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CLIMATE RESILIENT
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FIJI

A CASE STUDY CONDUCTED BY THE CLIMATE RESILIENT FOOD SYSTEMS ALLIANCE

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1. Geography and Economy

Fiji is a large archipelago with diverse landscapes and climate, lying on the border between Polynesian and Melanesian regions of the Pacific. More than 300 islands are scattered over 1.3 million square kilometers of ocean – islands categorised by diverse ecosystem including significant areas of natural forests, fresh water, coastal and marine life. The land area of Fiji is 18,333 km2.

Fiji is an upper middle-income country, with gross national income per capita of USD 5,860 (2018). Fiji has a market economy based primarily on tourism and agriculture, the latter including a substantial subsistence sector led by indigenous Fijians. Agriculture is second the mainstay of Fiji's economy, which is currently valued at approximately $690 million (FJ$1.5 billion) and accounts for about 8.1 percent of Fiji's GDP (2021) including the sugar industry (1.1 percent). The sector supports the livelihoods of 27 percent of Fiji's population and is the main source of work for more than 83 percent of Fiji's rural population (Ministry of Agriculture, 2021).

In 2020 Fiji was ranked as 164th economy in the world in terms of total exports and 166th in total imports. The top exports of Fiji are water, processed fish, gold, raw sugar, and petroleum oils; exported mostly to the United States, Australia, New Zealand, United Kingdom, and Japan. The top imports of Fiji are refined petroleum, wheat, aircraft parts, broadcasting equipment, and cars; imported mostly from China, New Zealand, Australia, Singapore, and South Korea (OEC, Observatory of Economic Complexity, 2020). According to FAO statics, 5.7% of the Fijian population suffers from undernourishment, while 4.2% of the population dwells in a condition of severe food insecurity (FAOSTAT, 2020).

Additionally, it is worth noting that Fiji's economic growth in recent years was underpinned by robust tourism sector. However, due to the coronavirus pandemic, Fiji's mainstay tourism sector is nearly at a standstill and related industries are under severe stress: job losses since 2020 have cut off incomes for almost a third of Fiji's workforce, and Fiji's GDP was down by as much as 20 percent (World Bank, 2022). According to the World Bank, to recover from these economic damages, Fiji must nurture new and

emerging growth sectors like blue economy – promoting coastal and marine tourism and infrastructure. Fiji remains in a unique position to leverage blue economy with its unique environment and unique natural resources.

Likewise, with its commercial and subsistence agriculture, forestry and fisheries, Fiji's renewable natural resources directly support nearly half of its rural population. To protect, manage and restore its mangroves and coral reef ecosystems are key for Fiji's resilience building efforts given the fate of the country due to increasing impacts of climate change.

2. Food Systems overview

2.1 Food Production

Subsistence farming and sugarcane production have traditionally been the mainstay of Fiji's agriculture and food production sector and crops, livestock and fisheries is important source of income, livelihoods and employment for Fijians. 65% of agriculture farmers are smallholder operators with land of 1 ha or less (Fiji Food Systems pathway, 2021).

Key agricultural products that Fiji produces are sugarcane, traditional food crops (dalo, cassava and yaqona), tropical fruits (pineapple, pawpaw and mango), vegetables, spices, cocoa, coconut products, beef, dairy, pork, poultry, and goat and bee stocks. The sector generates close to 5 percent of domestic exports and accounts for 19.6 percent of total food imports (Fiji Agriculture sector policy agenda, 2020). The other crops subsector is mainly driven by the root crops and horticulture industry. The major commodities are dalo, ginger, papaya, pineapples and BQA commodities such as eggplant, okra, and breadfruit. Dalo and cassava are the most planted root crops with the former geared mainly for the export market. Small scale processing of cassava into chips has provided an additional local market for the root crop.

Fiji has ideal climate for rice cultivation but struggles with rice production due to poor management practices. To solve this problem, the Government is focused reducing imports of rice, citrus fruits, other crops that can be grown locally. To this regard, the Government has reached out to more than 1000 villages to encourage them to start farming rice. Ministry of Agriculture is also constantly striving for import substitution—reducing imports of rice, citrus fruits, and other crops that can be grown locally by improving farmer self-sufficiency (GAFF, 2021).

The livestock subsector is dominated by beef and dairy production, but the sector has been struggling in the past decade due to the impact of diseases and poor quality breeding. Hence, the beef and dairy sectors of Fiji mostly rely on imports to meet their domestic demand. Pork, poultry and goat production are performing relatively better and are able to meet the domestic market demands.

2.2 Food distribution

With a tropical climate, Fiji has an advantage in the production of a wide variety of tropical fruit and vegetables. However, despite conditions being favorable for its production locally, Fiji imports 80% of its rice from Vietnam and Thailand. Fiji produces just half of what its population requires and urban centers are greatly dependent on imports from Australia, New Zealand and China.

The food value chain is driven by wholesalers, retailers, seed companies, farmers and consumers. The food industry faces challenges related to food handling, storage and processing, as well as transport as geographical distances and inadequate infrastructure development hinder the distribution.

2.3 Food Consumption

The traditional diet in Fiji is comprised of locally fished seafood served with root vegetables like cassava and tarot (GAFF, 2021). Fijians have traditionally relied on local agriculture, fisheries and wild foods to meet their dietary needs. However, food systems in Fiji (including the food environment) have changed and the consumption of local traditional foods has decreased. The amount of traditional starchy roots (e.g., cassava and dalo) and local vegetables and fruits has fallen over the past two decades. Fijians now rely – and consume – more non-perishable imported and highly-processed foods, usually bought in stores, such as flour, rice, noodles, sugar and canned meat and fish products. Although these changes are noticeable in both urban and rural communities, they are more pronounced among urban dwellers (FAO, 2020).

During certain times of the year, lettuce, cabbage and other fruits and vegetables need to be imported, which means that these popular products among Fijian families become seasonally unaffordable for large shares of the population. This example illustrates the difficulties many households face in accessing and consuming fruits, vegetables and other fresh foods, especially in the most populated islands. In these areas, Fijian households (especially the poorest ones) tend to choose cheaper, highly processed foods with poor nutritional values are available at cheaper prices, which is one of the main drivers of the high overweight and obesity rates in the country. Likewise, obesity, closely linked with other non-communicable diseases (which cause eight out of 10 deaths in the country), already affects one in three adults and it is especially worrying among poor women in urban areas. On the other hand, isolated islands with less exposure to cheaper processed foods, that are high in fats, sugar or salt, show much lower rates of obesity and overweight among the young population (FAO, 2020).

3. Risk Analysis

3.1 Climate Risk and Vulnerability Overview

The climate of Fiji is generally categorised as an oceanic tropical climate in which the dry season is from May to October and the rainy season from November to April. Climate change is expected to affect the country's coastal resources by way of raising temperatures in the marine environment and through sea level rise. Projections foresee a potential increase in the frequency and intensity of cyclones and other tropical storms, as the country is prone to El Nino events. During an El Nino- Southern Oscillation (ENSO) event, conditions drier and hotter than normal can be expected from June to August. During the November–April wet season Fiji is normally traversed by tropical cyclones (UNDP, 2022).

As a small island developing state (SIDS), Fiji lies on the front line of adverse climate change impacts and recognises that climate change is a major threat to the country, expecting to experience a multitude of interrelated climate risks which may lead to food insecurity, losses and damages and large-scale population displacement. As climate change worsens, Fiji is expected to be facing challenges like prolonged droughts, changes in the hydrological cycle resulting in intense floods, and extreme weather events, to rising sea levels and its resultant saltwater intrusion and loss of habitable land (Fiji NDC, 2021).

