Terminal Evaluation of the SPARC Project

Strategic Planning and Action to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur Province

Loom being set up for traditional ikat weaving
(Molie Village, Sabu Island)

Ministry of Environment and Forestry, Republic of Indonesia

United Nations Development Programme

Global Environment Facility

Provincial Government of Nusa Tenggara Timur, Republic of Indonesia

Project Title: Strategic Planning and Actions to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur (SPARC)

UNDP PIMS Number: 4549

GEF ID: 4340

Terminal Evaluation Review Period: January-May 2019

Region and Country included in this report: East Nusa Tenggara, Indonesia

GEF Operational Focal Areas/Strategic Program: Climate Change - SCCF

Executing Entity: United Nations Development Programme Indonesia

Implementing Partner: Ministry of Environment and Forestry, Republic of Indonesia

Responsible Party: Provincial Development Planning Agency, Nusa Tenggara Timur

Terminal Evaluation Lead Consultant: Dr. Brent Tegler

Terminal Evaluation Report Submitted: May, 2019

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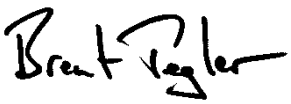
Report reviewers Christian Budi Usfinit, Yusuke Taishi, Pensiri Sattapan and Manas Moghe provided excellent feedback, comments and questions which has made an important contribution to strengthening reporting on analysis that informs the terminal evaluation.



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Executive Summary

The *Strategic Planning and Actions to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur* **(**SPARC) project began on February 27th, 2013 and closed on December 31st, 2018. Originally intended to run for four years in three districts of Nusa Tenggara Timur Province (NTT), Republic of Indonesia, the SPARC project was given a two year extension and it was expanded to four districts of NTT. SPARC is a nationally implemented project with funding support from the Special Climate Change Fund (SCCF) managed by the Global Environment Facility (GEF). The total SCCF-contributed project funds are USD 5 million with additional co-financing, including in-kind funding from the NTT Provincial Government and UNDP and grants from UNDP and partner agencies – Bank NTT and the Norwegian Geotechnical Institute (NGI).

<table>
<tr><td colspan="6">Project Title: Strategic Planning and Action to strengthen climate resilience of Rural Communities in Nusa Tenggara Timur ”</td></tr>
<tr><td>GEF Project ID:</td><td>4340</td><td></td><td>At endorsement (US$)</td><td>As of Dec 31, 2018 (US$)</td></tr>
<tr><td>UNDP Project/ Output ID:</td><td>00083625/ PIMS #4549</td><td>GEF SCCF financing:</td><td>5,000,000</td><td>4,933,943</td></tr>
<tr><td rowspan="2">Country:</td><td rowspan="2">Indonesia</td><td>IA/EA own (UNDP):</td><td>100,000</td><td>93,553</td></tr>
<tr><td>UNDP (in-kind & parallel activities)</td><td>6,337,372</td><td>6,337,372</td></tr>
<tr><td>Region:</td><td>Asia Pacific</td><td>Government:</td><td>67,873,320</td><td>67,873,320</td></tr>
<tr><td>Focal Area:</td><td>Environment Unit</td><td>Other (Bank NTT, NGI):</td><td>191,165</td><td>176,616</td></tr>
<tr><td>FA Objectives, (OP/SP):</td><td>Climate Change Adaptation</td><td>Total co-financing:</td><td>74,501,857</td><td>74,480,861</td></tr>
<tr><td>Executing Agency:</td><td>Ministry of Environment and Forestry</td><td>Total Project Cost:</td><td>79,501,857</td><td>79,774,804</td></tr>
<tr><td rowspan="2">Other Partners involved:</td><td rowspan="2"></td><td colspan="2">ProDoc Signature (date project began):</td><td>27 February 2013</td></tr>
<tr><td>(Operational) Closing Date:</td><td>Proposed: 31 December 2016</td><td>Actual: 31 December 2018</td></tr>
</table>

SPARC is Indonesia’s first nationally coordinated CC project financed through an instrument of the CC Convention (GEF Special Climate Change Fund) which worked with provincial and district governments to strengthen the climate resilience of rural communities.

Brief Project Description

The province of NTT is located in the eastern part of Indonesia. It consists of about 550 islands, with Flores, Sumba and West Timor as the main islands. Rural communities in NTT Province are characterised by subsistence agricultural production and dependency on water resources. The overwhelming majority of the population of NTT is dependent on agriculture, while, economically, the value generated from the primary sector is limited. Therefore, NTT remains at the top tier of Indonesia's poverty ranking.

Ensuring food and water security is a major challenge due to natural resource conditions as well as the state of economic development in NTT. The climate-induced problem that this project focused on was adaptation of livelihoods to current climate variation. The underlying causes of the problem include the following:

1) systemic vulnerabilities due to geographical and geophysical factors (i.e. the remote nature of the archipelagic area with a naturally high climate variability);
2) slow development progress in NTT (e.g. generally short term planning approaches used, the reactive responses to problems, and generally poor infrastructure and communication network at the community level);
3) decentralisation challenges (e.g. poor coordination among national, provincial and district government agencies that provide assistance and a lack of attention to the capacity development needs of sub-national institutions); and
4) social challenges such as lower education levels and varying cultural perspectives that tend to reinforce the isolation of dispersed island communities.

The project assists NTT with integrating climate resilience in rural development with a focus on livelihoods, food and water security. It worked simultaneously on developing institutional capacity at provincial and district government level and gaining practical experience with community based adaptation. Building on the capacities developed and practical experiences from the communities, climate change adaptation was then mainstreamed into development planning, policy and budgeting of the local governments involved.

The project implementing partner is the MoEF at the national level, and the Regional Planning and Development Agency (Bappeda) of NTT Province and the local Planning and Development Agency (Bappeda) in each of the Districts where the project was implemented. SPARC focuses on strengthening and developing climate-resilient institutions and rural communities around livelihoods, food and water security. The SPARC project, originally designed to cover three districts in NTT, was scaled up to include a fourth district and it was given a two year extension. The four project districts in NTT are Sabu-Raijua District; Sumba Timur District; Manggarai District; and Manggarai Timur District.

The project **objective**, **outcomes** and **outputs** are as follows**:**

> *To enable the NTT province to strengthen climate resilience of its rural communities to improve livelihood, food, and water security.*

Outcome 1: Institutional capacity developed to integrate climate resilience in sustainable development at provincial and district level

Outputs:
1.1 A multi-stakeholder dialogue on climate change has been established and institutionalized at provincial and district level
1.2 Staff of government agencies, members of parliament, media, universities and

CSOs capacitated to address climate change adaptation

1.3 The provincial government and three district governments have integrated key policies, programmes, and made necessary budget allocations to priority adaptation actions.

Outcome 2: Livelihoods of vulnerable rural communities strengthened in a changing climate

Outputs:

2.1 300 communities in 40 villages and 15 sub-districts have developed a community based climate risk information system

2.2 150 communities have adjusted subsistence farming practices to more variable and extreme climatic conditions to strengthen food security

2.3 100 communities have become more resilient by diversifying sources of income which are less sensitive to climate change

2.4 In 50 communities, water resources infrastructure and management have been improved taking into account projected changes in rainfall patterns

5.1 1 CCA-DRR convergence framework analytical study developed to promote effective utilization of resources for resilience building

5.2 Relevant map and data resources to enable application of CCA-DRR convergence initiatives are developed for 6 villages in 3 districts

5.3 3 Local NGOs capacitated to facilitate communities in developing CCA-DRR measures.

SPARC supports the UNDP primary outcome of integrating low emission climate resilient development in key-sectoral governance entities as well as the secondary outcome of strengthened capacity of developing countries to mainstream climate change adaptation into national development plans.

Summary Evaluation Rating Table for the SPARC Project

Monitoring and Evaluation	**rating**	**Implementing Agency (IA) & Executing Agency (EA) Execution**	**rating**
M&E design at entry	S	Quality of UNDP Implementation – Implementing Agency	S
M&E Plan Implementation	MS	Quality of Execution - Executing Agency	S
Overall quality of M&E	MS	Overall quality of Implementation / Execution	S
Assessment of Outcomes	**rating**	**Sustainability**	**rating**
Relevance	R	Financial resources	L
Effectiveness	S	Socio-political	ML
Efficiency	HS	Institutional framework and governance	ML
Overall Project Outcome Rating	S	Environmental	ML
		Overall likelihood of sustainability	ML

Summary of conclusions and recommendations

The SPARC project design and implementation was highly effective in achieving the intended project outcomes. The high efficiency of implementation led to an expansion into additional villages and a new district and a two year extension without requiring an increased budget. Monitoring and evaluation reports and observations during the TE determined the intended

outputs of SPARC have been achieved and in many cases exceeded.

Typical of the majority of development projects, the number of communities which benefited from SPARC was limited. As Indonesia's first CCA project, SPARC was a pilot project, testing a multi-sectoral, multi-hierarchical model of working with government to identify and work with communities at risk, in the implementation of CCA actions to increase resilience. There remain many thousands of communities across Indonesia which did not participate, but which are vulnerable, at-risk communities that could benefit from implementation of the SPARC model.

While SPARC was highly successful in meeting targets that verify the achievement of project outputs and outcomes, the project could have done more to ensure and support the scaling up of the successes demonstrated.

Recommendation 1: Project activities ensuring scaling up should be clearly articulated at project design and with actions included in annual plans intended to ensure the success of scaling up similar to other project outcomes/outputs.

For the SPARC project activities ensuring scaling up could have included the following:

- additional capacity building in the final phases of the project targeting needs identified by those persons who will be responsible for scaling up;
- reinforcement / formalization of networking connections supporting scaling up;
- identification of budgets, funding sources and funding application opportunities to support scaling up; and
- establishment of schedule prioritizing actions, including communities identified for engagement, into an attainable schedule for the years following project completion.

Recommendation 2: Incorporate participatory monitoring and evaluation in project design, whereby beneficiaries choose targets and indicators relevant to them, beneficiaries monitor and report of indicators, and identify adaptive strategies to adjust/modify CCA or AIG actions

For the SPARC project activities participatory monitoring and evaluation could have included the following:

- measurement of agriculture/aquaculture yields;
- measurement of income from agriculture and/or AIG;
- measurement of groundwater levels

Recommendation 3: Supporting existing or new income generating activities should be accompanied by appropriate market chain analysis

For the SPARC project consideration of market chain analysis could have included the following:

- consideration of the availability and cost of transport goods to markets;
- investigation of available markets and market value for goods to be sold;
- support of cooperative marketing of products; and
- consideration of potential short- and long-term risks (including climate risks) in supply, production and marketing of goods.

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Acronyms and Abbreviations

AIG …….. Alternate income generating
AMAT..... Adaptation Monitoring and Assessment Tracking tool for CCA projects
BAPPENAS ..... National Development Planning Agency
BAPPEDA..... Regional Development Planning Agency (Province and District)
BPTP ..... Assessment Institute for Agricultural Technology
BPBD..... Regional Disaster Management Agency (province and district)
CC ..... Climate change
CCA..... Climate change adaptation
CSO..... Civil society organization
CSR..... Corporate social responsibility
DRR …… Disaster risk reduction
DRM …… Disaster risk management
DC ..... District coordinator (project staff)
DNPI..... National Climate Change Council
DRR..... Disaster risk reduction
GEF ..... Global Environment Facility
GPS..... Global Positioning System
IPAR ..... Internal Project Assurance Report
Kemas Proklim..... Kelompok Masyarakat Perduli Iklim (Pro-climate community group)
M&E..... Monitoring and evaluation
MoEF ..... Ministry of Environment and Forestry
MTR..... Mid-term Review
NGO ..... Non-Government Organization
NTT..... Nusa Tenggara Timur Province
NGI ..... Norwegian Geotechnical Institute
PIR..... Project Implementation Report
PM ..... Project Manager
PMU..... Project Management Unit (Jakarta/Kupang)
ProDoc..... SPARC Revised Project Document (UNDP 2016)
QMR ..... Quarterly Monitoring Report
RAN-API ..... National Action Plan on Climate Change Adaptation
RPJMD ..... Medium Term Development Plans at the provincial and district level
RPJMDes..... Medium Term Development Plans at the village level
SPADU ..... International Cooperation Secretariat of NTT Province
SPARC ..... Strategic Planning and Actions to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur
TOC..... Theory of change
ToR..... Terms of reference
UNDANA..... University of Nusa Cendana (located in Kupang, NTT)
UNDP ..... United Nations Development Programme
VDF ..... Village Development Fund

1. Introduction

1.1 Purpose of the evaluation

In accordance with UNDP and GEF M&E policies and procedures, all full and medium sized UNDP supported GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from the SPARC project, and aid in the overall enhancement of UNDP programming.

1.2 Scope & Methodology

The evaluation has been conducted to assess the SPARC project performance vis-à-vis its targets and expected outputs, and its contribution relative to its objective. The TE has made an effort to draw lessons that can both improve the sustainability of results from the SPARC project, and aid in the overall enhancement of UNDP programming. The evaluation covers the implementation period for the SPARC project which is, February 2013 to December 2018.

The specific objectives of the evaluation outlined in the ToR include:

- To assess project performance relative to its objective and targets, as stated in the Project Document and AMAT;
- To assess the relevance, effectiveness and efficiency of the Project's implementation and strategies in achieving the set outputs and results;
- To determine local capacities developed and level of participation of stakeholders in the achievement of the outputs and results; and
- To identify lessons learned and innovative practices and recommendations to inform the potential scale up of the project.

The methodology for the TE followed guidance provided in the TOR (Annex 1) and the UNDP Evaluation Guidance for GEF Financed Projects (UNDP 2011). The TE began by reviewing relevant project documentation listed in Annex 5. Key stakeholders were identified in consultation with project staff to engage relevant stakeholders and beneficiaries in order to understand their perspective of the project in terms of the benefits received, the capacity built, adoption of climate change adaptation strategies and their recommendations.

Stakeholder consultations followed ethical guidelines to ensure safe, non-discriminatory, respectful engagement of stakeholders and they ensured that all those who engaged in the evaluation were aware of the purpose of the evaluation, that their participation was voluntary and that all information is confidential. The engagement approach went beyond simple questioning to include self-reflection and action oriented learning.

The evaluation utilized participatory approaches that:

- included primary stakeholders as active participants, not just sources of information to enable joint learning of stakeholders at various levels;
- required stakeholders to analyze, reflect and identify actions which may contribute to the sustainability of the results; and
- reviewed stakeholder commitments to sustaining new courses of action taken.

The evaluation ensured participation of both female and male stakeholders, and endeavored to include youth, elder population and disabled persons within the larger participating community.

The TE intended to visit three of the four Districts where SPARC worked, however, due to wet season weather conditions limiting flight travel only two of three Districts were visited, East Sumba District and Sabu Raijua District. See Annex 4 for a complete list of field mission dates, locations, and villages and government offices visited. In total 28 key knowledge holder interview sessions were conducted, which included beneficiary communities, Government officials, project staff and other key persons. Most interview sessions were conducted in small groups of two to three persons or in some cases only one person (see table 1). Larger community focus group discussions were not conducted, and no specific women's group was interviewed, however, in communities small groups generally had both women and men participants.

