

# Improving Agroforestry Policy for Sloping Land in Fiji:

## Land in Fiji:

### Policy Settings and Recommendations

ACIAR project FST/2016/147

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# 1. Executive Summary

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The Australian Centre for International Agricultural Research (ACIAR) project “Improving Agroforestry Policy for Sloping Land in Fiji” aimed to help advance the adoption of agroforestry systems on sloping lands in Fiji. It built on earlier ACIAR investments undertaken in Fiji and Vanuatu. Assessing past, existing and alternative policy and institutional frameworks and instruments that will facilitate adoption of silvopastoral systems is one activity under the project. This report addresses that activity, through a review of past project reports, literature, Fijian policies, strategies and governance documents and other sources. Due to COVID-19 more expansive and inclusive policy research in Fiji was not possible.

Given the research limitations the following observations and recommendations are made:

- 1) While Fiji does not have a specific policy or strategy for agroforestry, there are strong policy-aspirations for the development and expansion of agroforestry generally as a land use. However, these are oriented towards different and sometimes converging goals, and there are conceptual complexities that present barriers in realising them; this is not unique to Fiji. These barriers can be summarised (drawing on Van van Noordwijk 2021) as:
  - a. the segregation of “forestry trees” and “agricultural crops and livestock”, ignoring the continuity in functional properties and functions of these often spatially aligned systems;
  - b. the identification of agriculture with provisioning services and the assumed monopoly of forests on other ecosystem services in the landscape, challenged by the opportunity of “integrated” solutions at landscape scale;
  - c. gaps in local knowledge of farmers/agroforesters as landscape managers;
  - d. recognition of the contributions of social and ecological sciences;
  - e. the path-dependency of forestry, environmental or agricultural institutions, and emerging policy responses to “issue attention cycles” in the public debate, such as, green-growth, climate change and reforestation.
- 2) This segregation is apparent in governance and ministerial mandates, and this impinges on progress for developing a single policy or strategy for agroforestry, as well as the advance of agroforestry technology. The Ministry of Agriculture (MAF) is responsible for livestock and crops, the Ministry of Forestry (MoF) for forests and trees, Ministry of Environment (MoE) for biodiversity, the Ministry of Trade (MoT) for products, the Ministry of Economy (MoE) focuses on climate benefits and the Ministry of Health (MoH) for food and health benefits. Our analysis suggests all see some value in integrated systems like agroforestry but only MoF explicitly aspires to develop an agroforestry strategy and this does not currently appear to be funded.
- 3) Despite some apparent institutional divisions, there are some common spaces and institutional structures that are well suited to mediate the development of an agroforestry strategy for Fiji. Existing policies, strategies, operational plans and laws, provide (and in some cases require) Ministries to work together, but getting agroforestry on the agenda needs policy-makers to prioritise it.
- 4) COVID-19 exposed the vulnerability of economies and production systems, but also elevated awareness of integrated approaches such as One Health which point to agroforestry as solutions. Multi-product, multi-scale, multi-temporal systems are potentially shock-resilient and climate smart approaches that can provide immediate food needs, cash income from intermediate agricultural products as well as longer term security providing products for domestic and export markets.
- 5) Agroforestry systems can be inclusive: they can be intergenerational production systems with element attractive to men women and youth. However, due consideration is needed of what and how people want to participate and whether adverse consequences could arise. Cash crops can have good and bad social, economic and environmental outcomes. Land use conflict can arise, as has been seen with poorly planned plantations. The diversity of agroforestry elements necessitates good systems design - one model will not suit all. Addressing land-use rights and opportunities and land tenure and crop security are essential.
- 6) Recent successes and lessons learnt elsewhere in developing agroforestry policies and strategies, such as in Africa, can point the way, but policy processes will need to change.
- 7) Leadership and drive of departmental heads is critical in getting a policy issue on the government’s agenda and moving it forward, but current top-down policy processes through which issues are progressed may need to accommodate greater community involvement in order to ensure adoption and sustainability. Lack of consolidated community support will affect policy support and implementation. While it is relatively easy to write policies by drawing inputs from internal and external advisors and experts, understanding the experiences of those whose practices the policies are trying to change is essential for effective agroforestry adoption.

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## Acronyms and Abbreviations

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<b>Acronym</b>	<b>Name</b>
30MT15Y	30 million trees in 15 years
4MT4Y	4 Million Trees in 4 Years
ACCU	Australian Carbon Credit Unit
ACIAR	Australian Centre for International Agricultural Research
AFOLU	Agriculture, forestry, and other land uses
AFS	Agroforestry System
ANSAB	The Asia Network for Sustainable Agriculture and Bio-resources
API	Agroforestry Policy Initiative, formed by ICRAF with national partners in India
AusAID	The Australian Agency for International Development
BAU	Business-as-Usual Unconditional Scenario, of climate change mitigation
BMUB	German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BQA	Bilateral Quarantine Agreements
C2ES	Centre for Climate and Energy Solutions
CBA	Cost-Benefit Analysis
CC	Climate Change
CEA	Cost-Effectiveness Analysis
CEDAW	Convention on the Elimination of all forms of Discrimination Against Women
CGIAR	Consultative Group on International Agricultural Research
CLT	Crops, Livestock and Trees
CO <sub>2</sub> -e	Carbon Dioxide equivalents
CoA	Commonwealth of Australia
COP	Conference of the Parties
COP25	UN Climate Change Conference, December 2019, Madrid
CPF	Country Planning Framework (program)
CSA	Climate Smart Agriculture
CSIRO	Commonwealth Scientific and Industrial Research Organization
CTCN	The Climate Technology Centre and Network (CTCN)
DAC	Department of Agriculture and Cooperation, India
DAFF	Department of Agriculture, Forestry and Fisheries, of the Republic of South Africa
EbA	Ecosystem-based adaptation to climate change
ER	Emission reductions
ER-P	Emissions Reduction Plan
ETS	Emissions Trading System
EU	The European Union
EU ETS	EU emissions trading system
FAO	Food and Agriculture Organization of the United Nations
FCLC	Fiji Crop and Livestock Council
<a href="#">Fiji LEDS</a>	Fiji's Low Emission Development Strategy (for the period 2018 to 2050)
FRA	Forest Rights Act, India
FullCAM	Full Carbon Accounting Model of Australia's national greenhouse gas emissions for the land sector
GAP	Good Agriculture Practices
GEF	Global Environment Facility
GGGI	Global Green Growth Institute - an international treaty-based organization
GHG	Greenhouse gas (emissions)
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation)
GT	Gigatonne, 1 billion tonnes (1,000,000,000 tonnes)
ICAR	The Indian Council of Agricultural Research
ICRAF	International Center for Research in Agroforestry
IFAD	International Fund for Agricultural Development
IKI	International Climate Initiative
IMCC	Inter-Ministerial Coordination Committee, Government of Nepal
INGO	International Non-governmental Organization
IPCC	The Intergovernmental Panel on Climate Change
IPF	Intergovernmental Panel on Forests
JICA	Japan International Cooperation Agency
LDC	Least Developed Country
LDN	Land Degradation Neutrality

LEDS	Low Emission Development Strategy
LTS	Long-term Strategy
MoA	Ministry of Agriculture
MoAC	Ministry of Forests and Soil Conservation, Government of Nepal
MOAD	Ministry of Agricultural Development (MOAD), Government of Nepal
MoEF	Ministry of Environment and Forests, India
MoF	Ministry of Forestry
MoFSC	Ministry of Forest and Soil Conservation, Nepal
MoLD	Ministry of Livestock Development, Nepal
MoPE	Ministry of Population and Environment, Nepal
MoWE	Ministry of Waterways and Environment
MSME	Micro, Small and Medium Enterprises
NAC	National Advisory Council, India
NAFP	National Agroforestry Policy
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategy and Action Plan
NBWL	National Board for Wildlife, India
NCCP	National Climate Change Policy
NCCP	National Climate Change Strategy
NCSMED	National Centre for Small and Micro Enterprises Development
NDC	Nationally Determined Contribution - to the 2015 Paris Agreement to limit global warming to 1.5 to 2 degrees C above pre-industrial levels
NDCs	Nationally determined contributions to reducing greenhouse-gas emissions
NDE	National Designated Entities, of CTCN
NFP	National Forest Programme/s
NFPS	National Forestry Policy Statement
NGO	Non-Government Organisation
OH	One Health
PIC	Pacific Island Country
PICTs	Pacific Island Countries and Territories
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation, as well as conservation, sustainable management of forests and enhancement of forest carbon stocks
RI	Regeneration International
SCNR	Standing Committee on Natural Resources
SDG 13	Sustainable development goal 13 - climate action
SDG 5	Sustainable development goal 5 - gender equality
SDGs	Sustainable development goals, 17 of which were set in 2015 by the United Nations General Assembly
SDP	Strategic Development Plan
SFM	Sustainable forest management
SIDS	small islands developing states
SOC	soil organic carbon
SPC	South Pacific Community
SRA	small research and development activity
iTLTB	iTaukei Trust Board
UNCED	United Nations Conference on Environment and Development
UNCSD	The United Nations Conference on Sustainable Development ( <a href="#">Rio+20</a> Summit)
UNFCCC	United Nations Framework Convention on Climate Change
UNFCCC	United Nations Framework Convention on Climate Change
USD	United State Dollar
USDA	United States Department of Agriculture
WHO	World Health Organisation
WMO	World Meteorological Organization
WP	Working Paper

## 2. Introduction

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The project “Improving Agroforestry Policy for Sloping Land in Fiji” aims to help advance the adoption of agroforestry systems on sloping lands in Fiji. The specific project objectives are to:

1. examine the barriers and constraints to sloping land agroforestry in Fiji, and identify options for gender inclusive policy and institutional frameworks and instruments to overcome these and facilitate the establishment of silvopastoral systems;
2. identify potentially suitable sloping land areas and combinations of, pasture, livestock and tree species for selected areas of Viti Levu and Vanua Levu;
3. evaluate the financial performance of selected agroforestry systems and
4. estimate potential regional economic impacts (employment and income) of adoption of silvopastoral systems.

Assessing past, existing and alternative policy and institutional frameworks and instruments that will facilitate adoption of silvopastoral systems is one activity under the project. This report aims to help Fiji policy makers by informing them about policy and institutional frameworks and instruments to encourage adoption of agroforestry systems on sloping lands.

The policy research reported here is entirely desk-top based with field activities curtailed by COVID-19 restrictions. The report draws on the report from a small research and development activity (SRA) that preceded this project (ACIAR project ADP/2014/013, ‘Promoting sustainable agriculture and agroforestry to replace unproductive land use in Fiji and Vanuatu’, Harrison and Karim 2016), a series of working papers drafted in the preparation phase of this project (WP1, WP5, WP6, WP15, WP17 and WP19) and findings from a pre-project meeting and short study tour. Other literature was also reviewed.

An initial priority issues analysis was undertaken to focus research and analysis around key policy, legal and governance barriers to silvopastoral systems, silvopastoral products, gender equity and interactions and opportunities associated with other programs (such as associated with climate change or export strategies).

### 2.1. Context

Over the last few decades, rapid urbanisation, coupled with declining interest in agriculture, including agroforestry<sup>1</sup>, has had mixed effects on livelihoods (human health, food security, rural employment opportunities and poverty) and the Fiji economy. A convergence of factors has been working against the development and adoption of agriculture, including agroforestry in Fiji: geography; land use competition; land degradation due to flooding, inundation and soil erosion which is being exacerbated by climate change; and demographic changes and out-migration.

A major concern with sloping land agriculture is the risk of resource degradation. A combination of sugar-plantings expanding onto sloping land, and poor and sometimes illegal practices being adopted by loggers and by upland communities under population pressure to increase food production, has resulted in land and water systems degradation that continues to adversely affect Fiji today (UNCCD, 2006, Bacolod et al., 2014). Despite supportive national policy statements, progress towards aspirations for agroforestry have been disappointing and responsibility for agroforestry in Fiji appears to be thinly spread among ministries and departments; it ‘falls through the cracks’ from a policy perspective. There is a recognised need for rural land use policy in Fiji to consider non-market values, as well as market factors (Leslie and Ratukalou 2002), but policy-makers lack information on which to base policies, including about the overall economic cost-benefit and social and environmental impacts of alternative agroforestry systems in various parts of the landscape.

Several constraints to expansion of silvopastoral systems on Fiji sloping lands have been identified.

1. Sloping lands in Fiji are perceived and treated as unproductive acting as a deterrent to consideration in policy.
2. There is a lack of information about: (a) the range of pasture and tree species that are biophysically suited to degraded land, and that will achieve beneficial species interactions; (b) the technicalities about how to grow particular species and species combinations; (c) product and market opportunities; and (d) the likely financial performance of silvopastoral systems.

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<sup>1</sup> The definition of agroforestry adopted here is that of the World Agroforestry Centre as expressed by Nair (1993, p. 16), of “the purposeful growing or deliberate retention of trees with crops and/or animals in interacting combinations for multiple products or benefits from the same management unit”. This is similar to the definition of FAO (2015) of “land-use systems and technologies where woody perennials ... are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence”.

3. Landholders face financial and labour constraints and may have limited access to germplasm for suitable crop, pasture and tree species. There may be other factors limiting availability of these important inputs.
4. Much of the sloping land is under traditional tenure and managed via the stewardship of the iTaukei Trust Board (iTTLTB), which charges to establish leases, which (together with annual rentals) acts as an impediment to more productive use of sloping lands. During the pre-project visit to Fiji, the project team learned that some livestock projects have collapsed in Fiji because of payment arrears to the iTTLTB.
5. Wildfire, cyclone damage, occasional drought conditions and issues surrounding perceived land tenure security may be impeding silvopastoral system establishment on sloping land.

A series of policy and strategic documents over the last decade stressed Fiji's research and development priorities. The Republic of Fiji *Roadmap for Democracy and Sustainable Socio-economic Development 2010-2014* emphasised two strategic objectives related to the promotion of agriculture and rural development, namely to (a) improve the availability of and access to nutritious locally produced foods for poor and vulnerable rural households, and (b) to increase rural incomes from both farm and non-farm income generating and employment opportunities.

There is long-standing recognition in Fiji of the need to improve management of degraded sloping land. For example, the Fiji *National Environmental Strategy* of 1993 identified the need for increased research and extension effort on issues relating to land degradation, and specifically on adoption of sustainable methods of sloping land agriculture (Leslie and Ratukalou 2002). *The Rural Land Use Policy* for Fiji (Leslie and Ratukalou 2006) recommended that the area of sugarcane grown on slopes exceeding 11 degrees be greatly reduced and that alternative sustainable farming systems, including agroforestry and pine plantations, be developed on this marginal cane land. The 2007 Fiji *Forest Policy Statement* noted that 'The Government will promote and provide support to the development of agroforestry systems as a means to enhance food and forest production on areas cultivated for crop production by way of planting and integrating suitable forest trees into their existing farming system'. *Fiji's National Action Plan to Combat Desertification / Land Degradation and to Mitigate Against Drought* (Ministry of Agriculture, Fisheries and Forests, 2007) stressed the urgent need to improve sloping land management and to implement policies to ensure that development is sustainable. Commitment to this National Action Plan was stressed by the Fiji Prime Minister at the United Nations General Assembly to combat land degradation in Fiji (SPREP, 2011). Resource degradation is also to be addressed by the recently formed Wakatu Fiji campaign, in which the iTaukei Affairs Ministry, Ministry of Forests and Agriculture Ministry will raise awareness on sustainable use of soil through innovative outreach tools and capacity building in farming communities (Vuibau, 2016, Wakatu Fiji 2016).

The *Fiji 2020 Agriculture Sector Policy Agenda* (Bacolod et al., 2014) noted that land in upland areas is under population pressure for agricultural production, with poor land-use practices adversely affecting long-term soil fertility and river and water systems, and that agroforestry is 'the ultimate solution to address these problems'. The *Policy Agenda* stressed that a priority 'to be employed in mass-based modernization of the agriculture sector in Fiji is agroforestry in the upland areas where the forestry and agriculture sectors converge' and advocated the practice of Sloping Agriculture Land Technology (SALT) and Line Planting Technology for sloping lands. The proposed project is designed to support increased and agroecologically sustainable adoption of agroforestry in upland areas.

The Fiji REDD+ Secretariat (2016) noted that 'The National REDD+ Programme will work with local communities to convert degraded grasslands and idle degraded land into productive forests' and that 'Agroforestry systems will also be included to strengthen food security'. Stakeholder workshops by the Fiji REDD+ Secretariat (2016, p.13) have identified strategy options to reduce deforestation and forest degradation that include to 'rehabilitate degraded sites and grasslands for agriculture development to avoid farmer encroachment into forests', and 'agroforestry and multi-cropping systems that promote the inclusion of trees in farming'. The proposed project is focussing on the landscapes targeted by - and the agroforestry systems promoted by - the National REDD+ Programme.

Policy documents, including the *Fiji 2020 Agriculture Sector Policy Agenda*, indicated increasing production of livestock products is a high priority in Fiji (Bacolod et al., 2014, SPC Land Resource Division 2016). A joint meeting was held in Nadi in 2016 - hosted by the SPC Land Resources Division and supported by the European Union - with the Fiji Ministry of Agriculture and the Fiji Livestock Sector Strategy Working Group. The purpose of this meeting was to develop a plan for livestock development in Fiji, 'given the challenges the sector faces, including Fiji's continued import imbalance for livestock products, the demands from the growing tourism industry, and a renewed national government push for the agriculture sector' (SPC Land Resource Division, 2016). Silvopastoral systems are likely to be an appropriate use for much of Fiji's sloping lands, and landholdings could be relatively large to promote economies of scale in livestock production.

Discussions during the pre-project development trip in 2016 with personnel from government agencies and non-government organizations also revealed that the strong policy recognition of the need to improve management



of degraded sloping land, as described above, has not been translated into effective resourcing of necessary research, and education or other support programs to implement change. This report aims to help address this gap.

## 2.2. Methods and terminology

As noted above this research activity aimed to “examine the barriers and constraints to sloping land agroforestry in Fiji, and identify options for gender inclusive policy and institutional frameworks and instruments to overcome these and facilitate the establishment of silvopastoral systems”. In undertaking this task, it was deemed necessary to identify and review the existing policy settings, to reveal the actors involved in agroforestry and distil key relationships and potential obstacles to the consideration of agroforestry in policy and policy processes.

### 2.2.1. Methods

As a starting point this review explored the ways in which agroforestry, and related issues and topics (e.g. ‘agriculture’, ‘forestry’), are described in Fijian policy documents. This was based on a desk-top review of ‘policies’, literature and other relevant sources (e.g. media). This also drew on the earlier ACIAR small research and development project (ADP/2014/013 *Promoting sustainable agriculture and agroforestry to replace unproductive land-use in Fiji and Vanuatu*) and outputs and a workshop, meetings and discussions during a project visit to Fiji in December 2018. We also drew on the conceptual research associated with another ACIAR Project in which two project team member (Smith and Kanowski) were concurrently involved, exploring the concept of policy in an investigation of ‘research to policy impact’ in Laos (SSS/2020/142). We draw on their methods and analysis to frame considerations of ‘policy’ in the Fiji context.

Unfortunately, the constraints on the project due to COVID-19, meant that it was not possible to go to Fiji and talk to people about policies or to observe policy in action. This was unfortunate because policy and policy making is essentially a peopled process - policies are made by people, to change the behaviour of people. As such, broader literature on policy processes in Fiji was reviewed to conceptualise how, where and by whom policies are made in Fiji.

Thus, the method used in the research was primarily document-based. As Smith (2022) notes, analytic work on and with documents can be loosely divided into two areas:

- a. work that focuses on the actual textual and extra-textual content of documents; and
- b. work that focuses on some aspect of the use, role and function of documents in everyday and organisational settings.

The first focuses on the document as an object in its own right, the content of the document as static and immutable (Prior, 2008), as a ‘docile’ container of knowledge. The second area is primarily observational, seeking to understand some element of how documents are active agents in organisational and/or everyday life (Rapley and Rees 2018).

Our approach to document analysis involved:

1. Reviewing the SRA report for ADP/2014/013 (Harrison and Karim 2016), and working papers developed for this project (FST/2016/147). This is described in Section 3.
2. Re-examining the trip notes and outputs from the project’s planning visit to Fiji in December 2018 to distil key themes. This is described in Section 4.
3. Sourcing and re-reviewing the policy documents referred to in the working papers, and sourcing and reviewing any newer policy documents produced since the working papers were drafted in 2019. This is described in Section 5.
4. Undertaking a search for and review of publications describing policy and policy processes in Fiji and distilling key features and learnings to guide recommendations with respect to barriers and constraints to agroforestry policy in Fiji. This is presented in Section 6.

### 2.2.2. Terminology

The term ‘policy’ can be used in a broad sense, in that it can refer to government issued formal strategic documents with stated goals, as well as less formal documents, statements and measures. However, policy is about process - either the process of change or the processes or continuing with something that is working well.

Drawing on Smith et al (2022) it is useful to explore notions of what ‘policy’ is as these are central to understanding what *can* be meant by ‘policy’. Below are some ‘dictionary definitions’:

*Policy*....“a set of ideas or a plan of what to do in particular situations that has been agreed to officially by a group of people, a business organization, a government, or a political party” (Cambridge Dictionary<sup>2</sup>)

*Policy*....“A policy is a set of ideas or plans that is used as a basis for making decisions, especially in politics, economics, or business” (Collins Dictionary<sup>3</sup>)

*Policy*...