In 2021, Fiji was ranked globally among the top 15 countries with the highest disaster risk (The Commonwealth, 2021). Fiji has high exposure to flooding, specifically coastal, and very high exposure to tropical storms and their associated hazards. Drought exposure is also significant. More than 675,000 Fijians (c. 75% of its population) are coastal dwellers with total dependence on the coastline, exposing them to the worst impacts of sea level rise. This has exposed Fijians to coastal erosion, saltwater intrusion into drinking water and frequent flooding at high tide. The intensifying extreme weather events such as tropical cyclones and storm surges are destroying vital public infrastructures such as electricity and water stations, roads, schools, and hospitals. For instance, Tropical Cyclone Winston in 2016 entailed US$1.3 billion in economic losses, including US$700 million in damages (The Commonwealth, 2021).

Escalating climate impacts are endangering the vital ecosystems and natural resources – particularly coral reefs, coastlines, forests, farmland and river catchments – that support Fiji's agriculture, fisheries and tourism sectors.

3.2 Climate impacts on food and nutrition security

Impacts of climate change on Fiji's nutrition and food security are evident as much of the land used for agriculture in the country lie in coastal areas that are severely affected by

tidal surges, saltwater intrusion, and sea level rise, frequent cyclones, drought, and floods. The World Bank's Climate Vulnerability Assessment (CVA) 2017 revealed that the financial cost from these disasters average FJD500 million annually or nearly 5% of national GDP. The CVA also revealed that an increase in food prices by just 1 percent, would seriously impact household access to a sufficient and nutritious diet which could have long- lasting impacts on physical and cognitive development, mainly for children.

On food production, the following table adapted from the NAP identifies the key crops that are influenced by climate variability.

Crop	Climate change/climate variability impact in recent decades	Climate change impact (2030-2050)	Climate change impact beyond 2050
Sweet potato	Major impact of ENSO-induced droughts	Moderate	Moderate to high
Cassava	No discernible impact	Insignificant to low	Low to moderate
Taro	Affected by ENSO-induced droughts and cyclones	Low to moderate	Moderate to high
Giant taro	No clearly discernible direct impact	Insignificant	Low
Yam (domesticated)	Impact from ENSO-induced droughts and cyclones	Moderate to high	High
Rice	No information available	Moderate to high	High
Breadfruit	Changing rainfall affecting fruiting patterns	Insignificant to low	Low to moderate
Ambika/bele	No apparent impact	Low	Low to moderate
Banana	Cultivation at higher altitudes with warmer temperatures	Low	Low to moderate
Coconuts	Loss of palms close to sea and cyclones	Low	Low to Moderate
Coffee	Leaf rust	Moderate	High
Cocoa	No discernible impact	Insignificant	Moderate to High
Oil Palm	No direct climate change impact	Insignificant	Low
Sugar	Severe impact of cyclones, floods and droughts associated with ENSO cycles	Low	Moderate

3.3 Other factors and stressors

The climate risks and impacts mentioned above are compounded by other factors like oil prices, inflation, imports and the country's account deficits fueled by reduction in exports of agricultural commodities.

Relevant to this study and noting that climate presents a significant risk for agriculture in Fiji, other factors and stressors have been identified in Fiji's Strategic Development plan, as below:

National economic factors:

- Inconsistent and seasonal supply of produce due to poor infrastructure, lack of harvest knowledge, storage and processing facilities
- Increase in value and volume of agriculture imports resulting in large agriculture trade imbalance
- Poor infrastructure in remote rural areas hampers access to farms and markets

Social factors:

- Lack of enabling environment for local production systems – causing increase in consumption of unhealthy and cheap food that are imported
- Low-income households are most impacted due to urbanisation, cost inflation, leading them to consume cheap, unhealthy foods
- Low uptake of new technologies, breeds and varieties by farmers
- Aging farmer population and low youth involvement in agriculture

Risks in Implementation:

- Lack of expertise at the appropriate time in research, science, genetics and other areas
- Lack of financial resources to ensure there is sufficient staffing, infrastructure and technical resources
- Lack of commitment or adoption rate by farmers on agricultural programs

4. Climate, Agriculture and Food Systems Policies

At the core of Fiji's food and nutrition security is the need to ensure that ***every Fijian has access to adequate food of acceptable quality and nutritional value. Fiji***'s goal to achieve food sustainability is based around seamless and integrated production systems of green and blue foods. The current focus, through the Ministry of Agriculture, is on food security at the household level. Millions of dollars have been invested by Government over recent decades in the agriculture sector, particularly targeting subsistence farmers, as part of its rural development strategy.

An overview of key policies on agriculture and food systems is provided below.

4.1 Agriculture Sector Policy Agenda (2010-2020)

Fiji 2020 Agriculture Sector Policy Agenda compliments the National Green Growth Framework, launched in 2014 in Fiji. The agenda provides innovative dimensions by opening to global innovations for climate-smart agriculture generating co-benefits both for adaptation and mitigation. The policy also considers sustainable intensification to increase agricultural productivity.

Vision:

The aim is to establish a diversified, economically, and environmentally sustainable agricultural economy in Fiji. To achieve this goal, five agricultural development objectives have been identified and must be attained altogether.

Objectives and strategic actions:

- To build a modern agricultural economy in Fiji, as an organised system of production, process and marketing of crops, livestock, and aquaculture products.
- To develop an integrated production, processing, energy, and transportation infrastructure support system for agriculture.
- To improve the delivery of agriculture support services.
- To enhance capacities in generating funds and securing investments through foreign investment, private-public partnership, and other arrangements.
- To improve project implementation and policy formulation capabilities within the Ministry of Agriculture and its partner institutions.

Each of these objectives is complemented by a set of interrelated strategic actions to be carried out to achieve the main goal of the policy agenda.

4.2 5-Year Strategic Development Plan (2019-2023)

Fiji's National Development Plan (NDP), with the vision of "transforming Fiji", maps out the way forward for Fiji and all Fijians. For the first time, Fiji has both a 20-Year Development Plan (2017-2036) and a 5-Year Development Plan (2019-2023). These two plans work together as the 5-Year NDP provides a detailed action agenda with specific targets and policies that are aligned with the long-term transformation of the 20-Year Development Plan.

Vision:
The vision for the SDP is to create a sustainable, competitive, and resilient agriculture sector.

Goals:
The mission or goal of the SDP is to create an enabling environment that accelerates the pace of delivering sustainability, economic opportunities, climatic viability, and food and nutrition security for all Fijians. To attain this goal, the SDP identified 5 key strategic priorities to be attained to ensure food and nutrition security for all Fijians, this SDP also develops a set of strategies or key performance indicators (KPIs) with a strong multi-sector approach for each priority area.

Strategic priorities and objectives:

1. Improve food and nutrition for all Fijians
2. Increase farmer household income for sustainable livelihoods
3. Increase adoption of sustainable resource management and climate-smart agriculture
4. Establish and improve commercial agriculture
5. Improve the quality of the public sector performance and service delivery

Relevant strategies and KPIs to the agricultural sector include:

- Improved access to local, adequate, safe, and nutritious food for communities through increased productivity in both rural and urban communities.
- Adoption of local food gardens by schools and demand for diverse, nutritious, and safe food will be increased.
- Diversified economic opportunities through increased farmer participation in existing and new demand-driven markets, with a special emphasis on women and youth in the crop and livestock sectors.
- The transition to commercial agriculture will be accelerated through increased farmer access to loans, grants, insurance, and basic financial services; increased farmer, youth and agribusiness participation in producing market-driven

commodities; and improved value chain opportunities, financial literacy, business planning and farm management.

- The improved institutional, technical and scientific capacity of the Ministry of Agriculture in terms of climate-smart agriculture.
- Access to resilient crop varieties, livestock breeds and social safety nets and market products will be increased to ensure climate change adaptation and mitigation in the agriculture sector.
- Increased awareness and adoption by farmers of sustainable resource management and climate-smart agriculture practices.

