



Monitoring and Evaluation Framework for Fiji's National Adaptation Plan Process

Ministry of Economy's Climate Change and
International Cooperation Division

April 2020



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About the NAP Global Network

The NAP Global Network was created in 2014 to support developing countries in advancing their NAP processes and help accelerate adaptation efforts around the world. To achieve this, the Network facilitates sustained South-South peer learning and exchange, supports national-level action on NAP development and implementation, and enhances bilateral support for adaptation and climate-sensitive sectors through donor coordination. The Network's members include participants from more than 135 countries involved in developing and implementing National Adaptation Plans, as well as 11 donor members. Financial support for the Network has been provided by Austria, Canada, Germany, and the United States. The Secretariat is hosted by the International Institute for Sustainable Development (IISD). For more information, visit www.napglobalnetwork.org.

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Abbreviations

CCHSAP	Climate Change and Health Strategy Action Plan
CCICD	Climate Change and International Cooperation Division
CVA	Climate Vulnerability Assessment
DRRP	(national) Disaster Risk Reduction Policy
FRDP	(regional) Framework for Resilient Development in the Pacific
GGF	Green Growth Framework
M&E	Monitoring and evaluation
MoE	Ministry of Economy
NAP	National Adaptation Plan
NCCP	National Climate Change Policy
NCCCC	National Climate Change Coordinating Committee
NDC	Nationally Determined Contribution under the Paris Agreement
NDP	5-Year and 20-Year National Development Plan
PFPs	Policies, frameworks, and plans
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction
ToC	Theory of Change
UNFCCC	United Nations Framework Convention on Climate Change

1.0 Introduction

The Republic of Fiji's National Adaptation Plan (NAP) document was formally launched in December 2018 at the 24th session of the Conference of Parties (COP24) to the United Nations Framework Convention on Climate Change (UNFCCC). The document identifies 160 prioritized adaptation actions, which are to be delivered over a five-year timeframe (Ministry of Economy [MoE], 2018).

The Climate Change and International Cooperation Division (CCICD) of Fiji's MoE is responsible for coordinating and facilitating the development and implementation of the NAP process. It reports to an interministerial National Climate Change Coordination Committee (NCCCC), which functions at a strategic level on behalf of the government. The NCCCC's remit includes reporting on the monitoring and evaluation (M&E) of cross-cutting policies and sector plans. A NAP Steering Committee, comprising relevant sector technical leads, reports to the NCCCC and has a more operational role. It meets periodically to review progress and guide the development of future NAPs while considering changes needed due to the current climate risk context; it draws upon the technical expertise of key stakeholders from the private sector, civil society, and professional and academic institutions, amongst others, when their advice and support is required (MoE, 2018). The Steering Committee will be formally established and its role strengthened when Fiji's Climate Change Bill 2019 is enacted by Parliament, as expected in 2020 (MoE, 2019).

Fiji's NAP document (MoE, 2018) explicitly states that an M&E system for the NAP process is required to assess the implementation and effectiveness of the NAP and its actions and to support the development of its next iteration (Action 8.06: Establish an institutional and monitoring mechanism for NAP implementation). The mandate to develop such a system was established in Fiji's revised National Climate Change Policy (NCCP) (2018) (MoE, 2017b) and is further reinforced in its Climate Change Bill 2019 (MoE, 2019).

The purpose of this framework is to provide guidance to the CCICD on how a system to comprehensively monitor and evaluate the NAP process should be designed and to encourage government entities, their civil servants, and other stakeholders to support its development. It also seeks to identify other M&E systems that this system might link with. The framework does not cover the operationalization and governance of the M&E system (e.g., institutional arrangements, resource requirements, output types, and communication, etc.), but it represents the first step in the development of an M&E system for Fiji's NAP process.

The framework was created through an iterative process of national-level literature reviews and a series of consultations (conducted in Suva between July and December 2019) with around 30 stakeholders from 20 government agencies. These informed an exercise to identify and assess available data/information, which was complemented with relevant knowledge and learning from the international climate change adaptation community and associated M&E efforts.

2.0 Context of the NAP Process and Implications for Its M&E

Fiji's NAP document is a strategic action plan for climate-resilient development. It is consistent with the UNFCCC Cancun Adaptation Framework, which states that “the objectives of the NAP process are to reduce climate change vulnerability through improving adaptive capacity and resilience, and integrating adaptation into policies and development planning processes and structures” (UNFCCC, 2011). It also enhances the ability of government to meet the rights guaranteed to citizens under the Constitution of the Republic of Fiji (2013) (MoE, 2018).

As stated above, Fiji's revised NCCP (2018) provides the mandate for the development of the NAP process. The NCCP states that the NAP is a process that:

- Builds on existing adaptation activities
- Integrates climate change into every aspect of national decision making
- Fulfills international adaptation-related commitments
- Operationalizes the adaptation-related components of the NCCP at all levels.

The Climate Change Bill 2019 provides the mandate for further development and evaluation of the NCCP and, therefore, the NAP process (MoE, 2019).

The vision for the NAP process is cited as “a climate-resilient development pathway which enables Fiji to anticipate, reduce, and manage environmental and climate risks caused by climate variability and change to support a vibrant society and prosperous economy.” To achieve this goal, it is important that the development planning system is updated and that climate change risks and vulnerabilities in key sectors (along with barriers to adaptation in key systems and processes) must be addressed through strategies devised at the national level (MoE, 2018).

2.1 Links With National Policies, Frameworks, and Plans

The NAP process uses existing national policies, frameworks, and plans (PFPs) as its foundation, notably those that guide development planning and contain actions that address climate vulnerabilities and adaptation barriers (Table 1).

