

Green Climate Fund Study 6 Report

Mechanisms to produce behavioural change in fishing and consumption of tuna and other pelagic fish species by Pacific Island coastal communities

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Executive Summary

cChange was contracted by the Pacific Community (SPC) to conduct a technical study that provides recommendations to develop a behavioural change program(s) as part of the GCF Regional Tuna Programme (RTP) titled: *Adapting tuna-dependent Pacific Island communities and economies to climate change*, under RFP22-3866 – Study 6. This Report presents the findings of this study.

The study specifically targeted identifying practical ways, in Pacific Island contexts, to raise awareness about the benefits of diversifying reef fish diets to increase consumption of tuna and other pelagic fish species (hereinafter as tuna), and support scaling-up nearshore fish aggregating device (FAD) programs to increase access to tuna in rural communities and the formalisation of tuna landings by commercial tuna fishing vessels to increase supply in markets for urban communities.¹ In this Report, “practical ways” are defined as methods that are culturally appropriate, support inclusive local dialogues, and access information is cost-effective to reach and engage target audiences. This criterion is critical regionally to increase the likelihood of adoption and sustained long-term commitments for implementation through limited national budgets.

As outlined in the Terms of Reference, the initial task called for in the study was to categorise the 14 countries participating in the RTP. Countries were categorised into Category A: direct need to increase consumption of tuna or Category B: tuna already integrated into diets. The purpose of this task was to identify priority countries, where there is the greatest need to adapt diets to integrate more tuna. This task identified 7 countries for Category A to prioritise for targeted behavioural change interventions coordinated at the national level.

However, during inception of the RTP, it is recommended to consult national governments to assess interest and capacity to support these behavioural change approaches. Identifying early adopters could also provide motivation for additional countries to participate over time and reduce inefficient use of resources where priorities are not aligned. This additional assessment should consider all 14 countries.

Building on the initial task, this Report provides a strategic framework for the adoption of behavioural change approaches that targets actions to increase tuna consumption in Category A countries. This section of the Report builds a case to invest in context-appropriate interventions, which primarily will require additional consultation with Category A countries. However, the additional contextual background provided will assist all country national planning processes.

To support further consultations, this Report presents high-level barriers to action, interventions for behavioural change, planning guides and targets for monitoring and evaluation. Estimated reach for target beneficiaries is also presented.

¹ Although not specifically requested in the Terms of Reference, much of the context, needs assessment and response options could equally apply to sourcing tuna and bycatch transhipped or unloaded by commercial tuna fishing vessels for processing and distribution to urban and peri-urban communities to contribute to efforts to address concerns about national food security.

Based on discussions with RTP advisors, it is apparent that there is a need to also incorporate behavioural change approaches into RTP subsidiary initiatives. The framework presented in this Report can provide a starting point for this approach. Further, integrating recommendations presented in this report Programme-wide also intends to improve budget constraints for behavioural change program(s) in all jurisdictions.

While not part of the Terms of Reference, guidance on costs associated with behavioural change programs in the Pacific Islands was requested. An indicative budget is included to guide future RTP investment decisions. These budget estimates are likely beyond current allocations. However, the indicative budgets are valuable to illustrate the cost for fully developed behavioural change programs in Category A countries. Further work is needed to refine budget details for the activities targeted in each country, which will be dependent on interest and capacity. In addition, it is recommended that in year one a regional planning process is established to assess and prioritise components to integrate behavioural change approaches within the wider RTP communications and visibility strategy, and subsidiary initiatives. This can potentially lower overall costs.

Finally, implementation risks are presented to further guide decision making during implementation.

Throughout the Report, recommendations are informed by background research, which involved a review of available research and reports and interviews with identified coastal fisheries practitioners and subject-matter experts (see Appendix 1). Tuna consumption analyses and climate change vulnerability assessments were also reviewed to assess country-level resource needs.

The approach taken throughout the study was to ensure recommendations are practical. As a result, resource and capacity gaps and needs prevalent within fisheries ministries in the participating countries are accommodated to the extent practicable.

It is also important to note that this Report focuses on only the behavioural change aspects that the RTP seeks to achieve: increasing tuna consumption in daily diets as a result of behavioural change interventions in coordination with other subsidiary initiatives. This approach, as recommended, moves beyond raising awareness and requires more substantial funding than a traditional awareness campaign.

This work should also not be confused with Programme-level communications and visibility, which is a funder requirement, and should not replace the need for audience focused communications. It is highly recommended for the RTP to have a standalone Communications and Visibility Plan and allocate a separate core budget for such communications and visibility activities.

About cChange

Established in 2013, cChange is a non-profit organisation with offices in Brisbane, Australia, and Suva, Fiji, working to improve lives of Pacific Island communities through strategic communications and behavioural change initiatives.

cChange believes that solutions to society's challenges, big and small, lie in changing the behaviour of individuals. When people understand the personal relevance of society's issues, when they are motivated by their own values and desire the solutions, when barriers to action are meaningfully addressed and they are adequately resourced, only then will they change their behaviour in ways that will lead to the transformational outcomes needed.

As part of its approach, cChange has through years of work in the region refined behavioural change methodologies for the Pacific Island region, including adapting for the unique cultures and the limited capacity and resources and underdeveloped infrastructure throughout the region. This report is informed by cChange's experience in the region advancing behavioural change strategies.

Terms of Reference

This report presents the outputs/deliverables as outlined in the Terms of Reference published with the Request for Proposal.

- (i) The relative proportions of reef fish and tuna in the diets of coastal communities in all 14 countries, based on the information available in the latest household income and expenditure survey (HIES) available for each country.
- (ii) The Pacific Island countries where coastal communities consume relatively small proportions of tuna relative to reef fish (i.e., countries in Category A), and those countries where coastal communities have already integrated tuna well into their diet (Category B countries).
- (iii) Practical methods for raising awareness of coastal communities in all countries in 'Category A' about the decreasing supply of reef fish per capita, and the need to progressively substitute tuna for reef fish. These methods should include a monitoring and evaluation component so that staff from national fisheries agencies can gauge whether the desired awareness is improved and whether the transition from consumption of reef fish to tuna is occurring.
- (iv) An implementation plan for applying these methods in coastal communities in all countries in Category A' during the life of the Programme. The focus of this plan should be communities located in areas selected for installation of FADs.
- (v) An estimate the total number of people to be reached by the proposed mechanisms to increase awareness of the need to eat more tuna in 'Category A' countries.

Prioritising Countries Behavioural Change Interventions

Climate change impacts on the productivity of coastal fisheries, continuing population growth and ongoing unsustainable fishing in nearshore areas are contributing to increasing vulnerability to food insecurity for coastal communities in the Pacific.^{2,3,4,5} Vulnerability assessments of coastal fisheries confirm that rural coastal communities cannot depend solely on their customary fishing grounds for future protein needs^{6,7}. The RTP is being designed on the basis of a need to increase the consumption of tuna as a necessary adaptation to fill per capita protein deficiency gaps expected to occur in many of the 14 participating countries as a consequence of climate-related impacts on the fisheries productivity of reef ecosystems.

There are also high risks of food insecurity in urban areas with declining availability of affordable reef fish (see GCF Study 2). Such modelling shows that by 2030 coastal fisheries are unlikely to meet the demand for fish at sub-national levels in at least 8 of the 14 participating countries. High risk of food insecurity continues to increase by 2050 even if favourable climate change emission scenarios are achieved⁵ (also see GCF Study 1 & 2). These risks compound the problems associated with addressing existing food and nutrition security, particularly the burden of non-communicable diseases (NCDs).⁸ Such increasing vulnerability demands practical and urgent interventions to support efforts that aim to diversify diets that are currently dependent to reef fish. Through the proposed RTP, increasing the consumption of tuna is presented as a suitable adaptation to increase food security among countries where protein deficiencies are likely.⁹

To support the prioritisation of behavioural change interventions that aim to diversify diets through increasing the daily consumption of tuna, the 14 participating countries of the RTP were assessed on the basis of several key factors, including:

1. The current level of tuna consumption compared to reef fish consumption.
2. Projected protein deficiencies/need for alternative non-reef fish protein sources.

² Bell, J.D., Allain, V., Allison, E.H., Andréfouët, S., Andrew, N.L., Batty, M.J., Hanich, Q. 2015. Diversifying the use of tuna to improve food security and public health in Pacific Island countries and territories, *Marine Policy*, Vol 55, pp: 584-59.