4.3 National Food and Nutrition Security Policy (FPFNS)

The FPFNS is a whole-of-government policy that will address access to adequate food, which is a constitutional right of every Fijian; and will encourage the development of domestic agriculture and fisheries to support access to an adequate supply of healthy and nutritious food for optimal food and nutrition security. Fiji is proposing to develop a National Food and Nutrition Security Policy to support the implementation of its food systems' national pathway actions and achieve its 2030 goals.

Over 5 years (2022-2027), the FPFNS will address the importance of food and nutrition security and improve the overall health and nutrition status of the Fijian population.

Vision:
The overarching vision of this Policy is to ensure safe, nature-positive, sufficient and healthy food for all Fijians to satisfy their nutritional needs and safeguard optimal health.

Goals:
The strategic goal of the FPFNS is to guarantee the nature-positive availability, accessibility and affordability of safe and nutritious food for every Fijian, sufficient to meet dietary needs, as well as cultural and food preferences for a healthy lifestyle. To address the shortcomings identified in the FPAN review, the Fiji Policy and Framework on Food and Nutrition Security shall prioritise:

- A more holistic technical focus on nutritious diets considering affordability, accessibility, convenience and awareness of the population as well.
- Improved multi-sectoral coordination: securing improved commitment to and engagement from a broader range of actors, in achieving improved food and nutritional security. Ensuring that an efficient structure, with gender and social inclusiveness, is in place to support improved multi-sector coordination.
- Increase investment in identifying and scaling up food and nutrition security, promoting best practices interventions.

The FPFNS also outlines 10 main objectives aimed at reducing the impacts of the triple burden of malnutrition, this set of measures is key in shaping the related 10 strategy areas of the Policy.

Strategy areas:

- Improved multi-sector leadership, ownership and coordination of national food security.
- Enhance and promote a sustainable and diversified resilient food system.
- Promote investment in nutrition and over the value chain.
- Improved food safety and quality standards and promote safe water.
- Enhance reproductive, maternal, neonatal, infant, child, and adolescent (RMNCAH) nutrition.
- Support area food school environments.
- Promote healthy diets and lifestyles to reduce non-communicable diseases.
- Promote adequate and appropriate micronutrient intake for better nutritional health outcomes.
- Support the enhancement of social protection programs through the inclusion of complimentary food security and nutrition interventions.
- Scale up evidence-based actions to reduce food and nutrition insecurity.

4.4 National Adaptation Plan (NAP)

In the case of the agricultural and food systems sector, the actions and priorities outlined in Fiji's NAP focuses on the introduction or promotion of certain practices and behaviours, including conservation agriculture, agroforestry, soil and water management practices, and the diversification of farming systems.

Vision:

The vision for Fiji's NAP is to ensure effective climate-resilient development across the five priority sectors for Fiji and its people.

Goals:

The first Fijian NAP encompasses a holistic adaptation strategy with a vision to achieve a climate-resilient development pathway, which can enable Fiji to anticipate, reduce and manage environmental and climate risks induced by climate variability.

Objectives and priorities relating to climate-resilient food systems:

Relevant to food security and food systems resilience, Fiji's NAP aims at:

- Increasing the adaptive capacity of farmers.

- Increasing resource use efficiency and rejuvenating damaged ecological systems to build resiliency within food systems.
- Making supply systems resilient to environmental and climate events.
- Empowering low-income and otherwise disadvantaged groups (such as women, youth, and people living with disabilities) by tackling the restrictions they face in terms of gaining access to agricultural and wider resources and opportunities, and by incentivising them, especially youth, to go into agriculture (by professionalising the sector); this could, in turn, increase the productivity and profitability of the entire sector.
- Increasing fish supply and reversing the declining health of coastal fisheries and/or increasing supply from oceanic and freshwater systems including aquaculture.
- Rejuvenating traditional agricultural practices and modernising the food production systems taking into consideration the environment.

4.5 Nationally Determined Contributions

Fiji's current Nationally Determined Contribution (NDC 2021) is specific to the energy sector in terms of a GHG baseline (2013 as the reference year) and potential mitigation actions. The overall mitigation target in the NDC is to reduce CO2 emissions by 30% from a BAU (Business As Usual) baseline scenario in 2030, by striving to reach 100% renewable energy power generation through economy-wide energy efficiency.

2021 NDC now includes significant Adaptation Targets: target 5 relates to the adoption of climate-smart agriculture practices, emphasising the promotion of sustainable practices in crop management, livestock, and sugarcane farming; target 7 aims at developing a standard and simple early warning and monitoring system, prioritising nature-based solutions to mitigate the effects of cyclones and floodings.

5. Ongoing projects, programmes and initiatives in climate resilient food systems

5.1 Climate Risk Insurance project

In 2021, WFP, in partnership with the United Nations Capital Development Fund (UNCDF), the Fijian Government Department of Social Welfare (DSW) and the private sector, launched this one-of-a-kind parametric microinsurance project for social welfare beneficiaries found in Fiji's high-risk locations. The expected outcome of the pilot is to increase the resilience of those most vulnerable communities that are part of the DSW's schemes, protecting them financially from cyclonic storm-heavy wind and its effects. This project aims to support social welfare beneficiaries better cope with increasing climate-related shocks, building climate-resilient food security and livelihoods, and ultimately supporting the building of climate-resilient food systems in the country. In 2021 the project reached 274 beneficiaries; this number will be scaled up to 2,000 in December 2022.

Government partners: Department of Social Welfare (DSW), Ministry of Women, Children and Poverty Alleviation.

Non-government partners: United Nations Capital Development Fund (UNCDF), FijiCare, Sun Insurance.

5.2 Building resilience in Fiji's fisheries sector through improved DRR and DRM

Through improved disaster risk reduction and disaster risk management mechanisms the project, led by FAO, aims at enhancing the capabilities of Fiji's small-scale fishers and coastal communities to respond to climate-related disasters and hazards. The expected outcome of this project is to make the fisheries sector more resilient to climate change impacts and effects. In partnership with the Ministry of Fisheries and the National Disaster Management Office, the project targeted selected communities in the Northern, Eastern and Central groups of islands, fishers in the Lau group, youth and women.

Government partners: Ministry of Fisheries (MoF), National Disaster Management Office (NDMO).

5.3 Strengthening capacities to address climate change impacts on biosecurity and food security in Fiji, Samoa and Solomon Islands:

The project, led by FAO, was implemented in Fiji, Samoa and the Solomon Islands. The main aim of the project is to increase local, regional and national capacity to address climate change's impacts on food security. The project has three objectives: (i) conduct a

study using scientific and analytical techniques to assess the correlation between climate change and invasive species and its impacts on food security; (ii) according to the results of the study, propose interventions to address identified challenges, with clear economic and financial analysis to tackle barriers in the agriculture sector; (iii) securing finance to support countries in implementing the relevant interventions, considering also environmental and social safeguards, gender planning, and stakeholder and indigenous peoples engagement as well.
Government partners: Fijian Ministry of Agriculture (MoA) and Biosecurity Authority of Fiji.

5.4 Pro-Resilient Fiji - Strengthening climate resilience of communities for food and nutrition security

In 2021, FAO finalised the European Union-funded "Pro-Resilient Fiji – Strengthening climate resilience of communities for food and nutrition security" project. The desired outcome of the project was to sustainably reduce food and nutrition insecurity derived from the negative impact of climate change-induced disasters by tackling the underlying causes of vulnerability. The project successfully strengthened capacity at both the local, national and village levels in Fiji to identify, analyse, prepare and respond to climate-induced disasters. The project also supported gender equality as well as environmental and economic sustainability, while employing a human rights-based approach. The project reached 30 388 farmers throughout its three-year term (2018-2021).
Government partners: Ministry of Agriculture (MoA) and National Disaster Management Office (NDMO).
Resource partners: European Union, Environmental Defense Fund (EDF) Europe.