Table 1. Links between PFPs and the NAP process (and associated adaptation-related actions from which a prioritized list was made)

PFP (and coordinating ministry)	Date	Links with the NAP process	M&E status	Actions
National Development Plan (NDP) (Ministry of Economy)	2017	The NAP is closely aligned with the NDP and shares a five-year delivery cycle.	M&E system to be developed in 2020	99
National Climate Change Policy (NCCP) (Ministry of Economy)	2012 & 2018	The NAP integrates strategic actions from the first NCCP and high-level policy guidance and institutional arrangements to facilitate, monitor, and evaluate its implementation from the revised NCCP.	M&E system yet to be developed	92
Climate Vulnerability Assessment (CVA) (Ministry of Economy)	2017	The NAP is informed by the CVA's multi-sectoral analysis of Fiji's vulnerability to natural hazards and climate change.	M&E system yet to be developed	110
Green Growth Framework (GGF) (Ministry of Economy)	2014	The NAP reflects the GGF's focus on accelerating integrated and inclusive sustainable development.	M&E system yet to be developed	131
Climate Change and Health Strategy Action Plan (CCHSAP) (Ministry of Health and Medical Services)	2016	The NAP includes an adaptive and sustainable health system advocated by CCHSAP.	M&E system being implemented	40
(Regional) Framework for Resilient Development in the Pacific (FRDP) (The Pacific Community)	2016	The NAP is informed by the FRDP's voluntary action plan for building resilience to climate change and disasters in the Pacific.	M&E system yet to be developed	52
Disaster Risk Reduction Policy (DRRP) (Ministry of Disaster Risk Management and Meteorological Services)	2018	The NAP integrates disaster risk reduction with climate change adaptation, as called for by the UNFCCC, Sustainable Development Goals (SDGs), and Sendai Framework for Disaster Risk Reduction (SFDRR).	M&E system yet to be developed	77
Others				278
Total				879

A NAP catalogue (“database”) sets out precise linkages between adaptation-related actions across the PFPs and was, therefore, important in underpinning the development of the NAP process (MoE, 2018). From 879 actions already identified, 160 were prioritized for five systems components and five sectoral components identified in the NAP document (Table 2).

Table 2. Number of adaptation actions for the five systems components and five sectoral components identified in the NAP document

	10 Components	160 Actions
Systems components	Climate information services and management	10
	Horizontal integration	11
	Vertical integration	10
	Climate change awareness and knowledge	11
	Resource mobilization	13
Sectoral components	Food and nutrition security	23
	Health	10
	Human settlements	12
	Infrastructure	44
	Biodiversity and the natural environment	16

The NAP document also goes some way toward specifying assumptions and relationships (e.g., how actions in individual systems components or sectoral components interact with one another and how, collectively, they will achieve the vision and under what conditions). Each component is linked to a high-level outcome (Tables 3 and 4).



Table 3. Systems outcomes to address adaptation barriers

Systems component	Description	Outcome
Climate information services and management	Improves capacity to generate, manage, disseminate, and use climate change information.	Stakeholders helped to anticipate environmental and climate events before they occur.
Horizontal integration	Mainstreams climate change issues into national-level development planning processes.	Increased robustness of planning processes and helps prevent maladaptive outcomes.
Vertical integration	Integrates climate change issues into sub-national development planning processes which then inform national processes.	Reduced vulnerability by tackling environmental and climate risks where they are experienced.
Climate change awareness and knowledge	Enhances understanding by increasing the flow of relevant information to relevant adaptation stakeholders.	Stakeholders empowered to engage in decision making and understand relevant potential adaptation measures.
Resource mobilization	Enhances the accumulation and coordination of resources to support the transition to a climate-resilient economy.	Improved amount of resources available and the way available resources are utilized.

Source: MoE, 2018, p. 4.

Table 4. Sectoral outcomes to address environmental and climate risk

Sectoral component	Description	Outcome
Food and nutrition security	Improves capacity to anticipate and reduce environmental and climate risks and ensure sustainable food production.	Transformed and re-oriented agricultural system to support food production without degrading resources.
Health	Improves systems and infrastructure to manage the negative impacts caused by future climate variability and change.	Resilient health and medical services that can withstand future environmental and climate events.
Human settlements	Reduces vulnerability of major assets, infrastructure and population centres, providing the ingredients for growth.	Resilient population centres providing a firm basis for sustainable investments and continued economic prosperity.
Infrastructure	Helps to ensure full life spans of investments are reached by reducing environmental and climate risks.	Resilient infrastructure which can operate under future conditions and meet future needs.
Biodiversity and the natural environment	Supports maintenance of biodiversity and the natural environment and the services it provides.	Efforts supported to protect, maintain, and restore natural capital that underpins society and economic growth.

Source: MoE, 2018, p.4.

RECOMMENDATION 1: A lead government agency has been identified for each adaptation action and for each component. It is recommended that a steering group, led by a government agency and with both sectoral and cross-sectoral representation, be established to oversee the implementation and M&E of each component. This would also assist the CCICD with its role in coordinating and facilitating the NAP process.

RECOMMENDATION 2: Monitoring of the actions listed for each of the systems and sectoral components will help in evaluating progress toward that component's high-level outcome. However, these outcomes may not be directly measurable or quantifiable, so additional qualitative stakeholder feedback may be needed to help assess whether or not they are being achieved. For example, "Mainstreaming the use of analytical tools in adaptation and disaster risk management planning processes" (Action 8.10) should contribute toward the "resource mobilization" systems outcome: "Improves the amount of resources available and the way available resources are utilized" (Table 3). While not directly measurable, the action should create a better enabling environment—institutional arrangements, capacity building, and PFPs—to support effective mainstreaming and, thereby, contribute to the outcome for this component.

2.2 Links With International Policies and Agreements

The NAP process is also a key mechanism for implementing international adaptation-related commitments (Leiter & Olivier, 2017; UNEP, 2017). In Fiji, the UNFCCC Paris Agreement, Sustainable Development Goals (SDGs) and Sendai Framework for Disaster Risk Reduction 2015–2030 (SFDRR) are the most significant of these. However, the current state of M&E is fragmented and, with existing M&E systems operating independently, there are inevitable overlaps in reporting by different ministries on policies and agreements that may have common targets. While external support is contributing to local capacity development in meeting M&E obligations (e.g., SDGs, see below), much remains to be achieved, particularly in standardizing reporting mechanisms across ministries and normalizing M&E as an integral part of their service.

The long-term goal of the Paris Agreement is to hold global average temperature increase to well below 2°C. In addition, Article 7 requires countries to effectively implement their national climate change commitments while aiming to make all financial flows consistent with a pathway toward low-emissions, climate-resilient development. The agreement highlights the importance of M&E and learning from adaptation (Article 7, para 9d) and requires all countries to provide information on climate change impacts and adaptation in order to understand progress toward achieving climate-resilient development.

Fiji's current **Nationally Determined Contribution (NDC)** under the agreement (and its NDC Implementation Roadmap 2017–2030) is focused on the energy sector and related mitigation actions and outlines a framework for monitoring, reporting, and verification of the sector, which is still to be developed (MoE, 2017a). It also includes an adaptation goal to reduce the vulnerability and enhance the resilience of communities to the impacts of climate change and disasters, together with seven key adaptation challenges and a proposed way forward, actions, and time-bound indicators for each. Fiji will revise its NDC in 2020, and the NAP document will inform the revised adaptation section of the NDC.