Semi-structured interview sessions were conducted in an open-ended manner allowing knowledge holders to provide context regarding their position in the community or government structure and their role in the SPARC project, followed by questions directed at topics of relevance, effectiveness, efficiency, and sustainability. A total 60 persons were interviewed, 17 women and 43 men (see table 1). Annex 3 provides a complete list of persons interviewed showing date, location, person's name and affiliation. The SPARC project has reported benefits reaching over 12,000 community members and trainings for more than 800 government staff (see section 3.3.8), as such the 60 persons interviewed represents approximately 0.5% of the total stakeholder population.

Table 1: Summary table of key knowledge holder interview sessions

Agency	Meetings	Women Present	Men Present
Beneficiary Communities	10	10	23
Government	11	5	11
Project Staff	5	2	7
Other (University/Bank)	2		2
Totals	**28**	**17**	**43**

1.3 Structure of the evaluation report

The structure of the evaluation report is based on the evaluation report outline provided in the ToR, which includes the following table of contents:

Executive Summary
1. Introduction
2. Project description and development context
3. Findings
   - 3.1 Project Design / Formulation
   - 3.2 Project Implementation
   - 3.3 Project Results
4. Conclusions, Recommendations & Lessons
5. Annexes
   1. Terms of Reference
   2. Itinerary
   3. List of persons interviewed
   4. Summary of field visits
   5. List of documents reviewed
   6. Evaluation Question Matrix
   7. Evaluation Consultant Agreement Form
   8. Report Clearance Form

2. Project Description and Development Context

The project *Strategic Planning and Actions to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur* **(**SPARC) began on February 27th, 2013 and closed on December 31st, 2018. Originally intended to run for four years in three districts of Nusa Tenggara Timur Province (NTT), Republic of Indonesia, the SPARC project was given a two year extension and it was expanded to four districts of NTT. SPARC is a nationally implemented project with funding support from the Special Climate Change Fund (SCCF) managed by the Global Environment Facility (GEF). The total SCCF-contributed project funds are USD 5 million with additional co-financing, including in-kind funding from the NTT Provincial Government and UNDP and grants from UNDP and partner agencies – Bank NTT and the Norwegian Geotechnical Institute (NGI).

2.1 Development Context

The province of NTT is located in the eastern part of Indonesia. It consists of about 550 islands, with Flores, Sumba and West Timor as the main islands.

Rural communities in NTT Province are characterised by subsistence agricultural production and dependency on water resources. The overwhelming majority of the population of NTT is dependent on agriculture, while, economically, the value generated from the primary sector is limited. Therefore, NTT remains at the top tier of Indonesia's poverty ranking.

Rural community Molie village

Despite Indonesia's national policy on decentralisation and devolvement of power to local institutions, new development has not been able to catch on effectively in NTT. The reason for this is thought to be weak and underdeveloped local institutions, which could absorb new decision making powers and resources, as well as the lack of local capacity.

Ensuring food and water security is a major challenge due to natural resource conditions as well as the state of economic development in NTT. The climate-induced problem that this project focused on was adaptation of livelihoods to current climate variation. The underlying causes of the problem include the following:

5) systemic vulnerabilities due to geographical and geophysical factors (i.e. the remote nature of the archipelagic area with a naturally high climate variability);
6) slow development progress in NTT (e.g. generally short term planning approaches used, the reactive responses to problems, and generally poor infrastructure and communication network at the community level);
7) decentralisation challenges (e.g. poor coordination among national, provincial and district government agencies that provide assistance and a lack of attention to the capacity development needs of sub-national institutions); and
8) social challenges such as lower education levels and varying cultural perspectives that tend to reinforce the isolation of dispersed island communities.

Both Sabu-Raijua and East Sumba are among the driest districts in Indonesia. While Manggarai and Manggarai Timur Districts have acceptable levels of precipitation, high levels of climate variability and extreme weather events affect all four districts.

In dry areas, such as Sabu-Raijua and East Sumba, only one harvest per year is possible. Where there is access to irrigation or higher levels of rainfall, two or even three harvests per year are possible. During the wet season, November through March, agricultural activities are intense, with the bulk of the each community's staple crop produced. At other times of the year communities can be equally busy, raising livestock (e.g. horses in East Sumba), tending second harvests in higher rainfall areas in Manggarai or tending irrigation fed dry season vegetable crops. At all times farmers make the most of their scarce natural resources to make a living.

In Sabu-Raijua and East Sumba water scarcity has been a long standing major issue which has been exacerbated by climate variability, leading to periods of severe water scarcity. An average rainfall of around 1,000 mm in Sabu puts the island in the category of dryland agriculture, making it unsuitable for growing rice. The original tuber-based diet was more adapted to the environment but cannot sustain the current consumption requirements. Corn and sorghum crops are more suitable to the dry conditions and rice can only be grown in places along riverbeds or close to water sources.

The project assists NTT with integrating climate resilience in rural development with a focus on livelihoods, food and water security. It worked simultaneously on developing institutional capacity at provincial and district government level and gaining practical experience with community based adaptation. Building on the capacities developed and practical experiences from the communities, climate change adaptation was then mainstreamed into development planning, policy and budgeting of the local governments involved.

The project implementing partner is the MoEF at the national level, and the Regional Planning and Development Agency (Bappeda) of NTT Province and the local Planning and Development Agency (Bappeda) in each of the Districts where the project was implemented. SPARC focuses on strengthening and developing climate-resilient institutions and rural communities around livelihoods, food and water security. The SPARC project, originally designed to cover three districts in NTT, was scaled up to include a fourth district and it was given a two year extension. The four project districts in NTT are as follows:

1. Sabu-Raijua District;
2. Sumba Timur District;
3. Manggarai District; and
4. Manggarai Timur District.

2.2 Project Objective and Expected Outputs

As identified in the updated Project Document (UNDP 2016) the **project objective** is:

> *To enable the NTT province to strengthen climate resilience of its rural communities to improve livelihood, food, and water security.*

To achieve the project objective the following two **project outcomes** were identified:

Outcome 1: Institutional capacity developed to integrate climate resilience in sustainable development at provincial and district level

Outcome 2: Livelihoods of vulnerable rural communities strengthened in a changing climate

Outputs identified in the ProDoc supporting Outcome 1 include the following:

1.1 A multi-stakeholder dialogue on climate change has been established and institutionalized at provincial and district level
1.2 Staff of government agencies, members of parliament, media, universities and CSOs capacitated to address climate change adaptation
1.3 The provincial government and three district governments have integrated key policies, programmes, and made necessary budget allocations to priority adaptation actions.

Outputs identified in the ProDoc supporting Outcome 2 include the following:

2.1 300 communities in 40 villages and 15 sub-districts have developed a community based climate risk information system
2.2 150 communities have adjusted subsistence farming practices to more variable and extreme climatic conditions to strengthen food security
2.3 100 communities have become more resilient by diversifying sources of income which are less sensitive to climate change
2.4 In 50 communities, water resources infrastructure and management have been improved taking into account projected changes in rainfall patterns
5.1 One CCA-DRR convergence framework analytical study developed to promote effective utilization of resources for resilience building
5.2 Relevant map and data resources to enable application of CCA-DRR convergence initiatives are developed for 6 villages in 3 districts
5.3 Three Local NGOs capacitated to facilitate communities in developing CCA-DRR measures.

SPARC supports the UNDP primary outcome of integrating low emission climate resilient development in key-sectoral governance entities as well as the secondary outcome of strengthened capacity of developing countries to mainstream climate change adaptation into national development plans.

3. SPARC Terminal Evaluation Findings

3.1 Project Design / Formulation

SPARC is Indonesia's first nationally coordinated CC project financed through an instrument of the CC Convention (GEF Special Climate Change Fund) which worked with provincial and district governments to strengthen the climate resilience of rural communities. It is a pilot project that worked in one of Indonesia's more vulnerable provinces, NTT, where it selected and worked with 46 villages in four districts based on a Village Vulnerability and Climate Risk Index developed by the project. The success of SPARC has potential for replication across Indonesia, given the ability of the national implementing partner, MoEF Directorate for Climate Change Adaptation, to work with other provincial and district governments to address the needs of vulnerable communities.

At a global scale SPARC contributes to GEF objectives by reducing the vulnerability of the pilot rural communities to the adverse impacts of CC and increasing their adaptive capacity to respond to the impacts of climate change. SPARC contributed to UNDP country program outcomes (2011-2015 and 2016-2020) by incorporating CC policies into NTT provincial and district planning and policy documents which address rural communities' needs in response to a changing climate and contributed to inclusive, sustainable economic growth for these communities.

UNDP's experience working with governments to develop strategies for integrated planning for inclusive and sustainable growth and projects that support economic opportunities to address poverty, inequality and exclusion are reflected in the logical framework of the project that has two clear outcomes. One outcome is to build institutional capacity within the NTT provincial government and within four district governments to integrate climate resilience into their current planning and development programs. The second outcome is to actively work with the government, particularly the four district governments, to strengthen the livelihoods of rural communities vulnerable to a changing climate.

There are many aspects of the project design of SPARC which have contributed to efficiency, effectiveness and successful achievement of project outcomes. To begin, actions taken at the community level in Indonesia must be linked to enabling policies at the district, province and national levels. Recognizing this, SPARC had the MoEF Directorate for Climate Change Adaptation as its implementing partner, which has an excellent knowledge of and a lead responsibility for the implementation of national climate change policies, including the National Action Plan on Climate Change Adaptation (RAN-API). The MoEF provides the authority necessary for SPARC to work with provincial and district governments developing new capacity in CCA planning, leading to the development and introduction of climate resiliency policies into local Mid-Term Development Plans (RPJMD). Of particular importance is the lead role of MoEF in the Climate Village Program or *Proklim* which served as the focal point for SPARC activities in project communities. Also as the national lead for CCA, MoEF is the relevant body to replicate the success of SPARC in other provinces within Indonesia.

Within the province of NTT, SPARC worked closely with and through the provincial and district planning offices (Bappeda). The Bappeda offices provided an excellent focal point for the SPARC project given the ability of these offices to facilitate the networking required to engage relevant government bodies (e.g. environment, agriculture, disaster risk reduction, infrastructure, meteorology, etc.) and to provide leadership for the development, advocacy and adoption of CCA policies in RPJMD.

Finally, while SPARC identified the need for capacity and policy development in government (Outcome 1) it also supported the concept of locally appropriate, community supported CCA actions aimed at those persons who are most in need (Outcome 2). In this regard the SPARC project began by developing a Village Vulnerability and Climate Risk Index for NTT. The index was used to select districts and villages that were included in the project and the index may be used to continue and replicate the work of the SPARC project in the remaining villages of the province.

In addition to the key stakeholders of the SPARC project (MoEF, Provincial and District Bappeda, and the project communities) there were a number of other stakeholders who were engaged in the project to assist in addressing the diverse nature of actions required to address climate change. These included relevant environment, agriculture, meteorology, DRM, and infrastructure departments/agencies of the government across different levels including the national, provincial and district level providing technical assistance and capacity building. Additionally, non-government stakeholders included media for CCA advocacy, Bank NTT for private corporate funding of CCA and the University of Nusa Cendana (UNDANA) located in Kupang, NTT to develop a "climate and development" program providing CCA capacity building.

The ProDoc assumptions identified for the project objective and two project outcomes proved to be realistic. The project did benefit from the support it received from the government, and this was most notable among Bappeda staff who demonstrated an understanding of climate impacts experienced by communities and the role government can play in assisting communities with CCA actions. As assumed government staff and communities were very receptive to the capacity building and technical support provided by SPARC and they were willing to collaborate, organize and implement CCA actions which provided benefits to the participating communities.

The risk of competing government priorities identified in the ProDoc is very real; nonetheless the government appears to take seriously the well-being of rural communities and are aware of hardships faced by subsistence livelihoods made more difficult by an increasingly variable climate. Each of the various government stakeholders involved in SPARC showed a strong commitment in their respective contributions and willingness to collaborate in a multi-sectoral CCA program for rural communities. Staff turnover or transfer resulting in a loss of CCA capacity built up during SPARC remains a high risk as identified in the ProDoc. This concern was articulated by project and government staff during the field evaluation. To some extent SPARC could have addressed this through additional capacity building of government towards the end of the project.

SPARC builds on existing government programs that support CCA (e.g. RAN-API), it supported planning mechanisms such as provincial and district planning committees (Bappeda) and their development of medium term development plans (RPJMD) where CCA policy was incorporated. SPARC supports the bottom-up approach to development promoted in Indonesia and this facilitates working directly with communities at risk through financial support available from the Village Development Fund (VDF). SPARC is in line with UNDP Country Program (2011-2015 and 2016-2020) outcomes identified for climate change in regard to capacity building and policy development.

There were many government and non-government partners involved in SPARC, the field evaluation observed some significant alignment of the project with other development projects operating in NTT. Some of the alignments observed in the field and in PIR reports which have occurred over the course of the project include:

- collaborative work with the government PASIMAS program expanded clean water

distribution systems initiated by SPARC;

- work with Wahana Visi Indonesia / World Vision Indonesia (WVI), which also operates in some SPARC villages in East Sumba;
- a joint field visit was conducted by SPARC staff, with WVI, World Vision Australia, World Neighbor, Beyond Subsistence Australia, the World Agroforestry Center, Bogor University and UNDANA;
- collaboration with Action Against Hunger / Action Contre la Faim (ACF) to utilize their experience and expertise in designing community based water delivery systems that included solar pumps and water stations in Manggarai; and
- collaboration with World Neighbor's CCA program in East Sumba on aspects of community facilitation, mentoring, and monitoring.

3.2 Project Implementation

The SPARC project started effectively in August 2013 and received "satisfactory" implementation progress ratings from the UNDP Country Office Programme Officer and UNDP GEF Technical Adviser in PIRs from 2014 to 2018.

3.2.1 Adaptive Management of Project Design

Project documentation on the adaptation of SPARC activities over the course of the project indicate the Project Management Unit (PMU) was quick to identify potentials barriers to project success and responded with innovative management responses ensuring the success of project outcomes.

Three examples of adaptive management measures undertaken by the project as drawn from PIRs include the following:

> Originally, it was envisaged that the SPARC project would influence the formulation of RPJMD and integrate climate change concerns into it. However, a slight delay in the project start up proved that it was difficult to do so in a substantive manner. Nonetheless, the project team's technical advisory resulted in the inclusion of references to climate risks, though they were somewhat generic, which provided a legal basis and future scope for the SPARC project to mainstream climate change concerns into the RPJMD's annual action plan and potential revision at the midterm of the RPJMD cycle.
>
> The project districts selected through the *Village Vulnerability and Climate Risk Index* posed implementation challenges due the fact that the districts were located on three different islands all requiring air or boat transport from the provincial capital in Kupang and they had more limited telecommunication contact. This was considered to have potential negative impact on the efficacy and sustainability of planned capacity development activities in the districts due to the logistical challenges which would reduce the frequency and coverage of the capacity development activities. To overcome this challenge, the SPARC project decided to put a more emphasis on building capacity at the sub-national level in Kupang where substantial capacity development could be provided to government staff. Government staff in Kupang receiving the full benefit of SPARC capacity development could in future utilize and transfer their knowledge assisting district government staff. Working in Kupang also led to a curriculum development partnership with UNDANA which created a graduate program targeting local government planners, and increased training provided to enhance the capacity of local agricultural extension

officers, irrigation officers, and technical officers in key sectors, and village officials.