5.5 Seeds Without Borders Initiative (SWBI)

Seeds Without Borders, led by IRRI (International Rice Research Institute), is an initiative striving to speed up the distribution of modern rice varieties across Asia, through a regional seed policy agreement. SWBI's main objective is to facilitate the share and exchange of seeds beyond the borders in similar agro-ecologies, to promote enhanced and least-cost access to new and improved varieties of crops to smallholder farmers in 2014, IRRI facilitated the agreement signed by India, Bangladesh and Nepal. Then, this was also signed by Bhutan, Cambodia, and Sri Lanka. In 2022, the Philippines, Vietnam, and Fiji joined the agreement as well.
Government partners: Bhutan's Ministry of Agriculture and Forests.
Resource partners: the World Bank, International Fund for Agricultural Development (IFAD), and Asian Development Bank (ADB).

5.6 FishFAD: Improving livelihoods through sustainable nearshore fisheries in the Pacific

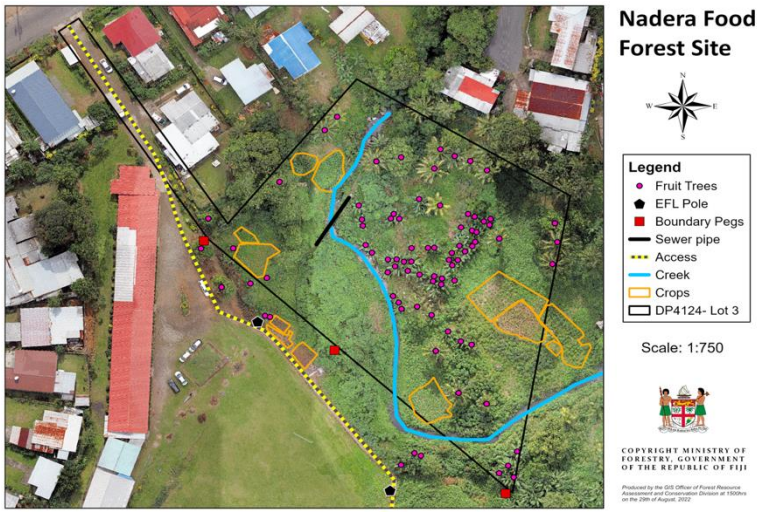
The Enhancing livelihoods and food security through fisheries with nearshore fish aggregating devices in the Pacific Ocean (FishFAD) project, led by FAO, is a partnership with seven different countries in the Pacific, each in different development stages in their nearshore fish aggregating device (FAD) fisheries. The participating countries are: Fiji, Kiribati, Marshall Islands, Palau, Samoa, Tuvalu and Vanuatu. FishFAD will focus on safely developing nearshore fish aggregation device (FAD) fisheries which will be co-managed by developing alternate income sources through value-adding activities. FAO will directly implement this project while working with Japanese institutions that have played a key role in developing the fisheries sector in the Pacific. In addition, the project will make use of South-South cooperation arrangements, as some of the project's partner countries can contribute knowledge sharing and technical assistance on topics that include the design and deployment of nearshore FAD. Over a three-year period, the project aims to improve the fisheries management of nearshore resources and respond to emerging gaps in marine resources.
Resource partners: FAO and the Japanese Government.

5.7 Home gardening program

The Home Gardening Program was designed for people living in urban and semi-urban settings. By the end of March, MoA extension officers were distributing 12 varieties of seeds for short-life cycle crops. Through this network, households were given seeds in order to plant, tend, and harvest their own food. Demand was high, and in less than a month the MoA had distributed more than 11,600 seed packages to 5,000 households. Soon, the Ministry began to ask farmers if they had surplus seeds to sell, spurring the creation of a seed buyback program where MoA bought seeds from local farmers and redistributed them to people in urban areas. In circumstances where urban residents didn't have space to grow crops, the Government would buy other locally-grown produce and distribute it through a food assistance program.

5.8 Nadera Food Forest

The project seeks to implement the restoration of the overgrown site in the community-managed pilot urban food forest. The project is spearheaded by Nasinu Town Council, the Ministry of Forestry and Tasty Kitchen Collective. The goal of the project is to engage with the community, especially youths to raise awareness of sustainable landscape restoration using agroforestry and sustainable management practices that can be applied in tree planting and setting up subsistence gardens for cultivating vegetables and root crops. The project is still in its initial stage of development establishing collaboration with stakeholder partners in the planning and design of activities, and funding proposal submission to finance some components of the action. There will be stakeholder collaboration in designing an integrated community-managed Food Forest model for the pilot site using nature-based solutions.



5.9 Navuso Agricultural Technical Institute

As part of the Fiji governments efforts in promoting sustainable agroforestry practices, Ministry of Forestry has partnered with Navuso Agricultural Training Institute to develop a Food Forest Model that trains indigenous Fijian youths from villages on climate-smart agriculture. The Government continues to invest in Forestry Training every year to ensure that the training needs of the industry, community and the people of Fiji are addressed to empower Fijians to undertake developments in which they can sustainably and meaningfully utilise their forest resources to improve their lives.

5.10 Tutu Rural Training Centre (TRTC)

This initiative, supported by the Fiji government is to "provide a place/ presence in which the people of the Northern division of Fiji are empowered to become more autonomous and take charge of their lives in a rapidly changing world". As part of this training center, the Government officers, particularly from the Ministry of Agriculture, have provided complementary farmer training services. Since the TRTC was created in 1969, the TRTC has had a major impact on the people of the Fiji, with nearly 2,000 young people completing various courses on agroforestry and agriculture.

Tutu Rural Training Centre compromises of 433 ha freehold land. Over the 40 years of the TRTC's existence, approximately 60% of the land has been deforested and used for

dalo, yaqona, and coconut plantations. A project to conserve the soil of the training centre is being conducted to ensure the restoration of soils using nature-based solutions such as the use of agroforestry trees and cover crops to increase the production of safe and nutritious food crops. The project will be spearheaded by the Ministry of Forestry, Ministry of Agriculture, PHAM plus and TRTC. The project is still in its initial stage of development establishing collaboration with stakeholder partners in the planning and design of activities, and funding proposal submission to finance some components of the action.

5.11 Farmer Support Program

This program led by the Government encourages farmers to boost production of crops with shorter life cycles. By providing free seeds to farmers, the Ministry of Agriculture is promoting organic agriculture to improve the health of people and local ecosystems. This program provides a form of cultured bacteria to farmers that can be used to speed up the decomposition process for their compost. Once they understand how to produce and use compost, the hope is that farmers will transition away from harmful chemical fertilisers. The surplus crops could be sold to meet shortages in urban areas.

6. PRIORITY ACTIONS IN CLIMATE AND FOOD SYSTEMS

Relevant to climate-resilient food systems, the case study focuses on the priority options, goals and strategies outlined on agriculture and food systems in the MoA Strategic Development Plan, Agriculture Sector Policy Agenda, Food and Nutrition Security Policy, National Adaptation Plan, Nationally Determined Contributions and the National Food Systems Pathway.