With regard to the **SDGs**, the NAP process supports efforts to deliver all of 17 goals, with the level of support varying from “general support” for the majority of the goals, to “substantial support” for three goals:

- Goal 13. Take urgent action to combat climate change and its impacts
- Goal 14. Conserve and sustainably use the oceans, seas, and marine resources
- Goal 15. Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation, and halt biodiversity loss.

Pacific regional organizations (e.g., the Pacific Community and Pacific Islands Forum) support the M&E of specific SDGs in Pacific Island Countries through multilateral projects. At the national level, Fiji reports on SDG progress through Voluntary National Reviews (VNRs) coordinated by the MoE, the first of which was published in June 2019.

The United Nations Office for Disaster Risk Reduction supports developing countries in monitoring progress with implementing the **SFDRR** through country-based status reports. The NAP is aligned with the principles of the SFDRR and will partially utilize these reports, the latest of which for Fiji was published in October 2019, to evaluate progress with relevant actions. Responsibilities for disaster risk reduction are shared between stakeholders and government at all levels, with relevant parts of the SFDRR being implemented through links with the national DRRP and regional FRDP. A regional needs assessment for the FRDP was conducted in 2019 and recommends strengthening national M&E systems, enhancing reporting coherence at national and regional levels, and facilitating enduring partnerships to guide the successful implementation of FRDP goals. This NAP M&E framework and the broader M&E system seek to reinforce high-level coordination between ministries for enhanced M&E of national, regional, and international PFPs. Three of the SFDRR's four priority areas for action are particularly relevant to the NAP process and its M&E (MoE, 2018):

- Understanding disaster risk through its promotion of disaggregated data and information collection, the need to recognize differentiated impacts of environmental and climate events across different social groups, and the emphasis on usability.
- Strengthening disaster risk governance at all levels by supporting disaster risk reduction mainstreaming efforts through its emphasis on horizontal and vertical integration.
- Investing in disaster risk reduction for resilience through its support to risk transfer mechanisms such as insurance.

RECOMMENDATION 3: M&E of international policies and agreements in Fiji is currently fragmented and lacks coherence. To streamline reporting and enhance coherence across policies, institutions, and M&E systems, while reducing resource requirements through sharing data/information and institutional arrangements, the CCICD should explore complementarities and exploit the synergies between international commitments. For example, Fiji's revision of its NDC in 2020 provides an opportunity to ensure that relationships with the NAP process and its M&E are properly recognized and used to mutual benefit.

3.0 Purpose and Proposed Approach of the M&E System

The overarching aims of the M&E system for the NAP process focus on adaptation to the climate-related risks and vulnerabilities identified in key systems and sectors and include:

- **Monitoring** by tracking progress with implementing actions (processes and outputs) and delivering results (outcomes) and the ultimate goal (vision).
- **Evaluating** by assessing the effectiveness of the NAP process in delivering intended results.
- **Learning** about reducing risk and vulnerability from the NAP process and its results (e.g., what works, where, why, and for whom?).
- **Reporting** on NAP-related and other climate-related commitments (national and international).

These aims represent the generic ideal scenario that all countries should aspire to through their NAP process. Building on these aims, the outputs of the M&E system could, for example, be used to:

- Ensure accountability between government, its civil service, and citizens
- Inform national and international reporting (e.g., in relation to the UNFCCC and SDGs)
- Increase support for adaptation among stakeholders
- Identify evolving adaptation contexts and needs
- Enable adaptive management
- Inform future revisions of PFPs
- Learn from barriers/challenges identified during the implementation of adaptation actions.

3.1 Requirements of the M&E System

The NAP document cites the following provisions for an M&E system (MoE, 2018):

- An M&E system is required under the NCCP (2018) to track progress and identify achievements in the NAP process.
- M&E should cover the entire life cycle of the NAP's first iteration, support the next iteration (2023–24) and inform future revisions of the CVA.
- The M&E system should capture both processes and results.
- The CCICD is mandated to analyze the NAP's progress and to carry out a mid-term review, on behalf of the NCCCC, to determine whether any changes are necessary.

The M&E system will also indirectly address several adaptation actions prioritized in the NAP document (MoE, 2018), for example:

- Action 7.04—requires any data or information collected to be used, managed, and shared accurately in user-friendly formats.
- Action 7.10—requires the establishment of a “standardised approach to collecting information on climate change interventions to facilitate monitoring and evaluation of outcomes relative to policy targets, including the use of Data Supply and Reporting Obligation Agreements to ensure that the data and information needed to track adaptation are provided to a centralised Data Repository.”
- Action 8.01—ensures that “finance and planning institutions play a central role in strategic, whole-of-country approaches for climate change and disaster-resilient development.”
- Action 10.07—ensures that “local-level stakeholders can participate in, understand, and have access to results and findings from monitoring and evaluation exercises at national and sub-national levels, access to relevant vulnerability and land-use capability maps, as well as participate in research through participatory action research.”

As the custodian of the NAP M&E system, the CCICD faces several key challenges in its effective implementation, including limitations in resources, availability of relevant current data/information, and existing internal M&E capacity. The recommendations provided in this framework will help the CCICD to develop strategies to address these challenges.



3.2 Collection of Data/Information to Inform M&E

Collecting data/information required by the CCICD to inform M&E should be done by those responsible for implementing adaptation actions. Annex 1 to this framework sets out a tested approach to the identification, collection, and management of the data/information that may be used by the CCICD in the NAP's M&E system. Annex 2 lists an extensive range of data/information sources and prioritizes these according to their primary or secondary importance to the NAP process. Primary sources of data/information include those essential to M&E and directly relevant to one or more adaptation actions; secondary sources are additional material to back up primary sources or to inform judgements where primary sources are not available (see examples, Box 1).

Box 1. Examples of primary and secondary sources of data/information

- A primary information source to monitor the progress of Action 13.4 (“Repair and reconstruct through the ‘build back better’ concept of health infrastructure affected by disasters”) would be the level of enhanced health infrastructure resilience to disasters, as reported in the Ministry of Health and Medical Services’ Annual Report.
- If the Annual Report is not available for the period of evaluation, the M&E system could utilize, as a secondary information source, the raw data captured by the ministry’s Asset Management Unit, including the number of health facilities repaired after a disaster and the cost of the work.