In the original project plan the *Village Vulnerability and Climate Risk Index* and subsequent participatory community consultations would lead to the selection of locally appropriate CCA actions. Upon reflection the PMU recognized this would result in a long gap between project launch and the provision of benefits to communities. Concerned about diminishing local interest and ownership if no concrete actions are demonstrated for such a long period of time, the project team agreed with the MoEF and BAPPEDA to identify 25% of target communities and move ahead with "no-regret" community investments. This would ensure that local stakeholders continue to observe tangible actions from the first year of the project, which is an important factor for uninterrupted community buy-in.

In the third year of the project several factors led Project Board Members to recommend expansion of the project into 12 additional villages within the existing project districts and to expand into an additional 13 villages in a new district, East Manggarai. The board also recommended a one year extension of the project to ensure successful project expansion. The positive results supporting project expansion included the successful incorporation of CCA into the RPJMD for NTT and RPJMDes for the three targeted districts, substantial capacity development of and networking among government staff, the successful implementation of CCA activities in project communities and the availability of unspent funds.

3.2.2 Project Monitoring and Evaluation

The design template developed for Quarterly Monitoring Reports (QMR) and Internal Project Assurance Reporting (IPAR) was comprehensive and provided the opportunity for clear tracking of project activities and finance against targets established in the ProDoc. The QMR table included information in columns under the following headings; Expected Output, Atlas Activity, Budget (for the year), Expenditure, and Link between Activity and Output. The QMR/IPAR provided for the TE covered the period 2015 to the 3rd quarter of 2018.

Review of QMR tables showed that, for the most part, Sections 1 Budget Delivery against Outputs and Section 2 Analysis of progress at Output level did provide detailed reporting on project activities that permit a clear understanding of the link between project activities and project outputs. The QMR however rarely provided information on the expenditure of atlas activities reported on. Also the QMR tables do not provide an explanation for atlas activities that are shown as planned and budgeted for a given year but apparently not carried out (i.e. no information was reported). The lack of information regarding expenditures for activities that were carried out prevents an assessment of project over or under spending against proposed annual budgets.

The detailed documentation of project activities provides substantial information regarding project outputs, including the number and type of activities, the number of participants engaged in project activities and a breakdown of the number of men and women engaged (occasionally gender was not recorded). While some of this information can be found summarized in QMR Section 2: Analysis of progress at Output level and in annual PIR, the reporting of project M&E could be enhanced by providing a more comprehensive summary table listing project activities, participants, and gender reported within the 30 to 40 page QMRs.

Portions of the QMR do not provide detailed reporting in files provided for the TE. In particular, Section 1: Budget Delivery against Outputs, components 3 and 4; Section 3: Cross-Cutting Issues; Section 4: Lessons Learned Log; and Section 5: Comments and questions from the Project Team. It is assumed Section 6 Clearance, has been completed and signed copies are

available in UNDP CO. Sections of the IPAR are also incomplete.

SPARC monitoring does not evaluate the success or potential negative impacts of the wide range of CCA and AIG activities supported by the project. In particular it would be beneficial to include participatory monitoring and evaluation, with indicators developed, monitored and reported on by beneficiaries. Knowledge of project success in terms of increased crop yields, income generation, ground water levels, etc. is important to inform successful project replication and scaling up. For example, SPARC provided infrastructure and capacity development to initiate community drip irrigation systems. Communities reported vegetable gardening during the dry season in areas that were not previously used. In addition, to providing nutritious food for the community and increasing food security, surplus crops were sold providing economic benefits. Community members interviewed were proposing to significantly expand the area under drip irrigation in the near future. Enhanced water security for communities was an important output of outcome 2 and the project provided infrastructure in the form of solar powered water pumps, piping, storage and distribution systems that dramatically improved the livelihoods of participating communities. Unfortunately little is known regarding the sustainability of ground water resources and communities reported the drying of wells in the past and the disappearance of springs. Surface and groundwater resource sustainability in a karst (limestone) landscape can change dramatically over time as new pathways for water movement evolve, including both the loss and re-appearance of available water. Community monitoring of ground water levels in wells may help to inform the variability and sustainability of the available water resources.

3.2.3 Project Coordination and Operation

Management arrangements of the project had some challenging logistics. The UNDP implementing partner MoEF, was seated within the national government in Jakarta and the SPARC project office implementing project activities in NTT province was located in Kupang, a two hour flight from Jakarta. The implementing partner expressed a desire to have more oversight over staff implementing field activities which would have used additional project budget for travel and accommodation. Secondly the project office in Kupang coordinated activities that required flights to district government offices and substantial car travel to project communities. The project office identified difficulties of travelling to some districts which at times were not possible during the rainy season due to limited access to small uncontrolled airstrips and restricted car travel to some project communities that were cutoff due to landslides caused by heavy rains or earthquakes.

Despite the logistical challenges, the role of MoEF was effective in its ability to provide authority for the project office to work effectively with the provincial and district governments. And as SPARC intentionally selected communities based on high vulnerability, it was inevitable that these communities were located in areas that are difficult to access. Working with local implementing partners (facilitators) in each district was an effective strategy for the project office to remain in contact with government and community stakeholders participating in the project.

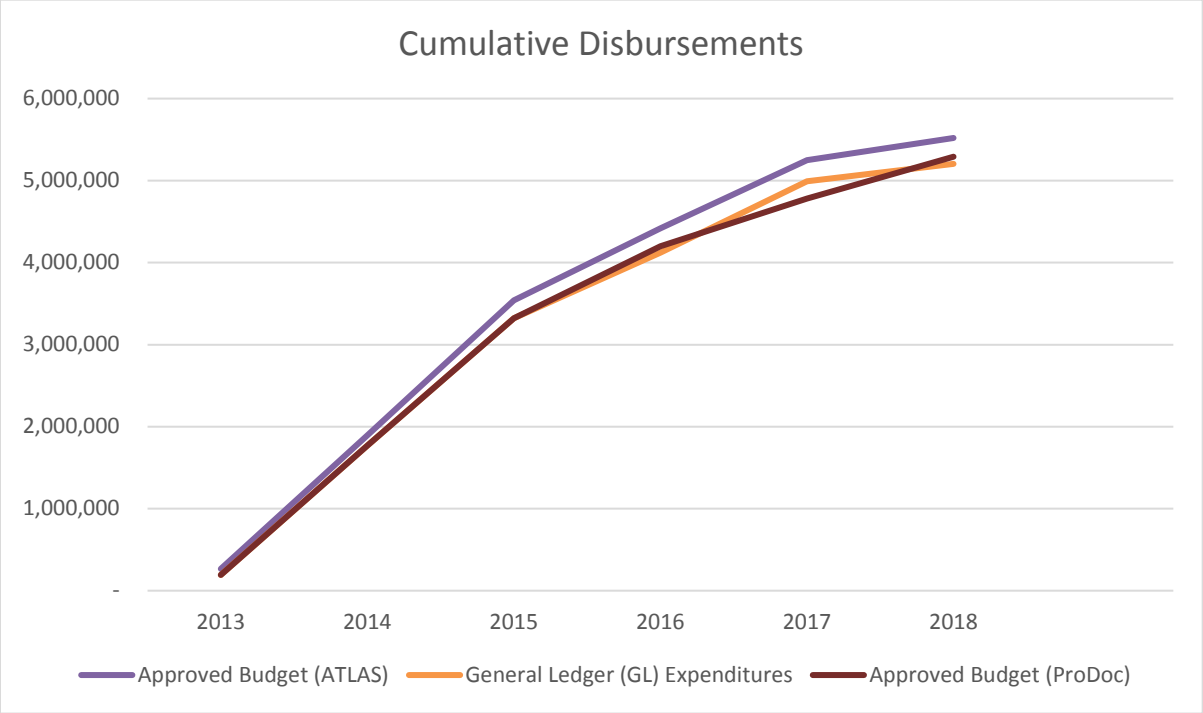
3.2.3 Project Finance

The SPARC project was provided with a $5M grant from the GEF SCCF, added to this were grants made available form UNDP ($100,000), Bank NTT ($155,565) and NGI ($35,600) for a total budget of $5,291,165. In-kind co-financing of SPARC was $74,210,654 (see co-financing Table 3 and discussion below). The SPARC project summary table is provided below:

Table 2. SPARC Summary Table

<table>
<tr><td colspan="6">Project Title: Strategic Planning and Action to strengthen climate resilience of Rural Communities in Nusa Tenggara Timur ”</td></tr>
<tr><td>GEF Project ID:</td><td>4340</td><td></td><td>At endorsement (US$)</td><td>As of Dec 31, 2018 (US$)</td></tr>
<tr><td>UNDP Project/ Output ID:</td><td>00083625/ PIMS #4549</td><td>GEF SCCF financing:</td><td>5,000,000</td><td>4,933,943</td></tr>
<tr><td rowspan="2">Country:</td><td rowspan="2">Indonesia</td><td>IA/EA own (UNDP):</td><td>100,000</td><td>93,553</td></tr>
<tr><td>UNDP (in-kind & parallel activities)</td><td>6,337,372</td><td>6,337,372</td></tr>
<tr><td>Region:</td><td>Asia Pacific</td><td>Government:</td><td>67,873,320</td><td>67,873,320</td></tr>
<tr><td>Focal Area:</td><td>Environment Unit</td><td>Other (Bank NTT, NGI):</td><td>191,165</td><td>176,616</td></tr>
<tr><td>FA Objectives, (OP/SP):</td><td>Climate Change Adaptation</td><td>Total co-financing:</td><td>74,501,857</td><td>74,480,861</td></tr>
<tr><td>Executing Agency:</td><td>Ministry of Environment and Forestry</td><td>Total Project Cost:</td><td>79,501,857</td><td>79,774,804</td></tr>
<tr><td rowspan="2">Other Partners involved:</td><td rowspan="2"></td><td colspan="2">ProDoc Signature (date project began):</td><td>27 February 2013</td></tr>
<tr><td>(Operational) Closing Date:</td><td>Proposed: 31 December 2016</td><td>Actual: 31 December 2018</td></tr>
</table>

Project documentation of financing provided in QMR/IPAR and PIR reports does not provide sufficient detail to permit verification of planned budgets as outlined in the ProDoc. The graph below updated to December 2018 based on Atlas/CDR reports shows cumulative expenditures over the course of the project from project inception in 2013 to closure in 2018. The approved budget (ProDoc) of $5M was originally to be disbursed by December 2016 however this was extended to December 2018 midway through the project, based on a recognition that SPARC was ahead of target achieving project outcomes and excess budget was available to extend the implementation of community CCA activities. The project board approved an expansion of the target area of the project and an extension of the project to December 2018. The graph also shows the Atlas approved budget for December 2018 exceeds the original ProDoc approved budget as a result of grants made available through co-funding as discussed below. It is anticipated the total budget will be utilized as the project is still active completing final closure steps.



The SPARC project benefited from co-financing grants and in-kind support provided by UNDP, grants provided by Bank NTT and NGI as well as in-kind support from the NTT provincial government as shown in the table below. The grant provided by Bank NTT was made through a unique collaboration between UNDP and Bank NTT, whereby SPARC was provided a substantial grant of $155,565 from Bank NTT's CSR fund to be utilized for CCA secure livelihoods activities in project communities such as micro-hydro and solar water pumps. The grant provided by NGI resulted from collaboration with the SPARC project with the $35,600 utilized for CCA soil improvement activities.

The very large amount of in-kind support provided by the NTT government represents a province-wide program called “Anggur Merah” (Red Wine) which ran from 2011 to 2018. Anggur Merah provided development assistance grants from the NTT Regional Budget amounting to approximately $58M distributed to 3,270 villages throughout NTT to support economic development aimed at improving the welfare of local communities. Some SPARC villages did access Anggur Merah to strengthen CCA activities, however detailed accounting was not available for evaluation. The Anggur Merah program was receptive to the SPRAC project and in some cases funding from Anggur Merah has directly supported SPARC actions in project communities and it has likely supported similar actions in other communities in NTT

Substantial in-kind support to SPARC provided by national, provincial and district government staff participating in the project is not currently reflected in the co-financing table given the unavailability of an assignable monetary value. The success of SPARC is in large measure attributable to the enthusiastic participation of government staff in all aspects of the project, including project design, capacity building provided technical experts, policy development and advocacy at the national, provincial and district levels, and the implementation, monitoring and support of CCA actions in project communities.

Table 3. SPARC Co-Financing Information

Co-financing (type/source)	**UNDP (US$)**		**NTT Provincial Government (US$)**		**Partner Agency Bank NTT (US$)**		**Partner Agency NGI (US$)**		**Total (US$)**	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	100,000	93,553			155,565	155,400	35,600	21,216	**291,165**	**270,169**
Loans/ Concessions										
In-kind support	6,337,372	6,337,372	67,873,320	67,873,320					**74,210,692**	**74,210,692**
Other										
Totals	**6,437,372**	**6,430,925**	**67,873,320**	**67,873,320**	**155,565**	**155,400**	**35,600**	**21,216**	**74,501,857**	**74,480,861**

3.3 Project Results

3.3.1 Overall results

SPARC has produced *satisfactory* measurable development change as a result of the project inputs and activities. There has been effective use of financial, human and material resources with satisfactory implementation, expansion of the project at the mid-term and the successful achievement of all project outcomes. The implementation actions effectively mobilized government and community stakeholders resulting in active participation, new forms of collaboration, advocacy of the SPARC project model and commitments to sustain the project outcomes. Tangible outputs included new CCA policies and actions plans incorporated into government planning documents and CCA activities enhanced or introduced and adopted by project communities increasing their resilience to a more variable and changing climate.

The challenge will be to sustain the institutional capacity created in government and for government to replicate the SPARC model in the villages, districts and provinces which did not directly participate in the SPARC project.

SPARC outcomes also provide sustainable environmental benefits by introducing renewable forms of energy use (solar water pumps), water conserving agricultural methods (mulching, drip irrigation) and tree nursery and tree planting programs.

The following table provides a summary evaluation for the SPARC project.

