



## FAO-GEF Project Implementation Report

Period covered: 1 July 2022 to 30 June 2023

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## 1. Basic Project Data

### General Information

<b>Region:</b>	Pacific Islands
<b>Country (ies):</b>	Tonga
<b>Project Title:</b>	Integrated Land and Agro-ecosystem Management Systems (ILAMS) in Tonga
<b>FAO Project Symbol:</b>	GCP/TON/001/GFF
<b>GEF ID:</b>	5578
<b>GEF Focal Area(s):</b>	Biodiversity, Land Degradation
<b>Project Executing Partners:</b>	Ministry of Agriculture, Food, Forests and Fisheries (MAFF) Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC), Ministry of Lands, Survey, Natural Resources (MLSNR), Ministry of Internal Affairs (MIA), Mainstreaming of Rural Development Innovation (MORDI), Tonga Trust
<b>Project Duration (years):</b>	4 years, plus 22 months
<b>Project coordinates:</b>	S 21°20'20.53" W 174°57'05.57" S 21°11'54.58" W 175°06'36.49" S 19°40'40.88" W 174°16'52.34" S 18°38'12.88" W 173°56'18.96"

### Project Dates

<b>GEF CEO Endorsement Date:</b>	20 September 2016
<b>Project Implementation Start Date/EOD :</b>	15 February 2017
<b>Project Implementation End Date/NTE<sup>1</sup>:</b>	31 August 2020
<b>Revised project implementation end date (if approved) <sup>2</sup></b>	31-Dec-2022

### Funding

<b>GEF Grant Amount (USD):</b>	\$2,344,954
<b>Total Co-financing amount as included in GEF CEO Endorsement Request/ProDoc<sup>3</sup>:</b>	\$7,170,000
<b>Total GEF grant disbursement as of June 30, 2023 (USD)<sup>4</sup>:</b>	\$2,328,444
<b>Total estimated co-financing materialized as of June 30, 2023<sup>5</sup></b>	\$4,381,273

<sup>1</sup> As per FPMIS

<sup>2</sup> If NTE extension has been requested and approved by the FAO-GEF CU.

<sup>3</sup> This is the total amount of co-financing as included in the CEO document/Project Document.

<sup>4</sup> For DEX projects, the GEF Coordination Unit will confirm the final amount with the Finance Division in HQ. For OPIM projects, the disbursement amount should be provided by Execution Partners.

**M&E Milestones**

<b>Date of Most Recent Project Steering Committee (PSC) Meeting:</b>	15 February 2022
<b>Expected Mid-term Review date<sup>6</sup>:</b>	completed
<b>Actual Mid-term review date (when it is done):</b>	MTR Report finalised 9 February 2020
<b>Expected Terminal Evaluation Date<sup>7</sup>:</b>	Terminal Evaluation completed. Final terminal report is being prepared by PSR Reporting team.
<b>Tracking tools/Core indicators updated before MTR or TE stage (provide as Annex)</b>	YES

**Overall ratings**

<b>Overall rating of progress towards achieving objectives/ outcomes (cumulative):</b>	Moderately Satisfactory
<b>Overall implementation progress rating:</b>	Moderately Satisfactory
<b>Overall risk rating:</b>	Moderate

**ESS risk classification**

<b>Current ESS Risk classification:</b>	Low
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**Status**

<b>Implementation Status (1<sup>st</sup> PIR, 2<sup>nd</sup> PIR, etc. Final PIR):</b>	Final PIR
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**Project Contacts**

Contact	Name, Title, Division/Institution	E-mail
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<sup>5</sup> Please refer to the section 12 of this report where updated co-financing estimates are requested and indicate the total co-financing amount materialized.

<sup>6</sup> The Mid-Term Review (MTR) should take place after the 2<sup>nd</sup> PIR, around half-point between EOD and NTE. The MTR report in English should be submitted to the GEF Secretariat within 4 years of the CEO Endorsement date.

<sup>7</sup> The Terminal Evaluation date should be discussed with OED 6 months before the project's NTE date.

## 2. Progress towards Achieving Project Objective(s) (Development Objective)

*(All inputs in this section should be cumulative from project start, not annual)*

Please indicate the project's main progress towards achieving its objective(s) and the cumulative level of achievement of each outcome since the start of project implementation.

Project or Development Objective	Outcomes	Outcome indicators <sup>8</sup>	Baseline	Mid-term Target <sup>9</sup>	End-of-project Target	Cumulative progress <sup>10</sup> since project start Level at 30 June 2022	Progress rating <sup>11</sup>
To strengthen the resilience of communities by enhancing land tenure systems, improving forest management, and piloting an integrated agro-ecosystem approach to rehabilitate degraded landscapes.	<b>Outcome 1.1: Increased acknowledgment and incorporation of integrated land and agro-ecosystem management principles in national policies, laws, and regulations.</b>	1. Integrated land and agro-ecosystem management principles and approaches mainstreamed in national policies, laws, and regulations	No Policies specifically indicate intention to promote ILAMS.	3 ILAMS Policy Intention Papers developed	At least 3 ILAMS Policy Intention Papers developed and published to inform national policies, strategies and plans.  National Land Use Policy Document adopted by Government.	Four (4) key Ministries have drafts of Ministry-specific ILAMS Policy Intention Papers (PIP) drafted, namely: <ul style="list-style-type: none"> <li>Ministry of Agriculture, Food and Forestry (MAFF)</li> <li>Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC)</li> <li>Ministry of Lands, Survey and Natural Resources (MLSNR)</li> <li>Ministry of Internal Affairs (MIA).</li> </ul>	MU

<sup>8</sup> This is taken from the approved results framework of the project.

<sup>9</sup> Some indicators may not identify mid-term targets at the design stage (refer to approved results framework) therefore this column should only be filled when relevant.

<sup>10</sup> Please report on results obtained in terms of Global Environmental Benefits and Socio-economic Co-benefits as well.

<sup>11</sup> Use GEF Secretariat required six-point scale system: **Highly Satisfactory (HS)**, **Satisfactory (S)**, **Moderately Satisfactory (MS)**, **Moderately Unsatisfactory (MU)**, **Unsatisfactory (U)**, and **Highly Unsatisfactory (HU)**.

					<p>The draft ILAMS PIPs have not been finalised by end of the reporting period and NTE.</p> <p>The LUP remains in draft form and has not been formally adopted by the Government.</p>	
<p><b>Outcome 1.2: Reliable information on land tenure is available to guide land use planning and facilitate the application of sustainable land management nationwide.</b></p>	<p>2. Number of 'complete watershed' areas with up to date cadastral maps used for GIS-based applications for land use planning and for monitoring land use changes over time.</p>	<p>None of the 'complete watershed' areas i.e., project locations have up-to-date allotment cadastre layer of map data available for developing mapping products.</p>	<p>Up-to-date allotment cadastre layer of map data available for developing mapping products.</p>	<p>4 'complete watershed' areas, with completed up to date cadastral maps used for GIS-based applications for land use planning and for monitoring land use changes over time.</p>	<p>By end of the project, the use of the SOLA database for GIS applications would be possible but the technical capacity to do so was outside the scope of project and the local programmer intended to lead this work was carrying out post graduate studies overseas for most of the project duration and was not able to prioritise this into his heavy workload on return. The GIS Unit of MLSNR prioritized its limited capacity to the use of QField.</p> <p>The project nevertheless improved the availability of cadastral data in digital form to make this possible when MLSNR is ready to do so in the future. By end of the project, all cadastral maps for the 4 target localities defined as watersheds in the project document have been digitized and uploaded to the SOLA database.</p> <p>Around 30% of Registration Records nationally have been</p>	<p><b>S</b></p>

					digitized.	
	<b>3. Degree of completion of allotment map data capture and quality improvement work</b>	Less than 10% of both the tax and town allotments in the right allotment map data quality for digital capture	Allotment map data capture and quality improvement work at least 70% completed	Allotment map data capture and quality improvement work 100% completed.	<p>A total of 11,966 Survey Plans have been digitized and uploaded to the database.</p> <p>% of Township Maps completed:                      Tongatapu – 98%                      ‘Eua – 100%                      Ha’apai – 100%                      Vava’u – 100%                      Niuafu’ou – 0%                      Niuatoputapu – 100%</p> <p>% of Township Plans completed:                      Tongatapu – 99%                      ‘Eua – 77%                      Ha’apai – 100%                      Vava’u – 100%                      Niuafu’ou – 0%                      Niuatoputapu – 0%</p>	S
	<b>4. Level of in-house capacity in MLSNR for data capture and input</b>	Tonga SOLA system not able to utilize spatial functionality of SOLA to deal with the cadastral mapping due to significant gaps in capacity for data capture and data quality.	Tools required for data improvement work in place and local staff received training on these tools.	By project end MLSNR staff have assumed all responsibility for data capture and input	By end of the project, the capacity of MLSNR was significantly strengthened to assume responsibilities for data capture and input. The project supplied a 42in scanner which helped with the digitization of data. The project also supported the development of 11 Standard Operating Procedures (SOP) for data capture and provided training of MLSNR on the use of these SOPs, which enabled them to make good progress in the digitization of cadastral data for the SOLA database.	S