“1a: prudence or wisdom in the management of affairs; b: management or procedure based primarily on material interest

2a: a definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions; b: a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body” (Merriam-Webster Dictionary<sup>4</sup>)

Organisations such as the Food and Agriculture Organisation of the United Nations (FAO), that strive to inform policy for development, also construct definitions and classifications, for example<sup>5</sup>:

“Public policy is a course of action chosen by public authorities to solve a problem, address an issue. Public policy is expressed in the body of laws, regulations, policy frameworks implemented through programmes and projects.

A Policy decision defines how to achieve a particular strategic outcome, clarifying what needs to be done and by whom.”

They might differentiate different types of policies and subsets of policy measures.

Smith (2022) proposes that public policy on a particular issue can be thought of as a high-level statement that might present an ultimate goal, a ‘Big P’ policy, and provide the ‘why’ of the goal. It might also be thought of as coming from a very high point of governance. Underneath a ‘Big P’ policy might sit ‘small p’ policies which could include supporting measures, documents or statements providing the ‘what’ and the ‘how’ of the ‘Big P’ policy. ‘Big P’ policies make a statement of change, ‘small p’ policies help the realisation of that change.<sup>6</sup> Thus an organisation, such as ACIAR or an ACIAR project, might seek to have impact on policy, without making it clear whether the intent is to change a policy goal (a ‘Big P’ policy) or a supporting element of a policy (a ‘small p’ policy’).

Howlett and Cashore (2009) developed a taxonomy of policy components, seeking to understand the need for disaggregation of policy elements in order to construct models of policy dynamics. Their taxonomy Table 1) breaks policy down into parts, articulating ends/aims and means/tools, which are conceptually similar but more explicit than ‘Big P’ and ‘small p’ policy. These concepts, or component parts of policy, are useful because they highlight the inadequacy of articulating generic policy aims in project design.

However, ‘policy’ or ‘policies’ are not just external, constraining forces, nor are they confined to text or generalised statements; they are human constructs, made and re-made by people embedded within particular social and cultural spaces and they create as well as reflect those spaces (Shore and Wright 2011). This has implications not only for what policy is but how it is made and how evidence shapes it.

**Table 1: A modified taxonomy of policy components (after Howlette and Cashore 2009)**

		POLICY CONTENT		
		High level abstraction	Programme level Operationalization	Specific-on-the-ground measures
POLICY FOCUS	Policy ends or aims	Goals What general types of ideas govern policy decisions?	Objectives What does policy formally aim to address?	Settings What are the specific-on-the-ground requirements of policy?
	Policy means or tools	Instrument logic What general norms guide implementation preferences?	Mechanisms What specific types of instruments are used?	Calibrations What are the specific ways in which the instruments are used?

<sup>2</sup> <https://dictionary.cambridge.org/dictionary/english/policy>

<sup>3</sup> <https://www.collinsdictionary.com/dictionary/english/policy>

<sup>4</sup> <https://www.merriam-webster.com/dictionary/policy>

<sup>5</sup> <https://www.fao.org/3/bc358e/bc358e.pdf>

<sup>6</sup> From <https://www.digital.nsw.gov.au/article/whats-name-deconstructing-and-defining-policy>

Like the concept of policy, policy-process is difficult to define. There is an extensive body of extensive literature exploring what policy-process is or could be, and it is outside the scope of this study to delve into that. Limitations of the project also obviated the opportunity to observe, participate in or question informants about how policy process in Fiji work. All we have been able to do is draw on the work of others to infer how relevant policies in Fiji have been made and used, and how they could be developed to enable change or policy design for sloping land agroforestry (see e.g. Siddiki and Curley 2022 for more on policy design).

In considerations of policy processes other research points to the importance of aligning research and the data and information it generates with the 'hot topics' and 'pressing issues' facing policy-makers (Smith et al 2022). The other research activities in this ACIAR project are focussed on the generation of that information as the basis of establishing evidence of the potential for silvopasture systems in Fiji. This policy-oriented activity looks for alignment between agroforestry and the policy problems to which it might provide a solution.

To that end it is useful to again reflect that policy and policy making are peopled processes. Policies are designed by people and implemented by people to change the way that people behave; people may be the agent of change and/or the subject of the policy, or both (Smith 2022). Some suggest that (see e.g. Moyson et al 2017) that policy processes consist of politically engaged individuals, called 'policy actors', interacting to influence (typically) government decisions in relation to a topical issue over time. Policy actors include politicians and public officials, managers of public and private companies, members of pressure groups, academics and researchers, active citizens, policy entrepreneurs, and others.

Policy network analysis is widely used as a concept and method in understanding the people and agencies involved in policy processes and the relationships between them. Noting that policy actors do not interact with policy processes in a vacuum and that their involvement is context dependent, institutional mapping is also used to identify and understand the relationships within and between the institutions, organisations or other entities in which policy actors exist. In policy network analysis, relationships of power and influence become particularly important (see e.g. Brockhaus et. al. 2014).

The identification and mapping of policy actors, their institutions, networks and the connections and relations between them is something that we would have done had this project been able to in-country research but again, this was not possible due to projects limitations. Instead, we draw on the roles of and interactions between people, policy actors and institutions as described in the documents we have reviewed.

### **3. Review and synopsis of SRA report and working papers**

This section reviews and summarises the SRA report (Harrison and Karim 2016) and draft working papers prepared by Steve Harrison in 2019 that are relevant to this objective. The purpose of this review is to summarise the main issues identified, identify gaps and confirm priorities for further or more detailed analysis.

#### **3.1. Report from Promoting sustainable agriculture and agroforestry to replace unproductive land-use in Fiji and Vanuatu**

ACIAR Small research and development activity ADP/2014/013 *Promoting sustainable agriculture and agroforestry to replace unproductive land-use in Fiji and Vanuatu* was undertaken as scoping exercise for an anticipated longer project. It included, amongst other activities, a review of relevant policies, and resulted in a series of working papers (Harrison and Karim 2016) of which one (Chapter 12) specifically relates to agroforestry policies in Fiji.

The Final Report for ADP/2014/013 recommended “legal and policy reform for ensuring the security of land tenure for farmers in agricultural areas and for building confidence of farmers about livelihood security, including providing secure lease arrangements for landholders adopting agroforestry systems which include long-rotation tree crops.”

The report noted:

“Various policy documents of the Republic of Fiji emphasise the importance of environmental protection, sustainable management and utilization of natural resources, economic development, and food security. However, these policy documents also mention the complexities in promoting sustainable agriculture. As observed in the Rural Land Use Policy for Fiji (Ministry of Agriculture, Sugarcane and Land Resettlement, 2002), attainment of sustainable land use may involve institutional and legal issues. Despite promulgation of the Rural Land Use Policy in 2002, some of these issues are still not fully addressed. This warrants further research with a view to identifying implementable strategies.

The report commented on the *Fiji Agriculture Sector Policy Agenda* (Bacolod and Natasiwai, 2014, p. 2) which stated that **‘The second principal operating system to be employed in mass-based modernization of the agriculture sector in Fiji is agroforestry in the upland areas where the forestry and agriculture sectors converge’**.

Thus, the SRA project examined the policy and legal framework for promoting sustainable agroforestry in Fiji. It found that **Fiji does not have a separate law or policy or strategy for agroforestry**. However, laws and policies relating to land-use systems and tenure, agriculture, land degradation, forestry, biodiversity and biosecurity are directly or indirectly relevant to agroforestry. Some other policies, including those dealing with export of produce and climate change, are also relevant for agroforestry:

- Laws and policies relating to land
- Laws and policies relating to agriculture
- Laws and policies for prevention of land degradation and management of land
- Forestry related Laws and policies
- Environmental Laws and policies
- Biosecurity and biodiversity laws and policies
- Other policies relevant to agroforestry
- Institutional cooperation

The review identified a number of critical issues:

- a. the lack of a joint agroforestry strategy by relevant government departments calls into question the effectiveness of existing policies that touch upon agroforestry, particularly those relating to agriculture and forestry.
- b. significant overlap of agroforestry-related activities across several government departments but coordination and cooperation between these departments is wanting.
- c. the destructive effect wildfires are having on land and the efforts of those seeking to engage in productive land uses.
- d. land degradation

The following recommendations were made:

1. A national strategy for agroforestry should be developed, that clearly identifies responsibilities for each relevant department and promotes cooperation.

2. Initiatives should be taken to ensure the security of tenure for farmers on agricultural lands and to build their confidence regarding livelihood security, thereby encouraging them in long-term investment and commitment in sustainable agricultural practices including agroforestry.
3. Reform and revitalisation of the Land Conservation Board is needed to ensure proper functioning of the Board including adequate human and financial resources.
4. Consolidation of 33 pieces of agriculture legislation into an omnibus Law which should include provisions for promotion of agroforestry.
5. Investigation of the feasibility of developing a National Agroforestry Plan.

There has been some progress against the first of these recommendations.

## 3.2. FST/2016/147 Improving Agroforestry Policy for Sloping Land in Fiji

### 3.2.1. Working Paper 1 (WP1) Policy Analysis Methods and Recent Applications

WP1 aimed to identify some of the more important (then) current public policies relevant to development of agroforestry systems on sloping land in Fiji and promoting discussion and developing of a shared understanding of the potential role of sloping land agroforestry in Fiji. It reviewed literature on policies for crop, livestock and forestry and also explored policy approaches and methodology for policy analysis. This summary does not revisit the review of the methods for policy analysis; those used in this research are described in Section 2.2.

WPI 1 made the following findings and recommendations (numbers added for this purposes of this summary):

**Finding 1:** There are many reports, journal papers and other documents which include policy components relating to land use, agroforestry systems, environment, trade, gender equity and other aspects relating to agroforestry systems. In fact, it is sometimes stated that there are too many policies relative to the activities which have been carried out. It is a challenge to identify which policies have current relevance for the ACIAR sloping land agroforestry project. WP1 attempted to identify policies relevant to and seek clarification of their current relevance; this was apparent in some cases and less so in others.

**Recommendation 1:** Discussion with representatives of the relevant authoring agencies is necessary for clarification.

**Finding 2:** There have been notable changes over time in two themes: land utilization and gender issues in agroforestry. Earlier land use papers were very much focussed on preventing degradation of sloping land, while **more recently there has been increased attention to sustainable use of sloping land**, e.g. in the Fiji 2020 Agriculture Sector Policy Agenda. Earlier papers consistently referred to marginalisation of females, particularly due to inheritance laws and social customs. **More recently, increased attention has been paid to empowerment of women, e.g. their inclusion in decision-making agencies.**

**Finding 3:** There are a large number of papers dealing with environmental issues. Included in these is the emphasis on climate change and REDD+ policies, Fiji having taken a lead role in Pacific Island climate change mitigation issues. It is apparent from this review there has been a major emphasis on adaption to risk. While this is to be addressed in ACIAR project ADP/2016/147, there are other ACIAR projects being carried out in Fiji with a more specific focus on climate change.

**Finding 4:** **Some concern on land tenure has been noted. This is probably not as critical an issue with crops as it is with livestock production and forestry plantations, for which “stranded assets” problems arise unless property rights have sufficiently long durations.**

#### 3.2.1.1. Policy

The paper introduces ‘policy documents’ produced in Fiji over more than a decade, as identified by a literature search, grouped into a number of themes and arranged by date of publication. These are listed below; not all are formal government policies and those that are not, are annotated with \*. A number of other sources, not explicitly concerned with agroforestry policy were also identified in the WP as having relevance to policy issues, and are briefly described in the paper.

- National development planning and land use policies
  - Rural Land Use Policy for Fiji (2006)
  - Roadmap for Democracy and Sustainable Socio-Economic Development 2010-2014 – a Better Fiji for All (2009)
  - Green Growth Framework for Fiji: Restoring the Balance in Development that is Sustainable for Our Future (2014)

- Sustainable Land Management for Food Security
- 5-Year and 20-Year National Development Plan: Transforming Fiji, 2017-2036 (
- Policies for agriculture
  - Agriculture Strategic Development Plan 2010-2012 (2009)
  - Fiji 2020 Agriculture Sector Policy Agenda: Modernizing Agriculture (2014)
- Forest policies (2 documents)
  - Fiji Forest Policy Statement (2007)
  - Forest Bill (2016)
- Livestock sector policies
  - Fiji 2020 Agriculture Sector Policy Agenda: Modernizing Agriculture (2014)
  - New Path for Fiji's Livestock Sector
  - Fiji Livestock Sector Strategy Final Report\*
- Financing forestry
  - Facilitating Financing for Sustainable Forest Management in Small Islands Developing States and Low Forest Cover Countries\*
- Greater commercialisation of farming
  - Fiji Agricultural Partnerships Project (FAPP), Final project design report\*
- Environmental policies and initiatives
  - Desertification Fiji, Third National Report on Implementation of the United Nation Convention to Combat Desertification\*
  - Land Use Planning in Fiji, Strengthening Disaster Response in the Agriculture Sector
  - Planning for Community Relocations Due to Climate Change in Fiji\*
  - Fiji's National Adaptation Plan Framework
  - National Biodiversity Strategy and Action Plan 2017-2024
- Gender and youth issues and mainstreaming
  - Fiji National Gender Policy
  - Workshop on Mainstreaming Gender Issues Into Forest Policies\*
  - Gender mainstreaming of Fiji's forest policies - Issues, challenges and the future for women in the development of the forest sector\*
  - Pacific Youth in Agriculture Strategy (SPC 2010)
- Property rights and land tenure security (2 documents)

WP1 did not cover climate change policies other than the Fiji NAPA.

### 3.2.1.2. Governance

WP1 described the formal institutional settings for policy making in Fiji. It noted that at a national level, policy decisions are made in Fiji by government ministries and their departments. As of 24 October 2018, 13 Ministries were listed on the website of The Fiji Government, <https://directory.digital.gov.fj/directory>

- Prime Minister and Minister iTaukei Affairs, Sugar Industry and Foreign Affairs
- Economy, Public Enterprises, Civil Service and Communications
- Local Government, Housing and Community Development, Infrastructure and Transport
- Agriculture, Rural and Maritime Development, Disaster Management and Meteorological Services
- Defence and National Security
- Employment, Productivity and Industrial Relations
- Fisheries
- Forestry
- Health and Medical Services
- Industry, Trade, Tourism, Lands and Mineral Resources
- Waterways and Environment
- Women, Children and Poverty Alleviation
- Youth and Sports

It identified the following Ministries or departments as particularly relevant to this project:

- Forestry;
- Agriculture, Rural and Maritime Development, Disaster Management and Meteorological Services;
- Waterways and Environment;

- Economy, Public Enterprises, Civil Service and Communication;
- Industry, Trade, Tourism, Lands and Mineral Resources;
- Women, Children and Poverty Alleviation;
- Employment, Productivity and Industrial Relations.
- *iTaukei* Affairs and the Sugar Industry under the Prime Minister's Office are also highly relevant to sloping land agroforestry policy.

Governance was further addressed in WP6

### 3.2.2. Working Paper 6 – Governance Frameworks

WP 6 undertook a targeted literature review on governance frameworks for agroforestry, focussing on national forest programs and national agroforestry programs. The objective of the working paper was to provide a basis for discussion of the pros and cons of alternative policy frameworks for sloping land crop-livestock-tree agroforestry systems.

In terms of extant policy settings in Fiji, the paper focussed on the Fiji Forest Policy Statement – prepared by The Ministry of Fisheries and Forests (2007) and noted that, at the time of writing, that policy was being revised. The following is taken from WP6:

“The Fiji National Forest Policy Statement of 2007 (currently being revised) includes some mention of agroforestry. For example, it is noted in section 5.3.2 that the Forest Department “will take the initiative to establish agroforestry farm models in cooperation with other public agencies and NGOs and ensure that new and appropriate technologies are applied”. Also, in Section 5.5.5 on forestry extension it is stated that “The FD in partnership with resource owners will develop and promote agroforestry and silvopastoral systems, particularly where resource owners wish to rehabilitate degraded land, or to improve the mix of income and other benefits from their land”. It is also reported that “The FD will improve coordination between government departments related to the rural development and elaborate extension packages for dissemination of effective forestry and agroforestry information which shall be used by the public service and non-governmental development agencies”.

Reading of NFPSs reveals that they do set out good intentions, and help to overcome disputes over forest use, but in themselves do not provide effective support for agroforestry. Including agroforestry within a National Forest Policy Statement gives some status within government for combining crops and trees. However, such policy ‘statements’ tend to be designed for forest dispute resolution rather than for governance in the sense of positive actions, and do not embrace the broad scope of agroforestry”

WP6 explored 5 options for the governance of agroforestry at a national level, varying in development effort required and effectiveness. Five options are examined here.

#### A. A government ministry, department or division designated as lead agency for agroforestry

Under this option agroforestry would be expected to fit most logically in a forestry, agriculture or lands ministry.

At the time of writing, the Department of Forests within the Fiji Ministry of Fisheries and Forests had responsibility for administration 8 relevant functional divisions, namely:

- Silviculture Research;
- Management Services;
- Timber Utilization and Research;
- Forest Parks;
- Extension & Advisory Services;
- Timber Industry Training;
- Forestry Training; Mechanical Division and Forest Harvesting & MCS.

The Ministry of Agriculture had the following 5 divisions:

- Human Resources, Finance & Information;
- Economic Planning & Statistics;
- Crop Extension Division;
- Animal Health & Production Division; and
- Crop Research Division.

The Ministry of Lands and Mineral Resources also has responsibility for administering land use. Within this Ministry, the two Departments have 6 and 4 divisions respectively.

## **B. Policy inputs on agroforestry and other land use issues by various government agencies, but with no lead agency**

This is the typical arrangement in Pacific island countries (PICs), and in general appears to have been the case in Fiji. It is the case of agroforestry “falling through the cracks” or being limited “by its thin spread among several departments of different ministries”.

## **C. Including agroforestry within a national land use policy**

The literature review revealed that many countries have a national land use policy, particularly in Asia and Africa, most of which have been developed in the 21<sup>st</sup> century. Guidelines for the development of these policies were produced by the EU Task Force on Land Tenure (2004), which acknowledged earlier strategy documents prepared by EU member state agencies, as well as policy documents prepared by the World Bank, International Land Coalition, IFAD and FAO. These policies typically have a focus on rural land, and concern over land access for the poor.

In the case of Fiji, a policy document was developed by Leslie and Ratukalou (2002), which was referred to a rural land use policy. The main purposes for adopting this land use policy were reported as:

1. An effective national policy for informed public opinion as much as on legislation or the activities of sectoral interest groups, including as an educational tool.
2. A long-term national framework, as a declared rural land use policy that is in harmony with national interests to promote guidance to and consistency of land use decisions over time.
3. A framework to manage policy change.

WP6 raises the question as to whether this policy would influence decisions with regard to agroforestry in Fiji. There are in fact four mentions of agroforestry within the document, one being “Promoting the benefits of planting trees, afforestation, and developing agroforestry systems, particularly in degraded farming land, grasslands, etc”. The policy document clearly encourages agroforestry, though does not provide mechanisms for promoting agroforestry expansion.

## **D. Coordinated joint efforts of several government ministries or agencies**

A relatively simple arrangement to promote agroforestry is to form an alliance between several ministries. This situation has arisen recently in Fiji with the advent of the Wakatu Fiji campaign. FAO Regional Office for Asia and the Pacific (2016) reported that “The Ministry of iTaukei Affairs, the Ministry of Fisheries and Forests, and the Ministry of Agriculture have launched ...Wakatu Fiji ... a groundbreaking campaign to better support community efforts to sustainably manage their land and forests” and that “The campaign was developed with support from FAO and cChange, a local communications NGO”. The motivation for introducing the campaign was reported by the Secretary of the Ministry of iTaukei Affairs as being that “the land and forests are increasingly being overused as demands on resources have increased due to population growth. The symptoms are declining food crops, flooding to homes, lack of clean drinking water, reduced fish stocks, and less access to building materials, traditional medicines, and foraged foods”.

Similar comments were made by Wakatu, Fiji (2016), describing the Wakatu Fiji campaign as a “multi-ministry led campaign for which the Secretary of the Ministry of Fisheries and Forests had said the ministries staff have collaborated well at the grassroots level and the campaign is bringing that collaboration to the highest level of the government ... at a time when threats such as climate change, are making life harder for Fiji communities”. A particular advantage of the Wakatu campaign is that native title holders are engaged in the program. A limitation from an agroforestry viewpoint is that the program is mainly concerned with increasing sustainability of landuse rather than promoting new agroforestry plantings.

## **E. Adoption of a national agroforestry policy and supporting institutional framework**

According to Cox (2011), with climate change drawing attention to the creative use of trees, efforts were growing to create better agroforestry policies, and ICRAF initiated the Agroforestry Policy Initiative in 2010 to participate in and learn from these efforts. Cox further noted that “A more understanding policy environment can make widespread agroforestry a reality when governments help smallholders access planting material, knowledge, markets and credit. Most importantly, it can give communities control over their trees, allowing time-tested systems of agroforestry to flourish”. The following sections discuss progress to date in developing national agroforestry policies.

WP6 explores the experiences in other countries, particularly India, Viet Nam and the Philippines.

### **3.2.2.1. Findings of WP6**

At the time of writing WP6 noted that only one country had adopted a national agroforestry policy, but several other countries had taken several steps – or at least contemplated – developing such a policy. Table 2



summarizes the current status of these initiatives, as at August 2018. India, Nepal and Vietnam had all invested considerable effort and obtained substantial assistance in this endeavour.

**Table 2: Progress in National Agroforestry Models, as of August 2018**

Country	Type of model	Supporting agencies	Status
India	NAP	Indian Council of Agricultural Research (ICAR), ICRAF and National Advisory Council, NAC	Finalized in 2014
Nepal	NAP	CTCN, ICRAF, ANSAB	In process
Vietnam	NAP	ICRAF, ACIAR, FAO, UN-REDD	Still being resolved; several meetings
Fiji	Draft Agroforestry Policy Paper for Fiji	FAO, Pacific German Regional Forestry Project	Back in 1997. An early version, not developed further
South Africa	NA Strategy	National government DAFF	Proposed
Philippines	NAP	Suggested by ICRAF	No activity identified

1. Representatives from Bhutan, not included in the table, have recently visited Nepal and apparently shown an interest in a national agroforestry policy.