³ Johnson, J., Bell, J., Gupta, A. S. (2016) *Pacific islands ocean acidification vulnerability assessment*. Apia, Samoa : SPREP.

⁴ Barnett, J. (2011) Dangerous climate change in the Pacific Islands: food production and food security, *Reg Environ Change*, Vol 11 (Suppl 1), pp: S229–S237.

⁵ Weng, K. C., Glazier, E., Nicol, S. J., Hobday, A. J. (2015) Fishery management, development and food security in the Western and Central Pacific in the context of climate change, *Deep-Sea Research II* Vol 113, pp: 301–311.

⁶ Bell, J. D., Johnson, J. E., Hobday, A. J. (2011) *Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change*, Secretariat of the Pacific Community, Noumea, New Caledonia.

⁷ Bell, J. D., Reid, C., Batty, M., J Lehodey , P., Rodwell, L., Hobday, A. J., Johnson , J. E., Demmke, A. (2013) Effects of climate change on oceanic fisheries in the tropical Pacific: implications for economic development and food security, *Climatic Change*, Vol 119, pp: 199–212.

⁸ Savage, A., McIver, L., Schubert, L. (2020) Review: the nexus of climate change, food and nutrition security and diet-related non-communicable diseases in Pacific Island Countries and Territories, *Climate and Development*, Vol 12(2), pp: 120-133.

⁹ Pilling, G. M., Shelton, H. J., Nicol, S., Williams, P., Hampton, J. (2015) Can the tropical Western and Central Pacific tuna purse seine fishery contribute to Pacific Island population food security? *Food Security*, Vol 7, pp: 67–81.

This assessment included reviewing complimentary studies commissioned for the RTP, particularly Study 1, 2, 3 and 5 (climate vulnerability, protein dependencies and national FAD program assessments and landing assessments) and additional relevant literature. Due to the lack of literature to provide subject-specific context, the assessment additionally conducted key informant interviews to add depth to the assessment and further test assumptions (see Appendix 1). Email engagement with subject-matter experts further clarified insights to complete an assessment that adequately supported the behavioural change recommendation's decision points.

Central to the behavioural change intervention prioritisation assessment involved calculating current consumption trends for reef fish and tuna. This comparative analysis focused on only finfish (tuna and reef fish), as outlined in the Terms of Reference. However, this approach does not intend to signal the dismissal of other critical seafood protein sources particularly reef-associated invertebrates.

To estimate trends between reef fish and tuna, total protein consumption data for reef fish and tuna were extrapolated from GCF Study 2 to calculate the percentage of tuna per kilogram consumed compared to reef fish, as:

Total reef and coastal fish & tuna and other pelagic fish consumed per country, per year
tuna and other pelagic fish consumed per country, per year X 100

In addition, the assessment reviewed current and projected consumption trends also outlined in GCF Study 2 and overarching qualitative insights regarding climate vulnerability in GCF Study 1. Together, these studies helped identify protein needs, or more specifically, protein deficiencies for all finfish food groups to meet national population needs due to climate change impacts on the productivity of coastal fisheries. As highlighted in the summary analysis (Table 1), high risk means countries will not be able to meet protein needs without significant intervention, while medium risk acknowledges increasing risks though there is capacity to adapt diets over time⁵ (also see GCF Study 1). These insights guided decision-making for recommendations when prioritising countries for the focus of this behavioural change program.

It must be noted that GCF Study 2 states that much of the Household Income Expenditure Surveys (HIES) data are at least a decade old, which this study also used. Some countries also have incomplete or unpublished HIES data, such as Papua New Guinea and Fiji, which could potentially create unexpected high relative proportions of tuna consumption compared to reef fish.

Finally, countries were further assessed based on the sub-national areas identified in GCF Study 3. GCF Study 3 has further details regarding the selection of sub-national areas which target the deployment of artisanal FADs in nearshore areas to provide additional opportunities for coastal communities to access tuna.

Based on these insights, countries were categorised into two categories:

1. Category A countries: Target coastal communities consume relatively small proportions of tuna and there are expected to be increasing protein deficiencies due to declining reef fish availability.
2. Category B countries: Target coastal communities that already have means to increase consumption of tuna or declines in per capita availability of reef fish are not forecast to occur.

To inform a strategic framework for a behavioural change program and recommendations to support decision points for the RTP, 7 countries were identified as Category A countries, as summarised in Table 1. The countries include Fiji, Papua New Guinea, Solomon Islands, Vanuatu, Federated States of Micronesia, Kiribati, and Samoa. The districts or provinces identified in GCF Study 3 are also included in Table 1.

Table 1: Country Categories and Target Areas

Country	Target District/Province*	Current relative proportion of reef fish vs tuna consumption (per country, per year)	Protein deficiency shortfalls	Country Categories (A or B)
Melanesia				
Fiji Islands	Rewa, Serua, Namosi, Kadavu, Lau	25.55%	High risk	A
Papua New Guinea	Manus, AR Bougainville	72.74%**	High risk	A
Solomon Islands	Temotu, Guadalcanal	29.91%	High risk	A
Vanuatu	Shefa, Tafea	22.33%	High risk	A
Micronesia				
Federated States of Micronesia	Pohnpei, Yap	35.31%	Medium risk	A
Kiribati	South Tarawa, Gilbert Island group island	37.95%	Medium risk	A
Republic of the Marshall Islands	Marshall Islands	11.00%***	Medium risk	B
Nauru	Nauru	80.24%	Medium risk	B
Republic of Palau	Palau - 14 states	12.12%***	Medium risk	B
Polynesia				
Cook Islands	Rarotonga, southern Cook Islands	72.2%	Medium risk	B

Niue	Niue	76.47%	Medium risk	B
Samoa	Samoa	27.59%	High risk	A
Tonga	Tongatapu, Eua, Ha'apai	61.70%	Medium risk	B
Tuvalu	Tuvalu	60.57%	Medium risk	B

*Target areas outlined in Study 3

**Unexpected high relative proportion potentially due to incomplete data.

*** Percentage of tuna consumed is low because there is an abundance of reef fish⁵.

Understanding Behavioural Change to Design Context-Appropriate Interventions

Behavioural change approaches are increasingly promoted as critical for creating sustainable outcomes across a host of societal challenges. However, behavioural change approaches are commonly viewed as simply smart communications or smart design rather than robust methodologies to understand behaviours, barriers and motivations to empower actions. This section introduces the strategic framework to adopt behavioural change approaches across the RTP, particularly at the national level. Contextual information will assist implementation planners and managers to best apply behavioural change approaches across the RTP.

First, it is important to highlight key foundational aspects of behavioural change approaches and discuss the limits and complexities for context.

The four areas of discussion presented below are:

- A. Behaviour change is a process of changing mindsets and not only raising awareness.
- B. Barriers must be addressed for people to change their behaviour, which is demonstrated through taking targeted actions.
- C. Interventions must consider contexts, particularly in terms of resources and capacity limitations.
- D. The complexity and variance across the Pacific and participating RTP countries warrant additional national and sub-national planning considerations, particularly for Category A countries.

A. Behavioural Change is a Process

Behavioural change should aim to move beyond awareness and create specific interventions that are locally appropriate. This recommendation is informed by understanding that behavioural change is a process, which requires designing interventions for several key stages of change for sustained success: from awareness to building urgency for action to supporting taking action to assessing impact and learning and adapting. Progress from awareness to action often requires first creating a level of urgency among targeted audiences so that they prioritise target issues/actions, and providing support for target audiences to overcome barriers through information, organisation, training, or equipment.

To help design approaches that target action, rather than just “awareness”, the behavioural change model illustrated in Figure 1 is recommended. This model applies a theory of change-based approach, a proven theoretical framework for behavioural change initiatives in both the health¹⁰ and fisheries¹¹ sectors in the Pacific. As illustrated in Figure 1, the staged approach can help inform required information interventions to influence behavioural change, as further described in Table 2. At each stage, interventions should be designed to support people to increase their knowledge of the problem and appropriate actions they can take to resolve “the problem”.