Monitoring and Evaluation	**rating**	**Implementing Agency (IA) & Executing Agency (EA) Execution**	**rating**
M&E design at entry	S	Quality of UNDP Implementation – Implementing Agency	S
M&E Plan Implementation	MS	Quality of Execution - Executing Agency	S
Overall quality of M&E	MS	Overall quality of Implementation / Execution	S
Assessment of Outcomes	**rating**	**Sustainability**	**rating**
Relevance	R	Financial resources	L
Effectiveness	S	Socio-political	ML
Efficiency	HS	Institutional framework and governance	ML
Overall Project Outcome Rating	S	Environmental	ML
		Overall likelihood of sustainability	ML

3.3.2 Relevance

Government staff at all levels indicated the impact of climate change on rural agricultural communities in Indonesia is of serious concern and that it is the responsibility of government to provide assistance. A statement from the Head of a District Bappeda is consistent with the responses received:

> *Within the District 80% of the population is made up of farmers working in dryland areas dependent on limited rainfall making them highly vulnerable to the impact of climate change.*

Infiltration well capturing roof runoff

Government staff acknowledged the importance of communication and coordination both horizontally (i.e. across National Ministries, or Provincial Offices or District Agencies) and vertically (e.g. between National, Provincial and District governments). The SPARC project was often referred to as the "SPARC Model" in reference to the multi-sectoral and multi-level approach to examining issues and finding effective and innovative shared responses incorporated into Action Plans for implementation by Provincial and District staff.

The "SPARC Model", highly touted by government staff involved in the project, provides a very relevant approach to CCA needed in remaining villages within NTT and villages in the other 32 Provinces of Indonesia.

At the village level community members expressed a general lack of development opportunities and identified a variety of impacts of climate change on subsistence agriculture, health, water supply and infrastructure. The formation of community groups, such as Kemas Proklim to more effectively manage the negative impacts of climate change and the technical and financial assistance provided for CCA and AIG activities were identified as SPARC project activities that were highly relevant to their needs.

3.3.3 Effectiveness

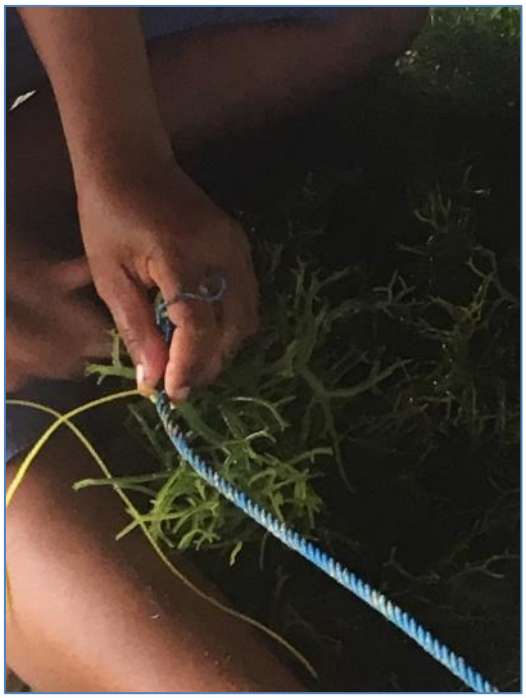
The outputs identified above in Section 2.2 are reported to have been achieved in the final Project Implementation Report (PIR) prepared in June, 2018. These results are substantiated by project results presented in the Adaptation Monitoring and Assessment Tracking (AMAT) tool for CCA projects prepared in June 2018 and the Quarterly Monitoring Reports (QMR) and Internal Project Assurance Reports (IPAR) prepared for the SPARC project. Project documentation provides reasonable evidence of the achievement of all SPARC outputs and in large measure the evaluation mission confirmed achievement of SPARC. Nonetheless, interviews conducted during the evaluation mission showed in some cases the quality and sustainability of some outputs could be enhanced (see the evaluation of Outcome 2 outputs below and the evaluation discussion of sustainability).

In regard to the outputs of Outcome 1, field mission visits with 16 government staff representing national, provincial and district government offices support results reported by the project, particularly the recognition of the need for and benefits from multi-stakeholder dialogue and planning to address community CCA. At the provincial and district levels this has been institutionalized through the establishment of multi-stakeholder planning committees, the incorporation of CCA into Medium Term Development Plans at the provincial and district (RPJMD), village (RPJMDes) levels and the development of Action Plans that provide direction for activities implemented annually.

In regard to the outputs of Outcome 2, the formation of community groups facilitated by project staff working with community members, was identified by implementation staff and also by community members as one of the most challenging implementation actions of the SPARC project and also the most significant positive outcome in terms of the mobilization of community members to identify and confront CCA. For facilitators there was the issue of building trust with the community and encouraging community members to recognize the benefits of working collaboratively through group facilitation meetings. Community members indicated there had become the habit of people working individually, pursuing personal or household activities to achieve economic benefits.

SPARC built on The Climate Village Program (Kemas ProKlim), initiated by the MoEF as an effort to strengthen local initiatives related to climate change. Through Kemas ProKlim, MoEF gives recognition to the active participation of communities that are engaged in integrated climate change mitigation and adaptation efforts at the local level. Funding for Kemas ProKlim initiatives was provided by SPARC and is also available through the VDF and District government. SPARC targeted capacity building of Kemas Proklim leaders and members further enhanced the CCA capabilities of project communities. Community mobilization was and continues to be an extremely important foundational step supporting the success of Outcome 2 outputs noted below.

Output 2.1 set a target for 300 communities to develop a "community based climate risk information system". Supporting this output, some communities participated in technical training and formed "climate risk information centres" to record and disseminate agricultural-tailored climate information to local farmers. One participating Kemas ProKlim leader reported sending posting regular reports to BKMG and sharing feed from BKMG to local farmers via smartphone messaging. It is not evident from project documents or from the field evaluation that 300 communities developed a formal "community based climate risk information system" to be used by communities as an ongoing risk assessment system. In reality the ongoing work of Kemas Proklim such as, CCA leadership, community discussions, future scaling up of existing CCA activities and the exploration and adoption of new CCA activities, may be considered an important part of a community's climate risk information system.



Preparing seaweed for farming

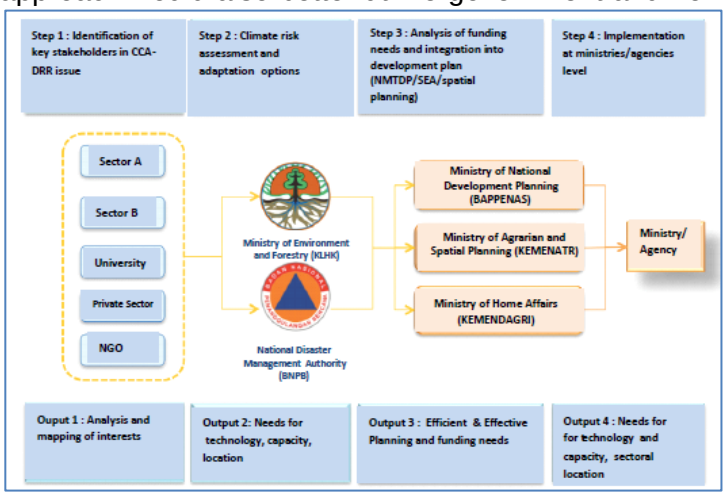
Output 2.2. set a target for 150 communities to adjust subsistence farming practices. Agriculture is generally the dominant activity in target communities. SPARC project documents and field evaluation interviews with farmers confirmed a strong interest in and benefits from training provided, technical support in climate smart agriculture such as biochar, the provision of infrastructure such as irrigation and plastic mulch, and the provision of climate adapted / drought resistant seed varieties. The June 2018 PIR noted that 175 community groups adopted more resilient agricultural practices.

Output 2.3 set a target of 100 communities diversifying income and becoming less sensitive to climate change, which was well exceeded based on a the 2018 PIR that reports 253 community groups participating in SPARC promoted Alternate Income Generating (AIG) activities. These were largely represented by providing direct grants to purchase inputs for existing income generating activities (e.g. livestock rearing, seaweed farming, fishing, traditional hand weaving, etc.), as well as in some cases training and grants for new income generating activities (e.g. bokashi fertilizer production, fiber-boat production, mattress production, etc.) and through the establishment of credit unions and cooperatives. Some AIG activities promoted by SPARC may not make communities "less sensitive to climate change", for example if households develop a heavy dependence on seaweed farming this may put families at risk due the potential impact of climate change through sea temperature change, sea level rise, and extreme storm events. SPARC project documents do not outline how or if AIG activities were assessed to ensure they met the criteria of "sources of income less sensitive to climate change".

Output 2.4 set a target of 50 communities with improved water infrastructure and resource management. This target was exceeded with 90 community groups reported to have benefited from SPARC activities. SPARC strategies targeting severe water scarcity for human use and for rain-fed agriculture included: the installation of solar powered pumps with piping bringing water to reservoirs for distribution to the community; the digging of infiltration wells to enhance groundwater recharge; the construction of water catchment dams; and the provision of training and infrastructure for water efficient agriculture and drip irrigation, etc. During the field evaluation, feedback from government staff and community members expressed a clear recognition of a long

standing water resources problem, which is now exacerbated by climate change and the ability to improve water resource management through interventions implemented by the SPARC project.

Output 5.1 identified the need for a coordinated and integrated approach to confront CCA and DRR resilience building. An integrated approach would also better utilize government and non-government staff and funding resources available to address the needs of CCA and DRR. With support from SPARC a workshop was organized and a report titled *Climate Change Adaptation and Disaster Risk Reduction (CCA-DRR) Convergence* was released in December 2018. The report provides a comprehensive assessment of the current CCA and DRR policy and implementation frameworks and makes recommendations for an integrated CCA-DRR planning approach as shown in the figure taken from the report. The report outlines the policy, institutional and funding instruments required and a set of indicators to measure the achievement of integrated CCA-DRR development planning. Implementing the recommendations of the CCA-DRR Convergence report will require strong leadership and significant effort by a committed government agency. Unfortunately the role of a leading sector or coordinating ministry/agency has yet to be established to guide all relevant ministries and agencies related to CCA-DRR.



Outputs 5.2 established a target to develop relevant maps and data resources to enable application of CCA-DRR convergence initiatives in 6 villages in 3 districts. Training on converging CCA-DRR for provincial and district government Disaster Management Agency (BPBD) officials and partner NGOs was conducted in three districts. Participants were trained to develop climate-related risk/disaster data and in using Global Positioning System (GPS) to show the areas that are prone to climate related disaster at village level. The information is intended for use in the development planning process.

Output 5.3 established a target to provide local NGOs with training to allow them to facilitate communities in the development of CCA-DRR measures. Local NGOs participated in multiple SPARC training sessions and they were assigned to each Kemas Proklim to provide ongoing capacity building support. Despite the training provided to local NGO staff, not all of those interviewed during the evaluation mission demonstrated a comprehensive understanding of CCA, DRR and the convergence of these.

3.3.4 Efficiency

The SPARC project is considered to have been very efficient, based on the project's ability to achieve the intended outputs of Outcomes 1 and 2 and given the fact that the project underwent a substantial expansion at the midterm from 21 villages in three districts in phase I to a proposed additional 12 villages in three districts in phase II and an additional 13 villages in a new, fourth district. It should be noted that during the evaluation some concerns were raised regarding the addition of villages at the midterm, in particular the fact that while the first 21 villages benefited

from five years of support and interaction with the SPARC project, the additional 25 villages were involved in the SPARC project for only two years and the limited support and interaction may reduce the sustainability of the outcomes.

It is difficult to evaluate the cost effectiveness of the SPARC project; however, a conservative assessment suggests there are likely considerable financial benefits to individual households and communities resulting from SPARC support of AIG. For example, during the field evaluation one household reported an income of approximately 100 M IDR (US$7,000) per year from seaweed cultivation which was re-introduced to the village by the SPARC project. Another household reported an annual income of approximately 4 M IDR (US$300) per year from the sale of traditional weaving, some of which may be attributed to support from the SPARC project which encouraged a revitalization of traditional weaving. Income generation was also reported from vegetable gardening, livestock rearing, biochar production, and fisheries, many of which were new sources of income generation for communities. Additional incremental household income may also be inferred from reported increased yields of crops using improved seeds and agricultural methods, time saving resulting from improved water supplies that reduce the time required to obtain water, and improved health as a result of improved nutrition suggesting reduced health care costs.

If a conservative estimate of 5M IDR generated from AIG each year is used for each of the 9,800 households that participated in SPARC, the total cash benefits derived would be equivalent to 49,000M IDR or approximately $3.5 M USD per year. This would suggest the $5M UNDP GEF investment provided over five years to the SPARC project is likely to be recovered in less than two years based on the future cash benefits to participating households.

Drip irrigation system

3.3.5 Country ownership

Success of the SPARC project can be attributed in large measure to the commitment and endorsement by national, provincial and district government staff. A high level of country ownership is reflected in the adoption the SPARC model in policies, planning documents and action plans promoted by all levels of government. Indonesia's Village Law (Law No.6 of 2014) and the associated VDF provides vital ongoing government financial commitment to SPARC actions that will continue to support the communities directly involved in the project and which can support actions in new communities through scaling up initiated by district and provincial governments. Further, district BAPPEDA staff interviewed indicated that relevant CCA VDF proposals submitted by communities to the district government would receive approval.

SPARC also inspired support form Bank NTT, which for the first time utilized their Corporate Social Responsibility fund to provide co-financing to a UNDP supported project.

SPARC also supported an initiative by the University of Nusa Cendana (UNDANA) resulting in the establishment of a post-graduate level elective program titled “Climate and Development” within the Environmental Science Department. To date 15 students have already been accepted into the course, many of whom are government staff who will return to utilize an important new understanding of CCA in government programs.

3.3.6 Mainstreaming

The SPARC project selected NTT within Indonesia as a province characterized by higher poverty and high climate change vulnerability resulting from a challenging communication network, infrastructure which is generally underdeveloped and a vulnerable subsistence agricultural economy associated with the 111 islands which make up much of the remote archipelago of the province. Further, the SPARC project selected districts and communities within NTT based on the village vulnerability and climate risk index which is based on higher poverty levels and climate risks. In this way the SPARC project can be said to have made a substantial contribution to poverty alleviation and the prevention and recovery from natural disasters to communities that are most in need within Indonesia.

The successful achievement of Outcome 1 has made a substantive contribution to improved governance of village communities through engagement, capacity development and the adoption of a multi-sectoral governance model at the national and sub-national level. The governance model adopted enabled identification of climate risks and vulnerabilities and helped collaboratively implement locally appropriate CCA. At the national level MoEF as the implementing partner for SPARC, will take on the responsibility for replication and scaling up of CCA in new provinces and districts using a multi-sectoral approach. At the sub-national level NTT province and the four district governments will continue to implement multi-sectoral planning for CCA through their Medium Term Development Plans. SPARC also supported research and actions to converge CCA–DRR programs to enhance government services to communities. And with support from SPARC a new “climate and development” graduate program at the University of Nusa Cendana in Kupang, NTT is training government staff and others in the field of multi-sectoral planning for CCA and DRR.

SPARC promoted gender equality by ensuring the involvement of both men and women in the decision-making and planning processes that developed community proposals for adaptation actions. Within family member groups that benefited directly from the SPARC project, 20,607 members are female (50% out of a total of 40,972 direct beneficiaries). Women members of family groups were empowered through project activities such as: increased time availability to undertake income generating activities (enhanced vegetable gardening for nutrition and income generation, mattress production, livestock rearing, traditional ikat weaving and sewing); a variety of trainings to improve knowledge and skills; improved access to resources (land and water); and improved networking to access district and provincial government resources as well as financial resources.

