



Regional Programmatic Approach on Climate Action (RPACA)

Annex 24: Estimation of Adaptation Beneficiaries

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1 Purpose of this Annex

This annex outlines how adaptation beneficiaries of the Regional Programmatic Approach on Climate Action (RPACA or Program) will be estimated. It presents the vulnerability context across the Pacific region, including exposure to climate hazards and vulnerabilities to sea level rise, coastal degradation, tropical storms, drought, and increasingly intensive rainfall events. Definitions and methodologies for calculating both direct and indirect beneficiaries are provided. Finally, it describes the expected benefits of the Program's adaptation measures, showing how these align with the identified solution pathways and their associated output and outcome indicators.

RPACA frames beneficiary estimation through its gender equality and social inclusion (GESI) commitments. All numeric methodologies are applied with equity and inclusion as the frame. Beneficiary estimation is therefore not only about counting individuals reached, but about demonstrating who benefits, how benefits are distributed across different groups, and how adaptation investments contribute to shifting systemic barriers over time.

2 Vulnerability Context

2.1 Vulnerability in the Pacific

Climate change impacts across the Pacific Island Countries (PICs) are determined not only by the magnitude and frequency of hazards, but also by the underlying vulnerability of exposed systems, communities and population groups. Vulnerability in the Pacific context is systemic and multi-layered, reflecting the interaction between biophysical constraints, socio-economic structures, infrastructure limitations, and institutional capacity.

These vulnerabilities are not experienced equally. Women, persons with disabilities, youth, older people, sexual orientation, gender identity and expression, and sex characteristics (SOGIESC) groups, and rural or outer-island households face compounded risks due to limited mobility, unequal access to services, and entrenched social norms. Adaptive capacity is therefore constrained not only by infrastructure and resources, but also by institutional and cultural barriers.

A defining feature of vulnerability in PICs is the intersection of high exposure and constrained adaptive capacity, which results in disproportionate impacts from climate hazards. Many countries are characterised by small land areas, dispersed populations, and limited natural resource bases, which restrict opportunities for risk avoidance, diversification, and relocation. These constraints are further compounded by economic structures that are highly dependent on climate-sensitive sectors, including agriculture, fisheries, and tourism, and by reliance on imported goods and external financial flows.

The influence of climate change on vulnerability is further shaped by the progressive intensification of climate drivers under different emission scenarios. Under SSP2-4.5, increases in temperature, rainfall variability, and sea level contribute to a gradual intensification of existing risks. Under SSP5-8.5, these changes are more pronounced, resulting in non-linear increases in hazard intensity and frequency, and in some cases, the emergence of conditions beyond historical experience. Regional assessments indicate that such threshold effects are particularly relevant in small island systems, where environmental and infrastructure limits may be reached rapidly. A comprehensive analysis of historical, current, and projected climate hazards and impacts is provided in Annex 2: Feasibility Study.

2.2 Variations in the geographical types of vulnerability

The vulnerability of PICs to climate change is strongly affected by geographic typology, which shapes the interaction between hazard exposure, system sensitivity, and adaptive capacity. The three dominant typologies - low-lying coral atoll systems, high volcanic and uplifted island systems, and large high-island systems - exhibit fundamentally different vulnerability pathways.

Social vulnerability follows these geographic pathways. In atoll systems, relocation pressures heighten risks for women and persons with disabilities. In volcanic islands, rural youth and older people are disproportionately affected by migration pressures and service gaps. In large high-island systems, inequality in access to infrastructure and services reinforces exclusion for marginalised groups. In low-lying coral atoll systems - including Kiribati, Tuvalu, Republic of the Marshall Islands, and Nauru - vulnerability is characterised by the convergence of extreme exposure, high system sensitivity, and severely constrained adaptive capacity.

In high volcanic and uplifted island systems - such as Fiji, Samoa, Tonga, Solomon Islands, Cook Islands, and Niue - vulnerability is characterised by spatial concentration of exposure combined with multi-hazard sensitivity.

In large high-island systems, particularly Papua New Guinea and parts of Solomon Islands, vulnerability is shaped by scale, diversity, and systemic inequality in access to infrastructure and services.