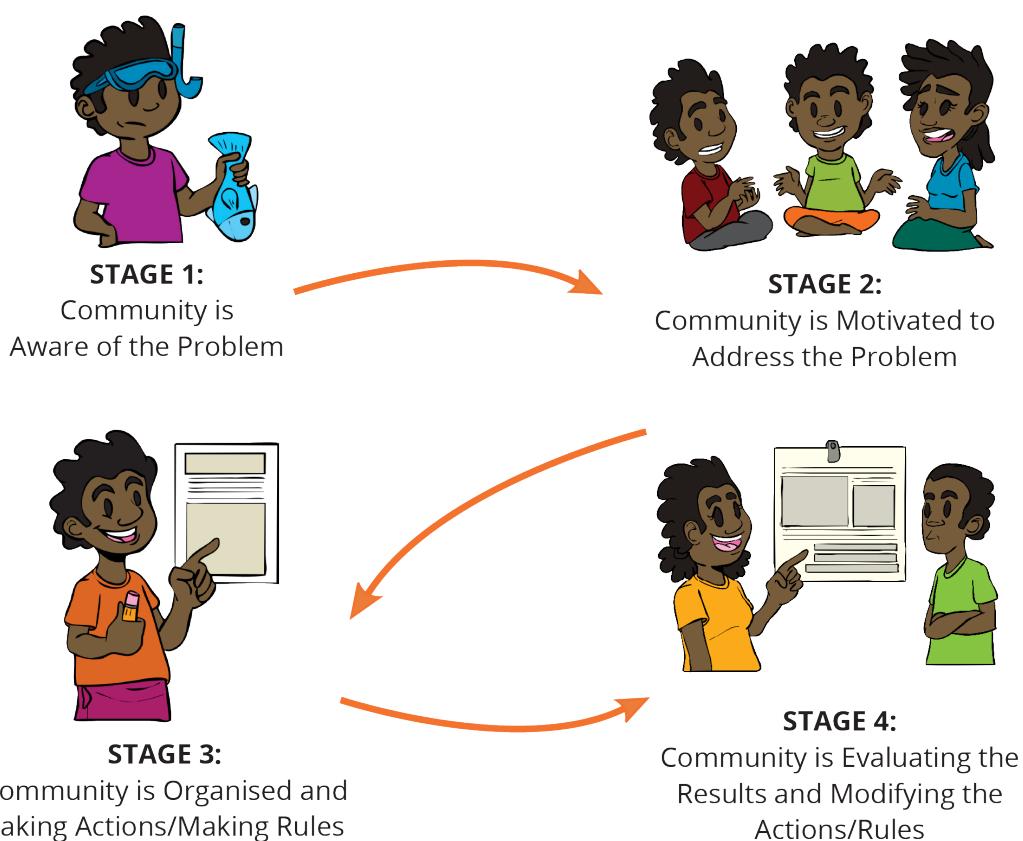


Figure 1: Example of the theory of change-based approach to behavioural change, illustration credit: cChange

¹⁰ Ryan, S. T., Kariippanon, K. E., Okely, A. O., Stanley, R. M. (2021) Social marketing benchmark criteria use in health behaviour change interventions in pacific islands populations: a systematic review, *Journal of Social Marketing*, Vol. 12 (2), pp: 124-153.
¹¹ Prince, J., Lalavanua, W., Tamanitoakula, J., Tamata, L., Green, S., Radway, S., ... Mangubhai, S. (2020). Spawning potential surveys in Fiji: A new song of change for small-scale fisheries in the Pacific. *Conservation Science Practice*, Vol 3, pp: 1–13.

Table 2: A schematic representing each stage in the recommended behavioural change model. Additional explanation is provided in the following table.

Stage	Summary of stage
Stage 1: Raising Awareness	Involves building urgency for action through raising awareness about a problem. Most programs that seek to create behavioural change usually fail during this stage as target audiences have not made the connection between the problem and how it impacts them. It is critical during this stage that target audiences have appropriate information to identify the problem and support, on the basis of their lived experience, for raising awareness to be more effective. This approach presents information that reflect the values and priorities of the target audience rather than presenting facts of the problem. It is critical to screen information to be made available for Gender Equity and Social Inclusion (GESI) and Human Rights (HR).
Stage 2: Building Motivation	Involves supporting communities to organise in preparation for making decisions ideally through existing structures or where needed create new ones. Inclusivity during this stage is critical to ensure solutions which may be intended to help address the problem do not create new issues or unequally distribute benefits. It is critical to screen information for GESI and HR.
Stage 3: Getting Organised	When target audiences are part of taking action – evidence of behavioural change.
Stage 4: Evaluation & Adaptation	Involves the monitoring and evaluation of solutions. Sharing feedback among target audiences during this stage can help build wider support and sustain dialogue to adapt and improve solutions.

B. Barriers to increasing fishing and consumption of tuna

A goal of the RTP is to increase effective, small-scale tuna fishing through more FAD deployments for coastal communities to increase access to tuna as an alternative protein source to reef fish in the face of declining coastal fisheries resources. Without understanding local contexts, particularly barriers to action, activities targeted will likely fail to produce real impact.

To identify potential key barriers to action, this study reviewed literature and applied targeted questioning during the informant interviews (see Appendix 1). While this study alone cannot identify all barriers in each country or at sub-national levels, insights presented below can provide useful context for additional consultations prior to implementation through the behavioural change program or subsidiary initiatives of the RTP. For instance, it is advised for key stakeholders for Category A countries to review and discuss barriers to action as part of Year 1 planning processes.

Firstly, it is critical to understand common barriers to behaviour change, which can be categorised as being (1) attitudinal-driven, (2) capability-driven and (3) environment and cognitive-driven:

1. **Attitudinal barriers** include the perceived limited need for change or lack of understanding of the opportunities. These social barriers can be based on fear, ignorance, or reinforcement of stereotypes.
2. **Capability** is based on skills and knowledge, which is also a social barrier.
3. **Environment and cognitive** include the physical environmental constraints which are usually time and resource-related but can also include policy-driven constraints such as regulation and enforcement. These barriers refer to structural elements that can prevent change.

Broadly speaking, to change mindsets, the behavioural change program and its interventions need to address both social and structural barriers. Without addressing these barriers, any behavioural change strategy is unlikely to succeed.

In summary, this study identified three core barriers to tuna consumption as summarised below and further categorised in Table 3:

1. **Preference:** Common perception that tuna is not a preferred fish to eat compared to reef fish due to cultural values that preference reef fish.
2. **Availability:** Structural and economic barriers which impact people's access to tuna; in rural areas, limited access to nearshore/artisanal FADs and suitable gear for fishing around FADs, also preference in households to sell their catch for income rather than consume it for food; in urban areas, inconsistency of supply and quality of produce at markets impacts consumer purchasing trends.
3. **Affordability:** In rural areas, the cost of fuel and gears for fishing further from the coast around FADs; in urban areas, the perception that tuna is more expensive than reef fish.¹²

Some of the barriers, such as fuel costs and the perception of high prices at markets, as outlined in Table 3, will likely require actions beyond the remit of behavioural change interventions. However, these barriers should be further assessed for the broader work of

¹² There is a broad perception that fresh tuna is perceived to be more expensive since they are generally larger than reef fish. Even though the price may be lower per kilogram for tuna than reef fish, individual fish cost more.

the RTP so that minimum conditions that address social and structural barriers for behavioural change can be reached.

For example, a minimum requirement may involve the implementation of a national FAD program to increase the accessibility to tuna in rural areas. In urban areas, this might relate to the formalisation of tuna landings from commercial tuna fishing vessels to increase availability in market settings. Therefore, any outcomes of the behavioural change interventions will be dependent on minimum structural interventions.

Table 3: Summary of key barriers to tuna consumption from key information interviews.

Barrier Theme	Core Barrier	Examples
Attitudinal	Preference	<ul style="list-style-type: none"> - Tuna is not culturally important - Diet & taste preference for reef fish - Perception that bigger fish are used for feasts and not daily consumption
Capacity	Accessibility & Availability	<ul style="list-style-type: none"> - Cost of fishing offshore – gear, boats, fuel - Sea safety and seasonal sea conditions - FADs constructed using non-local materials - Limited/lack of appropriate cold storage - Access to deeper waters within customary fishing grounds
Environment & Cognitive	Affordability	<ul style="list-style-type: none"> - Cost of fishing offshore – gear, boats, fuel - Perception of high price for tuna sold at markets

A key recommendation from this study is to create a process at the national levels to further assess barriers to action so any subsidiary initiative of the RTP responds to the real challenges on the ground. This process can be robust, or it can be also done through inexpensive focus groups. But it is a critical foundational component for any behavioural change invention to succeed.