The M&E system for the NAP process should, ideally, link with existing M&E systems for those PFPs through which adaptation actions are being delivered (e.g., the NDP, which contains a framework for M&E). However, many ministries have yet to develop an M&E system, and very few such systems currently exist, though these may not yet be sufficiently developed to be useful in adaptation M&E. This was confirmed by stakeholders during the NAP’s development (MoE, 2018) and in subsequent consultations in the preparation of this framework, which reinforces the need for a dedicated M&E system for the NAP process. A small number of ministries, including the Ministry of Health, Ministry of Agriculture, the Ministry of iTaukei Affairs and the Ministry of Fisheries, have M&E functions (either dedicated M&E staff or an M&E unit) to track progress with their national, regional, and international commitments. Regional and international agreements have specific reporting requirements, which may not be compatible with those of the NAP process. However, these reporting systems should be able to provide valuable input to the NAP’s M&E, particularly if the responsible ministry provides data/information in a suitable format.

Despite the current lack of complementary M&E systems, much of the data/information required by the CCICD is nonetheless held by government ministries, who are either directly implementing actions or overseeing their execution by others (e.g., community groups and NGOs). For example, data/information relating to national social, economic, and environmental vulnerability is held by the Ministry of Economy, through the Fiji Bureau of Statistics and the Budget and Planning Division. In the health sector, the CCHSAP outlines reporting requirements for indicators identified under the 10 components of the plan, and these could support the tracking of relevant NAP actions. The NAP also prioritizes actions to strengthen interministerial collaboration and coordination of implementation and reporting through the NCCCC. While sector- and local community-based climate change vulnerability assessments have also been

carried out, there is currently no national-level integrated system for tracking progress or the outcomes of these assessments, making comparisons between them difficult. The Climate Change Bill 2019 (MoE, 2019) provides for the establishment of an online National Adaptation Registry. This will house data/information from national vulnerability assessments but will rely on voluntary contributions from projects. In principle, it could also house the data/information collected in Annex 2.

The CCICD may require other government ministries and non-government stakeholders to provide additional data/information upon which to base its assessments and deliver its M&E mandate (e.g., when the results of an action become evident sometime after its completion, making it difficult to monitor its eventual outcome) (MoE, 2018). The Climate Change Bill 2019 provides for the CCICD to gain access to any additional information required from climate change-related research, programs, and projects from both government and non-government sources.

Arrangements for the M&E of adaptation actions linked to divisional, provincial, and other sub-national development planning are more complex. The mandate for sub-national social, economic and environmental vulnerability and adaptation lies with several ministries, including the Ministry for Rural and Maritime Development, the Ministry of Local Government, the Ministry of iTaukei Affairs, and the Ministry of Waterways and Environment. Based on ministry-led policies, plans, and strategies, a wide range of organizations (including sub-national government representatives, NGOs, community groups, and private sector bodies) are involved with planning and implementing adaptation actions at the sub-national level (MoE, 2018). These organizations should be able to provide data/information on progress toward integrating adaptation-related issues into existing development planning processes.

The M&E system should also record the extent to which local-level adaptation plans are being achieved over time (MoE, 2017b). This has progressed to some extent at the community level through an initiative on village profiling. Led by the Ministry of iTaukei Affairs, the aim is to create an Integrated Village Development Plan (IVDP) for each iTaukei village. While the primary goal of IVDPs is to drive development at the village level, the ministry is currently ensuring that all IVDPs reflect NDP goals and Fiji's regional and international commitments by incorporating elements such as environmental sustainability, gender, and disability inclusiveness along with climate resilience. The only specific community-level adaptation plans are those produced by donor-funded projects for a small number of villages.

RECOMMENDATION 4: The collection of data/information required by the CCICD to inform M&E should be undertaken by those responsible for implementing adaptation actions. Annex 2 lists an extensive range of existing data/information sources and prioritizes these according to their primary or secondary importance to the NAP process; it also lists the stakeholders from whom the data/information is available. The approach to the identification, collection and management of data/information (Annex 1) has been thoroughly tested and should be advocated for wider use in the future. In principle, the online National Adaptation Registry provided for under the Climate Change Bill could also house the data/information collected in Annex 2.

RECOMMENDATION 5: Where M&E systems do not currently exist, government ministries should be encouraged, using the approach set out in Annex 1, to provide data/information required by the CCICD for its assessments and to deliver its M&E mandate. These include ministries that are either directly implementing adaptation actions (or overseeing their execution by others) and those responsible for actions linked to divisional, provincial, and sub-national development planning.

3.3 Tracking Progress and Identifying Achievements in the NAP Process

One of the key requirements of the M&E system is to track progress with the NAP's implementation. The M&E system should also be able to identify and evaluate achievements in the NAP process.

Effective M&E requires data/information on a spatially and temporarily diverse range of potential outcomes identified in the NAP document. This includes those for the 160 adaptation actions (note that the majority of adaptation actions are included in national PFPs), the five higher-level system components and five higher-level sectoral components, together with the ultimate goal of achieving climate-resilient development.

In terms of a suitable methodology for tracking progress and identifying achievements, a two-part approach comprising, firstly, a simple monitoring system and, secondly, a more sophisticated process- and results-based evaluation is recommended. With coordination and guidance provided by the CCICD, it is suggested that the proposed methodology be piloted with those ministries with existing M&E functions and include assessing its effectiveness to inform any required changes.

1. Tracking progress: Simple monitoring systems have been developed in the United Kingdom (Adaptation Sub-Committee [ASC], 2015) and in South Africa (Harley et al., 2017). These countries have an established National Adaptation Programme and National Adaptation Strategy (respectively). Both have mandates to increase the resilience of "at-risk" sectors, with content underpinned by climate impacts/vulnerability assessments, and both are accompanied by well-developed M&E systems. Given the status of Fiji's NAP, and contextual similarities with both the United Kingdom and South Africa, a monitoring system based on these examples is proposed.

The recommended monitoring system to track progress with the NAP's implementation uses traffic light colours as the basis for summarizing progress (ideally based on a PFP's own assessment) and differentiating proportionately between:

- Adaptation actions not implemented/lack of progress in delivering actions (**RED**)
- Adaptation actions partially implemented/some progress in delivering actions (**AMBER**)
- Adaptation actions fully implemented/significant progress in delivering actions (i.e., completed or on track) (**GREEN**).

Table 5 explains the criteria used in arriving at "scores" for each adaptation action. The monitoring system will, for example, highlight adaptation actions that are experiencing problems with their implementation and help stakeholders identify possible causes and potential solutions. Table 6 illustrates the approach by providing a summary of progress, based on data/information available at the time of writing (January 2020), for six exemplar adaptation actions.