2.3 Sector systems and vulnerability

2.3.1 Sectoral Urban Development

Urban areas in the Pacific represent focal points of climate vulnerability due to the concentration of population, infrastructure, and economic activity in hazard-prone locations. The interaction of multiple hazards with structural vulnerabilities - particularly informal settlement growth and infrastructure constraints - creates complex and often systemic risk pathways. These dynamics disproportionately affect women-headed households and persons with disabilities, who are concentrated in informal settlements and face limited adaptive options

Across all geographical typologies, infrastructure systems are central to both vulnerability and resilience. Failures in transport, water, or energy systems can propagate across sectors, amplifying impacts and slowing recovery

2.3.2 Water Supply and Sanitation

Water supply and sanitation systems across the PICs are among the most climate-sensitive sectors, with vulnerability arising from the direct dependence of water resources on climatic conditions and the high exposure of infrastructure systems to multiple hazards. Water supply and sanitation systems in the Pacific are highly vulnerable to climate change due to their dependence on climate-sensitive resources, limited infrastructure capacity, and exposure to multiple hazards. Climate change affects both water availability and quality, creating complex and interacting risks. Breakdowns in water systems place disproportionate burdens on women and girls responsible for collection and caregiving and increase risks for persons with disabilities and older people.

Across all geographical typologies, infrastructure systems are central to vulnerability, determining the capacity of communities to manage and respond to climate impacts. The interaction of drought, flooding, sea-level rise, and heat creates compound risks that can overwhelm existing systems.

2.3.3 Transport

Transport systems in the Pacific are highly vulnerable to climate change due to their exposure to multiple hazards, limited redundancy, and critical role in connectivity and economic activity. Climate hazards affect both the physical integrity of transport infrastructure and the ability of systems to provide reliable services.

Across all geographical typologies, transport infrastructure is subject to increasing stress from flooding, cyclones, sea-level rise, and heat. The lack of redundancy and the concentration of assets in hazard-prone areas amplify vulnerability and increase the potential for cascading impacts. Limited accessible infrastructure constrains safe mobility for persons with disabilities and older people, deepening exclusion during climate shocks.

2.3.4 Energy

Energy systems in the Pacific are highly vulnerable to climate change due to their exposure to multiple hazards, limited opportunities for redundancy given resource constraints, and critical role in supporting other sectors. Climate hazards affect both the physical integrity of infrastructure and the ability of systems to meet demand.

Across all geographical typologies, energy systems are subject to increasing stress from cyclones, flooding, sea-level rise, heat, and drought. The interdependence of energy systems with other sectors amplifies vulnerability, creating cascading impacts that extend beyond the energy sector. Low-income households, often headed by women, face affordability barriers that reduce their ability to adapt when energy systems fail.

2.3.5 Coastal Management

Coastal management is a critical sector in the Pacific, with vulnerability driven by the interaction of sea-level rise, extreme events, and local coastal processes. The concentration of population, infrastructure, and economic activity in coastal zones amplifies vulnerability and increases the potential for systemic impacts. Women engaged in coastal livelihoods such as fisheries and market trading are particularly exposed to disruptions in coastal systems.

Across all geographical typologies, coastal systems are subject to increasing stress from both chronic and acute hazards. Natural ecosystems play a critical role in buffering impacts but are themselves vulnerable to climate change.

2.3.6 Agriculture and the Water–Food–Energy Nexus

Agriculture and the water–food–energy nexus in the Pacific is highly vulnerable to climate change due to the dependence of production systems on climate-sensitive resources and the limited buffering capacity of natural and infrastructure systems.

Climate hazards affect agricultural systems through multiple pathways, including water availability, soil conditions, temperature, and coastal processes. These impacts are amplified by interactions with water and energy systems, creating complex and cascading risks. Women's subsistence farming and informal food systems are highly vulnerable, with limited access to adaptive technologies and finance.

2.3.7 Disaster Risk Management

Disaster risk management (DRM) systems in the Pacific are critical to resilience but are increasingly vulnerable to the same climate hazards they are designed to manage. Climate change affects DRM not only by increasing the severity of individual hazards, but by increasing the frequency of compound events, the duration of response and recovery periods, and the probability of cascading failures across essential systems.

Across all geographic typologies, exposure extends beyond emergency agencies and assets to include populations, ecosystems, livelihoods, and the infrastructure systems that enable preparedness, warning, evacuation, response, and recovery. Infrastructure is particularly important because it acts both as an exposed asset and as a functional backbone for DRM operations. When transport, energy, communications, water, and health infrastructure fail, disaster impacts deepen and recovery slows. Displacement and sheltering increase risks of

sexual exploitation, abuse, and harassment, requiring safeguards to protect women, girls, and vulnerable groups.