C. Interventions must consider the limitations in PICs

Before interventions are presented, it is important to highlight how common limitations across PICs can impact implementation.

Broad limitations for behavioural change initiatives in the fisheries sector include the limited resources and capacity to support this discipline within fisheries ministries. Common constraints include limited knowledge, skills and appropriate training, lack of funding, access to locally-appropriate information, and outreach materials. In addition, many countries face vast geographic distances to disseminate information and reach rural and maritime communities with undeveloped or limited infrastructure or means of communication.

In acknowledgement of these internal and external challenges, it is recommended for any behavioural change program, regionally or nationally, to implement the following key strategic actions to help address cost-effectiveness, limited resources and gaps in knowledge, and the provision of appropriate information for local audiences.

1. **Identify and invest in cost-effective outreach opportunities**, such as the development of a regional-level toolkit that can be localised and implemented through various activities (e.g., consistent messaging through radio and social media to reach a large proportion of target audiences, and digital and printed information products targeted for widespread dissemination to reach all targeted coastal communities).
2. **Support the localisation of information**, e.g., fishing with FADs, to help communities to take locally-led actions.
3. Where possible, **work through Provincial/District Fisheries Extension Officers** to design locally-appropriate, cost-effective distribution and dissemination strategies.
4. **Identify local partners**, such as faith-based organisations, NGOs, and grassroots networks, to support outreach to communities.
5. **Identify local champions** who are trusted messengers among target audiences.

To help illustrate these strategic approaches in practice, intervention levels for information and communications activities are categorised into the four activity categories below (see also Table 4).

Activity Categories:

1. **Broadcast:** Radio, news media and social media to reach a large proportion of target audiences with information about the problem and solutions. Information is framed through locally informed messaging backed up with local stories that communicate the benefits, such as champion stories that share positive outcomes. This intervention is the least resource intensive and has the highest reach.
2. **Targeted engagement:** Frequent, low-cost opportunities to engage target audiences, e.g., fishers, fish buyers and sellers, and vendors through fisher forums, markets, and fisher association meetings. This intervention-level engagement should utilise key champions to reach target audiences. Similar approaches can be applied to engage women councils and youth groups consistent with GESI and HR guidelines. Activities

should aim to be low costs with the goal of engaging target audiences more frequently.

3. **Widespread dissemination:** Informed by a National/Provincial/District-level distribution plan that identifies appropriate pathways for widespread dissemination of an information toolkit, inclusive of digital and printed products. Such information toolkits provide critical information to guide target audiences, specifically coastal communities, why and how to diversify diets to include more tuna. Pathways should aim to be simple and cost-effective such as training videos shared through Facebook groups, WhatsApp groups or information to be picked up at fisheries centres, markets, government offices. Production of the information toolkit can incur initial higher costs, however, through a distribution plan widespread dissemination can reach 100 percent of targeted coastal communities, which will increase cost-effectiveness.
4. **Direct Engagement:** Working through national agencies, local partners, and champions, are engaged to coordinate trainings in National/Provincial/ District centres and demonstration sites in villages (e.g., Look and Learn/Community Exchanges). This intervention is the most resource intensive, and the target audience is limited.

Table 4 also includes the stages of change as outlined in Figure 1 to help guide how an integrated activity approach aims to create sustained change. Additionally, see Appendix 2: Spreadsheet for the breakdown of engagement tactics that could be employed at the country-level.

Table 4: Summary of example recommended interventions to be implemented in each country (i.e., prioritising Category A countries).

Activity Category	Channels	Frequency	Information interventions	Stages of Change (refer Table 2)
Broadcast	Talkback radio shows News media Social media Messaging Apps	1 x month 2-4 per year 5 per week As needed	Information on the problem – declining reef fish Information on the solution – fishing using FADs, role of markets, preparing tuna, cooking with tuna Messaging Apps to broadcast information	Stage 1 Stage 2
Targeted Engagement	Local Fisher Forums	2 per year	Short, frequent meetings with fishers and fisher associations	Stage 1, 2, 3
	Women Council/Fisher Meetings/ Small-Medium	1 per year	Short, frequent meetings with women's & mother's groups and enterprise networks	Stage 1, 2, 3

	Enterprise Networks			Stage 2, 3, 4
	Fishing Forecasts	As needed	Frequent forecast updates from echo-sounder buoys attached to FADs (Study 3)	Stage 2, 3, 4
	Messaging Apps	As needed	Messaging Apps to reach target audiences	
Widespread Distribution	Short videos	4 videos per year	Information on the problem – declining reef fish	Stage 1, 2, 3
	Posters Market billboards	One-off posters & billboards	Information on the solution – fishing using FADs, role of markets, preparing tuna, cooking with tuna	
	Information toolkit	One-off (adapted as needed)	Localise SPC technical information (e.g., translate Fishing with FADs into the local dialect), have printed and digital toolkits available for target audiences.	
	High-volume Events	At least once a month	Host events/stalls during high-volume events, national/provincial days (demonstration on cooking with tuna)	
	School education package	On-e-off (adapted as needed)	Align SPC information with education curriculums, with activities that target youth	
Direct Engagement	Workshops & Trainings & Site visits	Annually (once a year)	Host national/provincial/district-level workshops to maximise engagement with target audiences.	Stage 1, 2, 3, 4
			Host annual Look & Learn / Community Exchanges for fishers to learn from each other	Stage 4

D. Addressing complexities across PICs and in individual PICs

It is important to acknowledge that geographical contexts among other development needs can greatly impact the cost and complexity for behaviour change programs in the Pacific. For example, the need to increase tuna consumption in Papua New Guinea and Pohnpei may be the same, however, the complexity to implement behavioural change interventions, even to

reach targeted audiences, is expected to be vastly different. In addition, it is anticipated that some countries might have variance at the sub-national level.

To help address complexities, this study, through desktop and informant interview analyses, identified the following strategic recommendations to be considered when designing interventions to change behaviours:

- **Localise messaging so information reflects local values and priorities** to engage target audiences and build ownership for interventions to sustain change. Regional draft messaging and tools, such as SPC technical information, can be used to help guide national and sub-national discussions, but messaging must be targeted for each jurisdiction.
- **Messages should communicate the audience benefits** so information is relatable and translates how targeted actions will improve people's lives. This again needs to be achieved at a national level in each country.
- **Market test messaging** to ensure assumptions are known and understood is ideal. This can be done with inexpensive focus groups at minimum.
- **Utilise existing information channels** to reach target audiences and undertake monitoring and evaluation. In addition, utilisation or building on current national programs and activities, and existing staff capacity, should be considered to achieve cost savings.
- **Build institutional capacity** to enable extension officers to assist with delivering the behavioural change program.
- **Engage across ministries and sectors**, particularly health and climate change ministries given the RTP's cross-cutting focus.

Given the substantial barriers and complexities that need to be addressed to shift both fishing practices and consumption patterns, it is recommended for the RTP allocate resources to support participatory planning processes during the inception phase (Year 1). This planning should be targeted at the national level, and where needed, at provincial levels, to review and refine recommendations, particularly to confirm appropriate solutions. An additional objective of this process should aim to create local buy-in, particularly among influential gatekeepers such as political and cultural leaders.

Recommended Steps for Implementation and Application of Behavioural Change Approaches to Promote Increased Consumption of Tuna

The following section outlines steps to:

- (1) Develop/endorse a regional strategy/framework to advance national behavioural change approaches to promote tuna consumption; and
- (2) Using the regional framework, develop national programs and/or activities that apply the behavioural change approaches in country.

Please note the study calls for focusing on the Category A countries, but it is recommended that all countries are further screened for readiness and buy-in from national governments to advance specific programs targeted at increasing tuna consumption. Lessons learned during implementation in Category A countries will be invaluable if similar behavioural change interventions are proposed for other participating countries.

Following this section, additional guidance is provided for further RTP planning:

- (1) Draft regional framework to guide the development of national program(s);
- (2) Indicative budget; and
- (3) Draft monitoring and evaluation plan.

This, combined with the suggested activities in the previous section, provides the needed direction for the support of behavioural change interventions for the RTP.

Recommended Steps for Implementation

The following section presents a guideline for RTP planning at regional and national levels, including key outputs and expected activity targets and timelines.