Table 5. Criteria for monitoring adaptation actions

Does the PFP provide an enabling environment for the action?	Are actions taking place?	Is progress being made in managing vulnerability?
<p>GREEN: Enabling environment in place to fully implement the action.</p> <p>AMBER: Enabling environment in place to partially implement the action.</p> <p>RED: No enabling environment in place.</p>	<p>GREEN: Relevant actions are complete or on track.</p> <p>Green: Relevant actions are complete or on track.</p> <p>AMBER: Relevant actions are not all on track.</p> <p>RED: Actions are not being implemented or are behind schedule.</p>	<p>GREEN:</p> <ul style="list-style-type: none"> • Vulnerability reducing, or not increasing. • High uptake of low-regrets actions. • Long-term decisions are accounting for climate change projections. <p>AMBER:</p> <ul style="list-style-type: none"> • Some trends in vulnerability increasing. • Scope to increase low-regrets actions. • Decisions partially or inconsistently accounting for climate change projections. <p>RED:</p> <ul style="list-style-type: none"> • Most trends in vulnerability increasing. • Minimal uptake of low-regrets actions. • Decisions do not take climate change projections into account.

Source: Based on ASC, 2015.



Table 6. Summary of progress for six exemplar adaptation actions

Exemplar adaptation actions: three system component actions (7.10, 9.2 & 11.4) and three sectoral component actions (13.4, 15.A.2 & 16.9)	Summary of progress (January 2020)		
	Does the PFP provide an enabling environment for the action?	Are actions taking place?	Is progress being made in managing vulnerability?
7.10: Establish standardised approach to collecting information on climate change interventions to facilitate monitoring and evaluation of outcomes relative to policy targets.....	No enabling environment in place.	Relevant actions are not all on track.	Some trends in vulnerability increasing.
9.2: Integrate contextually relevant adaptation and disaster risk reduction measures into Divisional Strategic Development Plans and Provincial Strategic Development Plans.....	Enabling environment in place to partially implement the action.	Relevant actions are not all on track.	Scope to increase low-regrets actions.
11.4: Review and integrate climate and disaster issues into Financial Sector Development Plan to improve climate literacy, build capacity and transfer technology.....	Enabling environment in place to partially implement the action.	Relevant actions are not all on track.	Scope to increase low-regrets actions.
13.4: Repair and reconstruct through “build back better” concept of health infrastructure affected by disasters, particularly TC Winston and 2017 landslides in Qamea and St Giles Hospital.	Enabling environment in place to partially implement the action.	Relevant actions are not all on track.	Decisions partially or inconsistently accounting for climate change projections.
15.A.2: Conduct comprehensive assessment of all Fiji’s water and sanitation infrastructure and resources in order to meet current and future needs in light of climate change projections.....	Enabling environment in place to partially implement the action.	Relevant actions are not all on track.	Decisions partially or inconsistently accounting for climate change projections.
16.9: Expand Tree-Planting Campaign to encourage voluntary tree and/or mangrove planting activities as part of school curricula, community stewardship, and Corporate Social Responsibility.	No enabling environment in place.	Relevant actions are not all on track.	Scope to increase low-regrets actions.

Source: Author’s analysis.

In addition to tracking progress for individual actions, if an “in-combination” assessment of the actions is then undertaken, the monitoring system can also be used to determine progress toward:

- Delivering outcomes for each system component and sectoral component.
- The ultimate NAP goal of achieving climate-resilient development.
- Commitments to international policy processes and agreements (e.g., the Paris Agreement, SDGs, and SFDRR).

By comparing progress summaries for the prioritized adaptation actions for each system component and sectoral component over time (i.e., for successive reporting periods), the impact of the action, systems component, or sectoral component in addressing adaptation priorities and, therefore, contributing to climate-resilient development can be determined.

2. Identifying achievements: While the monitoring system described above represents a simple, practical approach to tracking progress with the NAP’s implementation, a more sophisticated approach is required to comprehensively identify and assess achievements in the NAP process. The second element of the methodology uses process- and results-based measures to monitor the effectiveness of activities and outputs in delivering an adaptation action’s intended outcomes (results) and enable robust evaluations to be undertaken (Box 2).

Box 2. Typology of adaptation measures

Process-based measures to monitor the development, implementation, and progress of an adaptation action; these are subdivided into:

- *Input measures*, which monitor the quantity, quality, and timeliness of the resources provided.
- *Activity measures*, which monitor how the resources provided are used.
- *Output measures*, which monitor short-term results and describe and quantify the goods and services produced directly by an adaptation action.

Results-based measures to monitor the effectiveness of adaptation actions; these are subdivided into:

- *Outcome measures*, which monitor and define the medium-term results and effectiveness of adaptation actions.
- *Impact measures*, which monitor broad-based, long-term changes toward the ultimate goal.

Source: Based on Harley & van Minnen, 2009 & 2013.

The approach builds on the data/information obtained from stakeholders to track progress and on UNFCCC’s “Technical Guidelines for the NAP Process” (UNFCCC, 2012, pps. 104–116), but importantly also requires qualitative and quantitative measures of activity, output, and outcome to be identified.

This element is inevitably more resource- and data-intensive than the tracking element described above, and its use will be determined by the capacity and capability of CCICD to carry out the detailed analyses required.

Table 7 illustrates the approach by providing an evaluation, based on data/information available at the time of writing (January 2020), of achievements in implementing the six exemplar adaptation actions shown in Table 6.

Table 7. Evaluation of achievements in implementing six exemplar adaptation actions (see Table 9)