The case study has analysed and grouped the strategic priorities outlined in all the above policies and pathways into the following:

- Improve food and nutrition security through blue and green foods to sustain nature-positive food systems
- Sustainable livelihoods and increasing farmer household incomes
- Improve sustainable resource managemen and promote diversified, climate smart agriculture and nature-positive food systems
- Integrated water, energy food support systems and commercial agriculture
- Strengthened services on land tenure, policy formulation, coordination and partnerships
- Climate information services and insurance schemes
- Knowledge, research, evidence generation
- Build resilience through self-sufficiency and local production for local consumption
- Upscale processing and reducing of food waste

Priorities	Agriculture Sector Policy Agenda	Strategic Development Plan	National Adaptation Plan	Food and Nutrition Security Policy	National Food Systems Pathway
Improve food and nutrition security through blue	All the strategic actions outlined in this agenda contribute to	• Nutritious food production, safety and access		All the strategic areas outlined in this agenda contribute to improving food and nutrition security	• Adoption of the National Food and Nutrition Security Policy and successful implementation of agreed programmes.

and green foods to sustain nature-positive food systems	improving food and nutrition security	• School focused interventions • Home gardens • Food and Nutrition Security planning, monitoring leadership and coordination		• Promote investment in nutrition-sensitive value chains • Support healthier school food environments	• Boost national nature-positive production to compensate for potential disruptions to food imports • Drive Food fortification or enrichment programs to address the nutrient deficiency • Improve accessibility of healthy products in the local markets and reducing access to cheap unhealthier options • Promote healthy diet in school environments • Improve attractiveness of agriculture as a subject of study in schools
Sustainable livelihoods and increasing farmer household incomes	• Improve access to credit to farmers	• Access to markets • Women and Youth in Agriculture • Agriculture research services	• Strengthening the resilience of farmers and farming families by encouraging the diversification of agricultural produce for subsistence consumption and market sales	• Assist households in dealing with nutrition challenges through trainings on vegetable gardens, fish farming, household poultry • Provide selected women and youth groups trainings on home gardens, dairy and fish farming • Support increased youth participation and career pathways in agriculture	• Promote use of technology through incentives and other schemes to improve productivity. • Promote of contract farming schemes, providing support to farmers to enable transition from small scale to semi-commercial and commercial farming. • Promote smart and innovative ways of making large size arable land available to producers for longer term • Empower women and youth through targeted programmes

				• Support the enhancement of social protection programmes • Establish Fiji IYCF strategy	to improve their skills on food systems • Educate farmers and fisher and equip with both traditional knowledge and latest scientific technology
Improve sustainable resource managemen and promote diversified, climate smart agriculture and nature-positive food systems	• Agroforestry and regenerative agriculture • Promote modern organised agriculture through the Rural Transformation Center model to provide information on crops, livestock, aquaculture products • Convergence of forestry and agriculture sectors	• Improve climate risk management capacities through improved technical, scientific capacities and partnerships • Improve technical adaptation capacities of farmers through resilient crop varieties, safety nets, livestock breeds • Increase awareness and adoption by farmers on climate smart agriculture	• Encourage agronomy practices, climate-based crop planning, and the protection, breeding, and cultivation of traditional and improved seed varieties and livestock breeds • Promote and integrate climate-smart agriculture (CSA) practices into farming, trainings extension services, policies and plans • Increase adoption of	• Enhance and promote sustainable, diversified and resilient food systems in order to make available safe, diverse, nutrient-rich foods in adequate quantities to everyone, everywhere	• Promote regenerative agriculture, and support communities to plant a diversity of trees, crops and integrating livestock activities in degraded areas • Achieve sustainable multiple trees and/or cropping system, based on local traditional plant biodiversity and market's demands • Develop and promote models of organic food forestry or agroforestry systems • Drive the development of more resilient crop varieties with special focus on regenerative agriculture and livestock breeds adjusted to the different climate and soil conditions

			sustainable soil and land management techniques to address soil erosion, increased soil salination and to improve soil fertility		
Integrated water, energy food support systems and commercial agriculture	• Food park infrastructure • Feedstock production and use of renewable energy	• Increase farmer access to loans, develop farmer technical capacities • Increase agribusiness participation in market driven commodities • Link commercial agriculture with the tourism industry	• Improve water management systems by assessing and protecting existing water sources, improving and upscaling (low-cost) irrigation systems, improving and maintaining water drainage systems	•	• Boost commercialisation and facilitation of market access and increase commercial participation from primary sector • Develop a robust online system throughout the value chain, enabled through the current wide access to mobile phones and internet
Strengthened services on land tenure, policy formulation, coordination	• Improve project implementation, policy formulation, fund generation capability within	• MoA structure with supportive systems and infrastructure, improved communications, enhanced	• Undertake regular climate change assessments, GIS mapping, and crop	• Establish Food and Nutrition Act and Food and Nutrition Security Secretariat with steering	• Prioritise investments in key sectors in the food systems such as agriculture, fisheries and forestry • Strengthen government capacity to work

and partnerships	the MOA and its partner institutions • Improve cold storage facilities to reduce food waste • Animal health programs	capacities in research, data	modelling, in partnership with diverse and inclusive groups of stakeholders to improve understanding of climate risks to food systems • Enhance the resilience of crop and livestock breeding infrastructure and supply systems • Improve bio-security efforts (including border controls, early warning systems, on-site visits, and breeding programmes) to enhance protection and action against invasive species, pests, and diseases	committees and working groups • Improve food safety and quality standards	collaboratively with partners to find solutions and use best practices • Promote use of blockchain, IoT, digital literacy trainings, digital platforms for providing information, etc. • Provide support for land preparation and assistance to proper land use planning and adoption of sustainable practices in the long-term

Climate information services and insurance schemes	•	•	• Work with diverse and inclusive stakeholders to ensure farmers (including disadvantaged groups) have inclusive access to hazard maps and climate information services • Enhance climate monitoring and projecting, user-friendly climate information services, hazard and risk information, and early warning and prediction systems to inform decisionmaking • Develop and make accessible user-friendly hazard assessments,	• Facilitate the establishment of national and inclusive community-based, natural disaster early warning alert and response systems (EWARS) in order to enhnace the resilience of food supply during crises. • Estblish Agriculture Insurance Scheme for commercial and small farmers	• Form alliances with financial institutions and partners to increase finance access for farmers, fishers and forest workers through financial inclusion schemes and insurance schemes, for example climate risk insurance.

			maps and models focusing on site-specific risks		
Knowledge, research, evidence generation	•	•	• Strengthen research collaborations with farmers (including disadvantaged groups), communities, and national research institutions	• Support nutrition-sensitive research services for product development • Scale up evidence-based action to reduce food and nutrition insecurity	• Carry out further research in fisheries involving innovation and technology transfer • Enhance capabilities to achieve a solid research and innovation system
Build resilience through self-sufficiency and local production for local consumption	• Enhance local production of seeds and feeds	• Link local food supply to the tourism market • Improve production and access to local and nutritious food to communities			
Upscale processing and reducing food waste	•	•	•	•	• Support SMEs and provide initiatives for supporting farmers to add value to their local production • Develop a "Food Hub" production setup

Although this case study has analysed all the food and agriculture policies of Fiji to identify the agriculture and food systems priorities, the following section gives a detailed overview of:
a) Strategic priorities in agriculture
b) Strategic priorities in food systems only reflecting the Agriculture Sector Policy Agenda and Fiji's National Food Systems Pathway to meet the focus purpose of this case study.

6.1 Strategic Priorities in Agriculture (Agriculture Sector Policy Agenda)

Improving food and nutrition security for all Fijians

- The Ministry will promote backyard gardening in rural and urban areas. MoA will work with the Ministry of Education and Health to strengthen school gardening. These initiatives will relay a message about the importance of producing and accessing nutritious food through collective effort.
- *Technical interventions* include Research and Development (R&D) programs promoting climate resilience of staple food crops, improved genetic diversity of livestock animals, improving farmers' access, availability of quality seeds and strengthened capacity in managing pests and diseases.
- The Ministry will work in partnership with relevant agencies and industry to ensure that local fresh produce is supplied and conveniently accessible at fresh food markets, supermarkets and roadside stalls. MoA will also scale pulse seed production, promote fruit-tree orchards and expand small and large ruminant programs.

