]... they already have all this knowledge about the crop, especially about the Indigenous crops. But as we face climate change impacts, things change. We need to educate them through training.” (#S13_agriculture_private)

However, the data revealed that personal capacity for food system governance at the national level tends to be low in the Solomon Islands. Government officials were identified as having limited relevant expertise and skills (refer to white arrow in Figure 2) to effectively implement food system policies. Participants explained this in the following ways: *“Having technical and competent people on the ground is an issue” (#S2_agriculture_govt); “In terms of enforcement, we lack nutrition knowledge and the components of nutrition are not in the regulations” (#S11_health_govt).*

As an opportunity, the role of development partners and regional initiatives in strengthening personal capacity across different government levels was cited by several participants. For example:

Regional initiatives such as policies, meetings, technical support are useful in terms of sharing of information. Because Solomon Islands might not have the capacity for research. So regional initiatives can help the country by providing information. Like SPC, they have good research facility. (#S10_industry_private)

3.3. Performance Capacity

Interviewees consistently highlighted an implementation gap regarding the translation of regional food system policy guidance, which they attributed to a lack of national policy priority and very limited funding allocation, which limited capacity to perform their roles to the extent desired (i.e., performance capacity). As a participant explained: *“Regional frameworks are not translated into national policies...and also resourced” (#S9_fisheries_govt).*

Our analysis revealed the ways in which workload and personal capacity are shaped by the performance capacity—the availability of tools, resources, and funds—of the food system. A provincial government official explained this in the following way:

From 2015 to 2019, there was this food security program. Even though it was in the policy, we did not implement it. These policies were developed at the higher [national] level but it was not translated to us at our [provincial] level. [...] we lack the financial resources to implement these policies. (#S5_agriculture_govt)

Performance capacity also appeared to be greatly defined by government agencies' priorities, which are reflected in strategic as well as operational plans and the annual budgets. For instance, resourcing was thought to be an issue by representatives from the Ministries of Finance and Treasury, Health, and Agriculture, because there is limited, or no, mandate to engage in policies that promote healthy and sustainable food systems, and thus inadequate resources are allocated to certain food system activities: *“We faced setbacks [in implementation] because [food systems] are not top priority” (#S3_economy_govt).*

Participants identified a need for relevant Ministries working on food system activities to strategically align their work programs with overall government policy, which defines budget allocation across government agencies. Participants explained that if the proposed activities do not align with current overarching government policy, the relevant government division will not receive the funds for implementation.

If the Government policy is different, the Division will miss out. [...] Government Ministries have their own laws, so each division works according to its own laws to achieve its own objectives. If the current government policy is different, then we cannot do anything as no budget is allocated to it. (#S8_trade_govt)

3.4. Supervisory Capacity

The analysis showed that the Solomon Islands' food system governance has an important strength in the institutional structures and mechanisms that are in place to support supervisory capacity—the ability to manage and hold staff and relevant agencies accountable, as well as to enforce policies. Participants described a range of official monitoring and accountability mechanisms between the national- and provincial-level governments that aimed to improve multisectoral coordination:

The [national] government like to monitor our progress but also ensuring that we deliver to their priorities in different sectors. For example, fisheries come under the productive sector. Under the productive sector, we have national coordinators at the prime minister's office, and also policy secretaries. The policy secretary and the national coordinator monitor progress and delivery of our implementation. (#S9_fisheries_govt)

Interviewees indicated that institutional structures are in place between the provincial and community levels to support food producers and ensure compliance with regulations.