2.3.8 Social Sectors

Social sectors – such as education, health care, and caring for the vulnerable, are all directly vulnerable. Vulnerabilities occur through the breakdown and damage to infrastructure. In addition, vulnerabilities occur due to the breakdown in social capacity caused by disaster, migration and increasing precarity. Service disruptions disproportionately affect excluded groups, but education, social protection, and health also provide entry points for empowerment and transformation of adaptive capacity.

3 Quantification of Programme Beneficiaries

3.1 GCF Outcomes – Adaptation Results Areas and Indicators of Adaptation Beneficiaries

3.1.1 Methodology and Assumptions

The number of beneficiaries has been estimated for each relevant GCF Adaptation Result Area (ARA), Core Indicator (CI) and Supplementary Indicator (SI). The number of beneficiaries has been further disaggregated:

- By Component 1 and 2.
- By each subproject in Component 1 and 2.
- By gender.
- By participating country.
- By direct and indirect beneficiary. Direct beneficiaries are defined as individuals, households, communities, organizations, or enterprises who (i) *receive targeted support/intervention*, and (ii) experience measurable *adaptation benefit* from project activities or investments. Indirect beneficiaries are defined as people who enjoy adaptation benefits as spillovers from project interventions *without* receiving any targeted support/intervention.

The estimation followed the following steps:

- a) Determining which resilience indicator each subproject makes contributions. For each sub-project, based on the sub-project's activities and outputs, the contribution to each GCF Indicator – both Core and Supplementary – is validated. If the sub-project is not designed to contribute to a given indicator, that indicator is filtered out. This is undertaken for both Components 1 and 2.
- b) Determining the number of beneficiaries for each sub-project – Component 1.
 - For Component 1 capacity building activities, the number of beneficiaries is estimated for each activity based on the technical content of the activity, the demand for support, and the number of concerned persons in the country. However, in order to be conservative, none of these beneficiaries are considered adaptation beneficiaries.
 - Only beneficiaries associated with Outputs 1.2.1 and 1.2.2 are considered adaptation beneficiaries.

Beneficiaries of Outputs 1.1.1, 1.1.2, 1.1.3, 1.3.1 and 2.1.3 are excluded from this count. These outputs provide targeted capacity-building, technical assistance or institutional/policy support, satisfying limb (i) of the direct beneficiary definition but do not, at this stage, satisfy limb (ii), as they do not yet generate a measurable adaptation benefit. For example, under Output 1.3.1, financial sector authorities are supported to implement climate-aligned policies and regulatory frameworks; this is expected, in time, to help financial institutions better identify and manage adaptation finance and mobilize investment in climate adaptation, but the pathway from policy support to an actual, on-the-ground adaptation benefit remains contingent on further steps outside the Programme's direct control and is therefore too remote to attribute a specific number of adaptation beneficiaries. The same reasoning applies to Outputs 1.1.1, 1.1.2, 1.1.3 and 2.1.3. This ensures that adaptation beneficiaries are only counted where a clear and reasonable

adaptation benefit can be demonstrated, consistent with the GCF's definitions. These outputs are nonetheless reported as programme-level (non-adaptation) beneficiaries under the ADB results framework in Section 3.2, which captures all project beneficiaries rather than adaptation beneficiaries specifically.

- c) Determining the number of beneficiaries for each sub-project – Component 2. As all sub-projects include adaptation as the overall project objective, all beneficiaries from the project infrastructure are considered receiving adaptation benefits. For each investment sub project under Component 2, the number of adaptation beneficiaries is estimated based on past experience and ADB guidelines, as follows:

Direct

- For the small island states with populations under 50,000 (Marshall, Palau, Cook, Niue, Nauru, Tuvalu), ADB investments typically directly impact around 40% of the population (for example all residents of capital city, or residents of several outer islands).
- For the larger Pacific SIDS, with populations up to 1,000,000 (including Fiji), ADB investments typically directly impact around 10% of the population (for example all residents of one city, or one island).
- In PNG, an ADB investment typically directly impacts 1% of the population. However, for this programme the transport and water projects are estimated to benefit 3% and 1% of the population respectively.