Achievements in implementing adaptation actions (January 2020)					
Adaptation action	Input	Process-based measures		Results-based measures	
		Activity	Output	Outcome	Impact
7.10: Establish standardised approach to collecting information on climate change interventions to facilitate monitoring and evaluation of outcomes relative to policy targets.....	National standardised guidelines developed by CCICD to collect information on climate change interventions.	Application of standardized guidelines by “x” Ministries and/ or Departments implementing “y” climate change interventions to achieve “z” policy targets.	Number of training programs delivered and number of participants trained.	Operational centralized data repository regularly updated with information captured in standardized format.	Easily accessible project implementation updates to inform reporting and decision-making processes.
9.2: Integrate contextually relevant adaptation and disaster risk reduction measures into Divisional Strategic Development Plans and Provincial Strategic Development Plans.....	Guidelines and training provided by CCICD to integrate adaptation and disaster risk reduction into sub-national planning processes.	Delivery of capacity development training programs to support mainstreaming of disaster risk management into sub-national development planning processes.	Number of training programs delivered and number of participants trained.	Adaptation and disaster risk reduction integrated into all sub-national development plans.	Enhanced disaster resilience at sub-national levels.
11.4: Review and integrate climate and disaster issues into Financial Sector Development Plan to improve climate literacy, build capacity and transfer technology.....	National climate finance policies and innovative solutions for green financing jointly developed by CCICD and Reserve Bank of Fiji.	Implementation of national climate finance policies and innovative green financing solutions.	Amount of financing disbursed to support adaptation and resilience interventions.	Enabling environment (policies, products and services) in place for individuals, communities, and businesses to access adaptation finance.	Individuals, communities, and businesses empowered to implement appropriate adaptation and resilience measures.
13.4: Repair and reconstruct through ‘build back better’ concept of health infrastructure affected by disasters, particularly TC Winston and 2017 landslides in Qamea and St Giles Hospital.	Repair and reconstruct health infrastructure in accordance with climate-resilient standards.	Implementation of climate-resilient installations and construction standards for health facilities.	Number of health facilities retrofitted with Category 4 cyclone-resilient installations.	Disaster-resilient health facilities provided for all urban and rural populations.	Resilient health services in operation during and following disaster events.

Achievements in implementing adaptation actions (January 2020)					
Adaptation action	Input	Process-based measures		Results-based measures	
		Activity	Output	Outcome	Impact
15.A.2: Conduct comprehensive assessment of all Fiji's water and sanitation infrastructure and resources in order to meet current and future needs in light of climate change projections....	Joint nation-wide assessment of water and sanitation infrastructure by Water Authority of Fiji (for urban water supply networks) and Department of Water and Sewerage (for rural water supply systems).	Deployment of water, sanitation and hygiene (WASH) assets and infrastructure survey teams to visit all populated areas.	Amount of urban and rural WASH infrastructure prioritized for upgrading or replacement.	Comprehensive urban and rural WASH infrastructure inventory in place, with prioritization for necessary upgrading/ climate-proofing.	Resilient WASH services in operation during and following disaster events.
16.9: Expand Tree-Planting Campaign to encourage voluntary tree and/or mangrove planting activities— as part of school curricula, community stewardship and corporate social responsibility.	Ministry of Forestry to provide and/or facilitate access to seedlings and suitable land for school, community and/ or corporate tree-planting activities under national Tree-Planting Campaign.	Propagation of suitable and adequate tree species in government nurseries and allocation of land for planting.	Number of seedlings supplied to schools, community and/ or corporate tree-planting activities, and number of hectares of land allocated for tree-planting.	Schools, communities, and corporate bodies actively and voluntarily involved in national Tree-Planting Campaign activities.	Enhanced coastal protection and carbon sequestration.

As already stated, adaptation actions are being implemented by a range of stakeholders, the majority of which are government ministries (see Section 3.2). While some stakeholders have systems in place to monitor their activities, others do not, and the quality and quantity of available data/information are quite variable. The CCICD should encourage all stakeholders to provide data/information about their actions using the approach provided in Annex 1. Annex 2 to this framework lists existing sources of data/information.

In some cases, it may be necessary to synthesize data/information from different sources to provide a cumulative “score” of progress for that action. This may require data/information to be assessed “horizontally” across systems and sectors (e.g., in relation to mainstreaming climate change issues into national-level development planning processes) or “vertically” across geographic scales (e.g., in relation to integrating climate change issues into sub-national development planning processes, which then inform national processes). Price-Kelly et al. (2015) suggest three approaches to facilitate effective data/information synthesis:

- Using standardized metrics at all scales so that data/information can be easily aggregated.
- Using scale-specific metrics, aligned with national M&E requirements, that would allow stakeholders operating in different systems or sectors or at different levels to collect data/information tailored to their needs.
- Using qualitative information on lessons learned and experiences from the beneficiaries of an adaptation action or those implementing it, or from feedback from the wider public.

RECOMMENDATION 6: A two-part methodology should be used for tracking progress and identifying achievements in the NAP process. This would comprise, firstly, a simple monitoring system using traffic light colours as the basis for summarizing progress and, secondly, a more sophisticated process- and results-based evaluation of the effectiveness of activities and outputs in delivering an adaptation action’s intended outcomes (results). The proposed methodology should be piloted with those ministries that already have M&E functions and include assessing its effectiveness to inform any changes that might be necessary. In some cases, it may be necessary to synthesize data/information from multiple sources to assess progress.



3.4 Communication and Learning From the NAP Process

Communication of progress, results, and lessons learned should form an integral part of the NAP process. The NAP document outlines the need for a communications strategy to support the adoption of the NAP principles, to raise awareness of the NAP process (including implementation of its actions), and to improve how government engages with stakeholders at all levels and across all sectors on adaptation issues (MoE, 2018)—a strategy was developed in 2019. The NAP document also states that the strategy should establish an M&E system to measure its own performance and identify any changes that might be needed. In addition, the Climate Change Bill 2019 (MoE, 2019) provides for the development of a national climate change communications strategy to guide the dissemination of climate change-related information to improve public awareness, risk reduction, and preparedness, as well as national climate change reports on mitigation and adaptation trends and actions.

The communications strategy should address facilitating learning, which will need to be targeted and tailored to different audiences. It is, therefore, important to not only identify these audiences, but also to assess their knowledge, attitudes, and requirements. It will then be possible to determine how to present information to potential users in a way that best meets their needs and purposes, and how best to reach them (Price-Kelly et al., 2015).

Consideration should also be given to the frequency and timing of communications with key audiences. The frequency of reporting on international commitments needs to be aligned with pre-determined timescales, although this could be affected by the availability of data/information or results. Similarly, the results from the NAP process may be used to inform the development of a new PFP or the revision of an existing one, in which case it may be necessary to synchronize communication with the PFP's policy cycle (Price-Kelly et al., 2015). For example, an opportunity that might be explored with the Ministry of Economy (Budget & Planning) in 2020 is the potential for joining this M&E framework and the proposed M&E framework for the NDP.

RECOMMENDATION 7: In establishing an M&E system to enable government, its civil servants, and key stakeholders to track and assess progress (processes and results) within the NAP process, the CCICD should also maximize learning from the adaptation actions identified in the NAP document and from the NAP process itself. This should include promoting experience-based learning and reflection to inform subsequent iterations of the NAP and its M&E, and improving the flow of data/information between different stakeholders.