		<p>5. Capacity of MLSNR to streamline business processes and accept applications and new survey plan data digitally through the internet.</p>	<p>Land administrative processes and services predominantly paper-based</p>		<p>MLSNR is actively accepting applications and new survey plan data digitally through the internet.</p>	<p>Since the mid-term, progress towards improving cadastral data capture and data quality in the SOLA database to a standard that would allow the use of spatial functionalities of SOLA for land administration processes was slow and it became obvious this indicator was unrealistic. By end of the project the capacity of MLSNR for cadastral data capture and maintenance has improved significantly as reported above and is a significant contribution towards a digitized/ computerized system to streamline land administration processes in the future.</p> <p>Since mid-term, the project refocused its support from SOLA-Registry (the main part of the FAO suite of SOLA open-source software for formal land registration) to SOLA-Open Tenure &amp; Community Server (SOLA OT/CS is part of the FAO SOLA suite for community use to record 'informal' land tenure such as in customary tenure and can be configured for land use).</p> <p>A proof of concept was developed and available as tongalands.org, and training of the Project Manager and local</p>	<p>MS</p>
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					<p>programmer in the MLSNR/GIS Unit was delivered.</p> <p>The travel restrictions however did not allow the international SOLA Specialist to travel and while many efforts were made to organize virtual training, this proved too difficult for many reasons, including several covid lockdowns that limited ability for groups to get together and individual internet access proved unreliable.</p>	
<p><b>Outcome 1.3: Improved strategic planning of forest resources.</b></p>	<p><b>6.</b> Extent of application of <b>National Strategic Forest Development Plan</b> by Central and local government bodies and civil society organizations</p>	<p>No National Strategic Forest Development Plan exists to implement the 2009 Tonga Forest Policy.</p>	<p>Management Plan for Forestry and Trees Resources in Tonga, 2017 published</p>	<p>The Management Plan for Forestry and Trees Resources in Tonga, 2017 published and key priorities implemented by Central and Local Government bodies and Civil Society Organizations</p>	<p>The term “National Strategic Forest Development Plan” is replaced by “Management Plan for Forestry and Trees Resources in Tonga” (MPFTR), which was published in 2017. Key priorities in the 2017 MPFTR implemented include:</p> <ul style="list-style-type: none"> <li>• Guidelines for the propagation of 5 main timber trees (kauri pine, mahogany, pinus caribea, red cedar and teak) have been completed.</li> <li>• Training module for the propagation of timber trees.</li> <li>• A monitoring and reporting framework for the state of the forests and tree resources has been completed for use by the Forestry Division.</li> </ul>	<p><b>S</b></p>



		<p>7. Degree to which National Forest Monitoring System (FMS) is utilised in planning</p>	<p>No Forest Monitoring System in place</p>	<p>Conceptual design and workplan for establishing the FMS developed; implementation at least 15% completed.</p>	<p>A fully functional FMS is in place and its data outputs are being used in planning by key entities of central and local Government and civil society organisations.</p>	<ul style="list-style-type: none"> <li>• A conceptual design completed and computer equipment including mobile tablets for field data collections have been delivered to the Forestry Division of MAFF</li> <li>• A Discussion Paper on the design of National Forestry Inventory (NFI) in Tonga has been completed.</li> <li>• Training Workshop delivered in partnership with and under FAO co-financing TCP (TCP/TON/3702) on National Forest Monitoring System &amp; Training on Land Cover and Land Use Assessment/Inventory.</li> </ul>	<p><b>MU</b></p>
<p><b>Outcome 2.1: Capacities for evidence-based, and negotiated formulation of resource management plans at landscape and village levels, clarification of farmers’ tenure rights and obligations</b></p>		<p>8. Frequency of meeting of multi-stakeholder mechanisms in target locations</p>	<p>N/A</p>	<p>Multi-stakeholder mechanisms are active at least twice per year in target locations</p>	<p>Multi-stakeholder mechanisms are active at least twice per year in target locations</p>	<ul style="list-style-type: none"> <li>• The various Village Committees participated in ILAMS Plans consultations and are involved in coordinating project activities within their communities.</li> <li>• Rather than establishing separate mechanisms in the target locations only, the project facilitated the establishment of a national coordination mechanism for extension services and FFS events under the umbrella of a National Extension Advisory Committee. The stakeholders agreed that this Committee’s roles be expanded to cover the national coordination of the FFS</li> </ul>	<p><b>S</b></p>

					activities.  The project also strengthened its partnership with Mainstreaming of Rural Development Innovation (MORDI) Tonga Trust, working together in coordination of support to agricultural development in communities in the context of their Village Community Development Plans.	
	<b>9.</b> Representativeness of participation in multi-stakeholder mechanisms in target locations.	N/A	All key stakeholder groups (commoners and nobles, men and women) participate actively in the mechanisms	All key stakeholder groups (commoners and nobles, men and women) participate actively in the mechanisms	Supported and facilitated the establishment of a National Extension Advisory Committee as a national coordination mechanism to work with the various Village Committees already in place within the context of the Village Community Development Plans.	<b>MS</b>
	<b>10.</b> Percentage of participants in multi-stakeholder mechanisms consider that the mechanism contributes significantly to resolving issues that impede equitable and sustainable approaches to land management	N.A	50%	80%	No specific mechanism was established so no assessment was done on effectiveness.	<b>U</b>
	<b>11.</b> Degree of initial implementation of 'Eua Watershed	Inter-sectoral Committee established	Draft Plan developed, including	Operational plan developed for the implementation of	The Inter-sectoral Committee established with GIZ support has long ceased to exist after key	<b>MS</b>

	Management Plan (EWMP)	with GIZ support, to coordinate work on a Catchment Area Management Plan.	identification of alternatives for farmers to reduce encroachment, and rehabilitation plans for degraded forest areas.	the 'Eua WMP over at least the project period, and corresponding activities implemented in accordance with the plan.	<p>members have either retired or have moved to new jobs. As there were no documentation of work carried out in terms of a draft EWMP, the project had to start from scratch with a new Draft drafted.</p> <p>Rehabilitation work has nevertheless begun in areas where the farmers have been relocated, using seedlings of native trees supplied from the nursery installed at 'Eua Forestry Division by the project.</p> <p>Three Operational Plans have been developed for all of Tonga, including 'Eua Water Catchment: (i) rehabilitation of degraded land with forest and trees; (ii) enhancement of regrowth forest; and (iii) tree seedling nurseries.</p>	
	<b>12.</b> Effectiveness of the Plan in reducing encroachment on forests in the watershed.	75 ha of farmed land within the catchment areas (45 registered tax allotments) relocated and rehabilitated with forest as a conservation area	90 ha of farmed land rehabilitated with forest as part of the expanded 'Eua Watershed Catchment area under the WMP	No new instances of clearance of forests in the watershed for agriculture	While the Plan itself is only in its first draft and no consultations has been carried out, a Monitoring protocols for the Code of Harvesting Practice for the 'Eua forestry plantations has been completed. A significant area of the water catchment is forest plantation. Fences and signs have been installed as well as rehabilitation to native forest where farmers have been relocated from, is resulting in no	<b>S</b>

		<p><b>13.</b> Numbers of staff members in Government institutions and NGOs who have received effective training through the modules</p>	<p>zero</p>		<p>20 members of Government institutions and 28 members of NGOs have received training through the modules and 'how to' manuals, and show improved knowledge, attitudes and practices (KAP) as a result</p>	<p>new encroachment reported.</p> <p>Under a LoA with MAFF to develop modules and coordinate training and strengthening of multi-stakeholder mechanisms and partnerships in the delivery of extension services to support and promote the adoption of ILAMS practices by village communities:</p> <ul style="list-style-type: none"> <li>- 30 staff from MAFF Research, Extension and Women, Livestock and Forestry Divisions and staff from MORDI received training on the use of PRA tools.</li> <li>- Training was also provided on Vulnerability Analysis to Climate Change.</li> <li>- Training workshops were also held in the 4 main island groups on Soil Health and Water management; pests and diseases; Diagnostic skills (plant health clinic and soil health card).</li> <li>- A total of 99 participants attended FFS training in the 4 island groups.</li> </ul> <p>Under a LOA with TCDT:</p> <ul style="list-style-type: none"> <li>- A total of 93 women from 7 Women Village Groups participated in conservation of plants with high cultural and medicinal values.</li> </ul> <p>Other trainings by the project team:</p> <ul style="list-style-type: none"> <li>- In Hango, 'Eua,</li> </ul>	<p><b>S</b></p>
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					<p>demonstrations were established and implemented in the use of mucuna as ground cover to protect soil moisture and for soil conditioning. A 100 square meters plot was planted with mucuna seeds. Mucuna plants have been planted in bigger areas and some intercroppings with Colocasia and Xanthosoma taro.</p> <p>- Beyond Hango, the Project Manager carried out training of Project Field Officers and MAFF staff as trainers and of communities in the use of mucuna.</p>	
	Number of members in Government institutions and NGOs making regular use of the training manuals				[indicator combined with 13 above]	
<b>Outcome 3.2: Increased capacities in local communities in the target localities to develop, apply and adopt SLM practices</b>	<p><b>14.</b> Number of tax allotments (<i>'api tukuhau</i>) in target localities on which integrated agroecosystem management practices are applied, including more than one of the following:</p> <ul style="list-style-type: none"> <li>- Use of piggery digestate as</li> </ul>		75 'api tukuhau (tax allotments) covering 250ha, with at least 12 'api tukuhau covering 40ha in each of the target localities	225 'api tukuhau covering 750ha, with at least 30 'api tukuhau covering 100ha in each of the target localities	<p>The estimated total area covered is more than 1321ha covering 408 'api tukuhau, comprising:</p> <ul style="list-style-type: none"> <li>• 253ha (625 acres) of land covered by the volcanic ashfall from the Hunga Tonga- Hunga Ha'apai (HTHH) volcanic eruption rehabilitated soil health by using tillage to turn the ash into the soil profile. The Project Steering Committee</li> </ul>	<b>S</b>