In the government sector, we have to really work with industries or fishermen or fisherwomen to ensure compliance with policies and creating an enabling environment. (#S9_fisheries_govt)

However, participants indicated that although these monitoring and accountability mechanisms exist on paper, in reality they are often not implemented, weakening an opportunity for ongoing and meaningful supervisory capacity. A private sector participant gave an example of this at the national level: *"But because M&E was not launched after it was approved, there was no recognition of everything that was in the policy"* (#S13_agriculture_private). A government official gave an example of the gap in provincial-community-level monitoring and enforcement:

We need to ensure that the regulation of pesticides is enforced. But some of our farmers order more pesticides for control of pests and disease [than allowed]. this committee, who is responsible for checking and monitoring, doesn't check: the residues are still in the plants. (#S2_agriculture_govt)

3.5. Role Capacity

It was evident from the interviews that role capacity—the authority granted to carry out responsibilities—is greatly shaped by the regulations and policies in place. As a government official explained: *"I'm guided by legislation in terms of what we'll have to do, in terms of that mandate. [...] when we're guided by policies instruments, we have more clarity on partner roles and responsibilities"* (#S1_health_govt). However, the analysis showed that, in national-level food system governance in the Solomon Islands, these documents are often not developed or endorsed to create the necessary role capacity. As a provincial government official explained:

At the Provincial level, we do not deal with one area, but in our Department we also respond to other areas, so my view if we have someone whose specific role is to look after the [food system] program it would be really good. (#S5_agriculture_govt)

An example provided was in relation to the country's National Food Security, Food Safety and Nutrition policy, which had been under draft since 2019, and was never adopted. Participants noted a lack of ownership of this policy by the Ministry of Health, explaining why there was no one to champion the policy to be adopted and implemented (paraphrased #S1_health_govt).

A private sector actor expressed the need for a clearly defined mandate to enable food system policy implementation:

The big question is who should implement the policy? Somebody has to be custodian of this policy to making sure this policy does not stay on the shelf of a ministry. [...] Someone needs to monitor and evaluate the effectivity and the relevance of these policies. (#S13_agriculture_private)

The difficulty of adding new activities to the government's agenda was identified as a reason why these food system policies—that could provide clear mandates—are not in place at the sector level: *"It's usually pretty hard to get new activities and new strategies into the government system. But once it's there, people will fight left right and center for financing."* (#S1_health_govt)

3.6. Systems Capacity

The analysis found that a strength of the Solomon Islands' food system governance was in the policy-making and legislative procedures that were carefully developed and planned. Such administrative procedures are vital to the development and implementation of effective and coordinated food system policies. However, when these procedures become too complicated and there are not enough skilled staff in place, or supervision is inadequate, they can limit systems capacity—the flow of information, directives, and funds within and between governance levels—as is the case in the Solomon Islands. The participants complained about the cumbersome administrative procedures slowing the transfer of information and funds from the national to provincial levels, which delay food system policy making and implementation. As a health official stated:

We want to do things from a policy level, from a legislation level, or from a strategy level, but sometimes going through that process with government is too slow. [...] Sometimes the government process does not allow timely action. (#S1_health_govt)

3.7. Structural Capacity

The data indicate that high-level institutional mechanisms are in place to create structural capacity—the ability for coordinated multisectoral and multistakeholder action—in the Solomon Islands' food system governance. Several interviewees discussed multisectoral coordination mechanisms in place:

The [food system] policy is implemented by different government ministries. The committee is coordinating and monitoring the activities. The respective government ministry should be implementing roles and responsibility within that policy, and on a quarterly basis, they (the Government Agencies) come together and update each other on the implementation. (#S6_health_devpartner)

Another participant also explained that the Ministries of Health and Agriculture work together on certain food system initiatives:

We provide the resources, and they [Ministry of Health] provide the knowhow. So that is a kind of example that I think must be strengthened between all sectors here, so that these sort of policies can be successfully implemented, not only resources but also continuous cooperation between each implementing ministries. (#S2_agriculture_govt)

However, interviewees indicated that these mechanisms currently do not facilitate the necessary coherence between food system policies and actors that is needed to improve social, environmental, and economic outcomes simultaneously. As a government official explained: *"Sometimes you just needing some level of guidance on how we should all work together."* (#S1_health_govt). Two-thirds ($n = 11$) of the participants across food system sectors suggested that it is imperative to improve multisectoral coordination, and six of them stated that a functioning food system coordinating committee would be needed:

A council or a committee that connects all these stakeholders within the food systems together, and to put something that addresses the challenges that each of the stakeholders are faced with. (#S11_health_govt)

3.8. Integrated Analysis of Capacities for Food System Policy

Overall, the analysis also highlighted a number of intersections between different capacity types. First, weak supervisory capacity further limits the already-weak systems capacity of the food system in the Solomon Islands. Weak supervisory capacity is also likely to be one of the drivers of the food system policy implementation issues described by the participants. In addition, this weakness might also explain why the national-level government fails to translate regional food system policy guidance into domestic policies.

Second, the issues with implementing monitoring and accountability mechanisms might be explained by the limited personal and workload capacities: supervisory structures do exist between different levels of governments, but because there are not enough skilled staff to follow the procedures supervisory capacity becomes weak. In addition, the inadequate number of skilled staff might be a result of the limited funds available to hire them, pointing at the importance of performance capacity.

Third, the slow pace of information and financial flows might be explained by the limited workload or personal capacity, which potentially reflects the importance of appropriate performance capacity in the shape of funding to hire the necessary number of skilled staff. In addition, this low systems capacity might be connected to structural capacity, as explained below.

Fourth, the analysis indicated that stronger structural capacity could improve the coherence between food system actors and policies, and it could help ensure that the limited funds (performance capacity) are allocated effectively to support multisectoral food system policy implementation. It could also support better role capacity by facilitating the establishment of clear mandates and responsibilities for the implementation of specific food system activities.

4. Discussion

In this study, we provided an analysis of systemic capacity needs in food systems across three levels of governance (national, provincial, and community) in the Solomon Islands. Food systems are a leading priority of the national government. While all three levels of government play an active role in food system planning and activities in the Solomon Islands [9], improving capacity is paramount in translating these policies into actions.

The analysis indicated that low systemic capacity is resulting in slow and limited policy implementation. This reflects prior research on the Solomon Islands and PICTs more broadly, which describes a lack of resources, poor technical support in terms of training, and the absence of clear strategies for improving the limits of food system policy implementation [25]. As an example, the absence of public extension officers at the provincial government level means that farmers and fishers find it challenging to acquire the knowledge they need to enhance production in a sustainable way [26]. In addressing these capacity gaps, research can play a role through informing evidence-based capacity-building sessions [27] and supporting effective monitoring as well as evaluation systems [28,29]. Capacity building is also identified as a development priority in PICTs, which supports improved institutional management; however, often only personal capacity is emphasized (which is critical to ensure knowledge, experience, and expertise to perform roles effectively) [30].

The issues of workload and personal capacity revealed by this analysis confirms previous studies suggesting that PICTs tend to have an inadequate amount of staff working in government [25,27,31–33]. This is in part due to the small population size, which limits the size of the administration and local capacity to establish higher education facilities [34,35]. In addition, the geographic isolation of PICTs makes studying abroad particularly challenging [34]. This study has expanded these prior works as it provided a more nuanced picture of how workload and personal capacity are connected to other capacity types across different governance levels.

This study also highlighted an opportunity for more institutional coordination of multisectoral food system governance, reflecting findings of a separate study in Vanuatu and the Solomon Islands that indicated a need for structural capacity to coordinate activities of a cross-sectoral policy [22]. Recognizing this opportunity, the Solomon Islands' Ministry of Health proposed the establishment of a multisectoral Technical Working Group (TWG) in its draft National Food Security, Food Safety and Nutrition policy in 2019. The TWG would be responsible for coordinating and overseeing the food system measures embedded in this policy. Its membership would consist of the Ministry of Agriculture and Livestock Development, the Ministry of Health and Medical Services, the Ministry of Fisheries and Marine Resources, and the Ministry of Education and Human Resources Development; however, this policy has not been endorsed by the Cabinet, leaving the Solomon Islands without a functioning food system coordination mechanism. Building systemic capacity among policymakers can strengthen committees such as the TWG, as sufficient personnel, skills, and knowledge can support coordination and decision making so that they can work more effectively.