Increase farmer household income for sustainable livelihoods – creating a strong viable agriculture sector that empowers all Fijians

- Establish a national farmer ID registration system to provide quality farmers profile and farm database to monitor and evaluate ministry services.
- Support for mechanisation, adopting proven technologies, expanding agriculture research and incentives, promoting participation of women and youth in key value chains.
- Continue to increase its R&D capacity at Research Stations, to tailor services to the needs of specific localities – strengthening of crop nurseries and seed banks.
- Continue to expand the small and large ruminant programs around the country including farmers in the sugarcane belt areas and support livestock breeding programs to produce resilient and high yielding breed for beef, dairy, sheep pigs poultry and goat.

Improve adoption of sustainable resource management and climate-smart agriculture

- Strengthen the research and knowledge base for climate resilience.
- Implement targeted adaptation strategies and programs to help farmers adapt to climate extremes.
- Develop an overarching climate resilient agriculture framework. This needs to address the structural causes of vulnerability in food systems, promote traditional, scientific knowledge and support decision-making across climate scenarios.
- Promote strong coordination and private sector participation and climate change financing.
- Support of strong climate resilience R&D agenda for staple crops to enhance crops that are resistant to heat, drought, floods and salt.
- Support for better soil and land management, integration of traditional and modern farming practices, water use efficiency and agroforestry.
- The Ministry will support mucuna crop cover, crop rotation, organic farming and integrated fertiliser application to maintain soil quality and weed management.

Establish and improve commercial agriculture

- The Government recognises the behavioral shift required of farmers to treat agriculture as a business. Hence, the ministry will assist basic infrastructure needs and inputs to provide enabling environment for farming business.
- Government plans to strengthen the capacities of farmers through a new agriculture commercial division.
- MoA will build strategic approaches with local and international business partners with a view in attracting investment, promoting contract farming and linking to global value chains.
- Develop clear frameworks for contract farming, organising farmer clusters with Fiji Crop and Livestock Council (FCLC) and incentivise public-private partnerships.

- Integrated production systems that promote cover crops, green manuring, nitrogen fixing plants and fertiliser or pesticide management will be strengthened.

Improve Quality Public Sector Performance and Service Delivery

- Investment in enhanced ICT platforms to establish effective data output system with value chain opportunities, business planning, farm management strategies.
- Enhanced utilisation of data, research information to ensure formulation of evidence-based policies, program interventions.
- Updated legislative frameworks and continuous capacity building platform.

Agroforestry as a priority

The Fijian Government has prioritised agroforestry as an approach to strengthen agriculture and forestry convergence for climate resilient food systems in Fiji by incorporating small livestock, such as poultry, sheep, and goats into the farming sysem. Technologies on agroforestry, root crops production, and the introduction of other crops with high biomass and other cropping systems are endorsed by the Government.

Additionally, the Government has endorsed training and capacity building of farmers by focusing on agroforestry concepts, plant propagation, nursery management and the establishment of agroforestry farms. This has helped the farmers to think strategically and take more interest in agroforestry as a model for sustainable farm development. Key indigenous species like Dakua (*Agathis macrophylla*) and Vesi (*Intsia bijuga*) have been encouraged, along with trees of economic value, such as sandalwood, planted alongside citrus and other fruit trees. Crops such as taro, pigeon pea, okra, cowpea, watermelon, eggplant and capsicum have also been promoted (World Agroforestry, 2013).

6.2 Strategic Priorities in Food Systems (National Food Systems Pathway)

In its National Food Systems Pathway, Fiji has identified the following strategic priorities:

- **Build resilience by increasing self-sufficiency:** A significant percentage of Fiji's food supply is imported. Their food is not only highly processed – it is also prone to supply chain disruptions. Local production of healthy food is one of their priorities.
- **Food Forests Systems:** Noting that food forests systems can be advantageous and has potential to improve the health and wellness of urban and per-urban communities, while contributing to climate resilience, adaptation and mitigation, Fiji has also prioritised models of food trees for food systems transformation.
- **Thriving primary sector** that not only is a leading contributor to Fiji's economic growth agenda but also is an attractive commercial proposition that ensures a sustainable and equitable livelihood for all.

- **Benchmark level of productivity in nature-positive food systems** and healthy, vibrant society with access to safe and nutritious food
- **Balanced and sustainable equation of green and blue food consumption** patterns that fully meet domestic food requirements, as well as positions Fiji strongly as a net exporter of food.
- **Well-developed and sustainable nature-positive food production systems** that prevent biodiversity loss, limited use of inorganic inputs and replacing monoculture with polyculture nature-based farming practices.

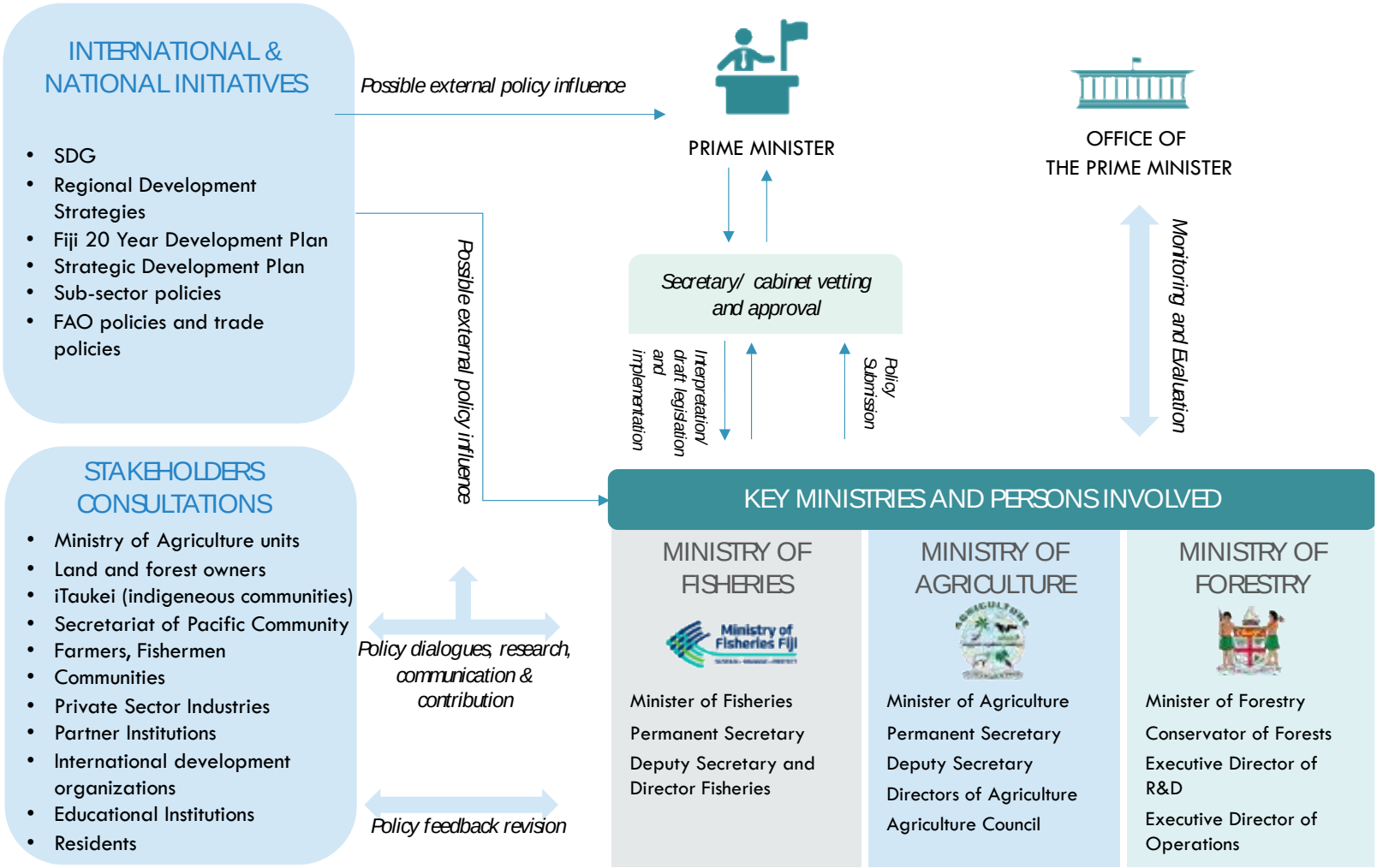
The strategic priorities outlined in NAP on food systems and agriculture are outlined below:

- Strengthen Fiji's disaster preparedness efforts in the agriculture sector by encouraging agronomy practices, climate-based crop planning, and the protection, breeding, and cultivation of traditional and improved seed varieties (including both plant genetics and open pollinated), cultivars and livestock breeds; advancing research and nurseries; and enhance the resilience of crop and livestock breeding infrastructure and supply systems, as well as seed and food storage facilities.
- Strengthen research collaborations with farmers (including disadvantaged groups), communities, and national research institutions – supported (but not led) by regional and international institutions – to create a community of practice and to support knowledge networks which facilitate innovative and climate-adaptive farming practices.
- Work with diverse and inclusive stakeholders to ensure farmers (including disadvantaged groups) have inclusive access to hazard maps and climate information services via a range of information communication technology90 in common vernacular to support inclusive participatory scenario planning at the local level.
- Promote and integrate climate-smart agriculture (CSA) practices, into farming, trainings, extension services, policies and plans (responsive to the needs of disadvantaged groups and tailored to subsistence, semi-commercial and commercial farmers) and adopt nature-based and urban solutions where possible.
- Increase adoption of sustainable soil and land management techniques93 to address soil erosion, desertification, increased soil salination and to improve soil fertility, nutrient management, arability & soil restoration, and revise, strengthen and enact the Soil Conservation Improvement Bill and enforce the unplanned Rural & Forest Fire Strategy.
- Improve water management systems by assessing and protecting existing water sources, improving and upscaling (low-cost) irrigation systems, improving and maintaining water drainage systems, applying and upscaling good agronomic practices for water conservation (e.g. mulching), and establishing watershed-based land use planning committees and developing integrated watershed management plans.
- Strengthening the resilience of farmers and farming families by encouraging the diversification of agricultural produce for subsistence consumption and market sales (especially in the sugarcane belt, coastal and interior areas and marginal land), promote

the (traditional) use of food preservation, processing and storage practices, seed banks, advance inclusive market information and dissemination systems, improve financial literacy and inclusive access to financial services, collaborate with the private sector to develop low-cost and locally produced feed supplements, encourage agrobusiness schemes and investment into value addition and commercial agriculture ventures.

- Enhance support for irrigation schemes which support agricultural diversification and mitigate increased drought and flooding.

7. INSTITUTION AND GOVERNANCE STRUCTURES



The food systems institution and governance in Fiji is comprised of three main government bodies – Ministry of Fisheries, Ministry of Agriculture and Ministry of Forestry. Devising of policies are influenced by national, regional and international policies, such as those crafted within regional or global bodies such as FAO and Secretariat of Pacific Community.

Key influencers in the Ministry of Agriculture and the Ministry of Fisheries include the minister, permanent secretary, deputy secretary, and directors. Likewise, Ministry of Forestry is governed by minister, conservator and executive directors. The policy formulation processes also involve consultations with stakeholders like communities (farmers), indigeneous communities, agriculture industries, partner ministries, NGOs, international organisations, and other stakeholders. The Ministry of Agriculture has in recent years increased its focus on strengthening data collection and placing greater emphasis on evidence-based approaches to better inform its work. This includes developing a robust policy agenda, strengthening research programmes, and elevating strategic approaches to food security.

8. FOOD SYSTEMS MEANS OF IMPLEMENTATION

Fiji envisions the agriculture and food systems priorities to be met by the following ways:

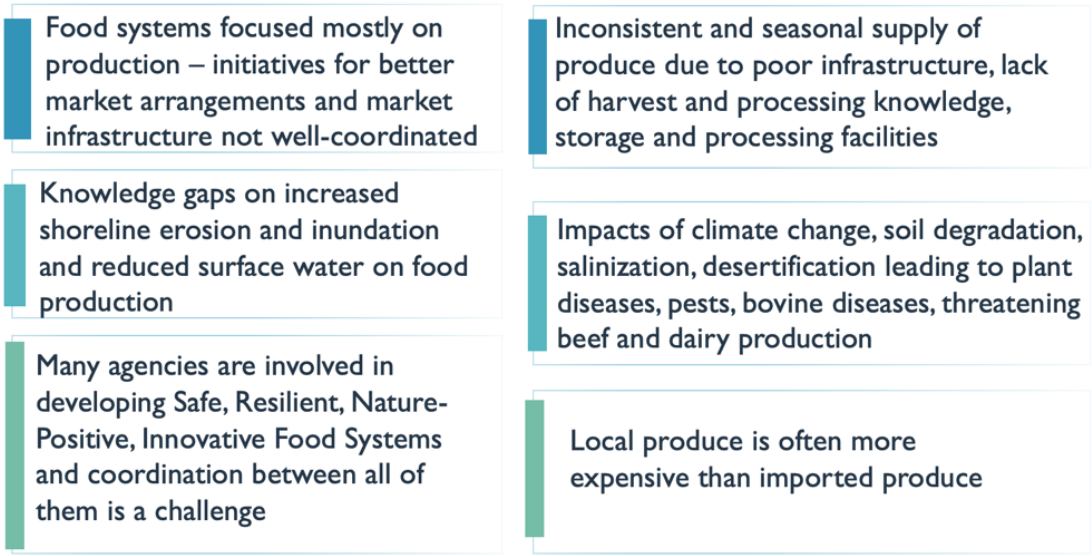
- Providing leadership and required resourcing to drive the inception of the agreed naturepositive game changing solutions and turning them into tangible actions and activities that forms a critical component of Government's nature-positive food system blueprint.
- Using short-term programs to achieve long-term transitions through projects and programs like home gardening program and Farm Support package to contribute to Government's long term mission of producing more local food, shifting to organic agriculture and getting more people involved in agriculture.
- Ensuring a collaborative, inclusive and unified progress on the game changing solutions identified through the Fiji Food Systems Dialogues and regularly review progress against plan to ensure real change.
- Creating a conducive environment for bolstering primary sector performance, promoting own learning and sharing knowledge with others to drive a multi-agency collaborative approach in achieving nature-positive food system transformation and maximise impact of the interventions.
- Ensuring relevant agencies are accountable for delivery of agreed objectives, measuring progress through annual planning reviews and robust monitoring and evaluation.
- Creating the enabling environment for nature positive food systems through governance, policies and regulations.
- Increasing access to healthy foods both blue and green foods to sustain nature positive food systems.
- A clear innovative, technology enabled system for agricultural, fishery and forestry products, with nutritional information that can assist consumers when deciding what to buy to be considered for implementation.
- Educating farmers and fisher and equipping with both traditional knowledge and latest scientific technology to ensure efficient and sustainable production systems.