WP6 noted that it was clear **that considerable experience had to be gained before national agroforestry programs would be widely adopted, that they would need to be flexible to suit the requirements of individual countries, and that expectations of their performance must be realistic.** The FAO (2012) guidelines on ways to improve NFPs provide some useful insights into this experience. Observations to date indicate that national agroforestry programs (NAPs) are much more challenging to establish than NFPs, but their benefits are likely to be much greater. The extent of these benefits will become clearer once more adoptions have taken place.

Based on the review of reports on national agroforestry programs, WP6 recommended a number of steps for setting up such a program:

- Deciding on the preferred national agroforestry model, and institutional arrangements.
- Defining the expectation of what will be achieved from a NAP.
- Deciding on the agroforestry priorities, e.g. species by land types, markets, supply and value chains.
- Identifying key informants and observing the approach adopted on other national agroforestry initiatives.
- Planning the land allocations and agroforestry support measures needed for traditional landowners.
- Seeking advice and, if possible, support from international agencies, such as ICRAF, CTCN, UNFCC, FAO.
- Deciding on the planned time schedule to finalize the NAP arrangements.
- Deciding on what institutional arrangements to adopt and resolve any legal implications and other complexities.

WP6 also notes that when deciding whether to develop an NAP, care needs to be taken to assess what costs are likely to be incurred, and what benefits are likely to be gained. Its assessments appear to indicate that major benefits are likely from expansion of agroforestry, although it is perhaps too early to judge the overall benefits of formal policies. The costs appear to arise from the time commitment for planning, workshopping and document production to arrive at shared views. It is probable that establishing a NAP would take several years, involve considerable assistance from international agencies, and require some investment in time and money from the domestic national government. The costs may however be ameliorated to some extent for adoptors by international support agencies. Both national forestry programs and national agroforestry policies have their detractors, in terms of criticisms that they mainly formalize what is happening or would happen anyway, but with recognition that they have provided a platform for wide consultation and consensus development.

### 3.2.3. Working Papers 15 and 17 The Gender Dimensions

Two working papers were drafted exploring the gender dimensions of sloping land agroforestry in Fiji. WP 15 set out a tentative approach to examining aspects of gender inequality in Fiji, with particular focus on farming households practicing or potentially adopting agroforestry. WP17 reviewed the literature of international agencies and Pacific Island national agencies on gender equity. They are summarised here together.

### 3.2.3.1. Review of literature

WP17 reviewed literature of international agencies and Pacific Island national agencies on gender equity, particularly as this applies to farming in Fiji, and was intended to support research into gender equity and empowerment of women. Issues concerning youth employment were also examined. The paper reported an impressively extensive but broad literature on gender equity produced by international and national agencies, including in relation to Fiji; two ACIAR monographs on addressing gender issues were reviewed. Land ownership and inheritance rights of females were identified as a major gender issue, but other aspects were also found to be important.

The literature search revealed that literally hundreds of documents are available on gender inequality and suggestions on how to overcome gender constraints on women in the workforce. The papers selected for review had particular focus on women in farming households, but even in this setting some selection of sources was required.

WP17 proposed that gender equality could be investigated in a number of areas or components of human activity. In general terms these components may involve on-farm and off-farm aspects, and legal and social aspects. For purposes of this summary, 7 initial components are identified:

- **Legal rights** - included enacted laws and customary or presumed rights - in areas including land inheritance and asset sharing after separation, divorce or decease of a spouse - which are highly variable depending on location and tradition in specific location within Fiji.
- **Financial rights** - equitably fund sharing within households, and access to loan finance.
- **Education opportunities** - including participation rate by age group, course options, and school leaving age.
- **Membership of social and professional groups** - equity of participation by females and males, including employment, salary rates, access to vehicles.
- **Family support regime** - including family size and extent to which parents or clans support their children, health levels and disease rates.
- **Domestic rights and responsibilities (on and off-farm)** - including food growing or collecting (e.g. responsibility for home garden maintenance and fuelwood collection), mealtime arrangements (e.g. whether families eat as a group and share food equitably), sharing of domestic chores such as cooking, clothes washing, child minding and fuelwood collection.
- **Farm decision making and performance of tasks** - deciding what crop, livestock and tree activities are adopted and participation in farming activities (e.g. in crop and tree planting, maintenance, harvesting, value adding and marketing), and use of plant and equipment (including machinery and hand tools).
- **Involvement in government** - membership of national parliaments.
- Access to communications - telephone, email.

### 3.2.3.2. Proposed research approach

WP15 aimed to identify areas of gender inequality of Fiji farming and non-farming households, and policies which could be adopted to promote greater gender equality, through survey and other methods. The WP suggested a research approach including a literature review, surveys of key informants, and contributions from the project expert group and workshop presentations.

### 3.2.4. Working Paper 18 on Potential Trade Opportunities for Fiji with New Zealand and Australia

WP18 examined international trade agreement and assistance programs, with particular emphasis on trade relations between New Zealand. It found that there has been a remarkable proliferation in global, multilateral and bilateral trade agreements, particularly in the last 20 to 30 years. These include agreements by New Zealand and Australia with Fiji that have resulted in an orderly freeing up of trade with major reductions in tariffs and other trade impediments. The WP provides some insights into opportunities for trade in Fiji crop, livestock and forestry products from sloping lands.

### 3.2.5. Working Paper 19 on Climate Change and Greenhouse Gas Emissions

WP19 explored the issue of climate change and greenhouse gas (GHG) emissions as both a risk and opportunity. It noted

“global warming does have important implications for crop-livestock-agroforestry (CLT) land-use systems. From a national policy perspective, research on which promotes carbon sequestration benefits can be expected to rank highly amongst the various non-market benefits of agroforestry. Research into cropping, including in upland areas, establishing permanent pastures in areas subject to frequent wildfires, and carbon sequestration from afforestation and plantation forestry would tie up carbon in trees and soils for many years.”

The literature reviewed covered the impacts and risks of climate change generally and with specific reference to the Pacific Island Countries. It described economic perspectives on combatting climate change, the international responses to climate change, measures adopted by PICs to mitigate and adapt to climate change, experience with specific GHG program, methods and projects. It also explored the feasibility of applying economic analysis to Fiji’s climate change mitigation measures.

In that context the paper reveals policies and other measures introduced in Fiji:

- The Ministry of Economy, Government of the Republic of Fiji (2018) released the Fiji Low Emission Development Strategy (LEDS) 2018-2050 which reports a central goal of reaching net zero carbon emissions across all sectors of the economy by 2050.
- REDD-Plus policy (Ministry of Primary Industries, Fiji (2011), in which (p. 11) it is noted that the national REDD+ programme and activities of the emissions reduction (ER) program ‘are important components of recent national plans and strategies, most of which are forward looking plans. These include the 5-year and 20-year National Development Plan (NDP) 2017-2036; Low Emission Development Strategy (LEDS); enhanced NDC (to be submitted in 2020); and the new National Climate Change Policy (2018-2030)’.
- Forest Carbon Partnership Facility of the Ministry of Forestry, Republic of Fiji (2018, 2019) noted that the national Emissions Reductions Program is designed to strengthen the resilience of communities against the impacts of climate change. Under the National Adaptation Plan Framework, the REDD+ Policy has the dual role in climate change of *mitigation* and *adaptation*. The emission reductions (ER) program has a focus on the islands of Viti Levu, Vanua Levu and Taveuni. The main drivers of deforestation and forest degradation have been identified as forest conversion to agriculture; traditional use of forests; poorly planned infrastructure development; conventional logging; natural disasters; invasive species; and mining.

WP19 noted that climate change is of particular concern for Pacific Island Countries which need assistance to reduce greenhouse gas emissions. Climate change poses a threat to food security and trade to these countries. Fiji has taken a prominent role in promoting climate action, being particularly concerned about sea-level rise.

## **4. Policy relevant observations from planning trip in 2018**

In December 2018 the project team undertook a visit to Fiji for the purpose of project planning, to establish connections with key stakeholders and initiate research activities. While not specifically aimed at policy issues, several of the activities revealed areas of policy research interest and potential 'hot topics'. The trip involved site visits, a two-day workshop, meetings with landholders and meetings with the Government. A trip report was made.

Various presentations were made during the workshop including on key legal and policy issues.

A group Strengths, Weaknesses, Opportunities and Threats (SWOT) exercise was undertaken at the planning workshop. A SWOT analysis is a subjective assessment and it was undertaken with the objective of reaching a shared view on favourable features and limitations of making greater use of Fiji sloping lands for crop, livestock and tree (CLT) agroforestry systems. Strengths are the outcomes that a project or activity is designed to achieve - basically the reasons for an activity or investment. Opportunities are favourable outcomes other than the core design benefits of the activity which might be possible. Weaknesses and threats approximate the constraints in achieving intended goals - what may be difficult to achieve, and what adverse outcomes are to be guarded against.

The workshop participants were asked to explore the question: what are the Strengths, Weaknesses, Opportunities and Threats to CLT agroforestry on sloping lands in Fiji? Participants first undertook a brainstorming exercise to list all strengths, weaknesses, opportunities and threats and were then asked to prioritise these, based on an allocation of 11 'points' which they could assign to their most important issues. The list of all SWOTs and point allocations are presented in Table 3 with a more detailed summary of the highest ranked SWOTs provided in Table 4.

The SWOT analysis covered all aspects of CLT agroforestry systems (AFSs). Some were directly related to policy issues while others pointed towards policy change.

The then newly appointed Permanent Secretary for Forests, Mr Pene Baleinabuli, attended the second day of the workshop and expressed a high level of personal interest in the aims of the project and a follow-up meeting was later held to explore key issues and project administration amongst other things. At that meeting the Permanent Secretary highlighted the new dimensions and directions for the Ministry of Forestry (MoF), focussing on livelihoods and sustainable management and economic development. The inter-sector challenges of agroforestry were raised at the meeting and the idea of forming a reference committee for the project was proposed. The outcome of the meeting was that a draft cabinet submission should be drafted explaining the project and requesting inter-ministerial support for it, noting the important roles of the Ministry of Agriculture, Itaukei Affairs and others.

Following that meeting the team undertook a number of site visits around the island of Suva. This involved stops at stations of the Ministries of Forestry and Agriculture, sawmills, small and large farms and agricultural enterprises, research sites of NGOs and donor funded projects and at *ad hoc* locations of interest.

Together these, albeit limited, activities garnered information on policy-oriented themes. Which can be summarised under the following headings.

### **A. Policy Issues**

- Agroforestry does have a 'home' in Focus III of the Forest Policy, but it is not a major part. The focus areas are:
  - Sustainable Forest Management;
  - Plantation Development; and
  - Product development (including value adding).
- Agroforestry is mentioned in the latest agricultural policy document but there is still limited agroforestry in Fiji; this suggests the policy is not effective;
- There is no land use policy that designates where agricultural land ends and forest land begins;
- The main policy drivers dominating policy discourse at present are REDD+ and the IUCN red list; and
- Log export ban has been in place for 10 years, which has reduced timber production and perhaps impacted the perception of the value of forestry.

### **B. There is low interest in Mataqali communities for tree planting**

- Monetary gain is a much stronger motivation than conservation. This should be a positive for agroforestry which can be about both.
- Communities have high expectations about benefits from forestry and agroforestry, but expect this can be achieved with low effort and inputs.
- Landholders are generally not interested and have limited capacity. They are highly dependent on Ministry employees to manage plots and on NGOs generally.

- There is lack of long-term land-use planning. People change their minds about what they want to do on replanted land and may kill the trees, usually with fire, to change land use.
- After planting, the Ministry of Forests remains engaged with the community for 2-3 years, but after the Ministry leaves, the communities lose interest.
- Internal problems and conflicts within communities makes the successful establishment of plantings or nurseries difficult.
- If communities get angry with the planting arrangements or with each other, they burn the planting!

### C. Planning issues

- Plantations are often planted in inappropriate areas that are being used, or will be used, by local communities for other purposes, for example, cattle or medicinal plants. There was little recognition or understanding that these can be managed together and silvopastoral or agroforestry systems.
- Communities need incentives to plant trees. The Ministry should provide incentives consistent with a village plan, e.g. distribute cash for scholarships for kids if that is what they want.

### D. Governance issues

- Ministry of Forests only manages trees, not land, and there are many divisions, with different roles between them.
- The Ministry of Agriculture has a broader extension program than the Ministry of Forests; both crop and livestock extension. One of their main extension objectives is poverty reduction.
- Programs often depend on donors and are not self-sustaining.
- When the Ministry of Forests visits a community, they don't talk trees. Trees enter the discussion as a way to support what the community really wants, e.g., electricity and water.
- Social relations, power and influence play an important role in some aspects, such as favourable or preferential access to land, special land lease rates and the level and management of risk (e.g. fire) and conflict.

### E. Gender

- All villages are different, and a 'cookie-cutter' approach cannot be used.
- The social roles of men and women should be determined on the basis of the norms and values of the culture of the society.
- Proposed interventions must be culturally appropriate and the impacts of them on the existing roles of people (men, women and youth) must be understood.
- Men and women will have different preferences about crops, trees and animals.
- Youth may be particularly motivated by cash crops (such as kava).
- There needs to be a social acceptance of recommended species if agroforestry is to be successful.

### F. Value chains

- The role of seed, wood and cattle traders needs to be better understood.
- There are enough sawmills, but other areas of possible value chains are under-developed.



Figure 1: SWOT analysis

Table 3: Brainstorming list of SWOTs and point allocation

Strengths		Weaknesses	
Issue	Tally	Issue	Tally
Long term enrichment on soil/environment	6	Expensive system to start and maintain (if with no external support)	5
Land protection and ecological benefits	5	Unrealistic farmers' expectations	5
Increase forest cover	5	Complex Systems	4
Cash crops and capital assets	4	Its experimental/developmental	4
More market choices	4	Labour demanding	3
Combines old (familiar) and new approaches	3	Takes a long time to research the system	3
Optimal use of limited available land (much degraded land is available?)	3	Lack of current knowledge (need to extension)	2
Complementary species mix	2	Reduces short term income and delays to longer term profit	1
Multiple products	2	High risk	1
Multiple time frame - short, medium long term production for farmer	2	Low fertility base	1
Increased food supply	2	Proximity to processors	1
Combinations of crops, trees and livestock possible	1	Opportunity cost of business as usual	0
National socio-economic development	1	Lower yields on low quality sites	0
More resilience in land use (including to natural disasters)	1	May need to borrow but limited access to finance	0
Low competition between land uses (but what about mining?)	1		
New technology choices/options	0		
Utilises available labour	0		
Opportunities		Threats	
Issue	Tally	Issue	Tally
Earn and income from underutilised land	18	Community conflict	7
Improved rural livelihoods/national wealth	4	Insecure land tenure	6
High interest in planting trees	3	Fire	4
Improved quality of living conditions such as clean air, water quality, and visual amenity etc	3	Community mindset	2
Opportunity for SME partnerships	3	Vulnerable to natural disasters	2
PES/Carbon sequestration	2	Lack of awareness	2
Attract support from financial institutions	2	Red tape	1
Increased GDP in sectors (complementary) leading to increased budgets	2	Theft	1
Eco tourism	1	Market uncertainty (especially long term crops)	1
Contribute to international obligations and targets	1	Unknown pests and diseases	1
Improved research/education in Fiji agroforestry	1	Political influence and change	1
Attract donor funding	0	Government budget/resources	
Employment		Climate Change	
Labour saving		Donor funding withdraw	
Scaling up		Project withdraw – trickle down affect	
Rural development		Donor discourse	
Product industry development		Fiscal/non fiscal trade barriers	
Export potential		International market standards	
Increased 'brand Fiji' products, e.g to resorts		Inability to pay back loans	
Integrated pest management		Lack of processing capacity	
Opportunity for farmer cluster groups		High interest rates	

Table 4: SWOT Analysis results for Crop-Livestock-Tree (CLT) Systems

Strengths	Weaknesses
CLTs can be adapted to different types of landscapes through selection of appropriate and complimentary crops, animal and trees species. They produce multiple products in different time frames, giving more market choices. Combined, crops, trees and livestock generate cash crops and capital assets supporting immediate and long-term needs of farmers.	CLTs are more complex and can be more expensive to start and maintain. There is a high opportunity cost of business as usual (non-use). Farmers and other investors in CLT may need to borrow to finance their activities, however there is currently limited access to finance; such approaches may be seen as high risk by lending Institutions.
CLTs provide potential environmental co-benefits such as soil enrichment, protection of land, and increases to forest cover. Through their diversity in products and timeframes, CLTs may be more resilient, to natural disasters and climate change.	CLT is experimental and developmental in Fiji. While there is some experience, the results of new research can take a long time, to show the benefits, especially from tree growing. While agroforestry systems are familiar in Fiji, there is a lack of experience with CLT systems and extension services will be needed.
With limited high-quality arable land in Fiji, well designed CLT systems can better use the available less-productive land and potentially restore degraded land. It has the advantage of having few competing land uses. CLT has the advantage over other systems, of being a familiar land -use concept, making adoption of new technology easier.	Past agroforestry programs have occurred on medium to high productive land. Farmer expectations for CLT on degraded sloping lands may be unrealistic because these lands have lower fertility and will result in lower yields. There will be trade-offs between short term income from crops and livestock against longer term profits, e.g. from tree products.
CLT agroforestry can help achieve a number of national socio-economic development objectives, including increased local food production and availability of higher quality more nutritious food, with associated health benefits.	There is some processing capacity in Fiji, but industry development will be needed for new product value chains. Proximity to processors and the logistics, within Fiji and to export markets may pose some constraints. CLT and processing of products may require increases in available and skilled labour
Opportunities	Threats
CLTs can improve livelihoods and support rural development. They provide an opportunity to improve the productivity of underutilised land. CLTs support employment opportunities but can also potentially be labour saving.	Unclear and complex land tenure may increase the cost of CLT systems and result in community conflict if land use rights are not clearly established. Lack of awareness and community mindset may hinder CLT agroforestry uptake.
There is scope to design CLTs to deliver co-benefits with direct value to farmers such as PES for watershed protection and carbon sequestration and that also deliver broader benefits, such as improved quality of living conditions such as clean air, water quality, and visual amenity etc. They can also contribute to global targets and Fiji's international obligations.	If left unmanaged, CLT systems may be vulnerable to a number of risks associated with natural and human-induced fire, other natural disasters, unknown pests and diseases and climate change.
CLTs are an attractive development tool. They directly benefit farmers and have potential to grow local industry and partnerships between farmers and SMEs. They may generate support from donor partners and build confidence of the financial sector for lending programs.	New donor and political discourse supporting agroforestry, and the withdrawal of donor funding may impact already limited government budgets and resources to provide technical support and administration of CLT systems, excessive red-tape along products value chains, may limit the uptake and value gained.
Increased national wealth and GDP in the agriculture, forestry and processing sectors will increase departmental budgets which will in turn support improved development and implementation of policy and research/education in agroforestry in Fiji. Flow-on effects should see increased community interest in planting trees.	With new crops, especially long-term crops, there will be market uncertainty. Lack of processing capacity may inhibit value-addition in the short term. International markets standards and fiscal and non-fiscal trade barriers exist and will need to be addressed.

## 5. Current policy settings

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This section describes key areas where policy or governance settings have changed since the planning trip and working papers were drafted (2019), to June 2022. It reflects on some of the findings and recommendations from the earlier work and observations made in the field.

### 5.1. Forests

In the May 2022 Standing Committee on Natural Resources (SCNR) reviewed the Ministry of Forestry Annual Reports for 2016–2017, 2017–2018 and 2018–2019, that were tabled in late 2021, and handed down a short report with appendices (SCNR 2022). Those documents provide updates from Ministry of Forestry on several relevant policy and related areas.

There is very limited to reference to agroforestry in the appendices and not at all in the SCNR report. It is mentioned briefly under the heading of “Reforestation and afforestation” in the MoF 2018-19 Annual Report summary, noting the establishment of four agroforestry plots.<sup>7</sup> Much more emphasis is placed on mass tree planting (refer below). In looking to understand how forestry policies and priorities have changed and are developing, this section draws in the SCNR report and the MoF corporate documents mentioned in it.

#### 5.1.1. Fiji Forest Policy 2007

The Fiji Forest policy (2007) has been slated as ‘under revision’ for many years and this review found no evidence that this has progressed. The SCNR (2022) asked about progress against the Fiji Forest Policy, to which the Ministry of Forestry responded:

“The Ministry continues to implement the components of the Fiji Forest Policy 2007 through the implementation of its 13-year Strategic Development Plan and Annual Operational Plans.

The review of the Forest Act 1992 and relevant regulations will also enable the full implementation of the Policy which are currently limited.

The Policy promotes the shift to a sustainable forest management regime which is what the Ministry aspires to on a daily basis with its vision and mission statements. (Vision: Sustainable Forests, Our Future; Mission: To be a leader in sustainable forestry).

The last audit of the 2007 Forest Policy was carried out in 2019. 77% of the recommendations have been implemented/partially implemented and the Ministry continues to work towards addressing the recommendations provided as the result of the Audit.”