Regional-level Planning

Year(s)	Key Outputs
Year 1	<p>Activity 1: Develop A Regional Framework for Behavioural Change</p> <p>Building upon this study, conduct consultations including workshop(s), background research, additional interviews with identified stakeholders and subject-matter expert to confirm framework. This consultation process should aim to review and confirm:</p> <ul style="list-style-type: none">○ High-level, regional objectives and targeted outputs, and a range of M&E indicators.○ Identify target audiences and partners (regional and national level).○ Assess budget availability for information interventions targeted countries.○ Identify information needs/gaps, including assess existing tools for FAD use and tuna consumption.○ Develop regional workplan for Years 1-7○ Identification of activities that need resourcing. <p>Deliverable: An Endorsed Regional Framework for Creating Behavioural Change for the RTP.</p> <p>Notes: This process can and should be implemented in coordination with the wider RTP and its broader strategic communications plan. Ideally, a consultant can support facilitating this process. However, this report provides key information to inform this process through existing program staff.</p>
Year 1	<p>Activity 2: Project Management Framework</p> <ul style="list-style-type: none">○ Develop workplan to manage identified deliverables○ Hire a full-time regional coordinator to support national-level behavioural change initiatives <p>Deliverable: Develop Project Management Tools</p>

	<p>Notes: Ideally the regional coordinator is hired and a participant in Activity 1.</p>
Year 1	<p>Activity 3: Develop Monitoring and Evaluation Framework</p> <ul style="list-style-type: none"> ○ Develop monitoring and evaluation framework with practical templates and tools to be adapted at each national-level. <p>Deliverable: Develop M&E Framework and Tools for adaptation at national level.</p>
Year 1 – 2	<p>Activity 4: Design & Develop Draft Regional Information Toolkit</p> <ul style="list-style-type: none"> ○ Develop draft messaging and tools package to support national-level interventions. ○ Communications and Visibility Plan guidelines, to support key information interventions. ○ Guideline for education/school curriculum. <p>This task may be supported through sub-contracts.</p> <p>Deliverable: Draft Information Toolkit for national partners to localise through national level processes in each target country</p>
Year 1 – 7	<p>Activity 5: Coordination support for national-level program(s), assessing barriers to actions, developing annual workplans using activities categories (Table 4) and localising information tools for target audiences in target countries.</p> <p>Activity 6: Annual face-to-face engagement with country-level national coordinators and facilitate national/provincial/district learning events.</p> <p>Activity 7: Reporting (6-monthly progress and annual reporting). Reports include progress for learning objectives and include recommendations to strategically target program resourcing.</p> <p>Activity 8: Annual regional workplan</p>

National-level Coordination Planning for target countries

Year(s)	Key Outputs
Year 1 - 2	<p>Activity 1: Program Design Consultation</p> <p>Applying endorsed framework, host inception workshop per country* with key national and provincial/district-level stakeholders to localise recommendations. This workshop and subsequent planning should cover at a minimum:</p> <ul style="list-style-type: none"> ○ Review objectives and targeted outputs ○ Identify target audiences and partners ○ Review barriers to action ○ Review information interventions and target beneficiaries ○ Localise messaging and branding and identify trusted messengers (e.g., champions) ○ National/provincial/district-level distribution plan (information distribution plan targeting key areas identified in GCF Study 3) ○ Minimum M&E targets** ○ Screen for GESI and HR implications and opportunities ○ Prepare workplan for Years 2 – 7 ○ Identification of activities that need resourcing, including practical workplan. [Review budget. Each country will have variations in costing, and some countries might select a more focused program based on, for example, smaller target audiences, or on easier-to-engage audiences, which may reduce costs]. <p>* Potentially host 1 x workshop for each province in Papua New Guinea (Manus and AR Bougainville) ** M&E supported by regional program coordination - at minimum provide templates to support reporting on activities being implemented.</p> <p>Deliverable: Country endorsed behavioural change strategies and workplans – “behaviour change program”</p> <p>Notes: It is recommended that a national level coordinator is hired to advance behavioural change initiatives. Alternatively, the program can be built into existing national government staff work plans, if funding is not available for a dedicated position. In addition, this process can be streamlined in the wider RTP. However, it is critical that the core elements of the behavioural change approaches be applied, such as local messages, barrier identification and targeting cost-effective dissemination.</p>
Year 1 - 2	<p>Activity 2: Establish partnership agreements (e.g., media partnership and provincial-level government)</p>

	<ul style="list-style-type: none"> ○ Engage key partners who can assist with delivering program activities (e.g., media partnership and provincial-level government partnership agreements) <p>Deliverable: Partnership Agreements</p>
Year 1 - 2	<p>Activity 3: Localise Information Interventions</p> <ul style="list-style-type: none"> ○ Prepare key messages* for awareness-raising activities ○ Translate selected technical information and print necessary quantities ○ Produce digital information package for identified targeted activities (videos, social media tiles, photos, e-information) ○ Other branded information products to share at events <p>*Engage local or regionally-based information specialists to assist with localising key messages.</p> <p>Deliverable: Endorsed Information Toolkit (by Year 2)</p>
Year 1 - 2	<p>Activity 4: Project Management Framework</p> <ul style="list-style-type: none"> ○ Develop national level project management framework to manage deliverables outlined in workplan. <p>Deliverable: Develop Project Management Tools</p>
Year 1 - 2	<p>Activity 5: Adapt Monitoring and Evaluation Framework</p> <ul style="list-style-type: none"> ○ Adapt monitoring and evaluation framework and templates and tools to be used at the national-level. <p>Deliverable: Develop national M&E Tools.</p>
Year 2	<p>Activity 6: Launch “Behavioural Change Program”</p> <ul style="list-style-type: none"> ○ Coordinate the launching of the behavioural change program(s) in each target country. Recommended to build-in flexibility over the year to allow regional coordinator to fully support each jurisdiction appropriately. <p>Deliverable: Behavioural change program implementation</p>

Year 2 – 7	<p>Activity 7: Coordination support to deliver workplan.</p> <p>Activity 8: Facilitate national/provincial/district event(s).</p> <p>Activity 9: Deliver 6-monthly progress and annual report. Reports include progress towards learning objectives and include recommendations to strategically target program resourcing.</p> <p>Activity 10: Annual workplan</p>
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As noted above, it is recommended that a full-time coordinator be hired at the regional level, and a full-time coordinator be hired at each national level. To assist in assessing needs, and the feasibility and value of these positions, the following outlines key responsibilities of each position.

Regional Coordination Responsibilities

- Endorsed Regional Behavioural Change Framework, informed by this study.
- Expand SPC's technical information on fishing using FADs (digital and printed products) to target messaging that communicates program benefits.
- Digital and printed information toolkit templates targeted for fish markets.
- Messaging guides for key activities (e.g., radio show guides, fisher forums, tuna cooking and preservation demonstrations).
- Stakeholder engagement guides (e.g., fisher forum agenda, private sector outreach, strategies to engage faith-based organisations and women and youth audiences).
- Guideline(s) to align key messages with education curriculums.
- Support the development of agendas for annual country-level program workshop(s) and training(s).
- Communications training and mentorship opportunities to increase behavioural change expertise among RTP staff and connect other RTP support (e.g., technical expertise).
- Regional monitoring and evaluation toolkit.
- Coordinate regional lessons learning through sustainable, low-cost mechanisms.

National Coordination Responsibilities (Category A countries only)

- Endorsed National Behavioural Change Program Plan(s), targeted for each Category A country.
- Localise SPC's technical information on fishing using FADs (digital and printed products).
- Local information toolkit for markets in digital and printed formats.
- Localise messaging guides for various activities (e.g., broadcast, and targeted engagement activities).
- Localise stakeholder engagement guides (e.g., fisher forum agenda templates, private sector outreach, engaging faith-based organisations and women and youth audiences).
- Mechanism to implement regional guidelines to align information with education curriculums at minimum cost.
- Integrate annual program workshops and trainings with existing ministry workplans.
- Integrate communications training and mentorship opportunities to increase behavioural change expertise among ministry extension officers.
- Localise regional monitoring and evaluation toolkit.

Strategic Behavioural Change Framework Summary

To assist the development of a regional framework for advancing behavioural change for the RTP, a strategic behavioural change framework summary is presented in Table 5. The purpose is to illustrate expected change among Category A countries as a result of the RTP investing in context-appropriate behavioural change interventions. This framework provides a starting point for further regional and national discussions.