4.1. Policy Implications

Our study confirmed that capacity is crucial for policy development, and it is fundamental to enabling institutional capacity and organizational development [30,36]. The identified opportunities to build capacity in a coordinated manner, consistent with the Solomon Islands' Sustainability Development Capacity Development Plan [37], will contribute to improved food system policy outcomes in three main ways.

First, strengthened capacity can help to improve the alignment between key policy actors, to enable policy coordination that addresses multiple food system objectives. The Ministry of Agriculture and Livestock, the Ministry of Finance and Treasury, the Ministry of Fisheries, and the Ministry of Commerce, Industries and Immigration are the key players in the production and distribution phases of food systems, so that when they are equipped with the necessary tools, skills, and knowledge they can perform effectively. The importance of improving coherence across food system sectors and actors in PICTs has been recognized by earlier studies [5,12,25,38,39]. For example, Reeve et al. [12] found that PICTs' policy instruments do not strongly reflect aims to promote environmentally resilient and healthy food supply chains. Similarly, a recent FAO report [5] suggested that there are alternative pathways to strengthen food system outcomes, such as the re-establishment of traditional farming practices and community-managed protected areas. While the trade-offs between the different pathways need to be considered, they provide opportunities to strengthen social, environmental, and economic food system outcomes simultaneously.

Second, the establishment of a multisectoral food system governance platform or agency, such as the TWG or a Food Council, could facilitate coordination and collaboration to make a food system work more effectively. Food system governance consists of multiple actors that interact through dynamic relationships. A multisectoral platform may provide the opportunity for key agencies to come together to discuss issues surrounding food system governance and track the progress of food system work across all governance levels. This insight is aligned with prior studies that suggest that a national-level multisectoral food system body or forum could improve coordination between relevant stakeholders [9,12,25,35,39,40].

Third, strengthening capacity would improve the involvement of vulnerable populations (such as women, youth, and the elderly) in food system policy planning and decision making. In communities, women and youth who have not undergone formal education can be excluded from the decision-making process [41]. In addition, Indigenous local skills that are reported to be important to strengthen food system outcomes are underutilized [5,42], and their uptake could be facilitated by more inclusive food system governance processes. Several studies in PICTs raised the importance of involving vulnerable populations [5,8,12,42,43]. For example, Reeve et al. [12] found that, to address multiple sustainable development objectives, food systems should be framed to consider

the involvement of vulnerable people. Our study expands on these studies by providing insights into the specific capacity types actors need across food supply chains to help their participation in food system governance.

4.2. Study Strengths and Limitations

This study used a qualitative policy analysis approach, drawing on an established capacity framework, to examine types of capacity related to food systems policy in the Solomon Islands. National and subnational stakeholders participated in the interviews, and they were identified as representatives of the different sectors involved in food system governance. The main limitation of this study is that community stakeholders were not directly interviewed (although subnational policy actors could speak to community issues as well). In addition, the relatively small number of interviewees means that there may be some perspectives that were missed. However, the relatively small size of the government and the private sector in the Solomon Islands means that key actors from the main relevant sectors did participate.

5. Conclusions

This study revealed important strengths in systemic capacity across multiple capacity types at the national, provincial, and community levels of food system governance in the Solomon Islands. Our analysis provided insights for future capacity-building efforts that build on these strengths to improve social, environmental, and economic outcomes. Taking a systemic, hierarchical approach to analyzing food system governance capacity across the three levels of governance enabled us to identify the tools, skills, and knowledge needed to enhance the policy development and implementation of food system governance. The insights arising from this study highlight the importance of a systemic approach to capacity building. In addition, our findings may be useful to inform policymakers', development partners', and NGOs' efforts to strengthen food systems in the Solomon Islands or other PICTs. Further research applying a similar approach in other PICTs (and more widely in low- and middle-income countries) could be beneficial to help propel countries in building stronger and more resilient food systems.

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