#### 5.1.2. The Forest Act

A Forest Bill was introduced in 2016 to review the Forest Act but it did not come into effect. That bill made no specific reference to agroforestry but has the following important inclusions:

- Inter-ministerial representation:
  - Article 6 requires that the Forestry Board includes, amongst other members, at least one representative from each of the department of agriculture, the iTaukei Land Trust Board and the department of environment.
- Forest Management Licences
  - Article 21.
    - (1) The Conservator shall issue Forest Management Licences for the purposes of creating long term tenures for persons, organisations or companies which can demonstrate a commitment to sustainable forest management in the planting and harvesting of trees within a forest plantation.
    - (2) A person may apply for a Forest Management Licence in the approved form accompanied by any such fees or information required by the Conservator.
    - (3) The duration of a Forest Management Licence may coincide with the term of the applicable land tenure.

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<sup>7</sup> Four agroforestry plots were established in the following locations: Vuma Village, Levuka; Dawasamu, Secondary School; Vunivaivai, Nakelo; and Yale Kadavu collaboration with USP.



- (4) The Forest Management Licence may contain such terms and conditions as the Conservator deems appropriate.
  - (5) A person must not operate or conduct activities for the purposes of maintaining a forest plantation except with a Forest Management Licence issued under this section.
- Article 2 defines Plantation:

“forest plantations” means forest stands established by planting or seeding in the process of afforestation or reforestation which are either of introduced species (all planted stands) or intensively managed stands of indigenous species”

The bill was revised in 2017, “except in the area of Carbon trade” which “required the enactment of the Climate Change Act 2021 (CC Act). Having the CC Act in place, the Forest Act was reviewed accordingly, and an emission reduction component added to include the responsibility of the Ministry under the CC Act. The Review of the 1992 Act has now been finalised and awaiting vetting by the SGs Office.” (Appendix SCNR 2022)

In 2021 a review of the Forest Act was again announced, to bring it into alignment with the Climate Change Act 2021.<sup>8</sup> The Climate Change Act is summarised below.

The SCNR noted that the Forest Bill No: 13 of 2016 had not been passed by Parliament and recommended that it be passed to allow for enactment. The Committee further noted the lapse of the current internal polices, laws and regulations.

### 5.1.3. Plantation Forest Policy

The 2022 SCNR report handed down six specific recommendations, the second of which was: “**Planted Forest Policy - The Committee recommends the Ministry to raise awareness and encourage the people to plant more trees**”. The Committee asked the Ministry of Forestry, in reference to the 2016-2017 Annual report<sup>9</sup>, for further detail on ‘**Planted Forests Policy**’ in terms of what the policy covers and who the beneficiaries of this policy are, to which MoF responded (emphasis added):

“The Planted Forest Policy is still a draft which needs to be reviewed to include current forest sector priorities, both national and international. The scale of plantations can only be determined following a National Forest Inventory to gauge domestic needs and economic performance expected from the sector. This will determine the extent of plantations required to substitute removals from native forest for timber needs.

This Planted Forest Policy will guide the establishment and development of new plantation enterprises involving teak and sandalwood, existing commercial-scale plantation forests within both Fiji Pine Limited (FPL) and Fiji Hardwood Corporation Limited (FHCL) lease areas, new plantation development for the production of fuel wood, fibre, bio-fuels as well as carbon forests, **community forests, small scale tree planting schemes, agroforestry including food forests, urban forestry and private woodlots**. This will ease the burden on native forests, allowing them to provide services such as sequestering carbon, improving biodiversity values and the maintenance of other environmental services, with timber being a lesser by-product.

The potential for a considerable increase in the extent and area of planted forest management is significant and there is sufficient under-utilised land in Fiji that can accommodate these new developments. However, there is a **need for a clear and coherent national policy framework to guide strategic actions and investments in these planted forests to reposition forestry as a desirable and sustainable land use**.

The beneficiaries include current and developing plantation industries, landowners with idle land and willing to develop plantations, woodlots, Agroforestry and sandalwood farms, etc. Without formal leasing of land, these landowners can attract investors to partner with for long term economic development. The investors, forest sector, government and the nation will also benefit from this Policy.”

With regards to Tree Improvement’ and Private woodlots, MoF noted, inter alia:

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<sup>8</sup> <https://www.forestry.gov.fj/pressdetail.php?id=90>

<sup>9</sup> My understanding is this was the first Annual Report after the establishment of the Ministry of Forestry as a stand-alone Ministry.

“Apart from the above [referring to pine trials], the Ministry of Forestry through the Reforestation of Degraded Forest (RDF) project is also working with communities to establish their own plantation forests. The 30MT15Y tree planting initiatives supports the RDF activities through the planting of trees in other areas.”

#### 5.1.4. Mass Tree Planting

In 2019 a program to plant 4 Million Trees in 4 Years (4MT4Y) was launched to help address climate change. The Government noted that the initiative had resulted in the planting of almost one million trees in nine months. In September 2019, Prime Minister Bainimarama announced a new target of 30 million trees in 15 years (30MT15Y) whilst attending the United Nations General Assembly in New York. The 30MT15Y tree planting initiative is part of Fiji’s push for a green economy and recovery from the ongoing impacts of climate change as well the recent impacts of COVID-19 which saw more than 120 thousand Fijians lose their jobs with many returning to their respective villages utilising land and sea resources.

The tree planting is being [digitally captured](#), and in January 2022 it was reported that 8 million trees and mangroves had been planted across Fiji over the preceding 36 months.<sup>10</sup>

Agroforestry projects are taking place under 30MT15Y and have prompted announcements about the value and role of agroforestry<sup>11</sup>, for example:

“Permanent Secretary for Forestry, Pene Baleinabuli said **“Agroforestry bridges the gap that often separates agriculture and forestry by building integrated systems that address both environment and socio-economic objectives. Agroforestry can also improve the resiliency of agriculture systems and mitigate the impacts of Climate Change”**.

#### 5.1.5. Institutional Settings

The Annual Operational Plan for MoF, 2021/2022, included amongst its functional divisions and sections one aimed at “Afforestation, Reforestation and Agroforestry”, with roles including:

- Provide extension/advisory services & raising awareness
- Reforestation & afforestation activities
- Promote Agroforestry

The outcomes and performance targets of the plan are set out against the SDGs and include several relevant to this study which are summarised in Table 5.

The plan includes reference to the ‘Draft Forests Plantation Policy’ under the list of legislation, regulations, policies, plans and manuals that guide MAF in its daily operations, but completion of that draft policy is not an action in the operational plan.

**Table 5: Summary of relevant outcomes, outputs and performance targets in MoF, 2021-2022**

Strategic Priority	Outputs	KPIs
Cohesive Legislation, Regulation, Policy, Guidelines & Compliance	Enactment of the Forest Bill by 2021 to support the Forest Policy.	Promulgation of Forest Decree by 2021
Enhance Sustainable Forests Management Frameworks and Implementation of SFM	Reforestation of Degraded Areas Programme implemented 2 Million Trees (2021- 2022 target) planted by July 2022.	Production of 1600 kg of native, exotic, coastal, sandalwood and fruit tree seeds. Reforestation of deforested areas (target of 2 million trees)
Capacity Building	Non-wood/timber species are developed. One Non-wood Product Industry developed by 2024.	Research on the properties and potential uses of wood and non-wood species.
Stewardship	Agroforestry integrated in forestry and agricultural practices.	Agroforestry strategy developed by 2023 Demonstration of Climate Smart Agriculture (Agroforestry) established in the 3 divisions (6 demo plots)

<sup>10</sup> [https://www.forestry.gov.fj/docs/news/ForestFocus\\_JanIssue\\_2022%20FINALv2.pdf](https://www.forestry.gov.fj/docs/news/ForestFocus_JanIssue_2022%20FINALv2.pdf)

<sup>11</sup> <https://www.forestry.gov.fj/pressdetail.php?id=112>

## 5.2. Agriculture

### 5.2.1. Agriculture 5 Year Strategic Development Plan 2019 - 2023

The Ministry of Agriculture's 5-year Strategic Development Plan (SDP) 2019-2023 (MoA 2019) aims to build a "sustainable, competitive and resilient agriculture sector" and contribute to building a vibrant and progressive nation. The SDP is linked to Government's 5-year and 20-year National Development Plan (NDP) and contributes to two national targets:

- 1) Every Fijian has access to adequate food of acceptable quality and nutritional value and;
- 2) a competitive, sustainable and value-adding non-sugar agriculture" promoting food self-sufficiency and the production of those agricultural products where Fiji has a competitive advantage. This will be achieved through five key strategic priorities: food nutrition, sustainable livelihoods, climate resilience, commercial agriculture and strengthened service provision.

The SDP lists interventions that are general, but are relevant in the context of this study:

- i. A holistic approach for managing food security and resilient food systems. This will be supported through an integrated framework of policies, programs, incentives and infrastructure investments.
- ii. **Strengthening transition of smallholder farmers to commercial level.** The SDP includes strategies for farmers to view agriculture as a business. There are commodity plans for each product which identify market supply and demand. Enabling policy and regulatory environment which will encourage youth and women participation in agriculture, increase production of Bilateral Quarantine Agreement (BQA) commodities, organic agriculture, livestock sector development, improved farm mechanisation and enhanced Public Private Partnership (PPP).

**Agroforestry is mentioned under Strategic Priority 3 "Climate Smart Agriculture"** which states "there will be support for sustainable land management, better soil management, integration of traditional and modern farming practices, water-use efficiency and agroforestry"

Under Strategic Priority 4 "Establish and Improve Commercial Agriculture" it is planned that Ministry of Agriculture will develop clear frameworks for contract farming, organising farmer clusters with Fiji Crop and Livestock Council (FCLC) and incentivise public-private partnerships.

The SDP understandably has a strong emphasis on crops and livestock and other than the one mention under SP3 it is largely silent on agroforestry. Fruit-tree growing in orchards is part of the strategy but there is no mention of wood of non-timber forest products that might be grown in agroforestry systems.

As the Forestry Plans also includes agroforestry and fruit trees, there is overlap and potential synergy here.

The SDP "provides space for collaboration" including with other organisations and Ministries.

Agroforestry generally, and sloping land agroforestry technology in particular, was highlighted in Fiji 2020 Agriculture Sector Policy Agenda, but this appears to have diminished in the current strategy.

### 5.2.2. UN Food Systems Summit 2021<sup>12</sup>

In 2019, the UN Secretary-General called for a Food Systems Summit and engagement process to unleash the power of food and deliver progress on all 17 UN Sustainable Development Goals (SDGs). Each Member State was invited to initiate a programme of progressive national Food Systems Summit Dialogues between November 2020 and May 2021. The following are a synopsis of the dialogues relevant to Fiji, or statements made by Fiji during the summit, with key issues and concepts highlighted:

#### A. Address at the Global Food Summit by Minister for Agriculture, Waterways and Environment - Dr Mahendra Reddy 23rd September, 2021

"Using the SDG as our compass, the success of Fiji's pathway will be denoted by the outcome of these five priorities:

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<sup>12</sup> <https://summitdialogues.org/>

1. Benchmark level of productivity in food systems and healthy, vibrant society with access to safe and nutritious food.
2. Balanced and sustainable equation of green and blue food consumption patterns that fully meet domestic food requirements as well as position Fiji as a net exporter of food.
3. Well-developed and sustainable food production systems that **prevent biodiversity loss**, limited use of inorganic inputs and **replacing monoculture with poly culture farming** practices.
4. Thriving primary sector that is a leading contributor to Fiji's economic growth agenda and is an attractive commercial proposition that ensures a sustainable and equitable livelihood for all.
5. Innovative, efficient, climate smart and resilient food system that is ably positioned to cushion the impact of future shocks.

## B. Horizon 2030 Fiji's Pathway to "A Safe, Resilient, innovative, Food System" September 2021

This unofficial report (not yet approved by the Government of Fiji) set out a draft plan that describes the current status and binding constraints on Fiji's food systems and 'game changing solutions'.

1. Creating an enabling environment for improved **nature-positive food systems: governance, policies and regulations.**
  - Strengthen government capacity to work interactively and collaboratively with other agencies and partners to find better solutions and use best practices.
  - Prioritise investments in key sectors in the food systems such as agriculture, fisheries and forestry; - key areas would be on infrastructure, technology, enhancing output, **diversification** and improving market access.
  - Adoption of the National Food and Nutrition Security Policy and successful implementation of agreed programmes.
  - **Optimise policies and put in plans in place across different agencies to promote ease of doing business in primary sectors** towards achieving our 2030 aspirations.
2. Increasing access to health food: Blue and **Green Foods** to transform and sustain nature-positive food systems while protecting vulnerable ecosystems.
  - Promote release of arable land for agriculture production.
  - Promote use of technology through incentives and other schemes to improve productivity.
  - Enhance knowledge on farming options according to weather and soil type and the benefits of protection of ecosystems and biodiversity.
  - Develop and promote models of **organic food, forestry or agroforestry systems** with processing facilities and business management plans for the retail of nutritious local food products that can easily scaled up for communities and/or down to fit into Home Gardens.
3. Upscaling Processing and reducing food waste
4. Tapping into **emerging market opportunities**
5. Building resilience
  - Climate smart practices and technologies to be promoted and adopted across the primary sectors, learning from other countries on their successful programmes and adopting benchmark practices.
  - Promote regenerative agriculture, and **support communities to plant a diversity of trees, crops and integrating livestock activities in degraded areas to complement reforestation and sustain ecosystem services.**
  - Provide an effective, multi-pronged rehabilitation support package to primary sector producers to bounce back quicker from external shocks such as natural disasters
  - **Achieve sustainable multiple trees and/or cropping system, based on local traditional plant biodiversity and market's demands to promote high value ecosystems that are beneficial for people and the environment.**
  - Provide technical assistance for the diversification of productive activity to farmers and fishers to promote resilience.
6. Finance and Insurance

7. Technology and digital solutions
8. Inclusiveness- women and youth
9. Research driven innovation and growth, *inter alia*
  - Enhance extension capability, to translate and disseminate innovative practices and technologies, and train farmers, fishers and foresters across the country to make better informed decisions.
10. Improving land utilisation
  - Promote smart and innovative ways of making large size arable iTLTB land available to producers for longer term (99-year lease for example) whilst ensuring resource owners (landowners) are treated as partners and get an equitable return to achieve an improved quality of life and enhanced livelihoods (win-win solution).
  - Provide effective rehabilitation methodology where needed and facilitating accessibility through iTLTB.
  - Provide support for land preparation and assistance to proper land use planning and adoption of sustainable practices in the long-term, and **commitment to integrated approaches for land management.**
11. Education and Behavioural Changes
12. Capacity development across food systems

**C. Action Track 1 Food Systems Stakeholders Dialogue (convened by Permanent Secretary-Ritesh Dass-Ministry of Agriculture; Chaired by the Fiji Ministry of Health and Medical Services)**

The Dialogue focused on a comprehensive exploration of Fiji's food systems. Relevant finding included:

- Fiji needs to transform its mindset by focusing on a whole-of-society approach and build capacities on systems thinking.
- There is a need to **identify linkages, break silos**, improve food supply chain (market, transport, infrastructure etc) and reposition and market healthy foods to make them more appealing. There is also a need to **relook at government policies to support transformation.**
- Opportunities to increase income across the food systems need to be reconstructed and rebuilt to identify the root causes of poverty. There is a need to invest more in the next generation in communities while addressing policies.
- Lack of access to land for people to be able to grow their crops and get fresh foods is a key aspect related to poverty in Fiji.

**D. Action Track 2- Shift to sustainable consumption patterns (convened by Permanent Secretary-Ritesh Dass-Ministry of Agriculture)**

**E. Action Track 3 - Nature Positive Production (convened by Permanent Secretary-Ritesh Dass-Ministry of Agriculture; Chaired by the Fiji Ministry of Forestry)**

- Nature-based solutions will lead to optimally utilized resources through the realization of economic potential in food forest nutrition.
- **Food forests** are complex systems that may have from 3-9 layers with tall trees that act as wind breakers, smaller trees such as nut and spice trees, shrubs and groundcovers. They have the potential to greatly contribute to the economy providing trees to people willing to buy and processing plants and other products to end users that are sold at retail outlets.
- Food systems play a huge part in the local ecosystems and would be beneficial for the environment for stakeholders in the food systems to investigate innovative ways of ensuring a safer and healthier environment. Natural ecosystems are amply recognised as part of the food systems in the rural areas but not so much in urban regions. For example, **forests are important not only to produce forest products but also for productivity of agriculture, helps to avoid soil degradation, capture water, mangroves, all species...**Community awareness needed for people to understand the importance of protecting the forest as unique space for biodiversity e.g. tree frogs, or plants, protection of watershed/water sources etc. and increase their knowledge and skills for managing sustainably land & forest (**restoring degraded land areas, participating in agroforestry systems** etc.).
- **Combined systems with trees, animals and crops (agroforestry, agrosilvicultural, silvopastoral etc.)** were identified in the discussion as **essential when managing existing**

**food production systems to benefit both nature and people.** Other important aspects that need some improvements in the food system are soil conservation, a seed system and prioritizing efforts to include Nutrition as a priority in the Food Systems, with better access (transport, distribution etc.) to nature fresh foods prioritized for consumption versus commodities as flour, rice etc.

- There is a range of food production systems and potential products that can be applied successfully to different contexts.
- The smallholder farmers as implementers need to be aware of their farming options and the benefits of protection of ecosystems and biodiversity. **A model based on Food System Clusters placing more management responsibilities on the people and less on the government** was discussed as a potential solution when there is natural a disaster with unexpected challenges towards Food Security and Nutrition.
- Policies from different sectors on different topics related to the food system (food security, climate change, protection of oceans etc.) need to be aligned. **Policy and governance are key to transformation.**

#### F. Action Track 4- Livelihoods and Equity in Fiji (convened by Permanent Secretary-Ritesh Dass-Ministry of Agriculture)

- A snapshot of farmer's distribution in Fiji showed that there are 1,544 (2%) commercial, 3,659 (5%) semi-commercial and 65,970 (93%) subsistence farmers in the country.
- There are many good programmes implemented by various ministries, development agencies, NGOs and faith-based organisations. Coordination and collaboration must be strengthened and there should be stronger monitoring and evaluation mechanisms. Furthermore, the *solesolevaki* (working together) tradition should be encouraged and supported. Most traditional knowledge and sustainable practices are underestimated in providing economic opportunities for people, particularly during the pandemic.
- **Many policies are discussed only at national level but it is really important to be able to contextualise policies to community level and are sustainable.**

### 5.3. Land

Land in Fiji can be categorised as being composed of three main types: freehold, state and iTaukei land. Out of these, about 9% of the land is freehold, 3% is state land and the remaining 88% is iTaukei land (Shah, 2004 in MoWE 2020). Therefore, close to 90% of land space in Fiji is under traditional ownership.

Customary ownership of land is recognised by the Constitution of the Republic of Fiji 2013. Customary land owners are given rights of access and use of land and marine resources in Fiji under the Forest Decree 1992, which secures the customary rights of iTaukei Fijians on iTaukei land and the right to exercise any rights established by custom such as hunting, fishing or collecting fruits and vegetables growing wild.

iTaukei land is governed according to the iTaukei Land Trust Act 1940. Traditionally owned land cannot be for sold. Leases of iTaukei land can be issued for up to 99 years. Any expansion of forest and agricultural land can only take place in accordance with the iTaukei Land Trust Act, taking into account the interests of the local population (LEDS 2018).

#### 5.3.1. Land Bill No. 17 on iTaukei Land

In 2021 Land Bill No. 17 was introduced to amend the iTaukei Land Trust Act 1940. This caused controversy and criticism<sup>13</sup>. Under the iTaukei Land Trust Act anyone leasing land or wanting to make changes has to go through the iTLTB which was 'set up to protect indigenous landowners' rights'. Bill No. 17 proposes that consent of the iTLTB is no longer required for any mortgage, charge, pledge, or caveat, as well as development, like water and electricity access, on registered leases which are properly issued by the iTLTB. This applies for leases initiated with the agreement of landowning communities. Concerns were raised that the Bill would reduce the rights of landowners, lower the value of land and reduce lease payments to landowners.

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<sup>13</sup> See <https://www.rnz.co.nz/international/pacific-news/448102/fiji-govt-urged-to-scrap-plan-to-amend-land-bill>; <https://fijisun.com.fj/2021/07/25/tltb-outlines-the-truth-about-bill-no-17/>; <https://www.theguardian.com/world/2021/aug/04/fijis-political-turmoil-everything-you-need-to-know>

## 5.4. Climate Change

The impacts of climate change, the potential for funds for adaptation and mitigation processes and activities, and the market-based benefits has been, perhaps, the biggest motivator for policy change and progress in Fiji.

The Climate Change and International Cooperation Division (CCICD) of the Ministry of Economy is the responsible national agency for addressing climate change policy in Fiji. The CCICD is guided by the Climate Change Act 2021 and the National Climate Change Policy (NCCP) and works in collaboration with government agencies, non-governmental organisations, regional and international agencies and development partners. Other Ministries have agency specific functions and develop relevant policies, strategies and programs. Table 6 sets out the timeline of Fiji's Climate Change 'policy' action since it ratified the United National Convention on Climate Change in 1998.

Key, and the most recent, policy developments are summarised below, highlighting the aspect that are most relevant to this study.