During the TE field mission where new water distribution systems were introduced by the project, the women interviewed reported significant time saving, given the amount of time previously required to reach the water source. One women reported that previously it was necessary to wake up at 3:00 am to fetch water, now with water available within the community she has more time for weaving (an income generating activity). In another case women reported having water available meant they were able to establish a vegetable garden within the community. In one community women have taken the lead to initiate expansion of the water supply system installed by SPARC, creating new additional water supply points for households. Where drip irrigation was

introduced women reported that in previous years they grew only maize and "salad", whereas now they grow so many different kinds of crops including, tomato, eggplant, chili, watermelon and long bean which can be sold in the local market for income.

The inclusion of children and youth groups was not a focus of the SPARC project. Based on the evaluators experience reviewing other project in Asia there are good opportunities working with children and youth as agents of change, they are more receptive to new ideas, they are innovative, they become great advocates of CCA and DRR and as the generation that will face more serious CC impacts there is tremendous value including children and youth in all CC projects.

3.3.7 Sustainability

The evaluation of sustainability is complex due to the fact that it is dependent on a large number of factors, some of which are within the control of a project and others beyond the control of the project. In addition, unforeseen changes can dramatically impact potential sustainability. The sustainability of the SPARC project outcomes is assessed below in the context of key stakeholders and beneficiaries at the following four scales:

1. **Project Communities** – these are groups of households living in close proximity that were engaged by SPARC within the project villages. A total of 456 project communities participated.
2. **Project Districts** – initially three and then a fourth District government located in NTT province participated in the SPARC project. In total there are 20 rural districts and one urban district in NTT province.
3. **Province** – a single province, NTT participated in SPARC. At the provincial level the Provincial Development Planning Agency was the responsible party for project implementation. There are 34 provinces in Indonesia.
4. **National** – at the national government level the MoEF was the implementing partner for the SPARC project.

The sustainability of the SPARC outputs in the 456 project communities is considered "*likely*" based on the following observed and reported results:

- Commitment of community groups, particularly Kemas Proklim;
- Leadership by the heads of community groups observed;
- Value of benefits derived from SPARC (cash benefits from AIG, water security, food security) reinforcing ongoing participation in CCA activities;
- Ongoing financial support available to communities through the Village Development Fund (VDF), District government and other agencies such as Bank NTT's Corporate Social Responsibility fund.
- Networking capacity demonstrated by community groups reaching for technical and financial support from a variety of sources including, district government agricultural extension services, environment services and national hydrometeorology services, etc.
- Support from the District government as a result of SPARC capacity development leading to the inclusion of CCA in RPJMDes and in one district the preparation of a CCA Action Plan.

Key Risks to Sustainability

- the severity of CC impacts, particularly those related to water security, further reduce the water resources available to the communities;
- a lack of support from district and provincial staff due to budget constraints or other

government priorities;

- the occurrence of catastrophic CC related events such as cyclones affecting coastal communities or high rainfall events affecting inland communities in mountainous regions; and
- The SPARC project has not documented the potential negative environmental impacts which may be associated with project activities. Observations made during the field evaluation identified some activities where negative environmental impacts may seriously affect the sustainability of the following activities:
    - The facilitation of increased water supply, particularly where it is used for agriculture, has the potential of depleting the limited ground water resources within regions with low annual rainfall. Beneficiaries reported some wells run dry during the dry season or over longer periods and this raises the concern that project interventions may exacerbate this problem. Currently there is no formal program monitoring ground water levels within districts or the province and SPARC did not introduce ground water monitoring within project communities.
    - The expansion of seaweed cultivation within coastal areas may have a negative environmental impact by occupying or altering habitat that supports native biodiversity. The size of areas utilized for seaweed cultivation and the impact on native biodiversity is unknown.

The sustainability of SPARC outputs in the four project districts is considered "*moderately likely*" based on the following observed and reported results:

- District Medium Term Development Policy Plans (RPJMD) include policies for CCA and climate resilience that apply to all villages within the district;
- District staff (Bappeda, Agriculture, Environment) demonstrate strong support for implementation of the "SPARC Model" across the entire district;
- Bappeda staff indicated with proper justification budgets can be identified to support CCA with annual funding;
- CCA Action Plans have been, or are being considered for development in each district and these were identified as important for ensuring the inclusion of CCA in Annual Plans that more precisely define the activities of government staff;
- Capacity development observed during the TE field interviews included a clear understanding among CCA facilitators, agricultural extension workers, and hydrometeorology experts, etc. of the importance of their participation in multi-sectoral approaches to CCA. Government staff interviewed expressed a commitment to continue to support CCA in at-risk communities with activities such as drip irrigation and infiltration wells.
- One district demonstrated scaling up by proposing to start CCA work in new villages not included in the SPARC project. The new villages were selected using the "Village Vulnerability and Climate Risk Index" prepared by the project based on their rating of *very high vulnerability*.

Key Risk to Sustainability

- Implementation strategies or plans aimed at reaching a new cohort of villages (and ultimately all villages within the district) were not articulated by any project district. Districts did not identify an implementation process involving the engagement of facilitators, a process to mobilize communities, networking with district, provincial, national or non-government stakeholders or the identification of a budget or sources of funding. Without a clear implementation strategy or plan there is a much higher risk of a failure to scaling up CCA to meet the needs of all communities in the district;

The sustainability of SPARC outputs within NTT province is considered "*moderately likely*" based on the following observed and reported results:

- During the project NTT province included CCA into its medium term development planning document (RPJMD 2014-2018) and then reportedly included more comprehensive and specific CCA guidance in the next RPJMD 2019-2023;
- NTT has prepared a draft CCA Action Plan intended to integrate CCA across all sectors;
- Support and understanding of CCA is very high from the Head of Bappeda and the Governor of NTT is strongly pro-environment, factors which contribute to the "*moderately likely*" sustainability rating;
- Expansion of the SPARC multi-sectoral approach beyond the three sectors embraced by the project (i.e. water security, food security, livelihoods) to include all sectors administered by the province is proposed by Bappeda;
- Facilitators (3000 proposed) are being hired by NTT who will assist in the implementation of district plans targeting specific sectors (e.g. tourism, maize) in specific villages.

Key Risks to Sustainability

- With seven remaining districts and more than 3000 villages the future work to implement CCA province-wide within NTT is substantial;
- Implementation strategies or plans aimed at reaching all districts and villages within NTT were not articulated by the Province nor was it observed in provincial planning documents. Without a clear implementation strategy or plan there is a much higher risk of a failure to scaling up CCA to meet the needs of all communities in the district;;

The sustainability of SPARC outputs nation-wide is considered "*moderately likely*" based on the following observed and reported results:

- SPARC's implementing partner, the Directorate of Climate Change Adaptation within the MoEF provides an important advocate at the national level promoting the scaling up of the "SPARC Model" (i.e. the multi-sectoral, multi-stakeholder approach to CCA) across all provinces in Indonesia;
- As a committed advocate MoEF presented SPARC with NTT at the Conference of Parties (COP) 22 in Marrakech. Morocco showing positive outcomes of the pilot project to the international community, demonstrating the potential for scaling up a multi-sectoral approach to CCA across Indonesia;
- The MoEF Directorate of CCA has been working with the Ministry of Home Affairs which is drafting a regulation to embed requirements for CCA in provincial and district development planning nation-wide. The experience SPARC provided to the MoEF Directorate will assist them in their role providing support to multi-sectoral CCA development planning in provincial and district governments;
- MoEF currently supports and promotes the development of Kemas ProKlim community groups nation-wide;
- MoEF recognizes the best examples of CCA through annual ProKlim awards given to community groups and to provincial and district governments that incorporate CCA into development planning;
- MoEF has developed guidance documents and delivers training programs for CCA, including topics such as, national policy for CC, international dimension of CC and commitments under UNFCC, and the basics of CC and CCA.
- MoEF is responsible for the System Inventory Data Vulnerability Index or "SIDIK" which includes vulnerability assessment data based on exposure to climate-related risks and the climate vulnerability index's map generated by the SPARC project. This data is uploaded

to Satu Data Indonesia (One Data Initiative) an important electronic planning and information tool intended to develop and strengthen the countries data system, data sharing, and governance.

Key Risk to Sustainability

- The MoEF Directorate has limited resources, budget and staff, to lead similar multi-sectoral CCA planning and implementation initiatives (similar to SPARC) in new provinces and districts;

In summary, the sustainability of water security, food security and livelihoods within the 46 communities where SPARC operated is *likely*. The sustainability of similar initiatives replicated in new villages, districts and provinces through future CCA planning and scaling up of multi-sectoral planning is *moderately likely.* This is due to the risks identified for national, provincial and district governments which impair their ability to undertake the necessary scaling up and replication of the SPARC Model beyond the 46 communities, three districts and one province reached by the SPARC project.

The SPARC project could have more extensively assisted responsible stakeholders (district, provincial and national government staff) in the development of implementation strategies, action plans and/or road maps intended to replicate SPARC in new communities after the end of the project (December 2018). The needs identified to strengthen scaling up / replication (i.e. sustainability) include the following:

- end of project capacity development targeting government planning staff and leading them through exercises that ensure they have the ability to undertake multi-sectoral planning following the SPARC model, including selecting new at-risk target communities and creating realistic future implementation timetables based on available budgets and staff resources. Also capacity development of technical staff (facilitators, extension workers, etc.) to prepare them for implementation of multi-sectoral actions plans prepared by planning staff. The intention being that over time all at-risk communities will receive the government CCA support they require;
- reinforcement and, where possible, formalization of horizontal and vertical government and non-government networking to better link the available government and non-government resources (financial, technical expertise, knowledge sharing, etc.) which supports multi-sectoral planning and implementation and are therefore essential for scaling up and replication;
- identification of government and non-government funding sources (including where possible establishment of budget lines) and training on funding and grant application processes; and
- prioritization of communities/villages/districts to be included in future CCA planning phases.

3.3.8 Mapping progress against results framework indicators

The table on the following pages provides a summary evaluation of projects results against targets established in the SPARC results framework table developed at the initiation of the project. The table also provides a rating in regard to achievement of end of project targets.

Project Results Framework	Objectively Verifiable Indicators provided in Project Results Framework			Terminal Evaluation Assessment
	Indicator	**Baseline**	**Targets End of Project**	**Rating**
Project Objective *To enable the NTT province to strengthen climate resilience of its rural Communities to improve livelihood, food, and water*	• Annual Provincial and District government Work Plans and budgets approved by provincial and district parliaments that include specific	• Climate change is not integrated in provincial and district budgets. The provincial Medium term development plan does not include	• budget allocation for adaptation actions in the Provincial Annual Work Plan and in the Annual Work Plans of at least three districts from 2014 onward.	• NTT province and three pilot districts have mainstreamed CCA in their respective Medium-Term Development Plans (RPJMD) and thereafter budgets for CCA actions through Annual Work Plans • target has been achieved
Outcome 1 *Institutional capacity developed to integrate climate resilience in sustainable development at provincial and district level*	• disaggregated by gender, number of trained people mandated to support climate resilient planning	• no trained people mandated	• at least 100 trained people are mandated to support climate resilient planning	• 222 government planning staff (163 male, 59 female) trained to support climate resilient planning • 264 government staff (202 male, 62 female) trained to utilize NTT One Data System and Climate Vulnerability & Risk Map • 328 extension workers (243 male, 85 female) trained on CCA in agricultural sector • 25 government officials (21 male, 4 female) 15 rainfall data collectors from Kemas Proklim (14 male, 1 female) and one lecturer (male) from UNDANA provided BMKG NTT Climate Field School training • 263 participants (174 male, 89 female) from provincial and district governments, local NGOs and university provided training on CCA-DRR nexus and drought disaster contingency planning • 15 students accepted into “Climate and Development” graduate course at UNDANA • target has been exceeded

Project Results Framework	Objectively Verifiable Indicators provided in Project Results Framework			Terminal Evaluation Assessment
	Indicator	**Baseline**	**Targets End of Project**	**Rating**
	• number and type of targeted institutions with increased adaptive capacity to minimize exposure to climate variability (describe number and time)	• no systematic institutional capacity development for adaptation is ongoing	• At least 5 institutes have strengthened their systems, programmes and human resources to better address climate variability	• 23 institutions have improved their capacities through training and other supports. • MoEF issued Guidelines for Developing CCA Action Plans • Bappeda NTT and three pilot districts incorporated CCA into RPJMD • Bappeda NTT developed an e-planning application for developing annual work plans • UNDANA developed Climate and Development graduate course • BMKG NTT strengthened 21 rainfall stations and dissemination of climate information • Provincial and district agriculture staff trained in CCA activities • BPBD of NTT and three pilot districts developed Drought Disaster Contingency Plan. • Catholic Church received training on community level CCA • Legislature (DPRD) of NTT has improved their understanding of CCA planning • Local and national media in NTT received training on CC reporting • target has been exceeded

Project Results Framework	Objectively Verifiable Indicators provided in Project Results Framework			Terminal Evaluation Assessment
	Indicator	**Baseline**	**Targets End of Project**	**Rating**
	• number and type of provincial and district level policies and programmes which have been adjusted / issued to address climate change resilience	• No integration of climate resilience in provincial and district policies and programmes	• climate change resilience has been integrated in at least NTT's Medium Term Development Plan 2014-2018, and policies and programmes on agriculture and water	• CCA mainstreamed in NTT RPJMD 2014-2018 and 2019-2023 • CCA mainstreamed in RPJMD in three pilot districts • Manggarai District has developed integrated farming management program (SIMANTRI) • Sabu Raijua District is developing a roadmap for CCA actions to be used as a reference in planning. • target has been achieved
Outcome 2 *Livelihoods of vulnerable rural communities strengthened in a changing climate*	• climate risk reduction activities introduced at local level (list type and scope)	• no climate risk reduction and awareness activities are introduced at local level	• At least 5 types of climate risk reduction measures have been introduced in the three target districts, of which at least three measures are specifically targeting women	• 456 community groups in 44 villages across three districts have implemented CCA actions benefiting 12,116 individuals (8,711 male, 3,405 female) • 15 types of climate risk reduction measures have been undertaken in the areas of climate resilient agriculture, livelihood security, water security and climate information dissemination • target has been exceeded
	• % of households with a lower perception of vulnerability to climate risks due to new adaptation measures being introduced and applied, disaggregated by gender	• currently, the majority of households regard themselves as highly vulnerability to climate risks	• at least 75% of the households that have implemented adaptation measures regard themselves less vulnerable to climate change related risks as a result	• development of an index to assess community perception of climate resilience was under development during terminal evaluation • target not determined at time of terminal evaluation

3.3.9 Impact

Based on the LogFrame for SPARC the following table outlines a Theory of Change (TOC) used to undertake an analysis of project impacts. The impact noted in the table is based on the project objective identified in the ProDoc and is considered equivalent to the Global Environmental Benefit which may be derived from the project. A second impact, considered implicit though not articulated in the project design, has been added based on the role of MoEF as the implementing partner in the project and their responsibility as Directorate of Climate Change and Adaptation.