Indirect

Indirect beneficiaries are calculated as follows:

- 60% for small SIDS (RMI, Palau, Cook, Niue, Nauru, Tuvalu) – i.e. the remaining share of the population not already counted as direct beneficiaries (see Direct, above), so that direct and indirect beneficiaries together do not exceed the total population and no individual is counted in both categories;
- 40% for larger PICs countries with populations up to 1,000,000;
- 40% of the local catchment population, rather than total population for PNG.

Should there be more than 2 projects in a country, only 20% of the indirect beneficiaries associated with the second project are accounted. The exception is for PNG where the projects are independent.

- d) For each indicator, aggregate the beneficiaries and avoid double counting. At the program level, when estimating the aggregate number of beneficiaries, for each core (CI) and supplementary indicator (SI), there is a danger of counting the same beneficiary twice - double counting. One person may benefit from two Component 2 subprojects, from a Component 1 sub-project, and/or from capacity building activities under Component 1.

To avoid double counting the following approach is applied:

1. Determine, for each sub-project, CIs and SIs;
2. For each SI (i) filter out the sub-projects that do not contribute (ii) if two sub-projects address the same geographical area and same target group, filter out the sub-project

- with the smaller number of direct beneficiaries. This notably applies to small countries in which 100% of the population indirectly benefits from an investment;
3. For all remaining sub-projects, assume the male: female beneficiary ratio is the same as the national average.
 4. Total up, for each country, and for each sub-project, the number of male, female, direct and indirect beneficiaries.
- e) For the Core 2 Indicator (“total number of beneficiaries”), one additional step is required regarding the beneficiaries of capacity building in Component 1. These are not considered to overlap with the beneficiaries of sub-projects. However, the number of direct and indirect beneficiaries at the sub-project and country level is capped at the population of the country.

3.1.2 Results

Disaggregated beneficiaries for each IRMF indicator are presented below.

GCF Result Area	IRMF Indicator	Baseline	Midterm Target	Final Target
Total number of direct and indirect beneficiaries	Core 2: Direct and indirect beneficiaries reached	0	Beneficiary disaggregation: Total: 1,116,863 Direct: 255,399 Indirect: 861,464 Sex disaggregation: Female: 558,434 Male: 558,429 Country disaggregation: COO: 7,350; FIJ: 133,242; FSM: 16,665; KIR: 19,666; NAU: 3,633; NIU: 500; PAL: 5,358; PNG: 688,614; RMI: 11,850; SAM: 34,047; SOL: 123,380; TON: 16,167; TUV: 3,001; VAN: 53,390	Beneficiary disaggregation: Total: 3,722,878 Direct: 851,334 Indirect: 2,871,545 Sex disaggregation: Female: 1,861,441 Male: 1,861,437 Country disaggregation: COO: 24,500; FIJ: 444,142; FSM: 55,547; KIR: 65,553; NAU: 12,111; NIU: 1,666; PAL: 17,861; PNG: 2,295,380; RMI: 39,500; SAM: 113,491; SOL: 411,265; TON: 53,890; TUV: 10,004; VAN: 177,968
ARA1: Most vulnerable people and communities	Core 2: Direct and indirect beneficiaries reached	0	Beneficiary disaggregation: Total: 1,116,863 Direct: 255,399 Indirect: 861,464 Sex disaggregation: Female: 558,434 Male: 558,429 Country disaggregation: COO: 7,350; FIJ: 133,242; FSM: 16,665;	Beneficiary disaggregation: Total: 3,722,878 Direct: 851,334 Indirect: 2,871,545 Sex disaggregation: Female: 1,861,441 Male: 1,861,437 Country disaggregation: COO: 24,500; FIJ: 444,142; FSM: 55,547;