**Table 6: Timeline of Climate Change Action in Fiji**

Year	Action/Policy	Responsibility/Author
1992	Signed UNFCCC	
1993	Ratified UNFCCC	
1998	Signed and ratified Kyoto Protocol to the UNFCCC	
2009	Fiji National REDD+ Programme began	MAF/ Ministry of Economy (MoE)
2010	Fiji REDD+ Unit established	MAF
2011	National REDD+ Steering Committee established	MAF,
2011	REDD Plus Policy	Ministry of Primary Industries, Dept of Forestry
2012	National Climate Change Policy	Ministry of Foreign Affairs and international Cooperation
2015	ER Readiness began	MAF
2015	Fiji's Intended Nationally Determined Contribution	
2016	Signed and ratified Paris Agreement	
2016	Climate Change and Health Strategic Action Plan 2018-2020	Minister for Health and Medical Services
2017	NDC Implementation Roadmap 2017-2030	Ministry of Economy
2017	National Adaptation Plan Framework	Ministry of Economy
2018	National Low Emission Development Strategy 2018-2050	
2018	National Adaptation Plan	Ministry of Economy
2018	Planned relocation Guidelines	Ministry of Economy
2019	National Climate Change Policy	Ministry of Economy
2019	Displacement Guidelines	Ministry of Economy
2020	Monitoring and Evaluation of Fiji's National Adaptation Plan Process	US NAP Support programme
2020	REDD+ Emissions Reduction Program Benefit Sharing Plan	Conservation International for MAF
2021	Emissions Reduction Payment Agreement (ERPA) with the World bank to operationalize its five-year REDD+ Emission Reduction Program (ERP).	
2021	Climate Change Act	
2022	Fiji National Climate Finance Strategy	

### 5.4.1. National Climate Change Policy 2018-2030

In 2019 the Government of Fiji launched a National Climate Change Policy (NCCP) 2018-2030. The NCCP

“services the ambition, commitments and priorities of Fiji's National Development Plan and Nationally Determined Contribution to the Paris Agreement. The NCCP legitimises, guides, drives, informs, and establishes the governance for delivering Fiji's climate change adaptation and mitigation priorities through the National Adaptation Plan Process and Fiji's long-term Low Emissions Development Strategy.....The objectives and strategies introduced by this policy have been designed to support existing efforts to improve development effectiveness, social infrastructure, public services, and human and environmental protection and recognises

the range of pre-existing government plans designed to support social development objectives and build national resilience.”

The NCCP (p 15) includes a depiction of its coordinating role and its relationships with other cross-government/ministerial policies, which is reproduced in Figure 2. It includes as one of its ten strategies:

8. Sustainable management of forestry supply chains is ensured through robust transparency systems, afforestation targets, and the demarcation of zero-deforestation zones.

The NCCS notes a sustainable forestry sector remains key priority for Fiji’s national climate change response as by reducing unsustainable practices there will be a range of co-benefits in relation to carbon mitigation, biodiversity conservation, ecosystem service protection, livelihoods protection, adaptation capacity, food security, as well as reduced risks of hazard events such as flooding and landslides.

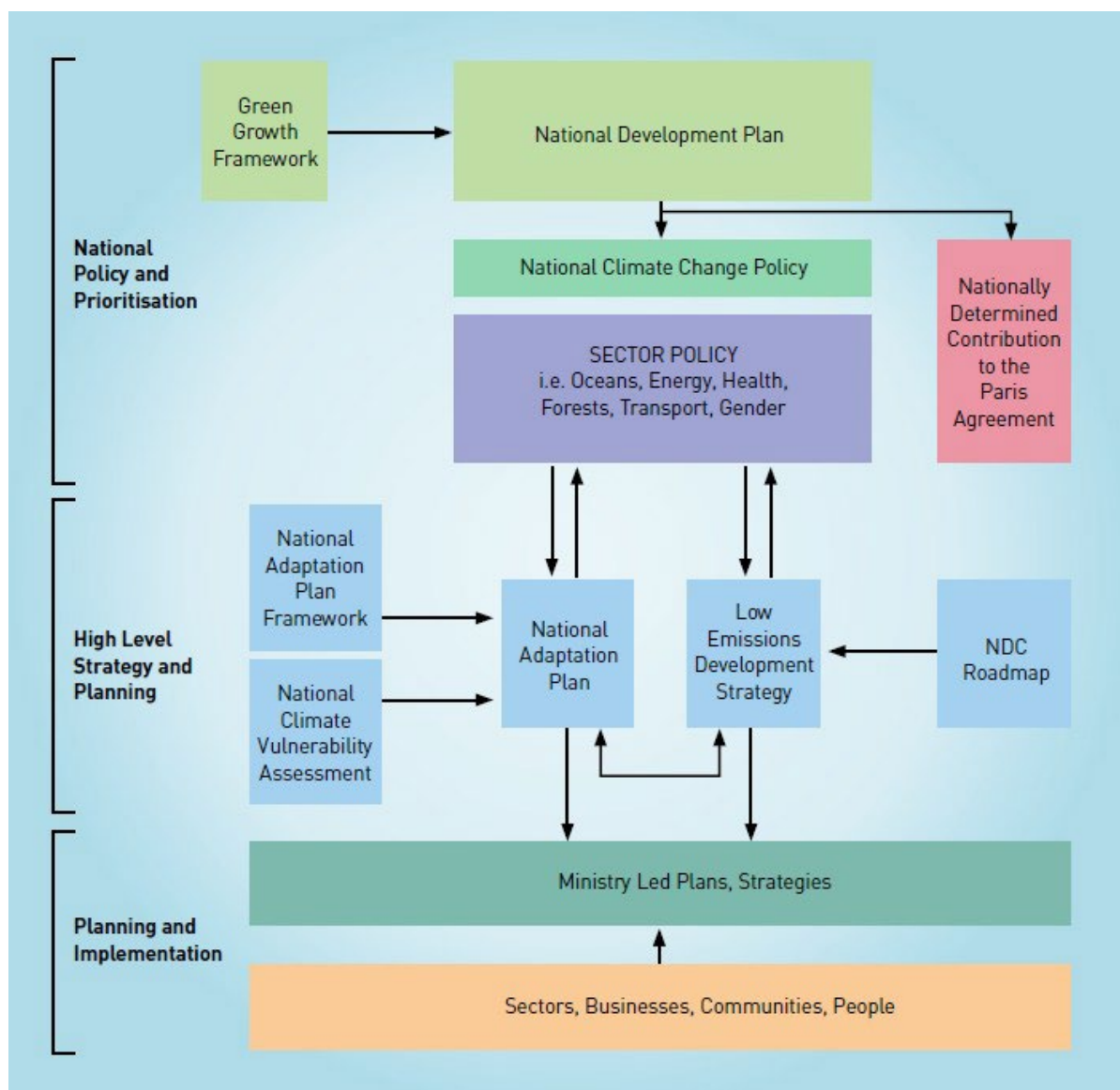


Figure 2: Relationships between key inter-ministerial policies and plans relevant to NCCP

#### 5.4.2. National Adaptation Plan

As the importance of adaptation to climate change gained increased global recognition, the international community established the National Adaptation Plan (NAP) process for Least Developed Countries (LDCs) and for other developing countries. NAPs are considered to be a core vehicle for delivering on adaptation priorities as well as countries’ nationally determined contributions (NDCs) under the Paris Agreement. The NAP process considers interactions between all sectors – and their implications on planning and implementation – in a coordinated and coherent way, offering considerable opportunities



for a more holistic approach to land use and landscapes – a prerequisite for effective adaptation (Meybeck et al 2020).

Fiji released a National Adaptation Plan in 2018.

The contribution of forests and trees to both adaptation and mitigation is linked to, and depends upon, numerous sectoral policies related land and water use such as for land use planning, water management, energy, and agriculture. Due to the fact that it is economy-wide, the NAP process gives the opportunity to examine the interactions between all economic sectors in a coordinated and coherent way. In fact, effective adaptation entails integrating such interactions and drawing consequences for planning and implementation (Meybeck et al 2020).

The NAP is aligned with other international processes and obligations, especially the SDGs. For example, the NAP states:

“The NAP is also expected to substantially support efforts to achieve Goal 15 which is to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification (the agriculture component is especially relevant for fulfilling Fiji’s commitments under the United Nations Convention to Combat Desertification and the new Strategic Framework (2018-2030)), and halt and reverse land degradation and halt biodiversity loss. It does this through its biodiversity and natural environment section which promotes the implementation of the National Biodiversity Strategy and Action Plan, and the promotion of protected areas (including enhancing their management and financing). The section on agriculture under food and nutrition security supports efforts to combat desertification through its focus on sustainable land management and efforts to tackle droughts and floods. The NAP is also expected to support efforts to integrate of ecosystem and biodiversity values into development planning processes through the multi-criteria analysis process. Finally, the biodiversity and natural environment section directly calls for the integration of green and blue accounting/ ecosystem valuations into the GDP formulation and budget process by 2020.”

The need for horizontal integration is acknowledged in the NAP, with “National level mainstreaming by Ministries and Entities” needed to support mobilization and efficient use of resources. Agriculture is a focus and the actions proposed in the NAP seek to enhance resilience through climate-smart agriculture, new agricultural technologies and practices, promoting coordinated multi-stakeholder collaboration regarding the generation of evidence, enhancement of local institutions, utilisation of both scientific and traditional knowledge, as well as an improvement in the coherence between climate and agricultural policies and finance (Lipper et al., 2014, in GoF 2018).

There are various adaptation measures identified for agriculture. Those particularly relevant to this study are:

12.A.6 Promote and integrate climate-smart agriculture (CSA) practices into farming, training, 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 (p 65)

“These CSA practices<sup>91</sup> include integrated farming (Integrated farming systems e.g. contour farming, minimum tillage, cover vegetation, crop rotation) and climate-based crop planning, and are aimed at diversifying crop cultivation, enhancing soil fertility, pest and weed control (e.g. marigold), **expanding agro-forestry practices (e.g. plant shade trees and live fences for grazing of cattle or pigs under tree crops)**, promoting the use of heat, drought, flood and salt resistant varieties and cultivars (e.g. early maturity crops, shorter varieties), climate-resilient livestock breeds (e.g. by selective breeding and artificial insemination AI), increasing the production and awareness of traditional farm approaches (including methods of traditional medicine for livestock) and indigenous crops (which can be grown easily, organically, and are relatively disaster-resilient) and strengthen these through scientific research and toolkits (including investing in scientific capacity and in the capacity of users to demand, interpret and apply scientific outputs effectively (endnote 91).”

“12.A.7 Increase adoption of sustainable soil and land management techniques<sup>93</sup> 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 (p 65).”

“By developing and applying practical on-farm approaches (demonstration sites) for sustainable land and soil management technologies, developing teaching material, strengthening the use of land use planning across soil and climate zones that involves the participation of communities and land users, **introducing alternative crops in association with more sustainable land-use practices, especially on marginal sloping**

**and coastal lands**, increasing coastal and foreshore protection with stones, rocks, mangroves, and coastal forests, and strengthen fire & wind breaks (e.g. bare strips, hedges, trees) especially in dry areas, integrating pest management, controlled livestock grazing, cover crops, soil health, water-run off controls, **integrated crop-livestock farming and agroforestry into farm practices**, and provide user friendly guidelines and incentives for investing in organic farming, including the use of green house and hydroponic systems.” (endnote 93)

16.9 Expand ‘Tree-Planting Campaign’ to encourage voluntary tree and/or mangrove planting activities which are to be conducted as a part of school curriculums, community stewardship and the Corporate Social Responsibility.

### 5.4.3. Low Emission Development Strategy 2018-2050

Fiji introduced a Low Emission Development Strategy in 2018 to define pathways to achieve low emission development in the country until 2050. Forests are core to Fiji’s ambitions as a low emissions pathway. The LED states (p 5)

“Fiji is able to ultimately achieve net negative emissions as a result of extensive afforestation measures, reduced deforestation, and increased use of sustainable forest plantations in the AFOLU sector.”

The GHG emissions, and opportunities to address from forests and agriculture are considered in one ‘accounting group’ used internationally - Agriculture, Forestry and Other Land Uses (AFOLU). While forest and forestry can be both a source and sink of GHGs, Agriculture is viewed in the LEDS only as a source.

It notes as key actions for ‘decarbonisation’ in the AFOLU sector:

- Reduced deforestation and increases in plantation productivity;
- Extensive afforestation; and
- Reduced enteric fermentation, manure management and measures to train farmers in the use of synthetic fertilisers.

Land availability is seen as key to enabling the contributions of forestry and agriculture to reducing emissions, primarily through

“the need for 30,000 ha of agricultural land. In order to increase forest carbon storage, an additional 77,400 ha are recommended for afforestation as part of the introduction of REDD+.

The expansion of agricultural and forestry production areas can only take place in accordance with traditional land use rights in Fiji. In addition to official institutions, local landowners in particular should be involved in the programs and compensated accordingly for the use of their land where necessary. In addition to participatory approaches, the creation of employment and income for the local population, as well as sufficient and fair participation in the profits achieved through land use, are indispensable.”

These actions are expected to be delivered largely by the private sector; with afforestation undertaken by Fiji Pine Ltd, Fiji and Hardwood Ltd (p 244), rather than by individual, households or communities. There is scant mention of agroforestry in the document.

### 5.4.4. Forest and Agriculture Specific Climate Change Policies

Fiji commenced a REDD programme in 2009, set up its REDD+ Unit in 2010 and introduced a REDD policy in 2011. The Conservator of Forests in the MoF is the secretariate for REDD+ in Fiji. The Fiji REDD+ Policy has the overall objective of enhancing the national forest-based carbon balance by (1) supporting and strengthening initiatives that address the drivers of forest-based carbon emissions and (2) encouraging the drivers of forest-based carbon sinks. The Forestry Department - in partnership with private sector players and landowners - is planning to establish about 77,400 ha plantations in Fiji over the next 15 years (LEDS 2018).

#### 5.4.4.1. Forest Carbon Partnership Emissions Reduction Payment Agreement 2021

The Republic of Fiji signed an agreement<sup>14</sup> with the Forest Carbon Partnership Facility (FCPF), a global partnership housed at the World Bank, that will unlock up to US\$12.5 million (approx. FJ\$26 million) in

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<sup>14</sup> <https://www.worldbank.org/en/news/press-release/2021/01/28/world-bank-and-fiji-sign-agreement-to-reduce-forest-emissions-and-boost-climate-resilience>

results-based payments for increasing carbon sequestration and reducing emissions from deforestation and forest degradation. Fiji is the first small island developing state to sign an Emission Reductions Payment Agreement (ERPA) with the FCPF. The five-year agreement will reward efforts to reduce carbon emissions from deforestation and forest degradation under Fiji's ambitious emission reductions program. Both the Ministry of Economy and the Ministry of Forestry play leading roles in this initiative.

Fiji's emission reductions program will address the main drivers of deforestation and forest degradation through integrated land use planning, native forest conservation, and sustainable pine and mahogany plantations. Other aspects will focus on **community-driven afforestation, climate-smart agroforestry, and alternative livelihoods initiatives**. These efforts are designed to provide job opportunities and improve livelihoods for local communities. The program will also include training and agricultural extension services to establish community plantations and woodlots as well as improving kava and vanilla agroforestry systems. These sustainable land-use techniques are expected to help boost incomes while also reducing pressure on forests.

The Agreement (p11) notes:

“Solutions to drivers of deforestation and forest degradation need to address barriers to REDD+ in Fiji and include development of district integrated land use plan, sustainable management, enhancement of forest resources and their conservation. The theory of change assumes that in addressing critical underlying causes of deforestation and forest degradation, the ER-P will strengthen enabling conditions for emissions reduction, and improve forest information systems, measurement, monitoring and reporting. Implementation of REDD+ activities (sustainable forest management, carbon enhancement, **agroforestry** and alternative livelihood as well as forest conservation) will result in improved coordination across sectors, enabling the realisation of Integrated Rural Development Framework. **Cross sectoral coordination** will strengthen sustainable management of forests and encourage private-public sector participation supporting growth of the forest sector. At the same time, efficient program management, reporting and verification of emissions reduction would enhance technical capability of the MOF.

And page 12:

Component 2: Promoting integrated landscape management (~ USD 36.681 million) - this is the core component of the ER-P and aims to implement integrated land use plans at district level; support reduced impact logging, advocate sustainable management of forests in large tracts of forest, and adhere to the FFHCOP over 8,500ha over 5 years. The component also aims to support **restoration of degraded lands through afforestation and reforestation** and to promote Fiji Pine Ltd. managed plantation forestry activities in 2500ha per year (1,219ha above BAU) for five years and Fiji Hardwood Corp. Ltd. managed plantation activities in 478ha above BAU for 3 years (2020-2022). At the same time **community-based afforestation and reforestation activities are proposed in support of the Govt. initiative of 1million tree a year where carbon enhancement planting is expected to cover an estimated 5,750ha by the end of 2024. Activities promoting agroforestry and alternative livelihoods to reduce pressure on forest resource/habitats will also be promoted. Agroforestry will focus on restoration of riparian zones estimated at 5,000ha over 5 years and shade grown agriculture is proposed for implementation in 5,000 ha over 5-year period.** A total area of 36,400 ha is proposed to be set aside as protected area by 2024, The ER program is expected to reduce 9,500ha of deforestation over 5 years of implementation.

Agroforestry and alternative livelihoods are expected to net 270,369 t CO<sub>2</sub>-e over 5 years, from over 6000 ha, in seven provinces, 20 districts and 1000 communities (ER-P, p 13). Interestingly the agency responsible for achieving this is the Ministry of Agriculture.

#### 5.4.5. Climate Change Act 2021

The Republic of Fiji enacted a Climate Change Act in September 2021 to

“Establish a comprehensive response to climate change, to provide for the regulation and governance of the national response to climate change, to introduce a system for the measurement, reporting and verification of greenhouse gas emissions and for related matters.”

The act defines forests”

“forest” includes—

- (a) land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 %, or trees able to reach these thresholds *in situ*;
- (b) areas with bamboo and forest palms provided that the height and canopy cover criteria in paragraph (a) are met;
- (c) forest road, fire breaks and other small open areas;

(d) areas defined by both the presence of trees and the absence of other predominant land uses; and (e) mangrove forest,

**but excludes tree stands in agricultural production systems;**

The Minister for Economy is also the Minister for Climate Change and The Minister has the power to, inter alia:

(43, 1) *introduce and implement regulations, measures and actions with the purpose of limiting or reducing Fiji's greenhouse gas emissions across the economy including the energy, transport, industry, agriculture, forestry, fisheries, waste, tourism, aviation and shipping sectors.*

(43, 2, d) *enhance environmental protection of land and ocean carbon sinks in consultation with the ministers responsible for forests, fisheries, agriculture and environment, including with respect to halting and reversing deforestation and degradation of forests, afforestation initiatives, Fiji's REDD+ initiative, reef and fisheries conservation, mangrove protection and planting initiatives, nature-based coastal protection applications and sustainable agricultural practices;*

The Act recognizes that cross-sector coordination and collaboration must be part of the institutional arrangement to support the national inventory development process. The Act provides clear mandates to the Minister, the Director of Climate Change, and the National Climate Change Coordination Committee ("the Committee") who will govern Fiji's national response to climate change. The Committee is established under the Act to facilitate intra-governmental cooperation on climate action. The Act also provides for the integration of climate change within all government sectors through the appointment of focal points within each ministry, who must report bi-annually to the Director of Climate Change on the implementation of the Act within their ministries.

The Minister for Forestry is responsible for (48):

- (a) developing and updating Fiji's national REDD+ policy and strategy including the development of any national or sub-national REDD+ programme;
- (b) developing the national forest reference emissions level;
- (c) developing policies, procedures and safeguards for the implementation of REDD+ and forest emission reduction projects, programmes and activities with all safeguards to be developed in accordance with sections 28, 29 and 40 of the Constitution, for the benefit of present and future generations;
- (d) Fiji's participation in international REDD+ programmes; and
- (e) developing a benefit sharing arrangement for forest emission reduction projects, programmes and activities.

Emissions reductions methodologies may be developed by the Director and approved by the Minister for Climate Change after consultation with the Minister responsible for forests.

There are specific rules for undertaking and obtaining permission for undertaking emissions reductions activities involving forests on different tenures.

## 5.5. Environment and Water

The Ministry of Waterways and Environment (MoWE) is responsible for a range of tasks from biodiversity conservation and environmental impacts assessments to waste and pollution control, irrigation and watershed management (amongst others).

Fiji has in place a National Biodiversity Strategy and Action Plan 2020-2025 ('NBSAP' MoWE 2020) and there is a Strategic Action plan for the Ministry 2020-2024.

The strategic objective of the Ministry is "Building resilience to climate change and waterways related hazards through irrigation, improved drainage, flood control, riverbank, and coastal protection." In this context forestry and agriculture are viewed, when uncontrolled, as agents of damage in the upper catchments but also as important ecosystems (in the case of forest) and as providing solution to climate change (when done in the right way).

Agroforestry is not mentioned in either the NBSAP or the strategic action plan.

MoWE is responsible for the GEF funded Ridge to Reef project which aims to preserve biodiversity, ecosystem services, sequester carbon, improve climate resilience, and sustain livelihoods through a ridge-to-reef management of priority water catchments on the two main islands of Fiji. It includes, amongst other things "the adoption of appropriate sustainable land use practices and riparian restoration in adjoining upstream watersheds as well as terrestrial PAs, restored and rehabilitated forests. These terrestrial PAs, coupled with an increase in the permanent native forest estate, including

through assisted natural reforestation of degraded grasslands, will contribute to Fiji's REDD+ strategy through an increase in forest carbon stocks".

### 5.5.1. Institutional settings in MoWE

Members of the National Environment Council as outlined in the Environment Management Act (Section 7) include:

- a) Chief Executive Officer responsible for the Ministry of Environment as the Chairperson;
- b) Chief Executive Officers for the Ministries responsible for Lands, Mineral Resources, Agriculture, Fisheries or Forests;
- c) Chief Executive Officer for the Ministry responsible for Fijian Affairs;
- d) General Manager of the iTaukei Land Trust Board;
- e) Chief Executive Officer of the Ministry responsible for Health;
- f) Chief Executive Officer of the Ministry responsible for Tourism;
- g) President of the Local Government Association;
- h) A member to represent the interests of non-governmental organisations;
- i) 2 members, one to represent the interests of the general business community and one
- j) to represent the manufacturing industries; and
- k) A member to represent the interests of the academic community.