Outcomes Impacts	Impact Drivers & Assumptions	Intermediate States	Impacts
Outcome 1: Institutional capacity developed to integrate climate resilience in sustainable development at provincial and district level	***ID:*** CCA discussed in regularly held multi-stakeholder planning meetings ***ID:*** Capacity development of community facilitators and extension staff to support community CCA implementation ***A:*** Provincial and district governments will replicate SPARC model in all rural communities in NTT	***IS:*** CCA is integrated into medium term development plans, CCA action plans are developed and CCA activities are included in annual work plans and budgets for priority at-risk communities	1. To enable the NTT province to strengthen climate resilience of its rural communities to improve livelihood, food, and water security. 2. To enable MoEF to strengthen climate resilience of rural communities throughout Indonesia
Outcome 2: Livelihoods of vulnerable rural communities strengthened in a changing climate	***ID:*** Community groups formed to work with government developing strategies to address CCA and adopt climate resilient livelihoods ***A:*** Sufficient technical capacity exists to develop and implement CCA and AIG actions at the local level ***A:*** CCA and AIG are resilient to the effects of increasingly severe climate events ***A:*** Transportation and markets are available for products produced in rural communities	***IS:*** Communities participating in project form committed working groups that implement CCA and AIG and begin to experience more climate secure and economically improved livelihoods	

Qualitative assessment of SPARC's TOC is presented in the table below along with the following ratings which are based on desktop and field investigations of the TE:

Not achieved (0) - the TOC component was not explicitly or implicitly identified by the project, and/ or very little progress has been made towards achieving the TOC component, and the conditions are not in place for future progress

Poorly achieved (1) there are no appropriate mechanisms set out to achieve the TOC

component after SPARC's UNDP GEF funding has ended, and/ or very little progress has been made towards achieving the TOC component, but the conditions are in place for future progress should new support be provided to complete this component.

Partially achieved (2) the TOC component is explicitly recognized and the mechanisms set out to achieve it are appropriate but insufficient (e.g. there is no clear allocation of responsibilities for implementing the mechanisms after SPARC UNDP GEF funding ends). Moderate and continuing progress was and is being made towards achieving the TOC component, although there is not yet a strong basis assuring the eventual delivery of the intended impact (Global Environmental Benefits).

Fully achieved (3) the TOC component is explicitly recognized and appropriate and sufficient mechanisms to achieve it are apparent (e.g. specific allocation of responsibilities and financial and staff support is available after SPRAC UNDP GEF funding ends), and/ or substantial progress has been made towards achieving the TOC component and there is strong assurance of eventual delivery of the intended impact (Global Environment Benefits).

Theory of Change Component	Qualitative Analysis	Rating
Outcome 1: Institutional capacity developed to integrate climate resilience in sustainable development at provincial and district level	• the multi-sectoral planning approach introduced by the project to existing BAPPEDA planning bodies was readily adopted as an appropriate and effective approach for government to coordinate and implement climate resilient sustainable development • without strong assurance of provincial and national scaling up the outcome is considered *partially achieved*	**2**
ID: CCA discussed in regularly held multi-stakeholder planning meetings	• provincial and district planning staff hold multi-stakeholder meetings developing RPJMD, Action Plans and Annual Work Plans and Budgets • without strong assurance of provincial and national scaling up needed to support CCA planning meetings the impact driver is considered *partially achieved*	**2**
ID: Capacity development of community facilitators and extension staff to support community CCA implementation	• there is a limited pool of trained facilitators and extension staff (agriculture, water security, AIG, CCA) needed to reach all rural communities in NTT, as such, this impact driver is considered *poorly achieved*	**1**
A: Provincial and district governments will replicate SPARC model in all rural communities in NTT	• the inclusion of CCA in RPJMD and RPJMDes has been completed indicating the intent to replicate the SPARC model • one of four districts participating in SPARC has selected at-risk villages for future climate resilient activities • NTT province is proposing to expand climate resilient multi-sectoral planning activities beyond water security, food security and AIG • there is a lack of concrete plans identifying a scaling up process intended to reach all villages at the district level or all districts at the provincial level, hence this assumption is considered *poorly achieved*	**1**

Theory of Change Component	Qualitative Analysis	Rating
IS: CCA in integrated into medium term development plans, CCA action plans are developed and CCA activities are included in annual work plans and budgets for priority at-risk communities	• the project achieved the inclusion of climate resilient development planning in medium term development plans (RPJMD) • three of four project districts and NTT province have not clearly identified meaningful planning strategies capable of coordinating and implementing climate resilient sustainable development that will reach all rural communities of NTT • MoEF does not have the capacity (staff, budget) to replicate the SPARC model in other provinces • lack of a clear strategy for scaling up has results in this intermediate state being considered *poorly achieved*	**1**
Outcome 2: Livelihoods of vulnerable rural communities strengthened in a changing climate	• communities responded positively to facilitation aimed at strengthening rural livelihoods • there was successful adoption of water security, food security and AIG activities • the outcome was successful in the pilot communities, but without assurance of scaling up to all communities it is considered *partially achieved*	**2**
ID: Community groups formed to work with government developing strategies to address CCA and adopt climate resilient livelihoods	• community facilitation was able to build trust and over time encourage the formation of village groups, particularly Kemas ProKlim to work with government to develop and implement climate resilient development strategies • district and provincial governments did not present clear strategies to form community groups to address CCA as such this impact driver is considered *partially achieved*	**2**
A: Sufficient technical capacity exists to develop and implement CCA and AIG actions at the local level	• project capacity development provided the technical capacity needed for CCA and AIG in 46 communities • capacity development will be required to expand the SPARC model in to new communities in NTT • provincial and district government did not have plans to expand existing technical capacity to address scaling up of CCA and AIG activities, as such, the assumption is *partially achieved*	**2**
A: CCA and AIG are resilient to the effects of increasingly severe climate events	• future CC impacts are likely to continue to impact water and food security and AIG activities such as seaweed farming may be directly impacted by warming ocean water, sea level rise and severe climatic events • greater monitoring and adaptive management is required to address this assumption, rated as *poorly achieved*	**1**
A: Transportation and markets are available for products produced in rural communities	• transportation to markets was cited as a constraint to marketing products from remote rural communities • market chain analysis is needed to identify and characterize AIG opportunities which may be available to rural communities • due to transportation and marketing difficulties identified by pilot communities and the lack of market chain analysis this assumption is rated as *poorly achieved*	**1**

Theory of Change Component	Qualitative Analysis	Rating
IS: Communities participating in project form committed working groups that implement CCA and AIG and begin to experience more climate secure and economically improved livelihoods	• following the SPARC model significant benefits can be provided to rural communities to provide climate resilient development for water security, food security and AIG • SPARC has demonstrated success is possible, however this remains a large need among NTT communities not involved in the project for which scaling up is required, as this intermediate state is *partially achieved*	**2**
Overall project summary findings: The SPARC project has introduced a climate resilient multi-stakeholder development planning model that is readily adopted by provincial and district governments and it has successfully piloted implementation of the model in 46 communities where substantial climate resilient benefits have been achieved. There remain many more rural communities in NTT and throughout Indonesia where similar climate resilient planning is urgently needed. At the end of the project there was insufficient evidence of strategic planning at the district, province or national level that was clearly aimed at upscaling the SPARC model following completion of the UNDP GEF funding. As such there was not a high level of assurance that all rural communities in NTT province and in all provinces of Indonesia would receive similar benefits of climate resilient sustainable development planning in a timely manner. Therefore the SPARC project has only *partially achieved* TOC impacts identified in the table above		**1**

The SPARC project has also demonstrated improvements in ecological status and reductions in stress on ecological systems. Most notable of the positive environmental impacts of the project are:

- The adoption of solar water pumps installed for either new water supply development or retrofit of existing gas or diesel powered pumps.
- Training, nursery establishment and native tree planting programs aimed at ameliorating the impact of higher temperatures and increased drought through enhanced groundwater infiltration and evapotranspiration. Environmental benefits also include the provision of habitat supporting native biodiversity and high rates of carbon sequestration.
- Surface water capture and infiltration wells reduce surface water runoff and associated soil erosion. Enhanced groundwater levels may support base flow in streams, springs and wetlands important to supporting native biodiversity.
- Improved agricultural methods, such mulching and drip irrigation, may enhance yields and thereby reduce the need to expand the area required for cultivation. This in turn will reduce the stress of agriculture on natural systems allowing for the protection of natural areas supporting native biodiversity.

4. Conclusions, Recommendations and Lessons Learned

The SPARC project design and implementation was highly effective in achieving the intended project outcomes. The high efficiency of implementation led to an expansion into additional villages and a new district and a two year extension without requiring an increased budget. Monitoring and evaluation reports and observations during the TE determined the intended outputs of SPARC have been achieved and in many cases exceeded.

Development projects in Indonesia working in partnership with the government, benefit from a well-educated and experienced workforce committed to improving the livelihoods of rural and urban populations. While CCA capacity building at all levels is important, there is a willingness to learn and a desire to implement new ideas and strategies to achieve meaningful results. In addition, the government of Indonesia supports bottom-up, locally appropriate development both in theory and with funds provided by the VDF. These have been important factors contributing to SPARC's success.

SPARC is Indonesia's first nationally coordinated CC project financed through an instrument of the CC Convention (GEF Special Climate Change Fund) which worked with provincial and district governments to strengthen the climate resilience of rural communities

Typical of the majority of development projects, the number of communities which benefited from SPARC was limited. SPARC was a pilot project, testing a multi-sectoral, multi-hierarchical model of working with government to identify and work with communities at risk, in the implementation of CCA actions to increase resilience. There remain many thousands of communities across Indonesia which did not participate, but which are vulnerable, at-risk communities that could benefit from implementation of the SPARC model.

While SPARC was highly successful in meeting targets that verify the achievement of project outputs and outcomes, the project could have done more to ensure and support the scaling up of the successes demonstrated.

During project design, the limited reach of the SPARC project was recognized and as such one province and three (later four) districts where selected to test the TOC to introduce climate resilient planning for rural communities. Given the limited number of communities where the SPARC model was piloted, it could have been possible to more explicitly include scaling up strategies as part of project design. These would be activities undertaken towards the end of the project which are intended to clearly identify next steps for the responsible bodies to replicate the anticipated success of interventions demonstrated within communities directly involved in a project.

In part, SPARC did anticipate the need for scaling up based on the inclusion of project activities working with NTT province and district planning staff to develop and incorporate climate resilient development policies into medium term planning documents (i.e. RPJMD). These policies broadly define climate resilient development activities to be conducted over the next five years, (i.e. after UNDP GEF funding ends). The successful efforts of SPARC working with BAPPEDA laid the foundation for potential scaling up within all rural communities of the province.

At the end of the project what remained to be done was to work closely with government staff to define a clear strategy and action plan for scaling up based on the policies incorporated in to RPJMD. This would include selecting at-risk districts and communities using the Village Vulnerability and Climate Risk Index developed for NTT by SPARC, developing timelines to reach

all at-risk communities, networking with stakeholders needed to assist in shared climate resilient development activities, and identifying funding sources to support implantation.

Based on the TE key findings the following recommendations are provided to enhance sustainability of the SPARC project outcomes and for consideration in future project design.

> ***Recommendation 1: Project activities ensuring scaling up should be clearly articulated at project design and with actions included in annual plans intended to ensure the success of scaling up project outcomes/outputs.***
>
> For the SPARC project activities ensuring scaling up could have included the following:
> - additional capacity building in the final phases of the project targeting needs identified by those persons who will be responsible for scaling up;
> - reinforcement / formalization of networking connections supporting scaling up;
> - identification of budgets, funding sources and funding application opportunities to support scaling up; and
> - establishment of a schedule prioritizing actions, including communities identified for engagement, into an attainable schedule a five year period following project completion.

SPARC actions successfully supported a wide variety of existing and new agricultural activities, aqua-culture, water security, and a variety of AIG activities. These activities provided substantial benefits with many lessons to be learned and shared. SPARC made a limited assessment of the potential positive and negative impacts of CCA and AIG activities on the community and on the environment. Participatory monitoring and evaluation could have been introduced to better document lessons learned, to instil an adaptive management approach and to ensure the sustainability of the results.

> ***Recommendation 2: Incorporate participatory monitoring and evaluation in project design, whereby beneficiaries choose targets and indicators relevant to them, beneficiaries monitor and report of indicators, and identify adaptive strategies to adjust/modify CCA or AIG actions***
>
> For the SPARC project activities participatory monitoring and evaluation could have included the following:
> - measurement of agriculture/aquaculture yields;
> - measurement of income from agriculture and/or AIG;
> - measurement of groundwater levels

SPARC supported existing and new activities that generated income through the sale of a variety of products (e.g. agricultural products, aquaculture, fish, and manufactured products such as fertilizer, traditional ikat weaving, etc.). The benefits derived by participating communities was not evaluated in the context of a market chain analysis. The ability to access the raw materials needed for production at a reasonable cost and the ability to reach markets and get a fair price are important considerations to maximize benefits to participating communities.

Recommendation 3: Supporting existing or new income generating activities should be accompanied by appropriate market chain analysis

For the SPARC project consideration of market chain analysis could have included the following:

- consideration of the availability and cost of transporting goods to markets;
- investigation of available markets and market value for goods to be sold;
- greater support of cooperative marketing of products; and
- consideration of potential short- and long-term risks (including climate risks) in supply, production and marketing of goods.

Lessons Learned

1. Community facilitation is an effective and crucial project activity empowering women, men, youth and children, it forms community groups, utilizes local knowledge and introduces innovation.
   - the value and importance of community facilitation to project success and sustainability should be reflected in project design, the number of staff involved, the amount of time allocated, and the budget allocated;
   - the quality of community facilitation will strongly influence the success of intended outcomes and outputs;
   - capacity development of community facilitators both as project staff and stakeholders should be included in project design;
   - the success of community facilitation reported by beneficiaries is the (re-) establishment of community working groups, providing increased community collaboration, communication and enhanced food/economic/climate security.

2. Assessment of the incremental economic gains resulting from alternative income generating activities is an important measure of project success.
   - project design should include participatory M&E to record incremental economic gains achieved;
   - micro-loans rather than grants may establish sustainable economic benefits available to a larger number of beneficiaries.

3. Capacity development was consistently reported as important element of the SPARC project by staff and stakeholders.
   - to further enhance and solidify training received and to contribute to project sustainability and replication consideration should be given to building on capacity development over the course of a project
   - refresher or enhancement training for existing and new staff and stakeholders may be planned to take place towards the end of the project cycle

4. Working with government planning staff incorporating project activities into medium and long term planning documents contributes to project sustainability
   - medium and long term plans embed project activities in future government planning cycles;
   - planning documents advocate for project activities through their annual review leading to the development of actions plans and budgets implementing project activities;
   - embedding project activities in national and sub-national planning documents will lead to the replication of project activities beyond pilot communities.