There are three (3) simple and measurable objectives that aim to focus the behaviour change initiatives to achieve outcomes and therefore produce evidence of sustained change.

Given the barriers and complexities outlined above, the **first objective** focuses on ensuring target audiences are aware of declining reef fish and the benefits of fishing for and consuming tuna. Key outputs include ensuring information interventions reach target audiences in both rural and urban areas and build capacity among key partners and stakeholders to increase effective communications and engagement and ownership of the national-level behaviour change program(s). Measurable outcomes include audiences understanding of the issues and solutions to protect food security and livelihoods through fishing for and consuming tuna, and an increase in tuna consumption among rural and urban areas. It is recommended that messaging includes not only increased FAD fishing, but promotes increased access to tuna through tuna and bycatch transhipped or unloaded by commercial longline tuna fishing vessels for processing and distribution in urban and peri-urban areas.

The **second objective** focuses on supporting national FAD program(s) through targeted engagement within communities located in areas selected for the installation of FADs, particularly fisher groups and associations. Key outcomes include increased use of FADs for fishing and consuming FAD-caught tuna at the household level within coastal communities.

The **third objective** seeks to assess and improve project and activity delivery and therefore produce sustained change. It will be critical for the RTP to adapt project delivery to improve effectiveness and efficiencies as behavioural change interventions are delivered and integrate learnings from the field and other RTP subsidiary initiatives.

As advised throughout this report, it is recommended to undertake additional critical inquiry targeted at the national-level and where possible provincial and district level to understand known and unknown assumptions. This work should be carried out during Year 1 planning processes as part of the delivery of national behavioural change program plans.

Through efficient and effective coordination with other RTP subsidiary initiatives, there is great potential for this behavioural change program to increase food security in the Pacific.

Table 5: Summary of overall strategic behavioural change framework.

Objectives	Outcomes (Overall Change)	Outcome Indicators	Key Outputs	Assumptions
Objective 1: Target audiences are aware about declining reef fish and the benefits of fishing for and consuming tuna.	<p>Increased understanding among target audiences about the issues and solutions to protect food security and livelihoods through fishing for and eating tuna.</p> <p>Increased consumption of tuna in both rural and urban areas.</p>	<p>Communities report that they have received locally-informed information and there is evidence of hosting dialogues themselves and organising in preparation of taking action (e.g., Expression of Interest to participate in national FAD programs).</p> <p>Fishers demonstrate understanding of the benefits of fishing using FADs through increased positive engagement in program activities and taking broader ownership of FAD programs.</p> <p>Urban areas have access to information on where and when to buy tuna, and comparable price trends between reef fish and tuna.</p>	<p>Localised information toolkit, at minimum an information toolkit produced for regional-outreach.</p> <p>Widespread dissemination of information and regular, low-cost engagement opportunities to create and sustain dialogues.</p> <p>Tuna pricing and availability information targeted for urban areas at markets (online and physical locations).</p>	<p>Locally-informed and market tested messaging communicated regularly through multiple activities and channels.</p> <p>Identified trusted messengers, such as local champions, are engaged and continually support the dissemination of information.</p> <p>There is a formal landing program to enable markets to provide consumer confidence with consistent value of money price trends for tuna.</p>
Objective 1 continued.	<p>Increased communications capacity among extension officers and key partners to communicate the impacts of declining reef fish effectively and convincingly for coastal communities to understand the benefits of fishing for tuna to protect food security and livelihoods.</p>	<p>All project stakeholders can effectively communicate the benefits of fishing for and consuming tuna.</p> <p>Key ministry staff and extension officers show ownership of the behavioural change program through taking initiative in hosting dialogues with target audiences, participating in media opportunities, providing leads</p>	<p>Key extension officers and partners participate in targeted communications training.</p> <p>Key extension officers contribute to localising information interventions and workplan meetings.</p>	<p>Extension officers received adequate training and resources to deliver effective community engagement and stakeholder engagement.</p> <p>Extension officers are engaged and committed to</p>

		for champion stories, and supporting the documentation of outputs for reporting, evaluation, and learning.	Key extension officers have access to suitable mechanisms to share feedback from the field.	the behavioural change program. Extension officers are acknowledged for their contributions, boosting morale and commitment.
Objective 2: Reach all targeted coastal communities with appropriate information on the benefits of diversifying diets through fishing using FADs and consuming tuna at household levels.	<p>Increased understanding of projected declines in reef fish and the benefits of diversifying diets through fishing for and consuming tuna using FADs.</p> <p>Increased fishing using FADs, including a reduction in the vandalism of FADs.</p> <p>Increased fishing for tuna targeted for household consumption.</p>	<p>Communities in targeted provinces/districts demonstrate increased understanding through the participation of building and deploying FADs, and ongoing ownership through the monitoring and maintenance of FADs.</p> <p>Households report increase access to tuna for household consumption and/or evidence of increasing tuna consumption at household level.</p>	<p>Localised information toolkit, at minimum an information toolkit produced for regional-outreach.</p> <p>Widespread dissemination of information and regular, low-cost engagement opportunities to create and sustain dialogues.</p> <p>Create and sustain opportunities for communities to participate in the building and deployment of FADs, including access to materials.</p> <p>Targeted and regular information for fishers to plan fishing trips with the aim of reducing costs (e.g., biomass forecasts).</p>	<p>Assumptions outlined for Objective 1 AND:</p> <p>National FAD programs developed and implemented so that communities and/or ministries have access to appropriate building materials to construct FADs, AND access to resources to monitor and maintain FADs.</p> <p>Fishers have access to appropriate boats and gears to fish using FADs, or at minimum understand sea safety to access FADs safely.</p> <p>Fishers receive regular information on biomass trends to reduce fishing costs and increase trip efficiency.</p> <p>Communities have access to appropriate cold storage</p>

				or other means to preserve tuna.
Objective 3: Provide recommendations to improve the effectiveness of project and activity delivery, therefore produce sustained change.	Improved delivery of program (i.e., projects and activities) that targets behavioural change objectives (1 & 2).	Evidence-based recommendations to guide decision-making, including the adaptation or development of new information interventions, and program resourcing investment that targets behavioural change objectives (1 & 2).	<p>Practical monitoring and evaluation (M&E) framework that utilises existing information channels or where needed create suitable feedback mechanisms.</p> <p>Regional M&E toolkit, including templates, that can be adapted and utilised by national-level program(s).</p>	<p>Committed by extension officers or at least available capacity at provincial/district level to report on activities.</p> <p>M&E is well resourced to capture at minimum annual evaluation of activities to strategically target resources that aim to address barriers that may be limiting outcomes for behavioural change objectives (1 & 2).</p>

Monitoring and Evaluation Framework

The monitoring and evaluation (M&E) framework presented in Table 6 is to be used as a guideline to monitor and evaluate key outputs outlined in the strategic behavioural change framework presented in the previous section. The purpose of the M&E framework is to provide regular feedback to inform RTP investment throughout the life of the Programme to ensure resourcing is invested in areas that will create sustained change – increase the consumption of tuna in daily diets to protect food security in the Pacific.

It is recommended to design and develop M&E activities that can be adapted and implemented by national partners (i.e., national coordinators as discussed in following section). For example, develop M&E tools at the regional level that can be adapted for national-level program delivery within Category A countries.

By taking this approach, the M&E framework is designed around learning objectives. Broadly, learning objectives aim to measure progress towards overarching objectives with the intention of promoting adaptation, investing resources strategically, and sharing lessons to improve sustainability of initiatives.

Therefore, it is recommended that the M&E learning objectives target:

1. Monitor progress in reaching all target audiences with information and evaluate the effectiveness of this information, with a particular focus on the communities located in areas selected for installation of FADs.
2. Monitor progress in meeting the RTP's GESI & HR objectives, focusing on how women and youth and people with disability benefit from information interventions.
3. Share learnings to inform RTP investment, ensuring decisions are based on technical analysis and continuous learning. This learning objective should also target peer-to-peer exchanges to support capacity building among key stakeholders and partners.

It is recommended to integrate M&E activities from the outset to ensure learnings are captured to support ongoing problem solving to adapt and improve program implementation. See Table 6 on the following page.

Table 6: Monitoring and evaluation framework, including outcome indicators and methods.