9. GAPS AND CHALLENGES

Fiji remains vulnerable to impacts of climate change and the focus for Fiji to build food systems resilience needs to be on building resilience to enhance ability to bounce back quickly in the event of a disaster or climate shocks. However, there are several gaps and challenges that limits the country's capacities in food systems transformation. The key challenges outlined in the National Food Systems Pathway are:

- Need for better production planning, improved market information and rural infrastructure, and access to capital are required for market improvement.
- Lack of access to land to plant and grow food especially in urban areas, restricted movements of fresh produce from farms to the markets.
- Releasing arable land for productive use – estimated 70% of arable land in Fiji is under-utilised; need for enabling solution for native lease land.
- Enhancing connectivity through provision of e-agriculture tools with enabled trade opportunities which are currently not fully evolved and in extensive use at producer level.
- Access to finance to secure additional farm power and mechanisation is a constraint.
- Production is constrained by poor agricultural practices and limited access by smallholder farmers to modern technology, knowledge, and markets.
- Low level of sophistication in the production systems, making primary an under-developed sector on a commercial scale.
- High production and labour costs, coupled with low productivity and inefficiency, are disincentives to staying in the agricultural sector.
- Private sector involvement in agriculture, in particular value-adding venture is limited.
- Free and fair-trade opportunities are limited and it is vital that trading partners allow streamlining of processes to enable exports of fresh produce.

Based on the challenges above and desk review conducted, the following gaps have been identified:



10. Needs for Implementation and CRFS entry points

10.1 Needs for Implementation in Fiji's Food Systems

- There is a need to address land access and tenure to enable long-term investment decisions by farmers, investors and landowners. The Ministry will work closely with Government and stakeholders including landholding communities to determine collective options that enable investment for agriculture (SDP, 2019).
- Regular climate change assessments, GIS mapping, and crop modelling to improve understanding of environmental and climate risks to agriculture production, distribution and processing, and use these assessments and models as part of national planning for food and nutrition security.
- Strengthen Fiji's disaster preparedness efforts in the agriculture sector by encouraging agronomy practices, climate-based crop planning, and the protection, breeding, and cultivation of traditional and improved seed varieties; cultivars and livestock breeds
- Improved multi-sectoral coordination, planning, implementation, and evaluation is needed.
- Strengthen research collaborations with farmers communities, and national research institutions.
- Assess farm community and sectoral attitudes to climate adaptation actions in agriculture to develop appropriate and inclusive education and awareness programmes, extension services, farmer field schools.
- Promote and integrate climate-smart agriculture (CSA) practices into farming, trainings, extension services, policies and plans and adopt nature-based and urban solutions where possible.
- Increase adoption of sustainable soil and land management techniques to address soil erosion, desertification, increased soil salination and to improve soil fertility, nutrient management, arability & soil restoration.
- Support the restoration, enhancement and conservation of coastal ecosystems such as mangroves, seagrasses and coral reefs.
- Improve water management systems by assessing and protecting existing water sources, improving and upscaling irrigation systems, improving and maintaining water drainage systems, applying and upscaling good agronomic practices for water conservation.
- Extend early warning systems to fishing households.
- Formulation of National Food and Nutrition Security policy to support Food Systems Pathway.

10.2 CRFS Entry Points

Fiji has the right policies, agendas, and structures in place for its food systems transformation. It is only through collective action through farmers organisations, cooperatives, policy makers that the vision, goals and targets outlined in the policy documents could come to fruition. To support the implementation of some of these policies and pathways relevant to climate resilient food systems, the CRFS Alliance has identified the following key strategic entry points which will be updated based on ongoing consultations with ministries and country focal points.

- Identifying appropriate solutions and expertise in and promoting knowledge and innovation towards climate resilient food systems in alignment with Fiji's vision.
- Support the implementation of priorities that have been identified in this case study, particularly relating to sustainable resource management, climate smart food systems, providing climate services, climate data, statistical capacities, tools to inform decision-making, planning, and investment and building resilience through self-sufficiency.
- Collection of possible climate finance sources and guidance on applying to them.
- Helping formulate domestic policies to promote climate resilient food systems, including aquatic foods, reducing reliance on processed and imported food. E.g., National Food and Nutrition Security Policy, Policy on Agroforestry Development.
- Availing methods with climate food and relevant data, information, and tools for adaptive management of fisheries, building capacity for management.
- Strengthening stakeholder coordination to ensure enhanced implementation, monitoring and evaluation of actions.
- Exploring ways to integrate the government efforts and food systems projects in academic curricula to educate the young generation on the importance of food systems and climate resilience.
- Collaborate with other UNFSS alliances like the Resilient Local Food Supply Chains alliance to promote local food systems by providing significant opportunities for local farmers. IFC report revealed that Fiji could potentially reduce its annual food import bill by $24.1m if it increased local food supply to the tourism market.

11. Sources

Fiji Ministry of Agriculture, Waterways and Environment. (n.d.). Investment guide. Retrieved October 24, 2022, from https://www.agriculture.gov.fj/documents/booklets/InvestmentGuide.pdf

Observatory of Economic Complexity (OEC). (n.d.). Fiji (FJI) profile. Retrieved October 24, 2022, from https://oec.world/en/profile/country/fji

FAO. (2019). The state of food and agriculture 2019: Moving forward on food loss and waste reduction. Retrieved March 24, 2023, from https://www.fao.org/3/ca9420en/CA9420EN.pdf

World Bank Group. (2019). Country partnership framework for the Republic of Fiji: FY2019-FY2023. Retrieved March 24, 2023, from https://thedocs.worldbank.org/en/doc/200821611265883268-0070022021/original/WorldBankGroupFijiCPFWEBFinal.pdf

Summit Dialogues Fiji. (2021). National Pathway for Fiji synopsis. Retrieved March 24, 2023, from https://summitdialogues.org/wp-content/uploads/2021/09/2021-National-Pathway_Fiji-Synopsis_Unofficial-Draft_Subject-to-Approval_150921.pdf

Fiji Ministry of Agriculture, Waterways and Environment. (2020). Fiji 2020 agriculture sector policy agenda. Retrieved March 24, 2023, from https://agriculture.gov.fj/documents/fiji-2020-agriculture-sector-policy-agenda.pdf

GAFF. (n.d.). Fiji's seeds of resilience. Retrieved March 24, 2023, from https://futureoffood.org/insights/fijis-seeds-resilience/

UNFCCC. (1997). Initial national communication of Fiji. Retrieved March 24, 2023, from https://unfccc.int/resource/docs/natc/fjinc1.pdf

UNFCCC. (2022). Republic of Fiji's Updated NDC 2020. Retrieved March 24, 2023, from https://unfccc.int/sites/default/files/NDC/2022-06/Republic%20of%20Fiji%27s%20Updated%20NDC%2020201.pdf

The Commonwealth. (2018, November 15). Blog: How Fiji is turning to nature to cope with climate change. Retrieved March 24, 2023, from https://thecommonwealth.org/news/blog-how-fiji-turning-nature-cope-climate-change

UNFCCC. (2018). National adaptation plan (NAP) for the Republic of Fiji. Retrieved March 24, 2023, from https://unfccc.int/sites/default/files/resource/NAP_Fiji.pdf

Government of Fiji. (2017). 5-Year and 20-Year National Development Plan. Retrieved March 24, 2023, from https://www.fiji.gov.fj/getattachment/15b0ba03-825e-47f7-bf69-094ad33004dd/5-Year-20-Year-NATIONAL-DEVELOPMENT-PLAN.aspx

Fiji Ministry of Agroforestry. (2022). Agroforestry Policy Brief. Suva, Fiji.

World Agroforestry (ICRAF). (2018, June 1). Agroforestry: sustainable farming in Fiji. Retrieved March 24, 2023, from https://www.worldagroforestry.org/news/agroforestry-sustainable-farming-fiji