		<p>fertiliser</p> <ul style="list-style-type: none"> <li>- Use of cover crops</li> <li>- Enrichment of fallows</li> <li>- Integrated pest management</li> <li>- Increased use of agroforestry trees for animal feed, household or commercial tree products and/or nutrient cycling</li> </ul>				<p>proposed a 4 month extension in response to the January 2022 HTHH natural disaster and agreed to a reprioritisation of project funds to the HTHH Emergency Response to protect the significant achievements made under the project that have been damaged. The rehabilitation work was carried out in partnership with MORDI.</p> <ul style="list-style-type: none"> <li>• 412ha arable land available including 49 'api tukuhau (tax allotments) in the 4 pilot villages benefited from integrated agroecosystem management practices in the forms of reduced crop damages from better management of roaming pigs and expanding the agricultural biodiversity of agroecosystems through provision of seedlings and planting of a wider range of trees and crops. About another 20 tax allotments (area estimate not included) in surrounding villages benefited from protection of crops from roaming and wild pigs as a result of pig fencing along villages boundaries and installation of both 'a-puaka Tonga fences and 'a-puaka palangi pens.</li> <li>• more than 400ha in 4 extra villages (Houma, Pea, Popua, Lapaha) involved in</li> </ul>	
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						<p>conservation and revival of plants with high cultural and medicinal value by Women's Groups, in partnership with TCDT.</p> <ul style="list-style-type: none"> <li>• about 256ha of more than 92 toutu'u systems (traditional communal management) in partnership with MORDI: 32 in Tongatapu, 16 in 'Eua, 24 in Vava'u and 20 in Ha'apai, which strengthened the agroforestry aspects of the systems.</li> </ul> <p>Other areas not estimated include those beyond the pilot villages that benefited from:</p> <ul style="list-style-type: none"> <li>- supply of seedlings and planting materials planted at tax allotments have been supported by upgrading the nurseries, through supplies of nursery shade cloth and structures at:             <ul style="list-style-type: none"> <li>- MAFF-Forestry Division nurseries in; Tokomololo (Tongatapu), Pangai (Ha'apai) and Fatai (Vava'u) and 'Eua.</li> <li>- Hango College nursery and Seed Centre in 'Eua</li> <li>- Supplies of seedlings and planting materials through strengthened partnership with MORDI.</li> </ul> </li> </ul>	
	<p><b>15.</b> Reduction in the amounts of firewood collected from vulnerable</p>	<p>Baseline to be established at project start</p>	<p>25% reduction over baseline levels (baseline to be</p>	<p>75% reduction over baseline levels</p>	<p>No biodigesters installed yet as replacement to firewood.</p> <p>The project's M&amp;E database</p>	<p><b>MS</b></p>	

	forest areas (in the target localities where such forest areas exist).		established at project start)		recorded 13,782 fuel wood trees within the 49 tax allotments (' <i>api tukuhau</i> ) and 91 town allotments (' <i>api kolo</i> ). More than 3,000 of these trees were planted with support of the project. While it is difficult to estimate the %reduction, the increase in the number of trees will ensure future supply to avoid firewood being sourced from vulnerable forest areas.	
	Percentage increase in water harvesting and storage capacity in target communities (m <sup>3</sup> /month).	Baseline to be established at project start	At least 20% increase in water storage capacity in whole area where piggeries and intercropping systems will be covered under each ILAMP.	At least 50% increase in water storage capacity in whole area where piggeries and intercropping systems will be covered under each ILAMP.	<i>Validation of baseline data through household surveys by the project team during first year of the project indicates water supplies for all pilot villages are considered adequate and no longer a priority issue. The indicator is therefore considered irrelevant.</i>	n/a
	<b>16.</b> Availability of water to local communities in target localities.	Baseline to be established at project start	No net reduction in water availability for domestic uses in pilot communities, despite the establishment of piggeries.	No net reduction in water availability for domestic uses in pilot communities, despite the establishment of piggeries.	There has not been any water shortage reported as result of installation of piggeries under the project.	<b>S</b>
	<b>17.</b> Percentage reduction in crop damage and loss from roaming pigs	Baseline to be established at project start	On average farmers in the pilot communities	On average farmers in the pilot communities report a 75% reduction in the areas of crops	At the beginning of the project less than 50% of pigs were confined in all pilot villages. At the end of the project, the % of	<b>S</b>



	in pilot communities and demonstration sites.		report a 25% reduction in the areas of crops damaged by roaming pigs.	damaged by roaming pigs. The total area benefitting from reduced degradation over the life of the project will be 245ha.	pigs confined in pig pens increased to 65% in Haveluliku, 70% in Mangia, 99% in Pukotala, 60% in Taanga. In addition, fencing were installed along village boundaries which stopped crop damage from roaming pigs and pigs from neighbouring villages.	
	<b>18.</b> Numbers of farmers in target localities with increased crop yields	Baseline to be established at project start	12 farmers in each target locality with 15% increases in crop yields over 40ha.	30 farmers in each target locality with 15% increases in crop yields over 100ha.	Yield data were not available or collected in the beginning to be able to calculate % increases.  The project however carried out several activities that anecdotally would meet the target of 30 farmers in each of the target localities covering areas well above 100ha, including: <ul style="list-style-type: none"> <li>- More than 180 households participating in <i>tou'tu'u</i> farming systems (over 90ha)</li> <li>- At least 49 farmers with 'api tuku hau (tax allotments) increased yields if reduction in crop damages from roaming pigs is taken into account. The % of pigs now confined in pig pens in pilot villages are: Haveluliku - 65%; Mangia - 70%, Pukotala - 99%; Ta'anga - 60%. The anecdotal baseline was less than 50% in each pilot village.</li> </ul>	<b>MS</b>

					<ul style="list-style-type: none"> <li>- More than 50 farmers with increased yields from adoption of mucuna cover cropping covering 25ha</li> <li>- More than 50 women farmers with increased yields in their home gardens from adopting organic farming practices involving composting, covering 28ha</li> </ul>	
	<p><b>19.</b> Numbers of farmers in target localities who report an increase of at least 20% in the numbers of established (live after 1 year) trees on their farms</p>	Baseline to be established at project start	75 farmers report an increase of at least 20% in the numbers of established (live after 1 year) trees on their farms	225 farmers report an increase of at least 20% in the numbers of established (live after 1 year) trees on their farms	<p>The project M&amp;E database contains records of 22,168 standing/live trees in the pilot villages, including fruit trees (breadfruits, citrus, pomelia, and mango) and fuelwood trees (sialemohe) that are predominantly used in boundary planting patterns, of which more than &gt;6,000 (&gt;27%) were planted as seedlings.</p> <p>Beyond the pilot villages, 12,900 trees were planted in the more than 92 toutu'u systems (traditional communal management) designed and established to strengthen the agroforestry aspects of the whole systems. A significant number were planted over a year and are considered established trees.</p>	<b>S</b>
	<p><b>20.</b> Avoidance of CH<sub>4</sub> emissions as a result of the use of piggery waste as</p>	N/A	247tCO <sub>2</sub> eq/year	247tCO <sub>2</sub> eq/year (988t total by project end)	No progress as no biodigesters were installed due to unsuccessful procurement of services.	<b>U</b>