## 5.6. Trade

The Fijian Trade Policy Framework 2015-2025 was published in 2015. It is premised on the following guiding principles:

- Maintain coherence with national policies and laws;
- Pro-growth and Pro-development;
- Job creation and poverty alleviation ;
- Raising the standard of living for all Fijians;
- An enabling and open business environment for private sector growth;
- Export growth and diversification, and enhancement of international competitiveness;
- Sound and stable fiscal and balance of payment position;
- Promote competitiveness of domestic firms and enhancement of domestic production and service provision;
- Improve human capital and technical skills; and
- Ensure sustainable development and environmental protection

It has ten policy objectives:

1. To transform Fiji into a vibrant, diversified and internationally competitive export-led growth oriented economy, by enhancing the performance of the manufacturing and services sectors contribution to economic growth, as well as, focusing on other growth areas in the priority sectors;
2. To facilitate the engagement of Fiji in bilateral, regional and multilateral trade frameworks with a view to expand and securing meaningful market access for Fiji's growing industrial base and integrate the Fijian economy into the global trading environment;
3. To use trade policy to contribute to creating the conditions for the sustained increase in the contribution of investment and the increase in total factor productivity (i.e. the efficiency with which the economy utilizes its available resources), that will be required in order for Fiji to realize its long term growth aspirations;
4. To stimulate and encourage value-addition activities through research and development with a view to increasing national export earnings, improve current account position and creating employment opportunities;
5. To assist domestic firms to increase their levels of efficiency and competitiveness, and therefore withstand increasing competition in domestic and international markets;
6. To facilitate for the growth of the micro, small and medium enterprises development as backbone of the Fijian economy;

7. To support the improvement of trade related infrastructure aimed at facilitating the smooth flow of trade thereby reducing the cost of doing business, positioning Fiji as a strategic location for global value chains and hub of the Pacific.
8. To support investment promotion and facilitation aspects to attract both domestic and foreign direct investments with a view to stimulate investment flows into export-oriented areas in which Fiji has comparative advantages and use this as a strategy for inducing innovation and technology transfer in the national economy;
9. To facilitate capacity building development in human capital in all the priority sectors to ensure high level productivity; and
10. To facilitate the mainstreaming of gender, environmental protection and other related policies to ensure coordination and policy coherence.

As part of its strategy to diversify its exports and improve its earnings, the strategy aims to encourage **value addition processes** in the manufacturing sector. The priority sectors identified in this policy are: Sugar; Agriculture (Non-Sugar); **Forestry**; Fisheries; Mineral Water; Textile, Clothing and Footwear (TCF); Mineral Resources; Audio Visual; and Tourism. The following summarises the key points to those relevant to this study: Agriculture (non-sugar) and Forestry.

### 5.6.1. Agriculture (non-sugar)

In 2015 the non-sugar agriculture sector was emerging from predominantly subsistence based, contributing on average 8 percent to the GDP and accounting for around 3.8 percent of domestic exports. Crops were mainly root crops, tropical fruits, vegetables, pulses, ginger, tobacco, rice, spices, cocoa, and coconut products. The livestock industry included beef, dairy, pork, poultry meat, eggs, sheep, goat and beef. Growth was described as ‘volatile’ due to vulnerability to natural disasters, incursion of pest and diseases, inadequate infrastructure, restrictive bio-security measures by trading partners, high production and transportation costs, poor husbandry practices, market deficiencies and limited access to finance by farmers. The policy noted (p28)

“Fiji encounters difficulties in exporting its products due to restrictive and additional biosecurity requirements from importing countries. Fiji currently has 28 Bilateral Quarantine Agreements (BQAs) covering exports of various products to New Zealand, Australia, Vanuatu, Tonga and Papua New Guinea.”

Policy recommendations for this sector were (emphasis added):

- Review existing Bilateral Quarantines Agreements (BQAs) and refine the processes for seeking new BQAs, with the view to ensuring that all opportunities are fully exploited and to eliminate avoidable delays in the processes;
- Utilize avenues of political action and any other feasible action to overcome unreasonable restrictions that are holding back exports of certain commodities
- **Support the commercialization of the agriculture sector through the successful implementation of the ‘Fiji 2020 Agriculture Policy Agenda’;**
- **Strengthen synergies or potential synergies between the agriculture sector and other sectors connected to the trade policy (such as tourism);**
- Ensure coordination among the various participants in the export pathways including: producers, packers, exporters, transport and logistics operators; and
- **Facilitate finance for new producers (particularly SMEs) and development of new markets for existing producers.**

### 5.6.2. Forestry

Mahogany and wood chips are Fiji’s principal wood exports products. The principal market for mahogany in 2014 was the United States, accounting for 54 percent of the total, while Caribbean and Asian markets accounted for another 46 percent. Woodchips are exported almost exclusively to Japan (69 percent) and China (31 percent). Exports of total wood products in 2014 were spread widely across a number of markets, including Japan (28 percent), Pacific (20 percent), USA (18 percent), China (13 percent) Dominican Republic (10 percent), New Zealand (5 percent) and Australia (2 percent).

Challenges facing the forestry sector include “the development of downstream processing industry; economic recognition of the real value of forest ecosystem services; compliance to international standards for forest certification and the slow rate of reforestation” (p 29).

The Government recognizes that certification of timber produced from sustainably managed forests and legal logging operations are important in maintaining access to export markets. These policy issues will increase in importance with a greater focus on export orientation.<sup>15</sup>

Policy recommendations were:

- Ensure that policy on the utilization and exporting of wood resources are developed on the basis of rigorous and clearly defined principles that emphasize the maximization of the economic return to Fiji from its forest resources;
- Discourage the exports of raw or sawn timber and work towards increasing value adding focusing on high yield products;
- Identify high value niche markets for Fiji's forest products;
- Promote the proper certification of forestry resources; and
- Promote and cultivate Fijian branded mahogany.

### 5.6.3. Other Trade Factors

#### 5.6.3.1. Micro, Small and Medium Enterprises

The policy recognises the role and importance of micro, small and medium enterprises (MSMEs) in to the Fijian industrialization process, due to their potential to generate economic activities along the manufacturing and service provision value chains including the contribution to employment creation for both rural and urban population, income generation and poverty alleviation.

“MSMEs are market path finders and are crucial in developing new areas of business, innovation, development of appropriate technologies and processes and diversification as well as exports for niche products.”

In 2014, 79% of registered enterprises in Fiji were MSMEs, with many more operating informally. The alleviation of bottlenecks to formalization was identified as a priority for growth in the sector. There is also a perceived a lack of appropriate regulatory and legal settings.

The National Centre for Small and Micro Enterprises Development (NCSMED) is an institution created by the Small and Micro Enterprise Development Act 2002. NCSMED has developed an array of business support resources and services to accelerate the successful development of the MSME sector including finance, training, mentoring, counselling, advisory services, business clustering, business incubators, supply chain development and market support.

Recommendations include:

- Review the SME Policy Framework, together with streamlining the functions of National Centre for Small and Micro Enterprises Development (NCSMED) and improving its functional capabilities to meet the demands of the sector and its stakeholders;
- Development of Micro-finance Regulatory Framework;
- Sensitize potential and existing MSMEs on the benefits of registering their businesses. This is aimed at facilitating graduation of the informal sector to formal sector, thereby widening the tax base as well as coverage of enterprises that would require government support;
- Establish and maintain MSME database;
- Support the promotion of business incubation centers and other institutional support mechanisms by institutions such as Ministry of Agriculture, Biosecurity of Fiji etc;
- Streamline the general MSME regulatory regime;
- Integration of registration and licensing of business establishments in order to create a single registration point. The initiative is to simplify procedures to reduce the time-lag and costs involved in starting a new business. The initiative will also enhance formalization as registration will be mandated as pre-requisite to licensing;
- Better resource allocation and targeted assistance schemes for MSMEs;
- Assist and support MSMEs to better manage costs and resource constraints;
- Encourage large local and foreign investors to consider engaging MSMEs in their supply chain; and

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<sup>15</sup> Timber Legality <https://fijisun.com.fj/2019/07/25/report-illegal-logging-baleinabuli-to-stakeholders/>; Forest certification <https://www.forestry.gov.fj/pressdetail.php?id=27>

- Catalyst Programme to create homegrown champions through a targeted approach with support in the area of access to finance, market access and Fijian Made licensing.

### 5.6.3.2. Cooperatives

Cooperatives are noted for their role in contributing towards the economic, social and cultural development as well as human capacity advancement in Fiji. The Government recognises the role played by cooperatives that “encourages integration of grass roots people in the modern business system.

Cooperatives are prominent in key sectors of the economy including agriculture and forestry. In 2014 there were over 400 registered cooperatives in Fiji. Conceptually cooperatives are thought to help members combine resources, reduce cost, increase volumes to be traded and enhance their bargaining powers thus, increasing profitability levels. However, many are unsuccessful.

The trade policy recommends:

- Enhance financial literacy programs which will allow cooperatives to be accountable, transparent and prudent thus, ensuring their longevity;
- Secure resources to establish the Cooperative College at tertiary level with appropriate courses and trainers;
- Encourage Cooperatives to take advantage of various Government grant and incentives and increase their value-addition capacity;
- Establish the partnership with private sector, donor agencies and non-Government organisations for co-operatives capacity building and marketing;
- Promote the establishment co-operatives within high schools which builds strong foundation for future co-operative ventures; and
- Encourage the establishment of the National Cooperatives Federation.

### 5.6.3.3. Land

The iTaukei land comprises 88 percent of all the land in Fiji. The iTaukei land is available for public use by lease agreement. Leases terms can vary from 30 - 50 years for agricultural purposes and up to 99 years for most other uses including residential, tourism, commercial and industrial leases. The trade policy notes:

“As Fiji continues to grow and makes its presence felt in the world of tourism, agriculture and in commerce, it is a virtual certainty that the need for the utilization of iTaukei land will expand dramatically. However, the iTLTB faces major challenges in administering iTaukei land. The challenges include among others:

- Accessibility issues related to lack or inadequate basic infrastructure in the provision of roads, telephones, water to the areas;
- Inadequate surveyors to properly survey land and value appropriately;
- Lack of planning, zoning and co-ordinated approach with respect to agencies involved in the land leasing process;
- Lack of knowledge or information among land owner’s on sustainable land use practices;
- Low productivity & efficiency of use by farmers & other users;
- Slow pace to dispose of cases before the Agricultural Tribunal which is responsible to adjudicate on disputes and issues affecting agricultural holdings;
- Landowners allowing occupation of itaukei land without formal leases from the iTLTB hence creating squatting settlements and other consequential social ills; and
- Lack of coordinated approach to monitoring and enforcement of bad husbandry practices on leases holds and outside leases.

A number of recommendations for Land are made, including:

- Establish a Land Use Council drawing membership from all Sectors of the Economy including iTLTB;
- Prioritise freeing up leased lands that are leased but not being cultivated or productively utilized;
- Prioritise reducing costs of land development for industrial, commercial, agricultural and residential subdivisions, to attract investments in these areas;



- Give priority to providing roads and amenities and access to undeveloped areas (lands) to facilitate development and use for all purposes;
- Demarcate and zone areas appropriately to avoid conflicting uses of land in the same locality;
- Investment Fiji to consider partnering with iTLTB in local and overseas trade shows and exhibitions to showcase and market its land products and packages;
- The Ministries of Trade, Industry and Tourism and Foreign Affairs to assist iTLTB in the marketing of undeveloped iTLTB tourism sites abroad;
- Prioritise sustainable land use practices, use of technology and productivity in land for other agriculture production as well as in the sugar cane sector; and
- Review the role of the Agricultural Tribunal to ensure disputes are expeditiously adjudicated, thereby avoiding negative effects on agricultural holdings of delays in dispute resolution.

## 5.7. Inclusion

Fiji ratified the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) in 1995 and the first Fiji Women Plan of Action was put in place in 1999.

A National Youth Policy was formed in 2011, which aimed to provide an enabling environment where youth development was mainstreamed into the various focal areas of national development.

The 2014 National Gender Policy articulated the commitment of the Government of Fiji to gender equality, equity and social justice. The Policy recognizes “ethnicity, disability, religion and gender often intersect and create a multiplicity of sources of discrimination against women in Fiji.” The policy aims to:

- Improve the quality of life of men, women, boys and girls, at all levels of society through the promotion of gender equity and equality.
- Reinforce the inextricable links between gender equality and sustainable development goals in national development.
- Promote active and visible gender mainstreaming in all sectors and within civil society to ensure agency for gender equity and equality in all spheres of national life.
- Remove all forms of gender inequality and gender discrimination in Fiji.

Specific strategies are included for Agriculture, rural development and the environment.

- Promote gender aware and gender sensitive policies, plans and strategies in the Ministry of Rural Development, Ministry of Agriculture, and the itaukei Land Trust Board, which foster gender equality in the agriculture and rural development sectors, and promote strategies to increase the participation of women in decision making at all levels, including issues of land rentals, applications for financing from banks and financial institutions, and the distribution of rental and lease monies under the Land Use Decree 2011.
- Facilitate the acquisition of data on the role played by women in the rural and agricultural sector and using such data for gender responsive budgeting and national planning in agriculture. Such planning will consider equitable access to micro financing and credit facilities.
- Promote increased regard for environmental sensitivity, climate change impacts and disaster risks and the role of men and women at all levels in facilitating the harmonious and sustainable use of the country’s limited natural resources, and the utilization of gender impact assessments, gender analysis and gender aware approaches in assessing environmental issues and on the utilization, exploitation and preservation of natural resources in Fiji through training and continuous monitoring.
- Train men and women on gender equity in the division of labour and on the economic empowerment of women in the agricultural sector.
- Strengthen equitable access by men and women to the factors of agricultural production, paying particular attention to the gender differences in access to and repayment of credit, beneficiaries of land purchase, land titling, amenities, extension services and technology, taking into consideration the disadvantaged position of the most vulnerable women in rural areas.

In 2020 the Ministry of Economy introduced a Gender Equity & Social Inclusion Policy 2021-2024 and Action Plan 2021-2022, tied to its role at Fiji’s Ministry responsible for Climate Change.

The Ministry of Agriculture has a specific Policy for Gender in Agriculture in Fiji (2020-2027). The policy targets women's full and effective participation, equal opportunities for leadership, decision making, equal rights to economic resources and financial services, and use of enabling technology in the Agriculture sector. The policy is broader than just agriculture and the governance arrangements for the policy involve the Ministry of Agriculture; Ministry of Fisheries; Ministry of Forestry, Ministry of Women, Children and Poverty Alleviation and Ministry of the Economy. It is expected that they will coordinate to jointly on the policy which makes some important observations (p 10).

- Based on the Fiji Agriculture census of 2020 there are 300,861 people who are members of agricultural households, nationally, of which 51.7 percent are men and 48.3 percent are women.
- 83,395 of these people (33.85 percent) identified that farming was their primary or secondary occupation (85.6 percent of these were men and 14.4 percent were women) - 'farmers';
- 14,094 people identified forestry as their primary or secondary occupation (48.8 percent of these were men, and 51.2 percent were women) - 'foresters';
- most farmers in Fiji are unpaid family workers (59.8 percent) or self-employed (39.5 percent), suggesting a predominance of subsistence agriculture. Most agricultural household members, including 88,034 women, perform agricultural tasks, even if they do not declare it as their main or secondary occupation: 188,786 people, or 76.6 percent, perform crop-related tasks while 28,719 people, or 11.7, percent perform livestock tasks
- In the case of forestry, although just 5.7 percent of agricultural household members declared it as their primary or secondary occupation, at least 74.3 percent of all agricultural household members, and 73.7 percent of women agricultural household members (87,537 women), are engaged in forestry to a certain extent.

The policy notes that these differences show that agriculture (including crops, livestock, forestry and fisheries) is under-recognised as a formal occupation, specifically for women, but also for men. More than five times as many men as women identify as farmers, despite women comprising more than a third of the people in agricultural households who are engaged in agricultural tasks. However, roughly equal proportions of men and women identify as foresters. Importantly the policy acknowledges that:

"Thus, when designing agriculture development programs and activities, it has to be understood that women often have a less recognised role, which prevents them from being considered professional farmers and fishers, and consequently eligible for and interested in programs that benefit the sector and which can increase incomes and make livelihoods more secure."

And:

"The differences in the roles of agricultural household members who are men and women are mostly related to the involvement of men in more commercial and profitable agriculture activities that require some degree of technical knowledge and/or access to modern inputs and equipment. Activities in which women have a higher involvement are those that are more compatible with women's present burden of unpaid household chores and role in feeding their families and carrying out community work. Similar patterns are found for fishing and forestry, with women always more involved in activities that are compatible with unpaid household and community responsibilities. For all subsectors, that is, crops, livestock, forestry and fishing, the Census reveals similar data; the more professional, commercial, or profitable the activity is (measured by activities providing the highest cash or non-cash value), the smaller women's participation is."

The policy includes proposed plans of action for each Ministry. It makes no mention of agroforestry.

### 5.7.1. Roles and issues in policy making

Women's movements have played a pivotal role in building the necessary momentum and consensus for progressive policy and legal reforms around gender equality in Fiji (George, 2012 in Chatter, 2015). Strategies to increase women's participation in politics (and therein potentially in policy-making) included not only encouraging voters to support women candidates but also providing support for women candidates who stand for elections (Chatter, 2015). Chatter notes:

"Although many women continue to struggle with gender-based disadvantages in their daily lives, things have changed for the better and at a pace that would have been unthinkable even two decades ago. For instance, women in Fiji have made unprecedented gains in education and in access to jobs, though women continue to cluster in sectors and occupations characterised as 'female'—many of them lower paying (Narsey, 2007). Moving out of the house and into the workforce appears to have a consciousness-raising effect on women and they are more likely to be seen as men's equals in a socio-political context (Matland, 2005)."

Gendered social norms in Fiji often reinforce the notion that men are better leaders than women, and this limits women's political aspirations (Chattier, 2015).

As was noted at the 2018 project workshop not all women are the same. There are major differences based on class, race, ethnicity, cultural background and education; and the same can be said for men. Chattier, 2015 observes "although women do identify within the common category 'woman', they also align themselves with ethnic, religious and traditional identities (see also Leckie, 2002) and can form alliances based on these. iTaukei and Indo-Fijian cultures differ, and the influence of religion has had compounding affects in the former. Fiji Indian society is culturally more diverse than iTaukei society, as Fiji Indians originate from many different parts of the Indian subcontinent and gender relations are influenced by various traditional cultural values (Chattier, 2015). For both iTaukei and Indo-Fijian women, however, there remain barriers to participating in politics and entering policy-making spaces.

Having said this, in looking at organisational structures it is possible to see some diverse representation; the MoF operational reports for 2021-2022 shows five out twelve senior managers are women; in MoA this is one out six.

### 5.7.2. Roles in Forestry and Agriculture

Men and women in Fiji have distinct roles, skills and knowledge in relation to forestry and agriculture.

The 2007 National Forest Policy includes no gender specific guidelines to enhance women's participation and representation in forestry, inclusion of women's concerns regarding their forest-based livelihoods and land inheritance rights has been poor (RECOFTC 2016).

Despite being much more recent the Agriculture Development Strategy 2020 includes only the setting up an investment fund for retirees, for women, and for youth to promote participation in agriculture. However, the 5-year SDP for the Ministry of Agriculture (2019-2023) aims to put forward interventions to strengthening transition of smallholder farmers to commercial level including through policy and regulatory environment which will encourage youth and women participation in agriculture. The SDP acknowledges that

"There are still persistent structural challenges for agriculture; financing, lack of participation by youths and women, land tenure and the slow transition to commercial farming"

It includes support for mechanization, adopting proven technologies, expanding agriculture research and incentives, promoting participation of women and youths in key value chains with increased participation of women and youth in the crop and livestock agriculture sector.

The Livestock sector working group has as its strategic vision

"The livestock sector, led by industry and government, will comprise modern, competitive value chains that are sustainable, resilient and diverse, providing livelihood opportunity for youth and women, and contributing to economic growth and food security."

The 2015 strategy includes specific consideration of the role, impediments to and opportunities for women and youth.

Other observations from the literature suggest that agroforestry can be both highly gendered and also exclusive:

- Women, for example collect fuelwood and different types of food, herbs and raw materials for consumption and sale from forests (RECOFTC 2016).
- Despite their heavy reliance on forestry related products, women are under-represented in decision-making positions, as men dominate decision-making about the management of forests and their resources. Consequently, women's participation in forest governance at national and community levels is limited. (RECOFTC 2016).
- Women's share of formal employment in forestry is significantly lower than that of men and tends to be concentrated towards the bottom of the pay scale in the labour market (Narsey 2007; Vuki 2013 in RECOFTC 2016).
- As Fiji is a patriarchal society, tribal landownership is ceded to men and in many cases women only have user rights to tribal land. (RECOFTC 2016).
- Farmland leases are issued to men as heads of households and are not registered under the names of both spouses, so women are excluded from inheritance rights over customary land.
- Women's lack of land rights contributes to their poor access to credit facilities and limited agroforestry and forest-based livelihood options as they cannot use land title deeds as loan collateral. (RECOFTC).

- Customary land tenure is a significant issue in Fiji as 82 percent of the land is owned in this fashion (Nayacakalou 2001; ADB 2006; Narsey 2007 in RECOFTC 2016).

Other ACIAR projects in the [Pacific](#) and elsewhere<sup>16</sup> have examined the inclusivity of agroforestry. For those in Fiji they have been mainly focused on technology and value chain development rather than on policy settings and change.