Outcomes (Overall Change)	Outcome Indicators	Measurement Indicators	Methods
Increased understanding among target audiences about the issues and solutions to protect food security and livelihoods through fishing for and eating tuna.	Communities report that they have received locally-informed information and there is evidence of hosting dialogues themselves and organising in preparation of taking action (e.g., Expression of Interest to participate in national FAD programs).	Who receives information, and where, when, and how to track demographics and locations (e.g., ensure interventions meet objectives). Records of meetings hosted by communities. Government FADs EOI tracking.	<ul style="list-style-type: none"> ○ Annual Intercept audience surveys ○ Activity reports ○ Distribution tracking tool updated quarterly ○ Analytics tracking ○ EOIs received ○ Photos and videos of actions taken once information is received
Increased consumption of tuna in both rural and urban areas.	Target audiences in rural* and urban areas report increasing consumption of tuna. * Households in targeted areas for FAD deployment report increase access to tuna for household consumption and/or there is evidence of increasing tuna consumption at household level.	Who, where, when, and how to track demographics and locations and ways people access tuna for consumption (e.g., how program interventions contributed to changes in consumption trends).	<ul style="list-style-type: none"> ○ Intercept surveys (prior*, during and post program interventions) ○ Periodic online polls ○ Activity reports ○ Focus groups ○ HIES/Census
Increased communications capacity among extension officers and key partners to communicate the impacts of declining reef fish effectively and convincingly for coastal communities to understand the benefits of fishing for tuna to protect food security and livelihoods.	All project stakeholders can effectively communicate the benefits of fishing for and consuming tuna. Key ministry staff and extension officers show ownership of the behavioural change program through taking initiative in hosting dialogues with target audiences, participating in media opportunities, providing leads for	Document partner demographics and associations who participate in program workshops and trainings. Document outcomes post-workshops and trainings to identify if capacity building contributed to increasing communications capacity.	<ul style="list-style-type: none"> ○ Activity reports ○ Focus groups

	champion stories, and supporting the documentation of outputs for reporting, evaluation, and learning.		
Increased understanding of projected declines in reef fish and the benefits of diversifying diets through fishing for and consuming tuna using FADs. Increased fishing practice using FADs, including a reduction in the vandalism of FADs. Increased fishing for tuna targeted for household consumption.	Communities in targeted provinces/districts demonstrate increased understanding through the participation of building and deploying FADs, and ongoing ownership through the monitoring and maintenance of FADs.	Who receives information, and where, when, and how to track demographics and locations (e.g., ensure interventions meet objectives). Records of meetings hosted by communities. Government FADs EOI tracking	<ul style="list-style-type: none"> ○ Annual Intercept audience surveys ○ Activity reports ○ Distribution tracking tool updated quarterly ○ Analytics tracking ○ EOIs received ○ Photos and videos of actions taken once information is received ○ Activity reports ○ Focus groups
Improved delivery of program that targets behavioural change objectives (1 & 2).	Evidence-based recommendations to guide decision-making, including the adaptation or development of new information interventions, and program resourcing investment that targets behavioural change objectives (1 & 2).	6-monthly and annual report document progress towards objectives	Program interventions are documented systematically through existing information channels or where needed create suitable feedback mechanisms. Program M&E dashboard (activity tracking spreadsheets)

**Prior program assessments to be captured through intercept survey methods. Household level consumption surveys would require substantial investment, unless integrated into other RTP subsidiary initiatives.*

Indicative Budget

Costings displayed in Tables 7-12 have been estimated based on cChange's experience delivering behavioural change programs in the Pacific. Costings are indicative and it is recommended for the RTP to review the budget(s) during additional participatory consultation processes. Considerable cost savings can be achieved through the development partnerships and aligning outputs with other complimentary RTP subsidiary initiatives.

At the Programme level, it is also understood that there will be 1 x Project Manager to oversee the Information and Knowledge Management component for this RTP. It is advised to recruit at minimum an additional Communications & Media Officer who would be positioned to support and coordinate country-level information activities and requests (e.g., this post could also potentially support the information requests from Category B countries). Engaging behavioural change information and educational specialists, designers, videographers, and media practitioners and journalists to support regional and/or national-level planning and implementation could improve efficiencies and reduce overall costs. Specific tasks could be contracted via deliverable-based contracts.

A practical solution to overcome budget limitations could involve providing targeted capacity building support for media officers within fisheries agencies to build in-country ownership through the life of the Programme. Media officers are already well-placed within fisheries agencies, and through engaging them directly they can further support extension officers engaged in RTP activities beyond the behavioural change program(s).

In addition, there could be beneficial outcomes through establishing networks with provincial/district-level government media officers and provincial-based journalists.

Cost savings could be achieved through the development of regional-level information and communications outputs for ongoing activities such as radio and champion story guides, awareness materials, event ideas and short videos or animations.

Please note that Programme costings do not include staff hours or international travel, or additional workshops and trainings.

See Appendix 2: Spreadsheet for detailed costings.

Table 7: Indicative activity budget per Category A country per year. Excludes salary/contractor rates/international travel.

Category	Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Broadcast	Talkback radio shows		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
	News media		\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
	Social media		\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
	Messaging Apps							
Targeted Engagement	Fisher Forums		\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00
	Women Council/ Small-Medium Enterprise Networks/Faith-based groups		\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	
	FAD Fishing Forecasts & Messaging Apps		\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
Widespread Distribution	Champion stories		\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
	Information Toolkit (printed products)	\$30,000.00		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
	Information Toolkit (digital products)	\$30,000.00		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
	Train the Trainers (capacity building)			\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
Direct Engagement	Provincial-level workshop* (including Host National Annual Look & Learn / Community Exchanges)			\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
Estimated Annual Activity Costings		\$60,000.00	\$25,500.00	\$70,500.00	\$70,500.00	\$70,500.00	\$70,500.00	\$68,500.00

Table 8: Indicative Administration and Equipment Budget per Category A country per year.

Key Budget Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Office expenses: printing, data, software subscriptions	\$ 5,000.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	
Media set up kit: laptop, camera, voice recorder, phone (Once off, with top up in Year 3/4)	\$ 10,000.00			\$ 3,000.00			
EST. Total Budget							\$28,500.00

Table 9: Indicative Budget for Program Consultations per Category A country per year.

Key Budget Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
2-day Inception Workshop	\$5,000.00						
2-day Mid-Program Workshop (Year 3/4)			\$5,000.00				
2-day End-of-Program Workshop							\$5,000.00
EST. Total Budget*							\$15,000.00

*Excludes International Travel for Program Staff or Consultants. Additional costs might be needed for local participants depending on travel in country.

Table 10: Indicative Budget for M&E Activities per Category A country per year.

Key Budget Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Baseline Survey Support**	\$10,000.00						
Annual Audience Survey**		\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00		
End-of-Program Review**							\$10,000.00
EST. Total Budget							\$28,000.00

**Additional funds might be needed for analysis, dependent on skill set for program manager.

Table 11: Indicative Annual Budget inclusive of Activities, Administration and Equipment, Program Consultations and M&E Activities.

EST. Total Budget Per Year for Category A countries	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	\$90,000.00	\$30,000.00	\$80,000.00	\$78,000.00	\$75,000.00	\$73,000.00	\$83,500.00

Table 12: Summary budgets for life of RTP (7 years) per Category A countries and total investment needs for the behavioural change program.

EST. SUMMARY BREAKDOWN	Total Budget Summary (USD)
EST. Total Budget Per Country (Activities Only)	\$436,000.00
EST. Admin & Equipment	\$30,500.00

EST. Additional budget for Category A country planning Years	\$15,000.00
EST. M&E Activities	\$28,000.00
EST. Total Budget Per Category A country for life of RTP	\$509,500.00
EST. Total Budget for 7 x Category A countries for life of RTP	\$3,566,500.00

Target Beneficiaries

Through recommended interventions it is estimated that 100% of targeted beneficiaries identified in Study 3 will be reached and receive benefits as a result of RTP investment in the behavioural change interventions recommended in this Report. It is recommended to clarify and confirm targets in coastal communities during Programme planning consultation as this will inform strategic methods to reach all coastal communities targeted in Study 3, and provide information on cost-effective ways to reach urban populations.

Table 13: Estimated beneficiaries expected to receive benefits as a result of the RTP investment in the behavioural change program targeting Category A countries.