	biogas fuel						
	<b>21.</b> Numbers of households benefiting from biogas produced from piggery biodigesters	No households use biogas and 70% use bottled gas	70, with a corresponding 7% reduction in the amounts of bottled gas used	130, with a corresponding 14% reduction in the amounts of bottled gas used	No progress. The project went through 3 RFP processes for installation of biodigesters that were not successful at securing technical support services to design biodigesters. The project team is now in the process of procuring off the shelf pre-fabricated model to be customized to the piggery pens already installed. 15 pig pens ('a puaka palangi) have been installed in pilot villages, with cement floor and drainage for channeling wastewater to the biodigesters, when installed.	<b>U</b>	
	<b>22.</b> Number of people in target villages where pig management practices have been modified who report no reduction in their abilities to meet social and cultural obligations	Baseline to be established at project start	100% of interviewees in villages where pig management practices have been modified report that there has been no reduction in their abilities to meet social and cultural obligations	100% of interviewees in villages where pig management practices have been modified report that there has been no reduction in their abilities to meet social and cultural obligations	There has been no reduction in the ability of communities to meet their social cultural obligations. The 16 pigs with superior genetics provided to communities in the target villages have produced at least 3 generations (more than 600) of pigs which have improved pig genetics pool.  In addition, the target villages have reported at least 40% increase of local pig feed supplements produced by households including cassava, sweet potato, moringa and Leucaena that are now available at satisfactory levels for the	<b>S</b>	

						local pig owners.	
	<p><b>Outcome 3.3. Increased capacities for the formulation and implementation of forest restoration plans, and for supporting improved management of forests, mangroves, and trees outside forests.</b></p>	<p><b>23.</b> Area in target localities covered by operational plans and Sustainable Forest Management Agreements (SFMAs) that are under effective implementation.</p>	No areas under SFMAs		Forestry Division and communities concerned agree that the provisions of operational plans and SFMAs covering 150ha <sup>12</sup> are being met	<p>A draft 'Eua Water Catchment Area Management Plan has been drafted. Due to a covid lockdown, a workshop to discuss the draft had to be cancelled and was not possible to reschedule.</p> <p>The project has also developed Guidelines for the development of Operational Plans for the key areas of:</p> <ol style="list-style-type: none"> <li>1. Agro-forestry plantings</li> <li>2. Rehabilitation of degraded land</li> <li>3. Enhancement of forest regrowth</li> <li>4. Small-scale nurseries for the local production of tree seedlings.</li> </ol> <p>These Guidelines form the basis for the Forestry Division and stakeholders to develop Plans for specific areas.</p>	<b>MS</b>
		<p><b>24.</b> Numbers of tree nurseries nationwide able to meet their seed supply requirements</p>	No nurseries currently meet seed supply requirement	30% of tree nurseries nationwide are able to meet at least 90% of their seed	80% of tree nurseries nationwide are able to meet at least 90% of their seed requirements	The nurseries established or upgraded by the project are now meeting requirements for some trees such as mei, coconuts, timber trees for boundaries and natives for	<b>S</b>

<sup>12</sup> Assuming 20% of each tax allotment = 225 total covering 750ha to be trees/forest

				<p>supply requirements</p>		<p>ecosystem rehabilitation. The demand for ‘ahi however is very high across the country and supplies are often reported as short of demand.</p> <ul style="list-style-type: none"> <li>• A private owned community nursery was established in Ha’atua in ‘Eua that was designed based on an Operational Plan for establishing a small-scale nursery for the local production of tree seedlings, prepared from the Guidelines developed under the project. The main tree species identified in the Operational Plan are sandalwood (‘ahi), cedar and kauri.</li> <li>• 6 community nurseries have been installed or upgraded in partnership with village Women Groups under TCDT.</li> <li>• Community nursery at Haveluliku upgraded.</li> <li>• Nursery at ‘Eua Forestry is specifically for native trees to rehabilitate the water catchment area.</li> <li>• The project provided training on composting techniques for improving soils at nurseries and also supplied shredders at each island to support the compost activities.</li> <li>• Nurseries upgraded at MAFF-Forestry Division nurseries:             <ul style="list-style-type: none"> <li>- Tokomololo (Tongatapu);</li> <li>- Pangai (Ha'apai);</li> </ul> </li> </ul>	
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						<ul style="list-style-type: none"> <li>- Fatai (Vava'u); and</li> <li>- Mata'aho ('Eua).</li> <li>- Hango College nursery and Seed Centre in 'Eua.</li> </ul>	
		25. Number of tree nurseries nationwide with long term funding needs ensured	No nursery has secure long term funding	30% of tree nurseries nationwide with long term funding needs ensured (from sources other than short term project-based support)	80% of tree nurseries nationwide with long term funding needs ensured (from sources other than short term project-based support)	Guidelines for developing Operational Plans for nurseries have been developed, which covers financial sustainability. Only one nursery has prepared an Operational Plan using the Guidelines	<b>MU</b>
		26. Area of agricultural land returned to forest use in the target localities (where land managers express intention to maintain the area under forest and there are at least XX trees/ha already present alive after 1 year)	Baseline to be established at project start	30ha	100ha	<p>More than 50has in the 'Eua water catchment area where farmers have been relocated has been rehabilitated and planted with more than 8,000 native tree seedlings produced at the Forestry Division nursery established under the project in 'Eua.</p> <p>A further 12,900 tree seedlings were planted in agro-forestry systems of more than 100ha at farm level. These however are not specific 'forest use', except for boundaries.</p>	<b>S</b>
	<b>Outcome 4.1: Project implementation based on results-based management</b>	27. Number of ILAMS reports presented at R2R regional meetings or shared with R2R regional networks.	zero	n/a	At least 2 technical reports presented at R2R regional meetings or disseminated through R2R regional	<p>No progress since previous PIR.</p> <p>The project presented on the ILAMS practices as case study of R2R approach at a Pacific R2R event at the 9<sup>th</sup> IW Conference.</p>	<b>U</b>

	and application of lessons learned and good practices in current and future interventions, facilitated				networks	The project also attended and presented the experiences and lessons learned at regional R2R meetings.  No Technical Reports have been shared yet on the regional R2R platform.	
		28. Number of Technical or Policy reports published online, including on MAFF website and ECC Portal.	zero	n/a	At least 10 Technical or Policy reports published on MAFF website and ECC Portal	No Reports have been published online yet. A Communications Specialist was recruited to support knowledge management and communications but did not deliver and her contract was terminated.	<b>U</b>

## Action Plan to address MS, MU, U and HU ratings

Outcome	Action(s) to be taken	By whom?	By when?
<b>Outcome 1.1: Increased acknowledgement and incorporation of integrated land and agro-ecosystem management principles in national policies, laws, and regulations.</b>	The Project Terminal Report to recommend the 4 key Ministries take ownership of their draft Ministry-specific ILAMS Policy Intention Papers (PIP) and to decide how they use them in policy formulation.	Senior Technical Adviser (STA)	In progress.
<b>Outcome 1.3: Improved strategic planning of forest resources.</b>	No actions possible on the MU rating for the National Forest Monitoring System as the project has reached its NTE.	n/a	n/a
<b>Outcome 2.1: Capacities for evidence-based, and negotiated formulation of resource management plans at landscape and village levels, clarification of farmers' tenure rights and obligations</b>	Finalise the ILAMS Plans, based on village mapping layouts from SOLA platform. No actions possible as SOLA Specialist was not able to travel due to covid restrictions and arranging virtual trainings proved too difficult and the project has reached its NTE	n/a	n/a
<b>Outcome 3.1: Increased capacities in Government institutions and NGOs for identifying and supporting SLM</b>	No actions possible as the last efforts to procurement of biodigesters were not successful with the Service Provider selected from a competitive process pulled out and the project has reached its NTE. The biodigesters were	n/a	n/a



<b>practice</b>	proposed to decrease the need for firewood.		
<b>Outcome 3.2: Increased capacities in local communities in the target localities to develop, apply and adopt SLM practices</b>	No actions possible as the last efforts to procurement of biodigesters were not successful with the Service Provider selected from a competitive process pulled out and the project has reached its NTE. The biodigesters were proposed as a key component of integrated livestock-crop farming systems, a key form of SLM practice.	n/a	n/a
<b>Outcome 3.3. Increased capacities for the formulation and implementation of forest restoration plans, and for supporting improved management of forests, mangroves, and trees outside forests.</b>	No actions possible as the planned multi-sector and key stakeholder meeting to finalise the 'Eua Water Catchment Area Management Plan got cancelled due to the covid lockdown when the Hunga Tonga-Hunga Ha'apai emergency response personnel introduced an outbreak and the project has reached its NTE	n/a	n/a
<b>Outcome 4.1: Project implementation based on results-based management and application of lessons learned and good practices in current and future interventions, facilitated</b>	No actions possible as the recruitment of a new Communications Specialist to replace the under-performed Comms Specialist proved too difficult with limited time left to NTE	n/a	n/a

### 3. Implementation Progress (IP)

*(Please indicate progress achieved during this FY as per the Implementation Plan/Annual Workplan)*

Outcomes and Outputs <sup>13</sup>	Indicators (as per the Logical Framework)	Annual Target (as per the annual Work Plan)	Main achievements <sup>14</sup> (please avoid repeating results reported in previous year PIR)	Describe any variance <sup>15</sup> in delivering outputs
<b>Outcome 1.1</b>				
<b>Output 1.1.1</b> Policy intention papers to inform sectoral policy and planning processes	At least 3 ILAMS Policy Intention Papers (PIP) developed and published to inform national policies, strategies and plans.	4 sectoral/Ministry-specific PIPs reviewed and finalized by the 4 key-Ministries	4 sectoral/Ministry-specific PIPs have been drafted and available as drafts.	The 4 Ministries (MAFF, MEIDECC, MLSNR, MIA) remain as drafts as the Ministries have not been able to carry out their reviews due to work overload and other priorities, including commitments to urgent responses to natural disasters and covid 19
<b>Output 1.1.2:</b> National Land Use Policy (NLUP) document	National Land Use Policy (LUP).	LUP Document adopted by Government.	The LUP remain in draft form	The LUP remains in draft form and has not been formally adopted by the Government. The reviews by Government Ministries, in particular b MEIDECC to strengthen the climate change aspects could not be complete again due to other priorities. Another factor for the LUP review dropping in t list of priorities by Ministries is the numerous changes in Governments th has affected its ability to move forward

<sup>13</sup> Outputs as described in the project Logframe or in any approved project revision.