## 5.8. Recent events, emerging issues and discourses

### 5.8.1. Blue Economy-Green Economy

In 2014, Fiji's Prime Minister, Bainimarama, launched Fiji's first Green Growth Framework (GGF), aimed at informing national planning across a range of sectors. Term "green growth" has become widely used across the world owing to the strong advocacy of international organisations, especially UN agencies. Usage of green growth terminology is now widespread in the Pacific, having been adopted in national planning frameworks, used by regional bodies, and advocated by international agencies and donors operating in the region; but there are local interpretations (Dornan et al 2018).

Emerging from the "Green Growth Initiative" are increasingly popular terms (and variations on them) such as the 'green economy' and the 'blue economy'. Both have both received significant attention in small states, particularly small islands developing states (SIDS), as alternative economic approaches to address growing financial uncertainty and vulnerability. Although there is still debate on what is meant by the green or blue economy, they have been promoted as offering a more resilient and sustainable economic path; one that re-balances the social, environmental and economic drivers. Green economy strategies tend to focus on the sectors of energy, transport, **sometimes agriculture and forestry**, while the blue economy focuses on fisheries sectors and marine and coastal resources. Both incorporate strategies to address climate mitigation and adaptation. (Commonwealth Foundation 2015).

In Fiji 'the green economy' can be observed in public and private sector deliberations<sup>17</sup> about changing practices to achieve various environmentally oriented goals be they nature-based solution, in finance<sup>18</sup>, for renewable energy or due to consumer demands.

### 5.8.2. 'Grey Infrastructure' – 'Green Infrastructure'

"Green Infrastructure" is a term that loosely describes engineering projects that use plants and ecosystem services to perform engineering functions.<sup>19</sup> In Fiji, where natural disasters caused damages worth 4.3 percent of GDP in 2012, when managing flooding risks, government planning agencies have generally defaulted towards man-made infrastructure — also known as "gray" infrastructure — such as building levees and dredging rivers. Increasingly, however, urban planners have developed an interest in so-called "green" infrastructure, in which nature is incorporated into the design. Green infrastructure solutions for floods include replanting vegetation in headwaters and riparian zones, which reduce flash flooding and erosion. Not only do these methods offer environmental benefits, but they can also be extremely cost effective in preventing flood damage.<sup>20</sup>

Permanent Secretary Wycliffe of the Ministry of Waterways & Environment noted in his speech in 2019<sup>21</sup>

"Forests, for instance, can prevent silt and pollutants from entering streams that supply freshwater to our households and to the businesses. They are a natural water filtration mechanisms provided by nature. These "mechanisms" form a part of the Green Infrastructure – functionally they can serve and deliver much better outcomes economically, environmentally and socially in comparison to the grey infrastructure," the human-engineered solutions oftentimes involving concrete and steel."

<sup>16</sup> e.g. Vietnam: <https://www.aciar.gov.au/publication/FST-2016-152-final-report>; East Nusa Tenggara: <https://www.aciar.gov.au/project/fst-2021-161>;

<sup>17</sup> <https://www.fijitimes.com/green-economy/>

<sup>18</sup> <https://fijisun.com.fj/2018/11/27/financial-sector-role-on-green-economy-important/>

<sup>19</sup> <https://www.pressreader.com/fiji/the-fiji-times/20201204/281887300877510>

<sup>20</sup> <https://environment-review.yale.edu/green-versus-gray-infrastructure-economics-flood-adaptation-fiji-0>

<sup>21</sup> <https://www.mowe.gov.fj/wp-content/uploads/2019/08/Green-Infrastructure-Beats-Grey-Infrastructure-Economically-speech-F.pdf>

### 5.8.3. COVID-19

As elsewhere in the world, measures to prevent the spread of COVID-19 sent people in Fiji ‘back to the farm’.<sup>22,23</sup> Specific programs were set up in support, such as the ‘Back To Rural Agriculture’ (B2RA) program.<sup>24</sup> The export economies of Fiji were also impacted and the Government introduced specific measures in support, for example, for **entrepreneurs in the agriculture, fisheries and forestry sectors**, the Fiji government guaranteed up to 75 percent of the principal outstanding on defaulted loans up to a limit of Fiji Dollar (FJD) 75 000 (US\$ 33 700) per business.

Impacts on the forestry and timber sectors were reported,<sup>25</sup> including on exports and domestic construction, with ripple effects felt along value chains.

In the Fiji National Statement at the 16<sup>th</sup> session of the United Nations Forest Forum in 2021,

“The global economic crisis due to the COVID pandemic has seriously affected Fiji’s economy, completely shutting down the tourism sector the largest economic contributor. **Fijians are increasingly turning to cash crop farming** to supplement income, and this increases the threat of forest clearance and to forest biodiversity. This is a reminder that the environmental and biodiversity impacts of the COVID crisis can be significant if not managed well. The pandemic reminds us of the need to balance economic demands and ecological needs.

We are turning the crisis into an opportunity. COVID has seen a surge in innovative entrepreneurs, some of whom have taken to reviving traditional crafting made from forest products for their income. The role wild forest foods play in strengthening food security was also recognised during the pandemic as families struggle with income losses. If upscaled, the market diversification of forest products can support recovery efforts with benefits directly reaching those who need it the most - local communities; and especially women in local communities. Both protection and food security can go hand in hand. This is an important reminder and one that we bring onto the centre stage in how we look at our forests as we build forward and build greener.

The pandemic has caused a tremendous strain across our SDG’s; including the achievement of our forest goals. Greater attention to the implementation of Global Forest Goal 4 and its associated targets is required through vastly increased forestry financing. Fiji looks forward to UN’s leadership on this and to working with our development partners on this.

At the height of COVID-19, MoF collaborated with the stakeholders in the forestry sector to develop a 3-year economic recovery plan targeting a contribution to the national economy of not less than \$400M. The plan aimed to progressively increase the sector’s contribution to Fiji’s gross domestic product with the first year (2021-2022) target set at \$123.9 Million. As of March 2022, the sector has generated \$113.6m or 92% through both domestic and export production and sales. The revised budget will enhance the sector’s overall performance.<sup>26</sup>

### 5.8.4. One Health

One Health is an approach that recognises that the health of people, animals and the environment are interconnected. Over the past decade, the One Health approach has garnered increasing interest most prominently across public health, animal, and livestock communities. The other factors and dynamics have often received less attention in One Health policies, projects, plans and research, with correspondingly lesser consideration for the upstream drivers of ill health and systems thinking.<sup>27</sup> It has become more prominent as a result of COVID-19 with increased awareness of the relationships between human food systems, human health and the environment.

Okello (2020; 1) notes:

“While the concept stems from earlier thinking around comparative medicine, the emergence of severe acute respiratory syndrome (SARS) and Highly Pathogenic Avian Influenza (HPAI) in the early 21st century expanded the One Health concept to encompass the environmental perspective. The

<sup>22</sup> <https://www.indepthnews.net/index.php/sustainability/health-well-being/3878-fiji-s-tourism-workers-turn-to-farming-and-fishing-as-covid-19-ravages-the-industry>

<sup>23</sup> <https://www.spc.int/updates/news/speeches/2021/08/remarks-by-the-president-of-fiji-his-excellency-major-general-retd>

<sup>24</sup> [https://www.fiji.gov.fj/Media-Centre/News/BACK-TO-RURAL-AGRICULTURE-\(B2RA\)-PROGRAMME-LAUNCHED](https://www.fiji.gov.fj/Media-Centre/News/BACK-TO-RURAL-AGRICULTURE-(B2RA)-PROGRAMME-LAUNCHED)

<sup>25</sup> <https://www.fbcnews.com.fj/news/timber-industry-faces-ripple-effects-of-covid-19/>

<sup>26</sup> <https://www.forestry.gov.fj/pressdetail.php?id=108>

<sup>27</sup> <https://www.cifor.org/event/strengthening-the-connection-between-forests-biodiversity-and-health-in-the-one-health-approach/>

truly global nature of COVID-19, compared to previous health security crises, brings the potential of the One Health approach to the fore in international development. More recently, One Health has developed from a tightly defined view of zoonotic disease mitigation to an approach that can address today's much broader socio-economic, environmental, human health and livelihoods challenges (Häsler et al., 2014). These range from sustaining ecosystem services to food and nutritional security, poverty, and fair trade (FAO/WHO, 2014), and now include non-communicable disease (Amuasi et al., 2020[3]).

Conceptually, however 'One Health' faces challenges that are not dissimilar to those facing agroforestry systems principally because it is multi-sector in nature, and multi-sector in governance. And, like agroforestry, there is no formal recognition of One Health coordination in Fiji but some informal engagements exist<sup>28</sup>, and it is reflected in some policies, but without a firm footing.

COVID-19 highlighted the risks associated with human exposure to wildlife, and although the exact pathway is not known, the connections between human expansion and habitat loss bringing humans and animals into closer contact, and poverty, food insecurity and consumption of wildmeat have been established.

In some arenas this has prompted calls to 'plant more trees', for example

"Reintroducing trees into one of humanity's largest land uses — agriculture — can restore lost biodiversity, protect existing biodiversity, and increase the resilience of agriculture to climate change"<sup>29</sup>

And with this there is increasing attention paid to the relationships between forests and agroforestry and human health (e.g. Rosenstock et al 2019). Development paradigms, which are increasingly embedded in domestic policies as described above for Fiji, articulate "nature-based solutions," "climate-smart agriculture," "agroecology," "sustainable intensification," and "ecosystem-based adaptation" that encompass or promote agroforestry.

There is potentially a "Catch-22" in this - will planting more trees in agroforestry systems bring humans and animals into even closer proximity and provide more opportunities for disease transmission?

In research undertaken in Laos amongst smallholders undertaking teak agroforestry, farmers adopting practices to reduce the use of fire to manage understory competition reported increased bird and wildlife diversity and opportunities for hunting (Smith et al 2017). However in their analysis of agroforestry and human health in sub-Saharan Africa, Rosenstock et al (2019) found that the evidence suggests that, despite some disease risks, agroforestry can positively affect human health outcomes across a broad range of concerns. They depicted these concerns in a systematic diagram reproduced in Figure 3; Line thickness represents the amount of evidence available; three weights are used. Line colour indicates the agreement in the available evidence, where green suggests general agreement and purple suggests some disagreement

Their research makes some useful findings generally about agroforestry and highlights that the number and diversity of pathways from agroforestry to health demonstrate the need for evaluating multiple objectives at the same time (Rosenstock et al 2019, 340), and the diversity of possible agroforestry elements further complicates this

There is potentially a natural synergy between One Health and Agroforestry.

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<sup>28</sup> <https://rr-asia.oie.int/wp-content/uploads/2020/01/fiji-1.pdf>

<sup>29</sup> <https://news.mongabay.com/2020/05/faced-with-a-health-crisis-a-plea-for-trees-and-agroforestry-commentary/>

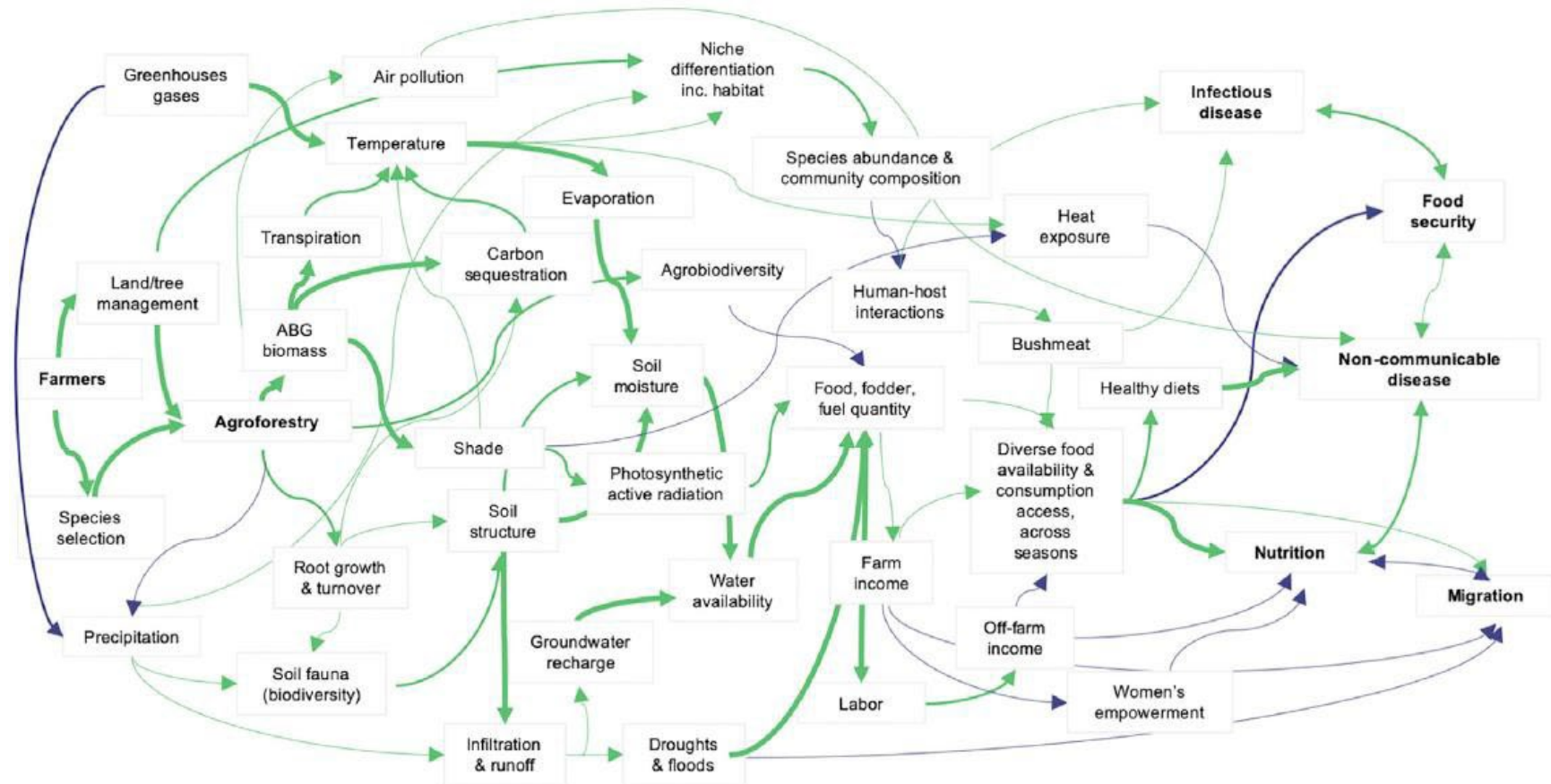


Figure 3: Pathways and Qualitative Evaluation of the Evidence by which Agroforestry May Affect Human Health through Mediating Changes of Climate, Hydrology, Biogeochemistry, and Biodiversity

## 6. Exploration of policy processes in Fiji

As this project was unable to observe, participate in or talk to stakeholders in policy making and policy processes in Fiji, the findings of other studies are used as a proxy. This section reviews research into policy making in Fiji through studies largely undertaken in the health, nutrition and food sectors as none were found from the forestry sector. The studies are relevant generally, but also specifically to this study on agroforestry because of the connections to the food production elements of this approach to land use. Generally, however, our literature search found that policy and policy making in Fiji is a relatively under studied area.

### 6.1. General Governance Settings

Fiji is governed by a national and provincial governments under the Westminster system. Elected members of parliament have 4-year terms in office, the Prime Minister is the head of the Government, and the President is the head of State.

Geographical, social, historical, political and developmental aspects have significant influences on policy development initiatives. These are further affected by frequent change in the political system and foreign influences (SPC 2021). Traditional authority rests with 'Chiefs' at different levels, e.g., district, provinces; although the Great Council of Chiefs, which was established under British rule, was dissolved in 2012.

The Executive is the administrative arm of government and is responsible for putting into operation the laws passed by Parliament and administering the programs and services that are delivered by Government. Executive authority is vested in the President, who acts on the advice of the elected Government. The Government is formed by the members of Parliament from the political party with a majority of members in Parliament. Governments must have the confidence of the Parliament as in practice it is the Government that puts forward the majority of legislation to Parliament.

The leader of the political party with a majority of members of Parliament becomes the Prime Minister, who is the head of the Government.

The Cabinet is the decision-making body of the Government and is chaired by the Prime Minister. Cabinet comprises Ministers appointed by the Prime Minister from among the members of Parliament who belong to the Government party.

Ministers are responsible for administering specific areas of government activity, known as portfolios. They are responsible to the Parliament for the way in which they exercise their powers and administer their functions.

### 6.2. Policy making

Phillips and colleagues (2022) explore policy making in the context of nutrition and the impacts of neoliberalisation on policy making, which they describe as "a process in which there is a priority placed on economic growth, a laissez-faire attitude to markets, the privatisation of public services so that they are run more like businesses". Their research showed Fijian policy makers face pressures from the top down, such as a government that tends to prioritise economic growth over other considerations, and very powerful industry players as well as pressures from the bottom up, such as communities who want consumer choice and do not want to be restricted in what they can buy. They observed:

"The policy makers respond by trying to work around neoliberal forces - forging alliances with community groups and strategically using 'rights' discourses."

A report by the SPC (2021) describes policy making in the Ministry of Agriculture.

The Fiji Prime Minister, through the Ministry of Agriculture, initiated the Fiji 2020 Agriculture Sector Policy Agenda, of which food security is one of the clusters. At the sector level, the Permanent Secretary for Agriculture signed off the policy agenda and submitted it to Cabinet as an information paper. The policy agenda was then adopted by the Ministry of Agriculture. Construction of policy is also influenced by national, regional and international policies, such as those crafted within regional or global bodies such as FAO and SPC.

Key influencers in the Ministry of Agriculture include the minister, permanent secretary, deputy secretary, and directors.

The Fiji Ministry of Agriculture policy agenda development is government-driven with technical assistance from FAO. This process involved comprehensive consultations with communities (farmers), agriculture industries, partner ministries, NGOs, international organisations, and other stakeholders. The World Food Programme (WFP), staff of the Ministry of Agriculture, all other agencies across government and NGOs in the food security cluster were also involved in the policy formulation process.



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. The Strategic Development Plan and the 2020 National Agriculture Census aim to provide comprehensive information on agriculture and related productive sectors. The Ministry of Agriculture has its own Economic Planning and Statistics Division that produces agricultural data and supports its policy formulation process. Further, agricultural statistics are integrated into the national statistics systems with stakeholders sharing data and information on trade and market prices.

The Ministry of Agriculture costed operational plans, as in the policy agenda, are often not fully implemented due to a variety of factors including political. However, the Ministry of Agriculture, in collaboration with FAO and stakeholders including farmers, communities, government leaders and exporters, has been implementing the food security policies.

The Ministry of Agriculture reviews and evaluates its costed operational plan (2019–2020) twice a year to ensure it reflects the agriculture policy agenda and the annual reports of the Agriculture Development Plan. The development process for food security policy is depicted in Figure 4, after SPC 2021).

The SPC report found:

- Sector policy development initiation depends very much on the government of the day.
- In general, the policy processes reflect a top-down approach, with most agriculture and fisheries policies initiated at the minister and prime minister level and with little direct community involvement. While consultative approaches have improved, the meaningful participation of civil society in policy processes is limited.
- Documentation of the policy framework is lacking or incomplete.
- The main challenge in the policy development process lies in the implementation and monitoring steps. Initiation and formulation of a national or sector policy document can be straightforward – **it is easy to write the policies through internal and external advisors/ experts – but implementation, monitoring and evaluation are big challenges.**
- A **lack of consolidated community support is a key area affecting policy implementation** in these geographically and culturally diverse countries.
- Political instability with regular changes of government also contributes to a lack of implementation of some policies.
- Ministries, and planning and statistics divisions, have some influence in evidenced-informed policy and data uptake.

Latu et al (2018) undertook an analysis of ‘Barriers and Facilitators to Food Policy Development in Fiji’ through document review and interviews with 20 key informants.

- Leadership and drive of departmental heads is critical in getting a policy issue on the government’s agenda and moving it forward.
- Conversely, a lack of leadership often hinders progress. When leaders who make the final decisions were not familiar with, and/ or committed to a specific policy, no progress was made in advancing it to the final stages of the policy development cycle. A number of reasons were identified for poor leadership. One was a lack of confidence and competence among staff in the field of policy making. Limited workforce and a narrow focus on other priorities contributed to this lack of capacity to develop policies.
- Policies perceived to have a minimum negative fiscal impact on consumers appeared to pass through the development process more quickly and easily.
- Even where the value of the policy was clear, if the benefits would not be realized until well into the future, this might put the policy beyond the scope (and priority) of the incumbent government.
- If the political environment and its actors did not share the same values and objectives (of the policy), then policy progression could be halted abruptly.
- Changing and competing political priorities were identified as barriers to policy development.
- Established networks between the private sector and government through which “political pressure” was applied in the form of funding and/or lobbying could prevent or delay policy that would negatively impact the industry.
- Communicating policy outcomes and working in partnership with stakeholders from the outset are important factors that influence policy development.

Waqa et al (2013, 2017a; 2017b) examined factors affecting evidence-use and knowledge-brokering in food policy-making processes in health and agriculture in Fiji.