RECOMMENDATION 8: The Climate Change Bill 2019 provides for the establishment of an online National Adaptation Registry. The bill will go through further changes before enactment, and the voluntary contribution of data/information from projects could become mandatory. This would be beneficial for the NAP and its M&E and should be actively supported by the CCICD.

4.0 Conclusions and Next Steps

The purpose of this framework is to provide guidance to the CCICD on how a system to comprehensively monitor and evaluate the NAP process should be designed. Once established, the M&E system should enable the government, its civil servants, and key stakeholders to track and assess progress and maximize learning from the adaptation priorities identified in the NAP document. However, climate change adaptation is inherently long-term and multifaceted, with a complex range of influences beyond single or multiple adaptation actions at both national and sub-national levels. Identifying and evaluating achievements in the NAP process is, therefore, likely to be challenging (particularly at the sub-national level). For example:

- Outcomes of adaptation actions may only become apparent or arise sometime after their completion, thereby extending the timescale for concluding the M&E.
- Relationships between the various parts of the NAP process and other priorities within PFPs are often complex and may lead to trade-offs between the intended goals and realized results of each; synergies with other M&E systems are needed to identify these trade-offs.
- Attribution of outcomes to specific adaptation actions may contain considerable uncertainty; better understanding of the links within and between prevailing socioeconomic and climatic systems may help in determining the causal relationships of an outcome.
- Availability of capacities and resources amongst stakeholders (government, civil society, the private sector, and other partners) for developing and implementing the M&E system could be limited, with external support (e.g., additional funding) being required.

In addition to the specific recommendations contextualized in Sections 2 and 3 above (and summarized below in Table 8), there are a number of generic steps that should be taken by the CCICD to facilitate the development of the M&E system for the NAP process:

- **Establish a project team to undertake the design and development work and identify a key individual who will stimulate and coordinate its progress.**
- **Gather data and information relevant to monitoring and evaluating the adaptation actions and other priorities identified in the NAP document and that constitute the NAP process from the primary and secondary sources listed in Annex 2.**
- **Use this data/information in the methodologies recommended in Section 3.3 for tracking progress with the delivery of adaptation actions and associated components and for assessing the effectiveness (achievement) of activities and outputs in delivering an action's intended outcomes (see Recommendation 3.4).**
- **Report and disseminate progress, results, and lessons learned from the NAP process to key audiences, as suggested in Section 3.4.**
- **Continually review the implementation of the M&E system and, where necessary, make changes to improve its performance.**

Table 8. Summary of recommendations made in this framework

Context of the NAP process and implications for its M&E	
Links with national policies, frameworks, and plans	
Recommendation 1	A lead government agency has been identified for each adaptation action and for each component. It is recommended that a steering group, led by a government agency and with both sectoral and cross-sectoral representation, be established to oversee the implementation and M&E of each component. This would also assist the CCICD with its role in coordinating and facilitating the NAP process.
Recommendation 2	Monitoring of the actions listed for each of the systems and sectoral components will help in evaluating progress toward that component's high-level outcome. However, these outcomes may not be directly measurable or quantifiable, so additional qualitative stakeholder feedback may be needed to help assess whether or not they are being achieved. For example, "Mainstreaming the use of analytical tools in adaptation and disaster risk management planning processes" (Action 8.10) should contribute toward the "resource mobilization" systems outcome: "Improves the amount of resources available and the way available resources are utilized" (Table 3). While not directly measurable, the action should create a better enabling environment—institutional arrangements, capacity building, and PFPs—to support effective mainstreaming and, thereby, contribute to the outcome for this component.
Links with international policies and agreements	
Recommendation 3	M&E of international policies and agreements in Fiji is currently fragmented and lacks coherence. To streamline reporting and enhance coherence across policies, institutions and M&E systems, while reducing resource requirements through sharing data/information and institutional arrangements, the CCICD should explore the complementarities and exploit the synergies between international commitments. For example, Fiji's revision of its NDC in 2020 provides an opportunity to ensure that relationships with the NAP process and its M&E are properly recognized and used to mutual benefit.
Purpose and proposed approach of the M&E system	
Collection of data/information to inform M&E	
Recommendation 4	The collection of data/information required by the CCICD to inform M&E should be undertaken by those responsible for implementing adaptation actions. Annex 2 lists an extensive range of existing data/information sources and prioritizes these according to their primary or secondary importance to the NAP process; it also lists the stakeholders from whom the data/information is available. The approach to the identification, collection and management of data/information (Annex 1) has been thoroughly tested and should be advocated for wider use in the future. In principle, the online National Adaptation Registry provided for under the Climate Change Bill could also house the data/information collected in Annex 2.
Recommendation 5	Where M&E systems do not currently exist, government ministries should be encouraged, using the approach set out in Annex 1, to provide data/information required by the CCICD for its assessments and to deliver its M&E mandate. These include ministries that are either directly implementing adaptation actions or overseeing their execution by others, and those responsible for actions linked to divisional, provincial, and sub-national development planning.

Tracking progress and identifying achievements in the NAP process

Recommendation 6	A two-part methodology should be used for tracking progress and identifying achievements in the NAP process. This would comprise, firstly, a simple monitoring system using traffic light colours as the basis for summarizing progress and, secondly, a more sophisticated process- and results-based evaluation of the effectiveness of activities and outputs in delivering an adaptation action's intended outcomes (results). The proposed methodology should be piloted with those ministries that already have M&E functions and include assessing its effectiveness to inform any changes that might be necessary. In some cases, it may be necessary to synthesize data/information from multiple sources to assess progress.
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Communication and learning from the NAP process

Recommendation 7	In establishing an M&E system to enable the government, its civil servants and key stakeholders to track and assess progress (processes and results) within the NAP process, the CCICD should also maximize learning from the adaptation actions identified in the NAP document and from the NAP process itself. This should include promoting experience-based learning and reflection to inform subsequent iterations of the NAP and its M&E, and improving the flow of data/information between different stakeholders.
Recommendation 8	The Climate Change Bill 2019 provides for the establishment of an online National Adaptation Registry. The bill will go through further changes before enactment, and the voluntary contribution of data/information from projects could become mandatory. This would be beneficial for the NAP and its M&E and should be actively supported by the CCICD.

The CCICD should also give consideration to the operationalization and governance of the M&E system (e.g., institutional arrangements, resource requirements, output types, and communication, etc.), which are not covered in this framework.