Appendix 1: Terms of Reference

Title: Terminal Evaluation Lead Consultant (International)

Project Name: Strategic Planning and Action to Strengthen Climate Resilience of Rural Communities in Nusa Tenggara Timur Province (SPARC)

Reports to: National Project Manager (NPM) SPARC

Duty Station: Home Based

Expected Places of Travel (if applicable): Nusa Tenggara Timur Province

Duration of Assignment: November – December 2018 (35 working days)

REQUIRED DOCUMENT FROM HIRING UNIT

√	TERMS OF REFERENCE
(8)	**CONFIRMATION OF CATEGORY OF LOCAL CONSULTANT, please select:** (1) Junior Consultant (2) Support Consultant (3) Support Specialist (4) Senior Specialist (5) Expert/ Advisor **CATEGORY OF INTERNATIONAL CONSULTANT, please select:** (6) Junior Specialist (7) Specialist **(8) Senior Specialist**
√	APPROVED e-requisition

REQUIRED DOCUMENTATION FROM CONSULTANT

√	CV/P11
√	Copy of education certificate
√	Completed financial proposal
√	Completed technical proposal

Need for presence of IC consultant in office:

partial (explain)

X intermittent (deliverables-based)

full time/office based (needs justification from the Requesting Unit)

***P*rovision of Support Services:**

Office space:	Yes	X	No
Equipment (laptop etc):	Yes	X	No
Secretarial Services	Yes	X	No

If yes has been checked, indicate here who will be responsible for providing the support services: Signature of the Budget Owner: Fransiska Sugi

BACKGROUND

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. This term of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the **"Strategic Planning and Action to strengthen climate resilience of Rural Communities in Nusa Tenggara Timur"** otherwise known as the "**SPARC Project"** (**PIMS # 4549).**

Rural communities in Nusa Tenggara Timur (NTT) are highly dependent on the climate for their subsistence agricultural production and water resources. Ensuring food and water security is already a major challenge. The climate induced problem that this project is focused on is thus that the impacts of the ongoing and projected changes in climate will very likely exceed the coping capacity of many rural communities. This will result in decreasing security in terms of livelihoods, food and water, affecting rural development in NTT.

There are strong indications that changes in rainfall patterns are already occurring: over the last decade, there has been a growing number of years with a 'false' start of the rainy season, floods and droughts both during dry and rainy season, and high winds. Historical data analysis indicates that extreme rainfall has increased during the last half of the 20th century when comparing 1901-1950 with 1951-2000. Climate change projections prepared up to 2050 for NTT province suggest a likely decrease in September-November rainfall by 2050, with greater decreases likely in the western parts of the Province. During the peak of the rainfall season (December-February) simulated changes are more uncertain, though there is a consistent indication that rainfall will increase during March-May, suggesting a shift of the rainy season (a later start and later end).

Whilst much of the variability in rainfall is currently dependent on ENSO, it is not clear how ENSO will change in the future as currently available models do not include ENSO. There are indications that the El-Niño phenomenon may be becoming more intense and their frequency relative to La Nina has increased since the 1970's1. It is however not clear how this will translate into impacts on NTT's climate in the long-term2. It seems likely that delayed starts to the season will continue to be a problem, especially in the near future, with the potential for increasing damages from increased incidence and intensity of cyclones (high rainfall and strong winds)3,4 Increases in rainfall during the peak and later part of the rainfall season also pose a potential threat to cropping activities (e.g. harvesting and drying rice/corn), though the impact of any such climatic changes will be dependent on the farming system, altitude and location.

The average temperature of NTT is expected to rise by 1-2°C by 20505. Whilst temperature increases will depend on altitude and the proximity of the ocean, any increases in minimum night-time temperatures will likely reduce rice yields6 whereas increases in maximum temperatures may lead to higher evaporation rates during the dry season

[1] Latif M, Keenlyside NS (2009) El Nino/Southern Oscillation response to global warming PNAS December 8, 2009 vol. 106 no. 49 20578-20583

[2] Naylor RL, Battisti DS, Vimont DJ, Falcon WP, Burke MB (2007). Assessing risks of climate variability and climate change for Indonesian rice agriculture. PNAS, May 8, 2007, vol.104, no.19, p7752

[3] Hennessy K, Page C, Bathols J, McInnes K, Pittock B, Suppiah R, Walsh K (2004) Climate Change in the Northern Territory. CSIRO: consultancy report.

[4] The Centre for Australian Weather and Climate Research (2010) Climate Change in the Pacific: Scientific Assessment and New Research | Volume 2: Country Reports: Chapter 3: East Timor (Timor-Leste)

[5] Kirono D. (2010) Climate change in Timor-Leste – a brief overview on future climate projections. Prepared for the Department of Climate Change and Energy Efficiency (DCCEE). CSIRO, Australia. Pp 27

[6] Welch et al. (2010). Rice yields in tropical/subtropical Asia exhibit large but opposing sensitivities to minimum and maximum temperatures. Proceedings National Academy of Sciences (www.pnas.org/cgi/doi/10.1073/pnas.1001222107)

before planting. The former implies reduced production of food, whereas the latter may exacerbate drought and the amount of water required for irrigation, hence making agricultural production more difficult.

In summary, projections are: 1) increased rainfall variability, 2) increased incidence and magnitude of extreme events (floods, droughts, high winds), 3) shift in rainy season (later start, later end), and 4) increased temperature. It is however unknown if the projected mid- to long-term changes are within the adaptive boundaries of the current agro-ecosystems of NTT, or that major shifts in agro-ecosystems can be expected over time. For example, it is unclear if maize production in certain areas can be sustained in the longer term by e.g. improved agricultural practices, or that the agro-ecosystems in these areas become unsuitable for maize. The latter would require farmers in the longer term to shift to alternative crops suitable for such conditions.

According to Indonesia Climate Change Sectoral Roadmap for Marine and Fisheries (2010), a moderate risk level of sea water flooding in coastal areas is to be found on the south coast of the island of Sumba, Sumbawa, Flores to Alor Island. Meanwhile there is a level of high risk on the Saleh Gulf coast of the Sumbawa Island and the Ende beach up to around Larantuka beach on the Island of Flores. Changes in surface wind and ocean circulation and level of precipitation were also predicted to happen in NTT area. These conditions will affect traditional fishermen due to changing in fishing ground and fish availability, which could contribute to the food insecurity particularly in small islands.

Access to water for domestic use is challenged by climate change. During periods of prolonged dry spells in NTT, water sources in and nearby the communities are commonly reported to fall dry. Government support to ensure water security is limited in rural areas. Interviews with communities reported drastic measures taken by households to cope with water shortages. For example, in Sabu Raijua there have been cases where people were not able to bathe for two weeks, affecting personal hygiene. The incidence of dry spells is likely to increase due to climate change. This would increase the burden on women who are responsible for domestic water supply, spending more time fetching water, an activity that also befalls to children in many households. Water quality often deteriorates during periods of drought increasing risks of outbreaks of waterborne diseases such as diarrhoea.

Recognizing the increase of risks from climate change, Indonesian government has issued assessment reports, policies and sectoral guidelines for adaptation to the climate change. The policies included National Action Plan for Mitigation and Adaptation to Climate Change (MoE, 2007), Indonesia Climate Change Sectoral Roadmap (Bappenas, 2010), Second National Communication (2011) and recently in 2012 is the appointment of Climate Change Adaptation task force, led by Bappenas, which is responsible to develop National Action Plan for Climate Change Adaptation. The abovementioned policies and guidelines are the rational for the implementation of climate change adaptation programme in the subnational levels. The results and lesson learned from the project is aimed for contributing to the national discourse and refinement of the national policies on climate change adaptation.

The project was designed to focus on strengthening and developing climate resilient institutions and rural communities centred around livelihoods, food and water security, to pave the way for climate resilient development in NTT. In particular, it will support the following long-term solution with regard to:

Local government and climate resilient development - Local government (including both provincial and district governments) has integrated climate resilience principles in policy, planning and budgeting, and have the institutional capacity to develop, implement and monitor this.

Climate resilient rural communities - Communities will strengthen and diversify their livelihoods in anticipation of further changes in the climate and its impacts. Men and women will have the awareness and information about climate change impacts and adaptation options, and access to technologies, finance and tools.

The essentials of the project to be evaluated are as follows:

PROJECT SUMMARY TABLE

Project Title:	***"Strategic Planning and Action to strengthen climate resilience of Rural Communities in Nusa Tenggara Timur"***			
GEF Project ID:	4340		*at endorsement (Million US$)*	*As of June 30, 2018 (Million US$)*
UNDP Project/ Output ID:	00083625/ PIMS #4549	GEF financing:	**5,000,000 (SCCF)**	**4,885,540**
Country:	Indonesia	IA/EA own (UNDP):	100,000	93,551
Region:	Asia Pacific	Government:	67,873,320	
Focal Area:	Environment Unit	Other (Bank NTT, NGI):	191,165	176,543
FA Objectives, (OP/SP):	Climate Change Adaptation	Total co-financing:	67,873,320	
Executing Agency:	Ministry of Environment and Forestry	Total Project Cost:	5,291,165.00	5,155,634
Other Partners involved:		ProDoc Signature (date project began):		28 January 2013
		(Operational) Closing Date:	Proposed: 31 December 2016	Actual: 31 December 2018

In line with the UNDP-GEF Guidance on Terminal Evaluation (TE), a Lead International Consultant will be recruited to conduct Terminal Evaluation for SPARC project. The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects. The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

II. SCOPE OF WORK, ACTIVITIES, AND DELIVERABLES

Scope of Work

The evaluation shall be conducted to assess Project performance vis-à-vis its targets and expected outputs, and its contribution relative to its objective. It will draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The evaluation will cover the implementation period January 2013 – December 2018.

The specific objectives of the evaluation include:

- To assess project performance relative to its objective and targets, as stated in the Project Document and AMAT (1.1.1.1, 2.2.1, & 2.2.1.1). AMAT can be downloaded from following link *https://www.thegef.org/gef/tracking_tool_LDCF_SCCF*

- To assess the relevance, effectiveness and efficiency of the Project's implementation and strategies in achieving the set outputs and results;
- To determine local capacities developed and level of participation of stakeholders in the achievement of the outputs and results; and
- To identify lessons learned and innovative practices and recommendations to inform the potential scale up of the project.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF-Financed Projects.

Expected Deliverables

Deliverables/ Outputs	Target Due Dates	Review and Approval Required
Draft Inception Report Evaluator provides clarifications on timing and methods.	Nov 2018 (5 days)	UNDP CO Indonesia, Programme Manager and NPM SPARC
Inception Report Finalized methodologies and data collection instrument, analysis (etc.).	Nov 2018 (10 days)	
Presentation and Submission of the Draft Evaluation Report Full report, (per annexed template) with annexes.	Dec 2018 (10 days)	
Final Report* Revised report with annexes and presentation to the project.	Dec 2018 (10 days)	

*When submitting the final evaluation report, the evaluator is required also to provide an "audit trail", detailing how all received comments have (and have not) been addressed in the final evaluation report.

III. WORKING ARRANGEMENTS

Institutional Arrangement

The overall approach and methodology of the terminal evaluation shall be guided by the provisions set forth in the UNDP Handbook on Planning, Monitoring and Evaluating for Development Results and the UNEG Norms and Standards for Evaluation (refer to attached documents). It should be conducted in accordance with the principles outlined in the UNEG Ethical Guidelines for Evaluation.

The evaluation should employ a mixed methods approach, using both qualitative and quantitative evaluation methods and instruments (e.g. documents review, key informant interviews (KIIs), focus group discussions (FGDs), surveys, and observations from project site visits). The evaluator is expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects.

The technical proposal of the Evaluator would have to indicate specific activities, data sources, data collection and analysis methods needed to meet the evaluation purpose and objectives. A set of evaluation questions

covering each of these criteria shall also be drafted by the evaluator as part of the inception report (see Annex C). The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the selected members of the Project Board, GEF Operational Focal Point, UNDP Country Office, Project Team, UNDP-GEF Technical Adviser and relevant PCIC and LGU personnel based in the region. The evaluator is expected to conduct a field mission in NTT Province, including the following project sites:

Sabu Raijua District; ii) Manggarai District; iii) Manggarai Timur District; and iv) Sumba Timur District. Interviews will be held with the following organizations and individuals at a minimum: i) Province and District Bappedas; ii) District agriculturists; iii) BMKG (Stasiun Klimatologi Lasiana-Kupang); iv) agricultural extension workers; v) local NGOs partner; vi) farmer groups; vii) Province and District Environmental Agency; viii) Nusa Cendana University (Postgraduate Programme); and ix) BPTP NTT.

The evaluator will review all relevant sources of information, such as the project document, inception report, project reports – including Project Implementation Reports (PIRs), project budget revisions, Quarter Progress Reports (QPRs), Midterm Review, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

Duration of the Work

The duration of work is 35 days from November to December 2018.

The expected starting date is Nov 2018 with expectation of completion on 31st Dec 2018.

The unforeseen delay will be further discussed by UNDP as basis for possible extension.

The feedback from UNDP and government partners to the submitted report can be expected within 10 working days from the date of submission.

Duty Station

The contractor's duty station will be home-based with travel to Jakarta and NTT province for field visits

The consultant is working on the output-based, thus no necessity to report or present regularly.

Travel Plan

a) The return travel cost from country of origin to Jakarta is to be included in the financial proposal.

b) Travel cost (ticket and daily allowance) to project sites in NTT is to be included in the financial proposal. The duration of field mission to project sites will be 10 days.

EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see Annex A), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: relevance, effectiveness, efficiency, sustainability and impact. A rating scale for each criterion and overall Project performance will have to be defined by the Evaluator and must include a description for each rating as basis for interpretation. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in Annex D.

Evaluation Ratings:			
1. Monitoring and Evaluation	***rating***	**2. IA& EA Execution**	***rating***
M&E design at entry		Quality of UNDP Implementation – Implementing Agency	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance		Financial resources	
Effectiveness		Socio-political	
Efficiency		Institutional framework and governance	
Overall Project Outcome Rating		Environmental	
		Overall likelihood of sustainability	

PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	**UNDP own financing (mill. US$)**		**Government (mill. US$)**		**Partner Agency (mill. US$)**		**Total (mill. US$)**	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/ Concessions								
In-kind support								
Other								
Totals								

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status; b) verifiable reductions in stress on ecological systems; and/or c) demonstrated progress towards these impact achievements.[7]

[7] A useful tool for gauging progress the Review of Outcomes to Impacts (ROtI). ROTI Handbook 2009

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**. Conclusions should build on findings and based on the evidences gathered and processed by the evaluator. Recommendations should be prioritized, specific, relevant and targeted with suggested entity or person in charge to implement the recommendation(s). Lessons generated from the experiences of the project should have broader applicability to other initiatives across regions or area of intervention.

IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in the Indonesia. The UNDP CO will contract the evaluator(s) and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluation team to set up stakeholder interviews, arrange field visits, coordinate with the Government and other participants who will be involved in the evaluation process.