			KIR: 19,666; NAU: 3,633; NIU: 500; PAL: 5,358; PNG: 688,614; RMI: 11,850; SAM: 34,047; SOL: 123,380; TON: 16,167; TUV: 3,001; VAN: 53,390	KIR: 65,553; NAU: 12,111; NIU: 1,666; PAL: 17,861; PNG: 2,295,380; RMI: 39,500; SAM: 113,491; SOL: 411,265; TON: 53,890; TUV: 10,004; VAN: 177,968
ARA2: Health, well-being, food and water security	Core 2: Direct and indirect beneficiaries reached		Beneficiary disaggregation: Total: 339,903 Direct: 87,848 Indirect: 252,055 Sex disaggregation: Female: 169,955 Male: 169,948 Country disaggregation: FSM: 15,807; KIR: 18,809; NAU: 2,907; NIU: 500; PAL: 5,358; PNG: 134,754; RMI: 2,180; SAM: 32,865; SOL: 98,697; TON: 14,985; TUV: 3,001; VAN: 10,040	Beneficiary disaggregation: Total: 1,133,007 Direct: 292,826 Indirect: 840,181 Sex disaggregation: Female: 566,504 Male: 566,503 Country disaggregation: FSM: 52,690; KIR: 62,696; NAU: 9,689; NIU: 1,666; PAL: 17,861; PNG: 449,178; RMI: 7,268; SAM: 109,549; SOL: 328,991; TON: 49,948; TUV: 10,004; VAN: 33,466
ARA3: Infrastructure and built environment	Core 2: Direct and indirect beneficiaries reached	0	Beneficiary disaggregation: Total: 1,108,056 Direct: 253,295 Indirect: 854,761 Sex disaggregation: Female: 554,032 Male: 554,024 Country disaggregation: COO: 7,350; FIJ: 132,385; FSM: 15,807; KIR: 18,809; NAU: 3,633; NIU: 500; PAL: 5,358; PNG: 687,108; RMI: 11,850; SAM: 32,865; SOL: 122,197; TON: 14,985; TUV: 3,001; VAN: 52,208	Beneficiary disaggregation: Total: 3,693,518 Direct: 844,321 Indirect: 2,849,198 Sex disaggregation: Female: 1,846,761 Male: 1,846,757 Country disaggregation: COO: 24,500; FIJ: 441,285; FSM: 52,690; KIR: 62,696; NAU: 12,111; NIU: 1,666; PAL: 17,861; PNG: 2,290,359; RMI: 39,500; SAM: 109,549; SOL: 407,323; TON: 49,948; TUV: 10,004; VAN: 174,026

ARA4: Ecosystems and ecosystem services	Core 2: Direct and indirect beneficiaries reached	0	Beneficiary disaggregation: Total: 1,108,056 Direct: 253,295 Indirect: 854,761 Sex disaggregation: Female: 554,032 Male: 554,024 Country disaggregation: COO: 7,350; FIJ: 132,385; FSM: 15,807; KIR: 18,809; NAU: 3,633; NIU: 500; PAL: 5,358; PNG: 687,108; RMI: 11,850; SAM: 32,865; SOL: 122,197; TON: 14,985; TUV: 3,001; VAN: 52,208	Beneficiary disaggregation: Total: 3,693,518 Direct: 844,321 Indirect: 2,849,198 Sex disaggregation: Female: 1,846,761 Male: 1,846,757 Country disaggregation: COO: 24,500; FIJ: 441,285; FSM: 52,690; KIR: 62,696; NAU: 12,111; NIU: 1,666; PAL: 17,861; PNG: 2,290,359; RMI: 39,500; SAM: 109,549; SOL: 407,323; TON: 49,948; TUV: 10,004; VAN: 174,026
ARA1: Most vulnerable people and communities	Supplementary 2.1: Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options	0	Beneficiary disaggregation: Total: 48,076 Direct: 12,403 Indirect: 35,673 Sex disaggregation: Female: 24,039 Male: 24,037 Country disaggregation: NAU: 2,907; TUV: 3,001; VAN: 42,168	Beneficiary disaggregation: Total: 160,253 Direct: 41,344 Indirect: 118,908 Sex disaggregation: Female: 80,126 Male: 80,127 Country disaggregation: NAU: 9,689; TUV: 10,004; VAN: 140,560
ARA2: Health, well-being, food and water security	Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security	0	Beneficiary disaggregation: Total: 308,366 Direct: 80,259 Indirect: 228,107 Sex disaggregation: Female: 154,185 Male: 154,181 Country disaggregation: FSM: 15,807; PAL: 5,358; PNG: 134,754; RMI: 2,180; SAM: 26,545; SOL: 98,697;	Beneficiary disaggregation: Total: 1,027,885 Direct: 267,531 Indirect: 760,355 Sex disaggregation: Female: 513,943 Male: 513,942 Country disaggregation: FSM: 52,690; PAL: 17,861; PNG: 449,178; RMI: 7,268; SAM: 88,482; SOL: 328,991;