Category A Countries	Target Population Description	Est. Pop targeted in 2030 (Study 3)
Fiji	30 percent of the population in Rewa (108,074), Serua (20,010) and Namosi (7,885) districts in the central division and 80 percent of the population in Kadavu (10,869), Lau (9,539) and Lomaiviti (15,657) districts in the eastern division, based on Fiji 2017 census.	72,483
PNG	20 percent of the 2022 population estimate of Manus and A.R. Bougainville provinces (395,000), based on 2022 population estimate.	91,834
Solomon Islands	90 percent of the population of the Temotu Province (22,132) and 20 percent of the population of Guadalcanal Province (154,150), based on the provisional 2019 census.	62,752
Vanuatu	Half the population of Shefa (54,953) and Tafea (45,714) provinces and 20 percent of the population of Port Vila (49,034) based on the 2020 census.	66,850
Samoa	20 percent the 2021 census population for Samoa (205,557).	41,874
Federated States of Micronesia	80 percent of the population in Pohnpei State (36,500) and 80 percent of the population in Yap State (11,500) in the FSM based on the mid-2022 population estimates.	38,588
Kiribati	40 percent the population of South Tarawa (63,072) and all population in other 16 inhabited Gilbert Islands Group islands (45,073) from the 2020 census.	81,778
Total Estimated Summary		456,159

Implementation Risks

There are broader, and at times conflicting, challenges that could impact implementation of the behavioural change interventions. There are additional implementation risks not exclusive of project management, national elections, geography, development which are summarised below:

- ***Embedding the behaviour change initiatives into existing initiatives***

As outlined in GCF Study 3, it is suggested to seek avenues to integrate the behavioural change interventions into existing initiatives wherever possible. For example, fisheries agencies community-based fisheries management programs, which are targeting to reach

100 percent of communities as part of the region's adoption of scaling-up. Establishing a stand-alone program, outside these community-targeted programs could be viewed as being in competition, or conflicting with existing awareness programs, and this could impede progress.

- ***Build capacity for behavioural change***

The RTP will require at a minimum some behavioural change readiness within fisheries ministries; meaning, an open mindset to consider new approaches to community engagement.

The RTP should consider developing a mechanism to provide ongoing mentoring in behaviour change to build capacity from start to finish for the behavioural change agenda that the Programme seeks to achieve. This approach could involve creating a community of practice within the RTP, where people can learn by doing and sharing as a way to inform and improve their practice.

Given one of the RTP's core focus is behavioural change, it will be critical for all other Programme streams to understand what this means, and the strategies and resources required to truly change behaviour. This approach goes beyond workshops and trainings and seeks to embed sharing and learning to improve daily practice in the delivery of the RTP.

- ***Design with GESI and HR***

Gender equity and social inclusion (GESI) and human rights (HR) is a necessary design principle to ensure activities are well thought through. There has been substantial work in recent years to understand best practices for designing support for GESI and HR elements within the inshore and offshore fisheries sectors. It is recommended to engage a GESI specialist, as it has been already identified, to advise on behavioural change interventions (e.g., review country-level plans and information outputs).

- ***Information, Communications and Technology challenges***

Access to internet is increasingly more accessible and affordable in the region but not everyone has equal access. Most countries have national information, technology, and communications strategies. Consider the objectives of these strategies and design with foresight, particularly taking advantage of the rapid uptake of smart phones. But also, how information can be further broadcast at a village-level where there is no coverage or where data costs are prohibitive.

- ***Technical advisory committee & local advisors***

Engage and create a regional/national technical advisory committee or working group, whichever is more appropriate in the wider RTP, to advise on the appropriateness for targeted information and activities (including content for rural communities). Members must

understand local contexts and should bring key technical experience, e.g., fisheries management, fisheries science, information and communications, GESI & HR, and working with coastal communities in the Pacific. See Appendix 3 for an example terms of reference for such support.

- ***Conditions for successful implementation***

Minimum social and structural barriers will need to be addressed for information interventions to create sustained change. For example, the implementation of a national FAD program to increase accessibility in rural areas and the formalisation of tuna landings from commercial fishing vessels to increase accessibility in urban areas are key minimum conditions, to be delivered through other RTP streams, for information interventions to be successful.

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Appendix 1:

Informant Interviews

Eight (8) semi-structured interviews were conducted by the project lead researcher to address the paucity of literature that examines social and broader barriers that may limit tuna consumption among coastal communities in the Pacific.

Participants were identified in consultation with the SPC GCF Project Manager and were selected based on their experience working within government ministries and/or with fishers, and coastal communities in inshore and offshore fisheries management across the Pacific. One additional interview was completed via snow-ball sampling, where a participant recommended a colleague given their direct experience working with fishers and communities in this topic. There was also consideration to ensure participants could provide insights at a country-level, and if possible, at the regional level. Gender was also considered, though only two (2) out of eight (8) interviews were women. All but one participant had some direct involvement in community-based FAD programs. See Table A for participant list and background.

Table A: Informant interview participant list

Participant	Gender	Country background	Background
1	Male	Pohnpei	Inshore & offshore fisheries management
2	Male	Pohnpei	National FAD management, Inshore & Offshore fisheries
3	Male	Fiji	Government ministry & Offshore fisheries management
4	Female	PNG, FSM	e-Monitoring & e-Reporting in Offshore fisheries
5	Male	Regional	Research, policy, implementation
6	Male	Samoa	Government Fisheries role
7	Female	Tonga / regional	Socio-economic researcher, implementation specialist
8	Male	Tonga	CEO of fisheries ministry

A semi-structured interview schedule was prepared to guide the questioning for each interview. Questioning focused on the barriers that may limit consumption and what conditions may enable or have enabled increased consumption. Questioning also inquired about the benefits of increasing consumption, including fishing for and value-adding for livelihoods. The researcher encouraged participants to share specific insights on information interventions that have worked as a way to capture success stories to inform potential behavioural change interventions.

Each interview went for 45min to 1hr in length and a transcript of each interview was prepared and cleaned in preparation for analysis. A thematic analysis was manually carried out, which involving reviewing transcripts and developing codes to identify themes. Due to the minimal sample size, it was not necessary to carry out a context analysis using additional software as previously discussed with the project team.

Appendix 2:

Attached Spreadsheet

Appendix 3:

Technical Advisory Committee (TAC) Terms of Reference

Purpose:

It is recommended to establish a regional, and if possible, national technical advisory committee(s) to inform and review information, ensuring all information is technically accurate and can support practical local actions that can reasonably provide tangible benefits to communities. All information should also be socially inclusive and be culturally appropriate and follow best practices to meet GESI and HR guidelines. The committee(s) should be exclusively focused on technical areas.

Membership:

Membership should be voluntary and cover range of technical disciplines including:

- Coastal fisheries, specifically FADs.
- Nearshore fishing practices
- Coastal and marine resource management
- Community-based fisheries management expert
- A gender inclusivity expert, if not included in the above expertise
- Media, information and/or communications expert

The advisory committee should be asked to apply a strict criteria to ensure best advice goes to communities, i.e., based on best available science/knowledge and demonstrated to be effective for communities in achieving food security and livelihood aims, including the equitable sharing of benefits.

As part of the review, information must also be vetted to ensure it is practical and appropriate for communities.

The committee will be mindful of the various gender and human rights elements of the RTP, including relevant policies and strategies of the governments information is developed for.

Funding:

The TACs should be unfunded. The costs of any member participating in committee activities will be responsibility of the member. However, meetings will be on an as needs basis, and conducted virtually. Ideally most reviews can be conducted via group emails and shared documents. Members must be able to operate well through email communications and meet reasonable turnaround times for content/key messages.

Governance Structure:

The Committee Chair shall be a technical advisor from the RTP or a government representative. The regional project manager for the behavioral change program should be the Secretary to guide the

review process, including sharing all content concepts and related products with members and schedule meetings as necessary.

All advisory committee members will be given the opportunity to provide feedback on the content/tools developed for the behavioural change program(s).

Should a member be no longer able to serve on the committee, a replacement will be sought.

Should a member be unresponsive or not provide feedback in a timely and reasonable manner, a replacement may be sought.

Review Process:

As information and content is developed, there will ideally be a series of emails and discussions to develop core messaging and materials over weeks. This period will allow for each member to provide thoughtful feedback. With each review step, a specific timeline will be provided. If no feedback is received in that period, the non-communication will be viewed as approval.

However, there will be issues that emerge and circumstances that will require immediate review. For emergencies and minor developments, each member will be given two days to provide feedback. If no feedback is received in that period, the non-communication will be viewed as approval. These expectations will be stated in these circumstances.