<sup>14</sup> Please use the same unit of measurement of the project indicators as per the approved Implementation Plan or Annual Workplan. Please be concise (max one or two short sentence with main achievements)

<sup>15</sup> Variance refers to the difference between the expected and actual progress at the time of reporting.

				in its public reforms, including to decide which Ministry to be responsible under legislation for the Planning and Urban Management Authority (PUMA) proposed to be strengthened in the LUP
<b>Output 1.2.1:</b> Enhanced National System of Land Administration, and operational with spatial functionality of SOLA utilized to recommend allowable land uses, monitor land	Capacity of MLSNR to streamline business processes and accept applications and new survey plan data digitally through the internet	MLSNR actively accepting applications and new survey plan data digitally through the internet.	The MLSNR has strengthened its capacity with upgraded equipment and staff trained on cadastral data capture and data quality management. Significant progress has been made in the digitization and upload of cadastral data into the SOLA database. The cadastral data capture however remain incomplete and overall quality of cadastral data in the SOLA database has not reached the required standard to fully utilize the spatial functionalities of SOLA-Registry for Tonga.	The expected output to have the whole National System of Land Administration fully digitized/computerized and operational by the end of the project was unrealistic. Changed to a more realistic output in the annual Work Plan to complete cadastral data capture and ensure data quality in SOLA database.
<b>Output 1.3.1:</b> National Strategic Forestry Development Plan (NSFP) developed	A NFSP (entitled MPFTR) published and key priorities implemented by Central and Local Government bodies and Civil Society Organizations	MPFTR key priorities implemented including training on the Modules and Guidelines for Propagation and for Operational Plans, prepared.	The MPFTR was published in 2017. Key priorities implemented include: <ul style="list-style-type: none"> <li>• 7 Training Modules developed: <ul style="list-style-type: none"> <li><i>Module 1:</i> Selection of Tree Species</li> <li><i>Module 2:</i> Small-scale nursery</li> <li><i>Module 3:</i> Planting and care of tree seedlings</li> <li><i>Module 4:</i> Rehabilitation of degraded sites</li> <li><i>Module 5:</i> Enhancement of</li> </ul> </li> </ul>	The NFSP title was changed to Management Plan for Forestry and Tree Resources (MPFTR) in Tonga to better reflect the context of 'forestry' in Tonga, which is predominantly tree resources within agro-forestry systems.  The proposed trainings were not delivered by the end of the project primarily due to the impacts of covid the restricted travels of the international Specialist. Efforts to deliver virtually

			<p>native regrowth  <i>Module 6:</i> Growing and harvesting sandalwood  <i>Module 7:</i> Preparation of timber species</p> <ul style="list-style-type: none"> <li>• Propagation Guidelines developed for 5 exotic timber species in Tonga:  <i>Species 1:</i> Kauri Pine  <i>Species 2:</i> Mahogany  <i>Species 3:</i> Pinus Caribaea  <i>Species 4:</i> Red Cedar  <i>Species 5:</i> Teak</li> </ul>	<p>were not successful due to covid lockdown restrictions and individual or personal internet connectivity are not reliable.</p>
<p><b>Output 1.3.2:</b>  National Forest Monitoring System (NFMS)</p>	<p>A fully functional NFMS is in place and its data outputs are being used in planning by key entities of central and local Government and civil society organisations</p>	<p>Consultations carried out on proposed NFI design and structure of proposed Monitoring and Reporting Framework for the State of Forestry and Tree Resources</p> <p>Training on tools for a NFMS delivered</p>	<ul style="list-style-type: none"> <li>• A draft Discussion Paper for the design of a National Forestry Inventory (NFI) for Tonga developed.</li> <li>• Monitoring and Reporting Framework for the State of Forestry and Tree Resources developed.</li> <li>• Training Workshop delivered in partnership with and under FAO co-financing TCP (TCP/TON/3702) on National Forest Monitoring System &amp; Training on Land Cover and Land Use Assessment/Inventory. The tools covered included: <ul style="list-style-type: none"> <li>- SEPAL – System for earth observations, data access, processing &amp; analysis for</li> </ul> </li> </ul>	<p>Reporting Framework for the State of Forestry and Tree Resources was added to provide a process to which a NFMS is developed and used in terms of periodic monitoring and reporting of outcomes under the various components of the legal and policy framework.</p> <p>The Forestry Division of MAFF has not provided inputs yet to the proposed Reporting Framework.</p> <p>A fully functional NFMS was not achieved by the end of the project due to delays in delivery of NFI equipment and training.</p>

			<p>land monitoring</p> <ul style="list-style-type: none"> <li>- Collect Earth Online</li> <li>- Collect Earth&amp;Collect</li> <li>- Google Earth Engine</li> <li>- Global Forest Canopy Height</li> <li>- Global Ecosystem Dynamics Investigation (GEDI)</li> <li>- GIS tools: QField</li> </ul> <ul style="list-style-type: none"> <li>• Computer equipment including mobile tablets for field data collections delivered and installed at the Forestry Division of MAFF.</li> </ul>	
<p><u>Output 2.1.1:</u> Multi-stakeholder mechanisms for the negotiation of resource management and tenure</p>	<p>Multi-stakeholder mechanisms established in each project target locality</p>	<p>Establish coordination mechanism for extension services at national level</p>	<p>The project facilitated the establishment of a national coordination mechanism under the umbrella of the National Extension Advisory Committee.</p> <p>The various Village Committees participated in ILAMS Plans consultations and are involved in coordinating project activities within their communities.</p>	<p>Rather than establishing separate multi-stakeholder mechanisms in the target locations, the stakeholders agreed to utilize the National Extension Advisory Committee and existing Village Agricultural Committees in the context of Village Community Development Plans.</p>
<p><u>Output 2.1.2:</u> Negotiated and evidence-based plans for land use and integrated agroecosystem</p>	<p>ILAMS Plans developed for each of the 4 pilot villages</p>		<p>Consultations carried out in each of the pilot villages and draft ILAMS Plans developed.</p> <p>The project also strengthened its partnership with Mainstreaming of Rural Development Innovation</p>	<p>The priorities of each communities for strengthening agro-ecosystems approaches were identified during consultations and already incorporated into the annual Work Plans for implementation.</p>

management at landscape and village levels			<p>(MORDI) Tonga Trust, working together in coordination of support to agricultural development in communities in the context of their Village Community Development Plans.</p> <p>A proof of concept was developed for the use of SOLA-OT&amp;CS for mapping tenure and configured for land use.</p>	<p>The ILAMS Plans could not be finalized as the spatial layout and mapping of each pilot village using SOLA Open Tenure and Community Server configured for land use could not be completed due to delays in procurement of services of a SOLA Specialist and then the impacts of covid that halted the delivery of trainings.</p>
<p><u>Output 2.1.3:</u> ‘Eua Water Catchment Area Management Plan (EUCAMP) developed, and implemented</p>	‘Eua Water Catchment Area Management Plan developed.	Hold a workshop for key stakeholders to discuss and finalize the draft EUCAMP.	<ul style="list-style-type: none"> <li>• Draft ‘Eua Water Catchment Area Management Plan (EUCAMP) developed.</li> <li>• Monitoring Protocols for the Code of Harvesting Practice for the ‘Eua Forestry Plantations developed</li> <li>• Some key priorities contained in the draft EUCAMP were implemented including fencing off areas and signs installed where farmers have been relocated from and rehabilitation of those areas using seedlings of native trees supplied from the nursery installed by the project at ‘Eua Forestry Division.</li> </ul>	All logistics were in place for holding a workshop to discuss the draft EUCAMP but got cancelled due to another covid lockdown.
<p><u>Output 3.1.1 &amp; 3.1.2:</u> Training modules for extension agents</p>	Training modules for extension agents developed	Training delivered based on the modules developed	<p>The following training modules were developed</p> <ul style="list-style-type: none"> <li>• Use of PRA tools</li> <li>• Community Based</li> </ul>	