			TON: 14,985; VAN: 10,040	TON: 49,948; VAN: 33,466
ARA1: Most vulnerable people and communities	Supplementary 2.4: Beneficiaries (female/male) covered by new or improved early warning systems	0	Beneficiary disaggregation: Total: 552,355 Direct: 116,261 Indirect: 436,094 Sex disaggregation: Female: 276,178 Male: 276,177 Country disaggregation: PNG: 552,355	Beneficiary disaggregation: Total: 1,841,181 Direct: 387,535 Indirect: 1,453,646 Sex disaggregation: Female: 920,590 Male: 920,591 Country disaggregation: PNG: 1,841,181
ARA1: Most vulnerable people and communities	Supplementary 2.5: Beneficiaries (female/male) adopting innovations that strengthen climate change resilience	0	Beneficiary disaggregation: Total: 12,671 Direct: 5,940 Indirect: 6,731 Sex disaggregation: Female: 6,336 Male: 6,335 Country disaggregation: RMI: 9,670; TUV: 3,001	Beneficiary disaggregation: Total: 42,236 Direct: 19,802 Indirect: 22,434 Sex disaggregation: Female: 21,118 Male: 21,118 Country disaggregation: RMI: 32,232; TUV: 10,004
ARA3: Infrastructure and built environment	Supplementary 2.6: Beneficiaries (female/male) living in buildings that have increased resilience against climate hazards	0	Beneficiary disaggregation: Total: 52,479 Direct: 13,402 Indirect: 39,077 Sex disaggregation: Female: 26,240 Male: 26,239 Country disaggregation: KIR: 18,809; NIU: 500; RMI: 9,670; SOL: 23,500	Beneficiary disaggregation: Total: 174,925 Direct: 44,671 Indirect: 130,254 Sex disaggregation: Female: 87,463 Male: 87,462 Country disaggregation: KIR: 62,696; NIU: 1,666; RMI: 32,232; SOL: 78,331
ARA3: Infrastructure and built environment	Core 3: Value of physical assets made more resilient to the effects of climate change and/or more able to reduce GHG emissions	0	Total: \$298,140,000.00 Country disaggregation: COO: \$8,808,000; FIJ: \$36,000,000; FSM: \$7,809,000; KIR: \$17,310,000; NAU: \$16,350,000; NIU: \$3,600,000; PAL: \$14,340,000; PNG: \$95,388,000; RMI: \$24,102,000;	Total: \$993,800,000.00 Country disaggregation: COO: \$29,360,000; FIJ: \$120,000,000; FSM: \$26,030,000; KIR: \$57,700,000; NAU: \$54,500,000; NIU: \$12,000,000; PAL: \$47,800,000; PNG: \$317,960,000; RMI: \$80,340,000; SAM: \$43,310,000;

			SAM: \$12,993,000; SOL: \$24,816,000; TON: \$8,058,000; TUV: \$14,100,000; VAN: \$14,466,000	SOL: \$82,720,000; TON: \$26,860,000; TUV: \$47,000,000; VAN: \$48,220,000
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3.2 Programme Specific Outcomes and Outputs

3.2.1 Methodology

The ADB results framework includes all beneficiaries, not simply adaptation beneficiaries. Hence it is not necessary to distinguish between ‘project’ and ‘adaptation’ beneficiaries. Regardless, the methodology employed is consistent with the approach as outlined in Section 3.1.1. However, the beneficiaries of processes, capacity building and institutional strengthening are included even when having no adaptation benefit.

Hence, for Outputs 1.1.1., 1.1.2, 1.1.3, 1.3.1, and 2.1.3 are all targeted capacity building activities and the beneficiaries are included. The number of beneficiaries is estimated for each activity based on the technical content of the activity, the demand for support, and the number of concerned persons in the country.

For the avoidance of doubt, beneficiaries of Outputs 1.1.1, 1.1.2, 1.1.3, 1.3.1 and 2.1.3 are counted here as programme-level beneficiaries under the ADB results framework only. They are not counted as adaptation beneficiaries and are not included in the Core Indicator 2 aggregation described in Section 3.1, which, consistent with paragraph (b) of Section 3.1.1, considers only the beneficiaries of Outputs 1.2.1 and 1.2.2 under Component 1. This distinction is what allows this section to include beneficiaries of capacity-building and institutional-strengthening activities “even when having no adaptation benefit”, as noted above, without creating any overlap or double counting with the adaptation beneficiary figures reported in Section 3.1.2.