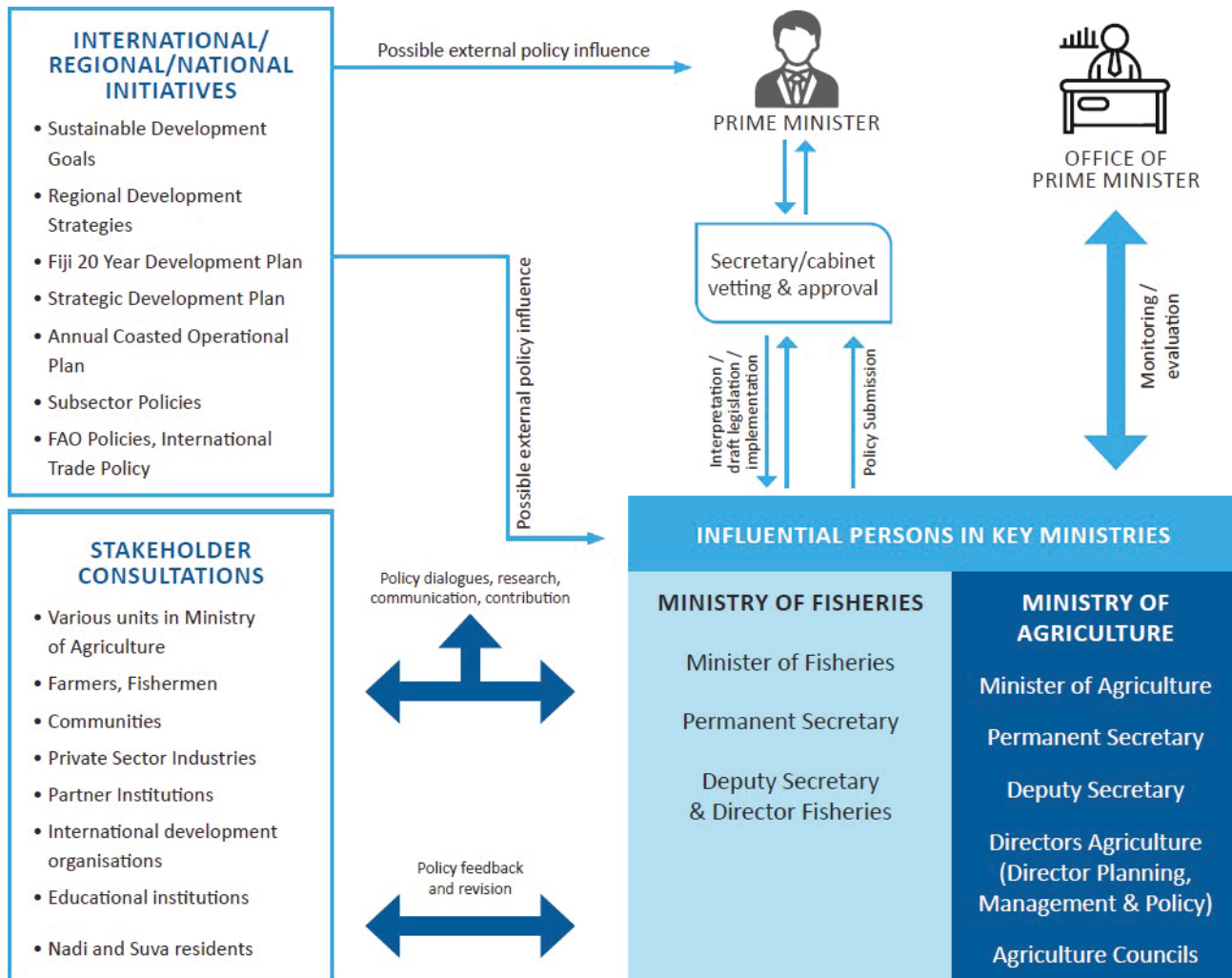


Figure 4: Fiji food security policy development process.

They suggest that evidence-based policy-making is characterized as a systematic approach to accessing, appraising and using evidence to shape the decision-making processes and they note that there are risks as well as benefits of using evidence in policy making. Smith et al 2022, in their research in Laos, noted that evidence-based policy (EBP) became a 'new' movement for policy formulation in the 1990s when it assumed prominence as a global movement that encourages jurisdictions to explicitly incorporate the language of evidence in their understanding and definitions of good policy (Huntington 2021); with particular momentum gained in the health sciences. In that context, evidence-based public policy can be seen as policy "based on research that has undergone some form of quality assurance and scrutiny, as distinct from public policy based on little more than faith, intuitive appeal, tradition and politics, or policy based on unqualified evidence." (O'Dwyer 2003, p 16). The evidence-based policy movement sought to promote rigorous analysis of service programs and policy options in order to improve the quality of decision-making but, over time, debates over forms of knowledge and evidence, and methodological issues concerning what counts as reliable and relevant evidence have occurred (Head 2010).

Like Smith et al 2022, Waqa and colleagues explore key concepts including people's perception of what evidence is, how it influences policy development, how people make sense of evidence and ways it is communicated. Their main findings are:

- Insufficient access to evidence for policy making can be determined by institutional settings and constraints, for example if an organization's data or information management policy does not accommodate open-access or if resources are limited, for example, in the case internet availability and connectivity.
- General lack of formal processes for engaging and collaborating with other stakeholders inhibited the use of evidence.

- The absence of a clear formal direction that guides effective communication between potential partners is important. In the case of inter-ministerial issues, concerted efforts are needed to harmonize the policy approaches and methods
- Effective use of evidence is determined by a policy-maker's ability to access and analyse the best available evidence and apply it to the formulation of policies. However, strengthening capacity building and providing incentives are key to the successful adoption of and support for the development of evidence-informed policies
- Mechanisms such as knowledge brokering and dialogue were viewed as useful, and while training in this is necessary, that alone will not solve the problem of low evidence uptake.
- Identifying and consulting with relevant parties is complex, requiring the coordinated efforts of government, private sectors and civil societies

They conclude (2017b) that “The use of evidence in policy-making will only become a reality in Fiji if it is a formalized part of the government’s policy-making systems. A systems approach food-related policy-making and implementation may achieve this by helping Ministries manage the complex and dynamic nature of food-related policy-making in Fiji”.

Alta and Mukhtarov (2022) examined policy development for gender mainstreaming through the lens of relationality—an approach that emphasizes relationships between policy actors as key forces that shape their identities, practices, and hence outcomes of their policy work. They propose that policy has been mostly approached as a rational project of setting goals and establishing rules and roles to achieve them and set out to explore new insights in policy analysis from a relational point of view as a complement to rational models. Relationality emphasizes the eternally unfolding nature of policy that resists attempts to be rendered predictable by structures such as power, funding, and path-dependency. The focus on relationality is present in the literature on policy networks that emphasizes the connectedness of actors.

## 7. Conclusions & Recommendations

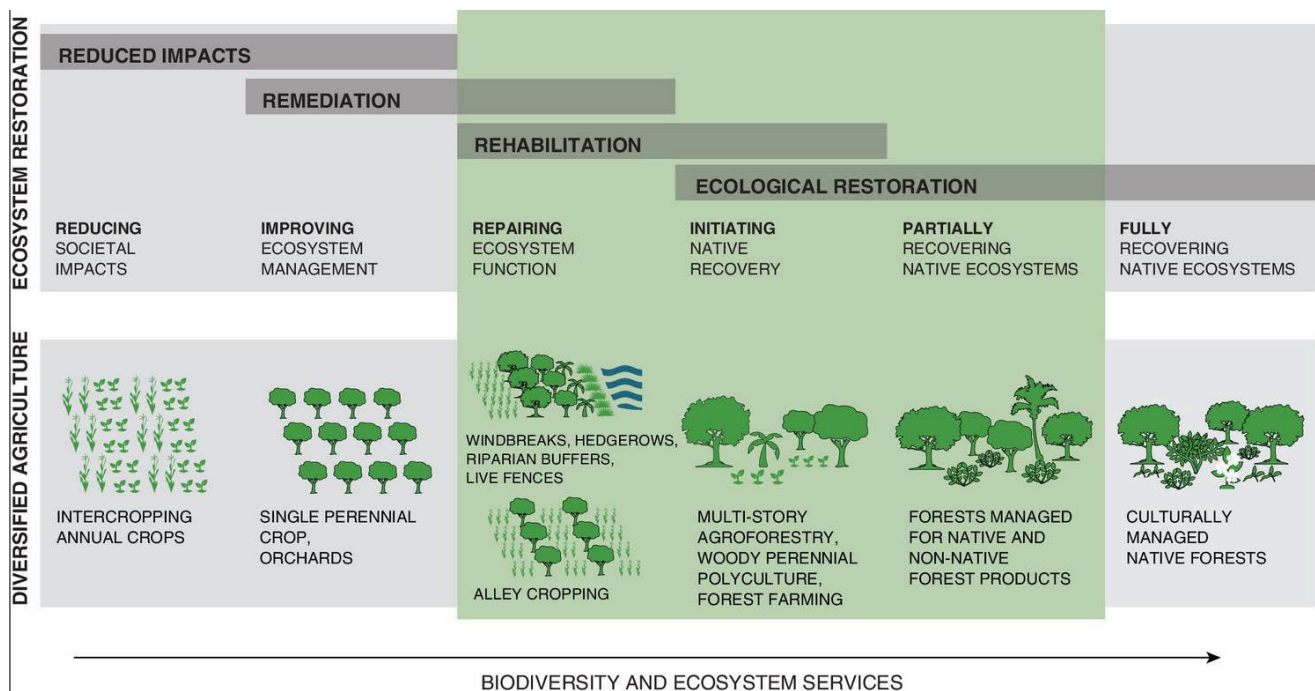
While Fiji does not have a specific policy or strategy for agroforestry, there are strong policy-aspirations for the development and expansion of agroforestry generally as a land use. However, these are oriented towards different and sometimes converging goals, and there are conceptual complexities that present barriers in realising them; this is not unique to Fiji. These barriers can be summarised (drawing on Van van Noordwijk 2021) as:

- A. the segregation of “forestry trees” and “agricultural crops and livestock”, ignoring the continuity in functional properties and functions of these often spatially aligned systems;
- B. the identification of agriculture with provisioning services and the assumed monopoly of forests on other ecosystem services in the landscape, challenged by the opportunity of “integrated” solutions at landscape scale;
- C. gaps in local knowledge of farmers/agroforesters as landscape managers;
- D. recognition of the contributions of social and ecological sciences;
- E. the path-dependency of forestry, environmental or agricultural institutions, and emerging policy responses to “issue attention cycles” in the public debate, such as, green-growth, climate change and reforestation.

In our analysis of the policy settings for agroforestry in Fiji, it is clear that there is segregation (although not absolute) between trees, crops and livestock, and that this impinges on progress for developing a policy or strategy for agroforestry, and the advance of agroforestry technology.

In climate policies, for example, agroforestry is viewed primarily as an adaptation measure for progressing climate resilience through ‘climate smart agriculture’. However, the perceived roles of agroforestry as a mitigation measure, e.g. through carbon sequestration in trees are less well articulated. Indeed, the definition of forests in Fiji’s Climate Change Act 2021 excludes tree stands in agricultural production systems. In agricultural policy, agroforestry is seen as a more sustainable form of agriculture, as well as ‘climate smart’. However, agroforestry is not actively promoted as a commercial land use system in agricultural policy.

The presentation and determinants of the physical nature of what an agroforestry system is made of, and what it looks like, can also be disparate – sometimes resembling natural forest systems (complex/diverse) or alternatively being structurally very simple (e.g. trees plus crops; trees plus livestock). When described in the context of landscape restoration or being compatible with conservation policy goals, preference may lean towards the former, but in the case of better use of degraded land, simpler systems dominate. A continuum developed by Hasting et al. (2020) depicts this well (Figure 5, after Hastings et al 2020).



**Figure 5: Conceptual diagram highlighting the intersection between ecosystem restoration and diversified agriculture**

This project- which looks specifically at silvopastoral agroforestry as a land use option on degraded sloping lands, sits to the left-centre of Figure 5, depending on the number of tree species planted - MoA sees the livestock, MoF sees the trees, MoE sees the climate benefits (resilience, avoided degradation/restoration and potentially GHG mitigation), MoT sees the products and MoH sees the food/health benefits. Only MoF specifically aspires to develop an agroforestry strategy and, in its currently operational plan, this is not funded.

Despite this there maybe common spaces and institutional structures that are well suited to mediate the development of an agroforestry strategy for Fiji. Existing laws, policies, strategies and operational plans provide (in some cases require) spaces for Ministries to work together, but getting agroforestry on the agenda needs policy-makers to prioritise it.

Agroforestry is often viewed as an ‘inclusive’ land use option – particularly for women and youth. However, what ‘agroforestry’ actually looks like in this context is not well described. Is it a ‘traditional’ land use allowing access to culturally important and subsistence-oriented products (sometimes conceptually oriented towards the participation of women; a gender bias), a commercially-oriented production system (oriented towards youth; a generation bias) or a hybrid approach that can provide for both? These differences are exacerbated because agroforestry is also institutionally dispersed – it can be ‘found’ explicitly in the Ministry of Agriculture, Ministry of Forestry and Ministry of Economy, and implicitly in the Ministry of Trade and Ministry of Health, but structurally, the responsibility remains somewhat obscure.

### **7.1. ‘Is (sloping land) agroforestry included and promoted in government strategies and plans for land use or is it omitted or excluded?’**

The Forestry Strategy 2007, the draft Plantation Policy, the proposed Agroforestry Strategy, programs for reforestation (mass tree planting) to address degradation, and references to ‘Climate smart agriculture (Agroforestry)’ all indicate that agroforestry is part of Fiji’s future land use options. The roles and promotion of crops and livestock are clear in Agriculture policy, and indications are that combined systems of trees, animals and crops are on the mind of policy makers.

However, the actual processes to increase agroforestry as a land use choice have not progressed, in part because the concept is underdeveloped; it used as a generic term, often with an assumption that it is a ‘traditional’ or ‘non-commercial’ practice. Perhaps because of this, its priority is low in the context of Fiji’s socio-economic development plans or policy priorities.

Where progress has been made, this has occurred with donor support. There is little spontaneous uptake, which indicates policies are not clear or sufficiently detailed, they have not been well communicated, or other factors are at play.

It appears that, although agroforestry is acknowledged as a ‘climate smart’ production system, the climate change policies may include some exclusions regarding tree stands in agricultural production systems. It is not clear how and whether agroforestry systems can participate in opportunities associated with carbon abatement projects domestically or internationally. This requires further clarification.

### **7.2. Are there institutional settings that enable or act as barriers to (sloping land) agroforestry?**

There are various institutional structures in which agroforestry is explicitly embedded or to which is it well aligned. However, these do not appear to be working in favour of progressing agroforestry as a land use practice.

The Forest Act requires that the Forestry Board includes, amongst other members, at least one representative from each of the department of agriculture, the iTaukei Land Trust Board and the department of environment, thus bringing together four of the key ministries involved in agroforestry – environment, land, agriculture and forestry. This provides a high-level forum at which agroforestry and related land issues could be discussed.

MoF has, in its structure, some institutional capacity aimed at afforestation, reforestation and agroforestry and, while the actual level of human resources and financial budget allocation to for this division to progress either the Draft Plantation policy or Agroforestry Strategy are not apparent, it could act as secretariate to the Forestry Board for the development or as a focal point for inter-ministerial technical consultation on agroforestry.<sup>30</sup> This would also seem to fit with MoA’s SDP which aims to provide space for collaboration including with other organisations and Ministries and with the strong statement by representatives from MoA at the UN Food Systems summit, which recognised the need to identify linkages and break silos and “to relook at government policies to support transformation”.

Within the MoE, the Climate Change and International Cooperation Division (CCICD) has a coordinating role and relationships with other cross-government/ministerial policies, and certainly climate change policy and

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<sup>30</sup> Noting we did not have access to lower-level budget details.

associated mechanisms seem central to the contemporary and most-pressing policy issues in Fiji. The NAP process provides the opportunity to examine the interactions between all economic sectors in a coordinated and coherent way and seeks horizontal integration, with “National level mainstreaming by Ministries and Entities” needed to support mobilization and efficient use of resources. Agriculture is a focus and the actions proposed in the NAP through climate-smart agriculture, new agricultural technologies and practices, promoting coordinated multi-stakeholder collaboration regarding the generation of evidence, enhancement of local institutions, utilisation of both scientific and traditional knowledge, as well as an improvement in the coherence between climate and agricultural policies and finance (Lipper et al., 2014, in NAP 2018). The role of forests is more focussed on REDD and the place of trees on agricultural land in the Climate Change Act remains somewhat unclear. However, the Emissions Reduction Purchase Agreement, and the financial incentives this brings, provide some indication that better inter-ministerial collaboration is needed for the commitments associated with this agreement to be achieved.

Structures set up to administer climate change initiatives generally seem to provide an opportunity under which a multi-sectoral group to progress agroforestry could be established.

### 7.3. What policy and institutional changes are needed?

With these questions answered, the question that next needs to be addressed is what else is at play, in a policy sense, that is inhibiting the development of supportive policy and the adoption of agroforestry generally, and sloping land agroforestry in particular, or that can provide an opportunity to elevate it a policy priority. Key to this is aligning agroforestry with other goals. What is evident from the above is that climate change is currently at the heart of policy and is already driving change. Pegging agroforestry to climate change responses might accelerate policy development or change and up-take.

The NCCS notes a sustainable forestry sector remains a key priority for Fiji’s national climate change response, because by reducing unsustainable practices, there will be a range of co-benefits in relation to carbon mitigation, biodiversity conservation, ecosystem service protection, livelihoods protection, adaptation capacity, food security, as well as reduced risks of hazard events such as flooding and landslides. It includes:

- Climate Smart Agriculture: expanding agroforestry practices (e.g. plant shade trees and live fences for grazing of cattle or pigs under tree crops); and
- Sustainable soil and land management techniques – integrated crop-livestock farming and agroforestry into farm practices.

In the Low Emission Development Strategy 2018-2050, land availability is seen as key to enabling the contributions of forestry and agriculture to reducing emissions. The expansion of agricultural and forestry production areas can only take place in accordance with traditional land use rights in Fiji.

Fiji’s emission reductions program will address the main drivers of deforestation and forest degradation through integrated land use planning, native forest conservation, and sustainable pine and mahogany plantations. Other aspects will focus on community-driven afforestation, climate-smart agroforestry, and alternative livelihoods initiatives.

- With respect to the draft Plantation Forest Policy, this is slated to include carbon forests, community forests, small-scale tree planting schemes, agroforestry (including food forests), urban forestry and private woodlots. It also recognises the ‘need for a clear and coherent national policy framework to guide strategic actions and investments in these planted forests to reposition forestry as a desirable and sustainable land use’. This suggests these settings are not in place in Fiji now.
- The Reforestation of Degraded Forest (RDF) project is also working with communities to establish their own plantation forests. The 30MT15Y tree planting initiative supports the RDF activities through the planting of trees in other areas. This is strongly linked to climate change, green economy and COVID-19 recovery (thus inferring some socio-economic benefit). Agroforestry projects are taking place under 30MT15Y. Permanent Secretary for Forestry, Pene Baleinabuli said

“Agroforestry bridges the gap that often separates agriculture and forestry by building integrated systems that address both environment and socio-economic objectives. Agroforestry can also improve the resiliency of agriculture systems and mitigate the impacts of Climate Change”.

- The MoA SDP aims include strengthening the transition of smallholder farmers to commercial level. Agroforestry, as mentioned under Strategic Priority 3 “Climate Smart Agriculture”. This states “there will be support for sustainable land management, better soil management, integration of traditional and modern farming practices, water-use efficiency and agroforestry”. This links to goals for climate change, food production and establishing partnerships. The MoA SDP is strong on crops and livestock, but relatively quiet on agroforestry.

- Speeches made at the UN Food Systems Summit 2021 by the Minister for Agriculture, Waterways and Environment used the strongest language in support of agroforestry approaches to land uses, oriented around the pressing topics of food security, but also drawing on associated issues related to health, climate change and environment. Concepts of polyculture, nature positive food systems, diversification, organic food, forestry or agroforestry systems, and food forests were all put forward, as were:
  - Promotion of regenerative agriculture, and support to communities to plant a diversity of trees, crops and integrating livestock activities in degraded areas to complement reforestation and sustain ecosystem services.
  - Achieving sustainable multiple trees and/or cropping systems, based on local traditional plant biodiversity and market's demands to promote high-value ecosystems that are beneficial for people and the environment.

Policy and governance were seen as key to transformation.

Newer concepts of 'green growth, a 'green-economy', and 'green infrastructure' all hinge on building a bridge between sectors to find land uses that enable production, but that mitigate natural disasters, address land degradation and reduce emissions.

COVID-19 exposed the vulnerability of economies and production systems, but approaches such as One Health also point to agroforestry solutions being conceptually well-positioned to examine interconnections among human and forest and ecosystem health. In response to COVID-19 sectoral ministries have shown that they can come together to address pressing issues and find solutions. During COVID-19 people went "Back to the Farm", and readopted or adopted land use practices for both subsistence and development needs. Multi-product, multi-scale, multi-temporal systems are suited to resilient and climate smart approaches because (depending on the elements) they can provide immediate food needs, cash income from intermediate agricultural products as well as longer term security from trees providing products for domestic and export markets. These are likely to be more resilient to shocks, such as was experienced with COVID-19. Such systems are also inclusive: they can be intergenerational production systems with element attractive to men women and youth.

Due consideration is needed of what and how people want to participate in agroforestry and whether adverse consequences could arise. Cash crops can have good and bad social, economic and environmental outcomes. Land use conflict can arise, as has been seen with poorly planned plantations. The diversity of agroforestry elements necessitates good systems design - one model will not suit all.

Recent successes and lessons learnt elsewhere in developing agroforestry policies and strategies, such as in Africa, can point the way, but policy processes will need to change.

Leadership and drive of departmental heads is critical in getting a policy issue on the government's agenda and moving it forward, but current top-down policy processes through which issues are progressed may need to accommodate greater community involvement in order to ensure adoption and sustainability. Lack of consolidated community support will affect policy support and implementation. While it is relatively easy to write policies by drawing inputs from internal and external advisors and experts, understanding the experiences of those whose practices the policies are trying to change is essential for effective adoption.

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