<p>&amp; Manuals for use by extension agents</p>			<p>Vulnerability Analysis to Climate Change</p> <ul style="list-style-type: none"> <li>• Training on presentation skills</li> <li>• Soil management</li> <li>• Farmer Field Schools</li> </ul>	
<p><u>Output 3.2.1:</u> Demonstration modules for integrated agroecosystem management systems</p>	<p>Integrated agro-ecosystem management system demonstration</p>	<p>Install at least 10 biodigesters connected to piggeries as key component of integrated livestock-crop/tree farming system as a form of integrated agro-ecosystem management system.</p>	<p>Several attempts were made but by the end, the project was not able to procure and install any piggery biodigester.</p>	<p>The final attempt to procure biodigester was for a prefabricated model that would have arrived with 'how to' manuals for installation. After a very prolonged competitive process, the selected and approved Service Provider pulled out citing FAO administrative processes as a hurdle. Further follow up also revealed concerns with ability to deliver given the disruptions to supply chains and uncertainties in shipping service costs due to covid.</p> <p>Attempts were also made to procure materials to install fixed-dome Chinese models already installed in other places around Tonga, in partnership with the MAFF Livestock Division. These were also not successful due to delays in procurements.</p>
<p><u>Output 3.2.2:</u> Farmer field schools for participatory problem analysis and development of</p>	<p>FFS delivered</p>	<p>FFS delivered</p>	<ul style="list-style-type: none"> <li>- FFS training were delivered in the 4 island groups in partnership with MAFF. A total of 99 participants attended.</li> <li>- FFS were carried out in partnership with MORDI and MAFF staff as trainers in the</li> </ul>	

SLM practices			use of mucuna as cover crop for soil health.	
<u>Output 3.2.3:</u> Extension modules applied in target communities	Numbers of staff members in Government institutions and NGOs who have received effective training through the modules		Soil Health training attended by 20 farmers  Five trainings were conducted in partnership with MAFF.	
<u>Output 3.3.1:</u> Operational plans for forest restoration, including mangroves, formulated and implemented	Number of Operational Plans developed	Deliver training on the use of the Guidelines for Operational Plans	Guidelines for Operational Plans were developed but training on use was not achieved due to covid	
<u>Output 3.3.2:</u> Systematisation of traditional tree management systems	<i>No indicator in logframe</i>	Deliver training on the use of the Guidelines for Operational Plans	Guidelines for Operational Plans developed for the following 4 topics: 1: Agro-forestry 2: Rehabilitation of degraded land with forestry and tree resources 3: Enhancement of regrowth forestry 4: Tree Seedling Nursery  More than 92 toutu'u agro-forestry systems were strengthened with tree plantings on boundaries.	



<u>Output 3.3.3:</u> Management Plans for forests and tree resources at the individual forest reserve or property level	Number of Management Plans for forests and tree resources at the individual forest reserve or property level.		No Management Plans developed	
<u>Output 3.3.4:</u> Improved mechanisms for supply of tree seed and planting materials			Issues Paper for developing a Nursery Strategy was developed	
<u>Output 3.3.5:</u> Training modules on forest restoration and management, for Forestry Division staff and community members	Training modules developed	Training delivered	Training modules on Rehabilitation of degraded sites (Module 4) and Enhancement of native regrowth (Module 5) are relevant for forest restoration	
<u>Output 4.1.1:</u> Monitoring and evaluation system established, supporting adaptive project management	M&E system	Populate the M&E database.	A M&E database was developed and data collected by the project team.	
<u>Output 4.1.2:</u> Mechanisms for			A draft Communication Strategy was developed but	

effective management and dissemination of knowledge within Tonga and the region			implementation limited when a Communications Specialist recruited did not deliver and contract was terminated.	
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## 4. Summary on Progress and Ratings

**Please provide a summary paragraph on progress, challenges and outcome of project implementation consistent with the information reported in sections 2 and 3 of the PIR.**

This is the final PIR for the project with the Terminal Evaluation completed. At the end of the reporting period, \$2,335,493 out of the \$2,344,954 grant or 99.5% was utilized.

The covid19 pandemic significantly impacted implementation, in particular the restrictions of travel that limited ability to deliver training. Natural disasters also impacted implementation, including the Hunga Tonga-Hunga Ha'apai volcanic eruption that threatened to reverse the gains made, especially from the ashfall on project sites.

Despite the above challenges some good progress was made, including towards strengthening the enabling environment through contribution towards the modernization of the land administration system. Progress was also made in strengthening capacity to adopt SLM practices, including through Farmer Field Schools, training in soil health and demonstration of use of cover crop or soil health, reduction in damages to crops from roaming pigs, strengthening agro-forestry systems improving provisions of seedlings and planting materials through upgrades and installation of nurseries and rehabilitation of forest areas where encroachment occurred.

**Development Objective (DO) Ratings, Implementation Progress (IP) Ratings and Overall Assessment**

Please note that the overall DO and IP ratings should be substantiated by evidence and progress reported in the Section 2 and Section 3 of the PIR. For DO, the ratings and comments should reflect the overall progress of project results.

	<b>FY2022 Development Objective rating<sup>16</sup></b>	<b>FY2022 Implementation Progress rating<sup>17</sup></b>	<b>Comments/reasons<sup>18</sup> justifying the ratings for FY2022 and any changes (positive or negative) in the ratings since the previous reporting period</b>
<b>Project Manager / Coordinator</b>	<b>MS</b>	<b>MS</b>	The project made good progress in promoting and strengthening capacity to adopt SLM practices on the ground. There was significant increased capacity in producing local pig feed and reduction in roaming pigs. Trainings and FFS were also delivered. The project was also successful in broadening its partnerships including with Women's Groups and with schools.
<b>Budget Holder</b>	<b>MS</b>	<b>MU</b>	The proposed demonstration of SLM through integrated livestock-crop farming systems were not achieved as result of delays and eventually unsuccessful procurement of biodigesters that were supposed to generate biogas from piggery waste to reduce firewood use and organic fertilizers for food and fodder crops. The project nevertheless provided training and supported the adoption of other SLM practices, including better management of roaming pigs and strengthening the agro-biodiversity through planting of trees in agro-forestry systems and rehabilitated areas.
<b>Lead Technical Officer<sup>19</sup></b>	<b>MS</b>	<b>MS</b>	The project has set good examples of agro-ecosystem approach of conservation and integrated approach of farming systems.

<sup>16</sup> **Development Objectives Rating** – A rating of the extent to which a project is expected to achieve or exceed its major objectives. For more information on ratings and definitions, please refer to Annex 1.

<sup>17</sup> **Implementation Progress Rating** – A rating of the extent to which the implementation of a project's components and activities is in compliance with the projects approved implementation plan. For more information on ratings and definitions, please refer to Annex 1.

<sup>18</sup> Please ensure that the ratings are based on evidence

<sup>19</sup> The LTO will consult the HQ technical officer and all other supporting technical Units.

<b>FAO-GEF Funding Liaison Officer</b>	<b>MS</b>	<b>MS</b>	The project activities completed in 2022 and the Terminal Evaluation concluded in early 2023. Hence there are no major activities to report during the reporting period. There were a few learnings from the project. SLM techniques have been incorporated to improve livelihoods while protecting forests and biodiversity. Communication activities improved in the reporting period. The capacity of MLSNR has improved with upgraded equipment and staff well trained on cadastral data capture and data quality management. Many farmers from the project sites benefitted from the farmer field schools and the extension services provided.
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## 5. Environmental and Social Safeguards (ESS)

*Under the responsibility of the LTO (PMU to draft)*

Please describe the progress made complying with the approved ESM plan. Note that only projects with **moderate** or **high** Environmental and Social Risk, approved from June 2015 should have submitted an ESM plan/table at CEO endorsement. This does not apply to **low** risk projects. Add new ESS risks if any risks have emerged during this FY.

Social & Environmental Risk Impacts identified at CEO Endorsement	Expected mitigation measures	Actions taken during this FY	Remaining measures to be taken	Responsibility
<b>ESS 1: Natural Resource Management</b>				
	Local community technical capacities in NRM enhanced	<ul style="list-style-type: none"> <li>Several technical NRM trainings of local community members conducted</li> <li>Women groups and individuals supported</li> <li>Farmers groups established and charged with NRM</li> <li>Appropriate fencing of homestead and farm lands constructed</li> </ul>	<ul style="list-style-type: none"> <li>Community to continue to promoted lessons learned from project innovations</li> <li>Relevant government and non-government partners, especially MAFF and Climate Change and Environment mainstreaming developed initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Target communities</li> <li>Government agencies</li> <li>Non-government agencies</li> <li>External aid donors</li> </ul>
<b>ESS 2: Biodiversity, Ecosystems and Natural Habitats</b>				
		<ul style="list-style-type: none"> <li>Multi-purpose community</li> </ul>	<ul style="list-style-type: none"> <li>Community to continue to</li> </ul>	