There are no direct or indirect benefits from Outputs 1.1.4, 1.1.5, 2.1.1. These outputs are in the form of policies, institutional changes, etc.

Output 1.2.1 and 1.2.2 are market development. The number of direct beneficiaries is the number of clients that can be directly reached. It is assumed that for each direct beneficiary there will be three indirect beneficiaries, benefitting from the market activities. This is the same as for adaptation beneficiaries.

Output 2.1.2 is the sub-projects investment in infrastructure. For each investment sub project under Component 2, the number of beneficiaries is estimated based on past experience and ADB guidelines and is typically a percentage of the country population. Measures are taken to avoid double counting as outlined in Section 3.1.1.

NOTE: The Programme Results Framework includes many indicators that are not equivalent to number of beneficiaries. This may include, for example, number of policies approved, or number systems established. These are not covered in this section which only considers individual beneficiaries.

3.2.2 Results

RPACA Result (Output/activity)	Pathway to beneficiaries	Methodology and estimation of the number of beneficiaries
Output 1.1.1: Skills and Capacity to Address Climate-, Disaster-, and Gender-Responsive Public Financial Management (PFM) are Enhanced, Retained, and Applied	Training programs; On-the-job support and mentoring; Pooling, retention and other innovative schemes Type: from training/capacity development	<u>Direct:</u> 44 (at least 2 staff trained per sub project) <u>Indirect</u> 88 (the program assumes that for every trained local actor, at least 2 additional individuals will indirectly benefit via knowledge sharing).
Output 1.1.2: Regional climate finance and adaptation planning coordination with gender equality and inclusion mainstreamed and enhanced	Training and technical assistance. Type: from training/capacity development	<u>Direct</u> 39 (at least three participants from each country – from NDA and MOF representatives, sector representatives, private sector or other – participate in steering committee and other activities). <u>Indirect</u> 39 (the program assumes that for every participant in the capacity building activities, at least one additional individual will indirectly benefit via knowledge sharing).
Output 1.1.3: Climate-related fiscal risk analytics and budget integration tools developed	Training programs Direct support to Ministries. Type: from training/capacity development	<u>Direct</u> 26 (at least two participants from each country will benefit from training programs). <u>Indirect</u> 26 (the program assumes that for every trainee, at least one additional individual will indirectly benefit via knowledge sharing).
Output 1.1.4: Climate Adaptation Investment Planning (CAIP) framework for appraising and prioritizing climate adaptation investments established.		<u>Not applicable</u> Performance measured in terms of the number of countries that adopt risk analytics into fiscal planning
Output 1.1.5: Innovative climate finance instruments and enabling frameworks designed		<u>Not applicable</u> Performance measured in terms of the number of bankable and evidence-based project pipelines developed.
Output 1.2.1: Regional blended finance approach for micro, small, and medium enterprises (MSMEs) adaptation lending established	MSMEs access adaptation finance → invest in resilient activities → improved income stability, business continuity, and household resilience.	<u>Direct</u> 1,300 MSMEs supported x 1 owner = 1,300 <u>Indirect</u>