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Annex 1. Identification, Collection and Management of Data/Information

This M&E framework provides guidance to Fiji's Climate Change and International Cooperation Division (CCICD) on the development of an M&E system for tracking progress and assessing achievements within the NAP process. Robust data/information is a core component of successful M&E. The data/information to be collected will be specific to each adaptation action and should enable M&E to be regularly repeated over time (e.g., in line with the five-year NAP cycle). A range of data/information will be required to facilitate M&E. Based on the criteria used to prioritize adaptation actions in the NAP document (MoE, 2018), this could include evidence of:

- Adaptation barriers/vulnerability to environmental and climate risks being tackled
- Causes (not symptoms) of vulnerability being addressed
- Management of social, economic, and environmental trade-offs
- Uptake of ecosystem-based adaptation/nature-based solutions
- Extent to which traditional and scientific knowledge are used
- Adequate resourcing of adaptation actions by local stakeholders (the majority of actions are at local level)
- Inclusive/collaborative/coordinated processes and robust decision making among stakeholders
- Inclusion of pro-poor/gender-related outcomes within development planning processes
- Provision of input/support by the private sector
- Use of existing/parallel processes (e.g., alignment with other reporting systems, where possible).

A1.1 Identification and Description of Data/Information Sources

A four-step process was used to help identify and describe sources of data/information that may be suitable for use by the CCICD in the M&E system (Box A1):

- Identify key stakeholders and map against adaptation actions
- Consult with key stakeholders to identify potential data/information sources
- Assess the suitability of data/information and describe main attributes
- Identify data/information gaps and options for filling these gaps.

Once the exercise had been completed, judgements were made as to the suitability of each data/information source for M&E, and these were prioritized according to their primary or secondary importance to the NAP process. Primary sources include those essential to M&E and directly relevant to one or more adaptation actions; secondary sources are additional material to back up primary sources or to inform judgements where primary sources are not available (see Annex 2).

Box A1. Four-step process to identify and describe suitable data/information sources

1. Identify key stakeholders and map against adaptation actions

As a precursor to Steps 2 to 4, below:

- Compile a list of key stakeholders for each adaptation action to be consulted with during this exercise.
- Determine the roles of these stakeholders in the delivery of the adaptation actions within the NAP process.

2. Consult with stakeholders to identify potential data/information sources

To identify the data/information available to monitor and evaluate progress toward the implementation of the adaptation actions:

- Consult with stakeholders to identify potential sources of data/information (national, sub-national and sectoral), notably including data/information from any complementary M&E systems.
- Determine whether the required data/information are readily available and, importantly, easily accessible (yes/no).

3. Assess the suitability of data/information and describe main attributes

To assess and describe available data/information for each action, paying particular attention to the following attributes:

- The type of data/information (i.e., quantitative/qualitative)
- The spatial scale/coverage of the data set (e.g., national/local)
- The time series of the data set (e.g., 2010-2019)
- The frequency with which the data set is updated (e.g., annual).

4. Identify data/information gaps and options for filling these gaps

Following the completion of Step 3, in relation to existing data/information sources:

- Identify gaps in data/information availability and in terms of their capacity for analysis to monitor and evaluate progress through the NAP process.
- Identify options for filling these data/information gaps to enhance the NAP M&E system.

A1.2 Timing and Frequency of Data/Information Collection

The timing and frequency of data/information collection will need to be established for each adaptation action. M&E of an action should start from an agreed pre-project baseline, continue through its implementation, to (or beyond) its endpoint. A sequence of data points may be needed to track changes that occur as a consequence of the action. The resulting time series will facilitate monitoring of progress and evaluation of achievements, and enable the action to be adjusted if the desired outcome is unlikely to be delivered. Certain actions may take longer to reach their full potential; it is, therefore, important for M&E to continue beyond the lifespan of such a project (i.e., by ensuring that there is a means of ex post evaluation). Some physical processes will require continuous monitoring in order to track trends and impacts of infrequent events (e.g., changes in river flow to ascertain the effectiveness of riparian planting to reduce flooding). Other processes may be captured by seasonal, quarterly or annual monitoring (e.g., changes in plant growth or crop yields).

A1.3 Location of Data/Information to Be Collected

The physical location of data/information will depend on the scale and sphere of influence of the adaptation action as well as the size of the study area. For example, large river catchments may need to be subdivided for M&E purposes to enable different areas to be sampled and to achieve greater homogeneity in the character of the sampled area. M&E may also be targeted at those areas most likely to be influenced by an action (e.g., areas closest to the coast when replanting mangroves), although this runs the risk of not identifying maladaptation or unanticipated benefits.

A1.4 Other Factors Affecting Data/Information Collection

Data/information collection may be affected by the human and financial resources and time available for M&E, as well as by logistical issues, and this may ultimately determine the design of the M&E system (GIZ, 2015). Realizing synergies with other M&E systems (if they exist) and increasing stakeholder participation in data/information collection (e.g., national and sub-national government institutions, private sector organizations, academia, NGOs, community groups, and civil society) can help offset resourcing issues that may affect M&E. Some stakeholders may require training to develop their capacity for M&E and ensure the consistency of data/information collection.

The choice of analytical methods will depend on the types of data/information that are available and what needs to be analyzed (see GIZ, 2015 for guidance). Data/information sources may be quantitative or qualitative (Box A2). For example, while observations of people's behaviour can be descriptive (qualitative), a full survey or structured sample of a population of interest may require more quantitative statements about the numbers benefiting from an adaptation action.

Box A2. Quantitative and qualitative data/information sources

Quantitative data/information sources

- Models
- Analysis of existing statistical databases
- Field measurements.

Qualitative data/information sources

- Observations
- Document and policy analysis
- Literature reviews
- Surveys—questionnaires, (semi-structured) interviews
- Focus groups—with local people and (other) experts
- Counterfactual scenarios.

A1.5 Data/Information Storage and Access

Data/information should be stored in a well-documented and consistent manner. This will ensure that the resource can be easily accessed by others wishing to undertake additional or other types of M&, or use the data/information for other purposes (e.g., inter-regional comparison of adaptation actions). In order to enhance learning and knowledge transfer, data/information should (if possible) be freely available. The use of electronic storage and web-based information systems should make this possible, and revisions and updates easier.

Several websites seek to draw together good examples of climate change adaptation (e.g., www.adaptationcommunity.net; www.adaptationlearning.net). These could be used both as a repository for certain types of data/information from the M&E process and to share adaptation experiences and key outcomes more widely.

Annex 2. Mapping of Data / Information Sources Relevant to Fiji's NAP Process as of February 2020 (Separate File)

Download Annex 2: <https://www.iisd.org/sites/default/files/uploads/annex-2-fiji-nap.xlsx>