		<p>nurseries constructed</p> <ul style="list-style-type: none"> <li>• Training on seed saving, seeds and seedling propagation of endangered trees were conducted</li> <li>• Replanting of several endangered tree species conducted</li> <li>• Conservation of native forests ecosystems were encouraged and supported</li> </ul>	<p>promoted lessons learned from project innovations</p> <ul style="list-style-type: none"> <li>• Relevant government and non-government partners, especially MAFF and Climate Change and Environment mainstreaming developed initiatives</li> </ul>	
<p><b>ESS 3: Plant Genetic Resources for Food and Agriculture</b></p>				
		<ul style="list-style-type: none"> <li>• Ex-situ conservation by planting of many useful and endangered tree species in the homesteads, tax allotments/farmlands, coastal areas</li> </ul>	<ul style="list-style-type: none"> <li>• Community to continue to promoted lessons learned from project innovations</li> <li>• Relevant government and non-government partners, especially MAFF and Climate Change and Environment mainstreaming developed initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Target communities</li> <li>• Government agencies</li> <li>• Non-government agencies</li> <li>• External aid donors</li> </ul>
<p><b>ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture</b></p>				

	<p>Minimize damages of roaming animals damages to the environment and agriculture</p>	<ul style="list-style-type: none"> <li>• Management of roaming pigs constituted a large effort of project implementation via; building of pig fences, fencing of farmlands, developed diversified livestock feed, increase production of local animal feeds and improving of local-inbred pig breeds</li> </ul>	<ul style="list-style-type: none"> <li>• Community to continue to promoted lessons learned from project innovations</li> <li>• Relevant government and non-government partners, especially MAFF and Climate Change and Environment mainstreaming developed initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Target communities</li> <li>• Government agencies</li> <li>• Non=government agencies</li> <li>• External aid donors</li> </ul>
<p><b>ESS 5: Pest and Pesticide Management</b></p>				
	<p>To decrease the use of chemicals in agriculture</p>	<ul style="list-style-type: none"> <li>• Agroforestry and intercropping of crops and trees were promoted and implemented in all communities</li> <li>• Organic farming and use of non-chemical pesticides were promoted through trainings and field demonstrations</li> </ul>	<ul style="list-style-type: none"> <li>• Community to continue to promoted lessons learned from project innovations</li> <li>• Relevant government and non-government partners, especially MAFF and Climate Change and Environment mainstreaming developed initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Target communities</li> <li>• Government agencies</li> <li>• Non=government agencies</li> <li>• External aid donors</li> </ul>



<b>ESS 6: Involuntary Resettlement and Displacement</b>				
		<ul style="list-style-type: none"> <li>Not occurred during project cycle</li> </ul>		
<b>ESS 7: Decent Work</b>				
<b>ESS 8: Gender Equality</b>				
		<ul style="list-style-type: none"> <li>Field works including project planning and implementation targeted women, men and youth</li> <li>Matters concerning persons with disabilities were closely monitored</li> <li>Traditional social taboo were closely adhered</li> </ul>	<ul style="list-style-type: none"> <li>Community to continue to promoted lessons learned from project innovations</li> <li>Relevant government partners, especially MAFF and Climate Change and Environment mainstreaming developed initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Target communities</li> <li>Government agencies</li> <li>Non=government agencies</li> <li>External aid donors</li> </ul>
<b>ESS 9: Indigenous Peoples and Cultural Heritage</b>				
		<ul style="list-style-type: none"> <li>Not significant during project cycle because 99 percent a Tongans living in target communities</li> </ul>		
<b>New ESS risks that have emerged during this FY</b>				
		<ul style="list-style-type: none"> <li>Low</li> </ul>		

**In case the project did not include an ESM Plan at CEO endorsement stage, please indicate if the initial Environmental and Social (ESS) Risk classification is still valid; if not, what is the new classification and explain.**

<b>Initial ESS Risk classification</b> (At project submission)	<b>Current ESS risk classification</b> Please indicate if the Environmental and Social Risk classification is still valid <sup>20</sup> . If not, what is the new classification and explain.
Low (para 279 of prodoc)	Still valid

***Please report if any grievance was received as per FAO and GEF ESS policies. If yes, please indicate how it is being/has been addressed.***

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<sup>20</sup> **Important:** please note that if the Environmental and Social Risk classification has changed, the ESM Unit should be contacted and an updated Social and Environmental Management Plan addressing new risks should be prepared.

## 6. Risks

The following table summarizes risks identified in the Project Document and reflects also any new risks identified in the course of project implementation (including COVID-19 related risks). The last column should be used to provide additional details concerning manifestation of the risk in the project, as relevant.

	Type of risk	Risk rating <sup>21</sup>	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit

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<sup>21</sup> Risk ratings means a rating of accesses the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives.

Risk of projects should be rated on the following scale: Low, Moderate, Substantial or High. For more information on ratings and definitions please refer to Annex 1.

	Type of risk	Risk rating <sup>21</sup>	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
1	<b>Limited collaboration by local communities:</b> Collaboration of local communities will be critical to achieving the objectives of the project, but these communities will need to meet their own needs before agreeing to devote time and resources to resource management and biodiversity conservation. It may be difficult to reach agreement with all members of communities on management and enforcement measures.	M	Y	Extensive community consultations are built into every aspect of the project. Project sites have been selected, in large part, on the basis of communities' expressions of interest and willingness to engage in project activities and the existence of relations of trust that have been built up through previous agency initiatives. Participation will further be ensured through the tangible socioeconomic benefits that will result from the project's actions in the short term, in the form of reductions in the damage to crops and lands caused by roaming pigs, and the provision of clean and accessible renewable energy in the form of biogas.	<b>The communities collaborated fully with the project, especially with implementation of activities on the ground. The envisaged socioeconomic benefits from biogas from piggery biodigesters did not eventuate. The improvements in confining pigs which reduced damages to crops helped improved the buy-in of communities.</b>	<b>The risk was well mitigated. Working in collaboration with co-financing partner MORDI significantly helped towards securing buy-in of communities</b>

	Type of risk	Risk rating <sup>21</sup>	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
2	<p><b>Limited human and financial capacities in national Government:</b> while the Government of Tonga (GoT) has experience implementing GEF-financed and other projects, overall human resource capacity is generally low, particularly in the outer islands where government presence is nearly non-existent. Government budgets are fairly low, which could present problems if already low budgets are reduced due to changes in national budget allocations.</p>	M	Y	<p>Significant capacity-building activities, for government and stakeholders alike, are included in the project to address capacity gaps. Project management will closely monitor government budget allocations in order to flag and potential shortfalls as soon as possible, so that corrective measures can be taken as needed to ensure continued implementation of project activities. In addition, the project will seek to minimize communities' dependence on Government support by promoting their capacities for the participatory generation, adaptation and dissemination of SLM technologies, based wherever possible on traditional knowledge; and "low-tech" approaches to the production and supply of planting materials.</p>	<p><b>FFS and other trainings were carried out in partnership with MAFF and helped strengthen the coordination of extension services with NGOs and private sector actors. Better coordination helps buffer low Government budgets.</b></p> <p><b>The Government sees value in the modernization/digitization of the land administration system and will need to secure provisions in the national budget for ongoing operations and maintenance beyond the project.</b></p> <p><b>Several project outputs are in draft form by the end of the project, e.g. Policy Intentions Papers and 'Eua Water Catchment Area Management Plan. Limited budgets and human resource capacity may limit the capacity to develop these further.</b></p>	<p><b>All Government co-financing contributions to the project were in-kind. There were no extra demand on Government resources and the project helped strengthen human resources capacity, especially for extension services.</b></p>

	Type of risk	Risk rating <sup>21</sup>	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
3	<b>Unsuitability of technologies to local conditions:</b> While the biogas/piggery system is already being piloted in Tongatapu, the integration of the system with whole farming system at the community-level to be piloted under this project has not been tested as yet in Tongatapu or the outer islands	M	Y	The project will build on previous experiences with piggery systems in Tonga and community-based biogas systems in other countries, which have shown a high level of uptake and sustainability. On-going training in operating and maintenance of the entire system would be provided during project implementation. In addition, this training will focus on developing capacities among community members to troubleshoot technical, social or other problems that may arise in the future; while the community-based governance mechanisms to be supported by the project will facilitate the resolution of any stakeholder conflicts that may arise regarding, for example, roles and responsibilities for the maintenance of the systems, or the equity of the distribution of their benefits.	<b>The biodigesters are proven technologies. As reported above, the project failed to install biodigesters by the end.</b>	<b>The impact of covid on supply chains and shipping services partly contributed to the failure to secure procurement of prefabricated biodigesters. The earlier failures to secure contractual services to design and install biodigesters through competitive processes did not help.</b>

	Type of risk	Risk rating <sup>21</sup>	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
4	<b>Climate change:</b> climate change will pose a risk to the achievement of the project's objective as it may result in the climatic coping limits of the proposed production systems being exceeded (due to increases in temperature, rainfall variability and storm damage); land loss and degradation due to sea level rise, saltwater intrusion and salt spray impacts may also exacerbate productive pressures, and associated degradation, on the remaining land.	L	Y	The project's approach will mitigate these risks by promoting capacities among extension agents and among community members to innovate and adapt the resource management systems they promote or apply, through the use of participatory, adaptive approaches to analysis, learning and technology generation such as farmer field schools. The project's support to negotiated approaches to addressing land use planning and land tenure issues will further enable communities to adapt to CC-related changes in biophysical and demographic conditions.	<b>The training and modules for extension services included vulnerability assessments to climate change.</b>	

**Project overall risk rating (Low, Moderate, Substantial or High):**

FY2022 rating	FY2023 rating	Comments/reason for the rating for FY2023 and any changes (positive or negative) in the rating since the previous reporting period
M	M	No change from previous year. The failure to install biodigesters for management of piggery waste was the main risk to demonstrating integrated farming system. The successful demonstration of other SLM practices like composting, key-hole gardening, wicking gardening, and introduction of new sources of local pig feed like moringa helped mitigate this risk

**7. Follow-up on Mid-term review or supervision mission (only for projects that have conducted an MTR)**

If the project had an MTR or a supervision mission, please report on how the recommendations were implemented during this fiscal year as indicated in the Management Response or in the supervision mission report.