	Type: from support to MSME, private sector, livelihoods	1,300 MSMEs × 4 household members/employees = 5,200 <i>Assumes MSMEs support household and employment resilience; includes women-led MSMEs</i> Note The program assumes that for every MSME supported, 4 household members/employees will benefit via improved social and economic conditions and access to employment.
Output 1.2.2: Pacific Infrastructure Risk Advisory and Transfer (PAC-INFRAT) Advisory Support Piloted	Infrastructure becomes insurable and resilient → improved service continuity (transport, water, energy) → reduced disruption for users. Type: from support to MSME, private sector, livelihoods	<u>Direct</u> 2 projects × 5,000 users per project = 10,000 <u>Indirect</u> 10,000 direct beneficiaries × 3* = 30,000 Note The program assumes that system-wide and interconnectivity benefits are felt across sectors, leading to at least three indirect beneficiaries per beneficiary.
Output 1.3.1: National financial sector policy, regulatory, and institutional capacities are strengthened (in accordance with regional and international frameworks)	Financial sector authorities implement climate-aligned policies and regulatory frameworks → financial institutions can better identify and manage adaptation finance → stronger conditions for mobilising investment in climate adaptation. Type: Institutional and policy support to financial sector authorities and industry representative bodies.	<u>Direct</u> 8 mechanisms × 10 staff supported = 80 <u>Indirect</u> 80 direct beneficiaries × 3* = 240 *Note The program assumes that institutional (within and across) knowledge spillovers will lead to at least three indirect beneficiaries per beneficiary.
	Central banks integrate climate risk into supervision, disclosure, and taxonomy frameworks → systemic strengthening of financial sector resilience	<u>Not applicable</u> Performance measured in terms of the number of frameworks, taxonomies, and related standards developed and implemented.
	Financial institutions adopt climate risk tools and expand climate-resilient lending → improved access to finance for end-users. Type: Institutional and policy support to financial sector stakeholders.	<u>Direct</u> 14 institutions × 10 staff = 140 <u>Indirect</u> 140 staff × 3* = 420 *Note The program assumes that institutional (within and across) knowledge spillovers

		will lead to at least three indirect beneficiaries per beneficiary.
Output 2.1.1: Evidence-based system scale climate adaptation sub-projects developed and approved	Government endorse and approve transformational climate adaptation projects	<u>Not applicable</u> Performance measured in terms of the number of Government that endorse and approve transformational climate adaptation projects.
Output 2.1.2: Climate-resilient and inclusive adaptation infrastructure sub-projects completed and operationalized	Project preparation and due diligence for projects integrate climate risk projections Post: This will increase the resilience of economic and socio-economic systems by transforming the infrastructure conception and design so that it is predicated on contributing to resilience. The following systems are targeted: coastal areas and areas subject to flooding; water security; transport and connectivity; energy; urban and; health and social systems All relevant population groups, economic sectors and ecosystems will benefit. Construction. Type: from infrastructure	<u>Direct</u> the total of direct beneficiaries is 844,321 <u>Indirect</u> Indirect beneficiaries of 2,849,198
Output 2.1.3: Institutional capacity and enabling environment of national agencies for climate resilient infrastructure strengthened	Type: from training/capacity development	<u>Direct</u> 46. At least two staff from the 23 agencies that operate, maintain and/or manage infrastructure will benefit from training. <u>Indirect</u> 92 Note The program assumes that for every participant in the technical training activities, at least two additional individuals will indirectly benefit via knowledge sharing.
Total – Direct		851,334*
Total – Indirect		2,871,545*
Grand total		3,722,878*

* Considers de-duplication of beneficiaries between Component 1 and 2.

4 GESI Alignment in Beneficiary Estimation and RPACA Program Implementation

Beneficiary estimation across RPACA is guided by the Gender-Transformative Climate Action (GTCA) approach set out in the GAAP. The program applies a numeric methodology to identify direct and indirect beneficiaries, and GTCA ensures these figures are interpreted through an equity lens. This means RPACA does not only report how many people benefit, but also examines who is reached, who is excluded, and how benefits contribute to shifting power relations over time.

Beneficiary counts will be disaggregated by sex, age, disability, and location wherever possible, with proxy indicators used where data gaps remain. RPACA's Components 1 and 2 are financed with a USD 3.750 million GESI allocation, and all tracking is aligned with programme-wide GESI standards: inclusive governance, SEAH safeguards, universal design, equitable finance access, and participatory monitoring.

Tracking will also reflect GAAP horizons — Foundations (Years 1–3), Institutionalisation (Years 4–6), and Transformation (Years 7–10) — to show how benefits shift from protection to empowerment over time. Intersectional vulnerability pathways are explicitly recognised: women, persons with disabilities, youth, older people, SOGIESC groups, and rural or outer-island households often face compounded exposure and constrained adaptive capacity. Indirect beneficiaries will include caregivers, households, and community networks, not only individuals. Distinct tracking of women-led micro-, small, and medium enterprises (MSMEs) and inclusive finance access will be applied to ensure adaptation finance pathways are visibly equitable.

By embedding GAAP principles into RPACA's beneficiary estimation, the program demonstrates that adaptation outcomes are donor-credible, equity-driven, and program-wide in scope. This ensures that Components 1 and 2 deliver measurable and inclusive resilience outcomes.