MTR or supervision mission recommendations	Measures implemented <u>during this Fiscal Year</u>

Has the project developed an Exit Strategy? If yes, please describe	
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## 8. Minor project amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the GEF Project and Program Cycle Policy Guidelines<sup>22</sup>. Please describe any minor changes that the project has made under the relevant category or categories. And, provide supporting documents as an annex to this report if available.

Category of change	Provide a description of the change	Indicate the timing of the change	Approved by
Results framework			
Components and cost			
Institutional and implementation arrangements			
Financial management			
Implementation schedule			
Executing Entity			
Executing Entity Category			
Minor project objective change			
Safeguards			
Risk analysis			
Increase of GEF project financing up to 5%			
Co-financing			
Location of project activity			
Other			

<sup>22</sup> Source: <https://www.thegef.org/council-meeting-documents/guidelines-project-and-program-cycle-policy-2020-update>

## 9. Stakeholders' Engagement

Please report on progress and results and challenges on stakeholder engagement (based on the description of the Stakeholder engagement plan) included at CEO Endorsement/Approval during this reporting period.


Stakeholder name	Role in project execution	Progress and results on Stakeholders' Engagement	Challenges on stakeholder engagement
<b>Government Institutions</b>			
MAFF	Execution Farmer Field Schools	FFS activities completed	
MLSNR	Execution of land administration system	Good progress made	
<b>Non-Government organizations (NGOs)</b>			
MORDI	SLM practices in communities	Good progress made	
TCDT	Partnerships with Women's Groups in strengthening agro-ecosystem health through conservation of plants and crops with cultural and medicinal values.	Good progress made in terms of increasing the number of women participations in project activities through TCDT's national network of Women Groups.	
<b>Private sector entities</b>			
<b>New stakeholders identified/engaged</b>			
Schools	Engagement with youths and schools	Youth and schools participated in SLM training in home gardening techniques: keyhole gardens, wicking gardens, composting. A demonstration and training site was established at Tailulu College to demonstrate nursery seedlings propagation and compost making.	

## 10. Gender Mainstreaming

**Information on Progress on Gender-responsive measures as documented at CEO Endorsement/Approval in the gender action plan or equivalent (when applicable) during this reporting period.**

Category	Yes/No	Briefly describe progress and results achieved during this reporting period
Gender analysis or an equivalent socio-economic assessment made at formulation or during execution stages.	No	none
Any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment?	Yes	none
Indicate in which results area(s) the project is expected to contribute to gender equality (as identified at project design stage):	Yes	none
a) closing gender gaps in access to and control over natural resources	Yes	none
b) improving women's participation and decision making	Yes	none
c) generating socio-economic benefits or services for women	Yes	Nurseries installed by Women's Groups and a Woman Private Sector
M&E system with gender-disaggregated data?	No	
Staff with gender expertise	No	
Any other good practices on gender	No	

## 11. Knowledge Management Activities

<b>Knowledge activities / products (when applicable), as outlined in Knowledge Management Approach approved at CEO Endorsement / Approval <u>during this reporting period.</u></b>	
<p>Does the project have a knowledge management strategy? If not, how does the project collect and document good practices? Please list relevant good practices that can be learned and shared from the project thus far.</p>	<p>No</p>
<p>Does the project have a communication strategy? Please provide a brief overview of the communications successes and challenges this year.</p>	
<p>Please share a human-interest story from your project, focusing on how the project has helped to improve people's livelihoods while contributing to achieving the expected Global Environmental Benefits. Please indicate any Socio-economic Co-benefits that were generated by the project. Include at least one beneficiary quote and perspective, and please also include related photos and photo credits.</p>	<p>The Hon Lord Tu'ilakepa led a delegation that included senior government officials to inspect the project implementation by the village community. The Minister and his delegation arrived on the island on board the ILAMS R2R vessel that was provided by the project for the island community.</p> <p>A tour of the different project programs were held which included viewing the 'puaka palangi' piggery, the 'pauaka Tonga' piggery, tree planting sites, village nurseries, keyhole gardens, composting sites, chicken houses plus the 'Vai ko Kanakana' site.</p> 
<p>Please provide links to related website, social media account</p>	<p><a href="https://www.facebook.com/groups/763339937157345">https://www.facebook.com/groups/763339937157345</a></p>
<p>Please provide a list of publications, leaflets, video materials, newsletters, or other communications assets published on the web.</p>	
<p>Please indicate the Communication and/or knowledge management focal point's Name and contact details</p>	

## 12. Indigenous Peoples and Local Communities Involvement

**Are Indigenous Peoples and local communities involved in the project (as per the approved Project Document)? If yes, please briefly explain.**

If applicable, please describe the process and current status of on-going/completed, legitimate consultations to obtain Free, Prior and Informed Consent (FPIC) with the indigenous communities.

Do indigenous peoples and or local communities have an active participation in the project activities? If yes, briefly describe how.

**Only less than 5% of Tonga's population are non-Tongan ethnicity.**

### 13. Co-Financing Table

Sources of Co-financing <sup>23</sup>	Name of Co-financer	Type of Co-financing	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2023
National Government	Ministry of Finance and National Planning	Grant	3,340,000	3,014,235
Regional Organization	Secretariat of the Pacific Community	In-kind	750,000	15,000
NGO	MORDI Trust	In-kind	980,000	968,635
NGO	Oxfam	In-kind	240,000	
Bilateral agency	GIZ	Grant	150,000	
GEF Agency	FAO	In kind/Grant	1,400,000	178,203
National Academic Organization	Tupou College	In-kind	155,000	54,400
National Academic Organization	Hango Agriculture	In-kind	155,000	150,800
		TOTAL	7,170,000	4,381,273

<sup>23</sup> Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Beneficiaries, Other.

## Annex 1. – GEF Performance Ratings Definitions

<b>Development Objectives Rating.</b> A rating of the extent to which a project is expected to achieve or exceed its major objectives.	
<b>Highly Satisfactory (HS)</b>	Project is expected to achieve or exceed <b>all</b> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”
<b>Satisfactory (S)</b>	Project is expected to achieve <b>most</b> of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings
<b>Moderately Satisfactory (MS)</b>	Project is expected to achieve <b>most</b> of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve <b>some</b> of its major global environmental objectives or yield some of the expected global environment benefits
<b>Moderately Unsatisfactory (MU)</b>	Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only <b>some</b> of its major global environmental objectives)
<b>Unsatisfactory (U)</b>	Project is expected <b>not</b> to achieve <b>most</b> of its major global environment objectives or to yield any satisfactory global environmental benefits)
<b>Highly Unsatisfactory (HU)</b>	The project has failed to achieve, and is not expected to achieve, <b>any</b> of its major global environment objectives with no worthwhile benefits.)

<b>Implementation Progress Rating.</b> A rating of the extent to which the implementation of a project’s components and activities is in compliance with the project’s approved implementation plan.	
<b>Highly Satisfactory (HS)</b>	Implementation of <b>all</b> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be resented as “good practice
<b>Satisfactory (S)</b>	Implementation of <b>most</b> components is in substantial compliance with the original/formally revised plan except for only a few that are subject to remedial action
<b>Moderately Satisfactory (MS)</b>	Implementation of <b>some</b> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action
<b>Moderately Unsatisfactory (MU)</b>	Implementation of <b>some</b> components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.
<b>Unsatisfactory (U)</b>	Implementation of <b>most</b> components is not in substantial compliance with the original/formally revised plan
<b>Highly Unsatisfactory (HU)</b>	Implementation of none of the components is in substantial compliance with the original/formally revised plan.

<b>Risk rating.</b> It should assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
<b>High Risk (H)</b>	There is a probability of greater than <b>75%</b> that assumptions may fail to hold or materialize, and/or the project may face high risks.
<b>Substantial Risk (S)</b>	There is a probability of between <b>51%</b> and <b>75%</b> that assumptions may fail to hold or materialize, and/or the project may face substantial risks
<b>Moderate Risk (M)</b>	There is a probability of between <b>26%</b> and <b>50%</b> that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.
<b>Low Risk (L)</b>	There is a probability of up to <b>25%</b> that assumptions may fail to hold or materialize, and/or the project may face only low risks.