EVALUATION TIMEFRAME

The total duration of the evaluation will be 35 days over a time period of three (2) months according to the following schedule:

Activity	Timing	Completion Date
Preparation of the Draft Inception Report • Inclusive of the initial meetings	5 days	2nd week of November 2018
Submission of the Final Inception Report • Circulation of the draft inception report, consolidation of comments from the Evaluation Review Group (ERG), revision and approval	3 days	3rd week of November 2018
Data Collection Period • Field visits and meetings with partners	10 days	4th week of November 2018
Draft Evaluation Report	10 days	1st week of December 2018
Submission of the Final Evaluation Report • Circulation of the draft evaluation reports, consolidation of comments from the ERG	7 days	3rd week of December 2018

IV. **REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS**
Academic Qualifications: • Master's degree in development economics, development studies, management and other climate change adaptation-related fields. Years of experience: • At least fifteen (15) years' experience with result-based management and evaluation methodologies particularly in the area of sustainable development and/or climate change adaptation with gender sensitive analysis; • Experience in climate finance is an advantage; • Experience working with the UN and/or GEF or GEF-evaluations; • Experience working in Asia-Pacific region.

III. Competencies and special skills requirement:
• Competence in climate change projects management/application. • Demonstrate understanding of issues related to gender and climate change mitigation; experience in gender sensitive evaluation and analysis. • Excellent communication skills; • Demonstrate analytical skills; • Familiarity with the key issues and stakeholders in the agriculture sector of the Indonesia; • Demonstrated interviewing and writing skills with a strong capacity to produce evaluation and terminal reports based on a sound analysis of facts gathered; • Demonstrated ability to assess complex situations particularly in agricultural financing, distil critical issues and to outline forward-looking conclusions and recommendations

V. EVALUATION METHOD AND CRITERIA

Cumulative analysis

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

a) responsive/compliant/acceptable, and

b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weight; 70%
* Financial Criteria weight; 30%

Only candidates obtaining a minimum of **70 point** would be considered for the Financial Evaluation

Criteria	Weight	Maximum Point
Technical		
• Criteria A: qualification requirements as per ToR:	40%	
1. Master's degree in development economics, development studies, management and other climate change adaptation-related fields. Experience in climate finance is an advantage.		10
2. At least fifteen (15) years' experience with result-based management and evaluation methodologies particularly in the area of sustainable development and/or climate change adaptation with gender sensitive analysis;		10
3. Experience working with the UN and/or GEF or GEF-evaluations;		10
4. Experience working in Asia-Pacific region.		10
• Criteria B: Brief Description of Approach to Assignment	60%	
1. Understands the task and applies a methodology appropriate for the task?		25
2. Important aspects of the task addressed clearly and in sufficient detail?		20
3. Is planning logical, realistic for efficient project implementation?		15
• Criteria C: Further Assessment by Interview (if any)	N/A	

VI. EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'

ANNEX A. PROJECT RESULTS FRAMEWORK

This project will contribute to achieving the following: **Country Programme Outcomes 2011-2015:** 2.2. Potential impact of Climate Change (CC) reflected in policy frameworks at all levels. 4.1. GoI is able to minimize the risk of and respond adequately to community conflicts and natural disasters through the application of conflict-sensitive national policies and community initiatives, as well as recovery and disaster risk reduction strategies drawn from international and national best practices. **CPAP Output(s) 2011-2015:** 2.3.3 Policy and guidelines to integrate climate change adaptation associated with DRR at decentralized level developed with appropriate capacity and resources 4.3.1 National and local governments policy and regulatory enabling framework for DRR in target areas designed and implemented
Expected CPAP Indicators 2.3.3.1 Number of provinces which have adopted or mainstreamed climate change adaptation principles into their development plans 2.3.3.2 Extent to which climate change adaptation methodologies (including Climate Risk Management) and interventions associated with DRR are being piloted 4.3.1.3 % of target areas effectively developing and implementing DRR sensitive spatial planning incorporating climate risk reduction
Expected CPD Outcome (s) 2016-2020: Strategic Plan Outcome 1. Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihood for the poor and excluded
Expected CPD Output indicator (s) 2016-2020: 3.8 Policy and technical guidance are in place for integrating Climate Change Adaptation (CCA) and DRR into spatial and local development planning
Primary applicable Key Environment and Sustainable Development Key Result Area: 3. Promote climate change adaptation
Applicable GEF Strategic Objective and Program: OBJECTIVE 1: Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level OBJECTIVE 2: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level
Applicable GEF Expected Outcomes: 1.1 Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas 2.2 Strengthened adaptive capacity to reduce risks to climate-induced economic losses
Applicable GEF Outcome Indicators: 1.1.1: Adaptation actions implemented in national/sub-regional development frameworks 2.2.1: No. and type of targeted institutions with increased adaptive capacity to minimize exposure to climate variability

	Objectively Verifiable Indicators				
	Indicator	**Baseline**	**Targets End of Project**	**Means of verification**	**Risks and Assumptions**
Project Objective[8] *To enable the NTT province to strengthen climate resilience of its rural Communities to improve livelihood, food, and water security.* **(equivalent to output in ATLAS)**	- Annual Provincial and District government Work Plans and budgets approved by provincial and district parliaments that include specific reference to adaptation actions [refer to AMAT 1.1.1.1]	- Climate change is not integrated in provincial budgets and district budgets. The provincial Medium term development plan does not include any reference to climate change	- budget allocation for adaptation actions in the Provincial Annual Work Plan and in the Annual Work Plans of at least three districts from 2014 onward.	- Annual Work Plans approved by provincial parliament and district parliaments	Assumptions: - High level national commitment will enable Senior government officials and politicians to give priority to addressing climate change Risks: - provincial and/or district governments fail to allocate funding to climate resilience due to competing priorities and/or poor understanding of the climate change issues
Outcome 1[9] **/ Activity Result 1:** Institutional capacity developed to integrate climate resilience in sustainable development at provincial and district level	- disaggregated by gender, number of trained people mandated to support climate resilient planning - number and type of targeted institutions with increased adaptive capacity to minimize exposure to climate variability (describe	- no trained people mandated - no systematic institutional capacity development for	- at least 100 trained people are mandated to support climate resilient planning - At least 5 institutes have strengthened their systems, programmes and human resources to	- Annual questionnaire - mid-term evaluation - annual progress reports - survey	Assumptions - key-stakeholders are able and willing to absorb and apply the new knowledge and systems - a well designed approach to human resource development enables trainees to use their knowledge to change attitudes and practices towards an effective approach to climate change adaptation Risks

[8] *Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR*

[9] *All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.*

(equivalent to activity in ATLAS)	number and time) [refer to AMAT 2.2.1] - number and type of provincial and district level policies and programmes which have been adjusted / issued to address climate change resilience	adaptation is ongoing - No integration of climate resilience in provincial and district policies and programmes	better address climate variability - climate change resilience has been integrated in at least NTT's Medium Term Development Plan 2014-2018, and policies and programmes on agriculture and water	- Provincial and district policy documents and decisions	-trained people will be transferred to other positions which are not related to climate resilience -bureaucratic processes may hamper the implementation of institutional capacity development plans - insufficient political will at national, provincial and district level to allocate budget for climate resilient development
Outputs supporting outcome 1: 1.1 A multi-stakeholder dialogue on climate change has been established and institutionalized at provincial and district level 1.2 Staff of government agencies, members of parliament, media, universities and CSOs capacitated to address climate change adaptation 1.3 The provincial government and three district governments have integrated key policies, programmes, and made necessary budget allocations to priority adaptation actions					
Outcome 2 / Activity Result 2: Livelihoods of vulnerable rural communities strengthened in a changing climate (equivalent to activity in ATLAS)	- climate risk reduction activities introduced at local level (list type and scope) [refer to AMAT 2.2.1.1]	- no climate risk reduction and awareness activities are introduced at local level;	- At least 5 types of climate risk reduction measures have been introduced in the three target districts, of which at least three measures are specifically targeting women	- Technical reports; KAP assessment	Assumptions: - sufficient technical capacity and human resources can be mobilized at the local level to implement project activities - communities are committed and able to invest time and effort Project adaptation measures are effective enough to reduce the effects of extreme climate events on lives and livelihoods. Risks:

	- % of households with a lower perception of vulnerability to climate risks due to new adaptation measures being introduced and applied, disaggregated by gender	- currently, the majority of households regard themselves as highly vulnerability to climate risks	- at least 75% of the households that have implemented adaptation measures regard themselves less vulnerable to climate change related risks as a result		- project may face significant delays with community action plans because of disagreements within communities about priorities and beneficiaries, - communities may be unwilling to participate and prefer to continue business as usual
Outputs supporting outcome 2: 2.1: 300 communities in 40 villages and 15 sub-districts have developed a community based climate risk information system 2.2: 150 communities have adjusted subsistence farming practices to more variable and extreme climatic conditions to strengthened food security. 2.3: 100 communities have become more resilient by diversifying sources of income which are less sensitive to climate change 2.4: In 50 communities, water resources infrastructure and management have been improved taking into account projected changes in rainfall patterns. 5.1: 1 CCA-DRR convergence framework analytical study developed to promote effective utilization of resources for resilience building 5.2: Relevant map and data resources to enable application of CCA-DRR convergence initiatives are developed for 6 villages in 3 districts 5.3 3 Local NGOs capacitated to facilitate communities in developing CCA-DRR measures.					

ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATOR

A. Project Document: **Strategic Planning and Action to strengthen climate resilience of Rural Communities in Nusa Tenggara Timur**
B. Project Inception Report (March 2013)
C. Annual Progress Reports (2013-2017)
D. Project Implementation Review (2014 – 2018)
E. Quarter Progress Reports (2014-2018)
F. Annual Work and Financial Plan (2013 – 2018)
G. Project Quality Assurance (2016-2017)
H. Minutes of the Project Board Meeting (1^{st} to 7^{th}) including Board Resolutions
I. Consultants' Reports, Terms of Reference (TORs) and Contracts
    1. Mid Term Review report
    2. Science to practice: lesson learnt from community based adaptation in semi arid region of Indonesia
    3. Local Knowledge on Climate in 4 Districts in NTT
    4. Success Story Books (Manggarai, Manggarai Timur, Sabu Raijua, and Sumba Timur)
    5. Book of Info SPARC
J. Responsible Parties' Reports
    1. Local NGOs' Report
    2. Report of District Coord (2014-2016)
K. Relevant Bills and Policies on Climate Change Adaptation
L. Strategy for Upscaling: Concept note for GCF – Developing Climate Resilience in small scale farming system in NTT
M. Compilation of Information, Education and Communication (IEC) Materials (e.g. newsletters, policy briefs, brochures, translated briefs, posters)
N. Project Tracking Tool (AMAT)

ANNEX C: EVALUATION QUESTIONS

This is a generic list with sample questions, to be further detailed by the evaluator during the inception phase.

Evaluative Criteria Questions	Indicators	Sources	Methodology
RELEVANCE: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
To what extent were the project objectives and outputs aligned with member States' and other project stakeholders' development strategies?			
Were the project's expected accomplishments and indicators of achievements properly designed, time-bound and achievable?			
EFFECTIVENESS: To what extent have the expected outcomes and objectives of the project been achieved?			
How effective was the project in building the capacity of policymaker on (…)?			
To what extent does the project contribute to the objective of enhanced capacity of (…) to use the tools and mechanisms developed under this project to (…)?			
Do the project-related activities give the participants adequate access to the benefits and implications of the project?			
EFFICIENCY: Was the project implemented efficiently, in-line with international and national norms and standards?			
What was the level of involvement of (insert division name) staff in meeting the requests for technical advice?			
How efficiently were human and financial resources used to deliver activities and outputs, in coordination with stakeholders?			
What were the major factors influencing the achievement or non-achievement of the project objectives?			
SUSTAINABILITY: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
To what extent has support from other stakeholders, donors, or other multi-lateral or national partners been obtained to take forward positive outcomes resulting from the project?			
Was there adequate ownership of the project by the end-users, beneficiaries, and was there commitment displayed by them?			
IMPACT: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			

To what extent was environmental sustainability integrated into the design and implementation of the project?			
To what extent is the sustainability of environmental concerns assured?			

ANNEX D: RATING SCALES

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	***Sustainability ratings:***	***Relevance ratings***
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS) 3. Moderately Unsatisfactory (MU): significant shortcomings 2. Unsatisfactory (U): major shortcomings 1. Highly Unsatisfactory (HU): severe shortcomings	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1. Not relevant (NR) ***Impact Ratings:*** 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A)		

[10] www.unevaluation.org/unegcodeofconduct

Appendix 2: Proposed Itinerary

Date	Time	Agenda	Team member(s)	Flight Info	Accommodation
Sunday, 20 January 2019	13:20	Arrive Jakarta Soekarno Hatta Intl	Brent Tegler (Evaluator)	EVA, BR 238	Holdiay Inn Express
Monday, 21 January 2019		Meetings in Jakarta	Evaluator (1)		Holdiay Inn Express
Tuesday, 22 January 2019	07:05 – 12:50 14:00	Travel: Jakarta – Kupang Meetings with Bappeda NTT	Evaluator (1)	GA 438	La Hacienda
Wednesday, 23 January 2019	09.10 – 10.15 11.00 – 12.00 12.00 – 13.00 13.00 – 19.00	Travel Kupag – Waingapu (East Sumba) Meeting with Bappeda Sumba Timur Lunch Field Visit to Napu village	Evaluator (1), Bappeda Sumba Timur (1), DC Sumba Timur, NPM SPARC (1)	TransNusa, 531	?
Thursday, 24 January 2019	08.00 – 19.00	Field visit to Pallanggay and Lai Lanjang village			?
Friday, 25 October 2018	08.00 – 09.00	Travel Waingapu – Kupang Meetings in Kupang?		TransNusa, 532	La Hacienda
Saturday, 26 January 2019	06.00 – 13.00 13.00 – 20.00	Travel: Kupang – Ruteng – Bea Muring (East Manggarai) Field visit and discussion in Bea Muring Back to Ruteng (Manggarai)	Evaluator (1), Bappeda Matim (1), DC Manggarai (1), NPM SPARC (1)	TransNusa, 551	?
Sunday, 27 January 2019	10.00 – 18.00	Field visit to Gapong and Liang Bua village			?
Monday, 28 January 2019	08.00 – 09.00 09.00 – 18.00	Meeting with Bappeda Manggarai Field visit to Wae Mantang village			?

Date	Time	Agenda	Team member(s)	Flight Info	Accommodation
Tuesday, **29 January 2019**	07.35 – 09.00	Travel: Ruteng - Kupang Meetings in Kupang?		TransNusa, 550	La Hacienda
Wednesday, **30 January 2019**	07.00 – 08.00 08.00 - 09.00 09.00 – 19.00	Travel: Kupang – Seba (sabu Raijua). Meeting with Bappeda Sabu Raijua Field visit to Eiada and Bodae village Field visit to Molie village	Evaluator (1), Bappeda Sabu Raijua (1), CIS Timor (1), NPM SPARC (1)	Susi Air, SI 256	?
Thursday, **31 January 2019**	08.05 – 9.00	Travel: Seba – Kupang Meetings in Kupang?		Susi Air, SI 257	La Hacienda
Friday, **01 February 2019**	16:40	Travel: Kupang- Jakarta		GA 457	Holiday Inn Express
Saturday **02 February 2019**	14:20	Travel: Jakarta – Toronto	Evaluator (1)	EVA, BR 238	

Appendix 3: List of Persons Interviewed

Date	Location	Name	Affiliation
Sunday, 20 January	Arrive Jakarta		
Monday, 21 January	MOEF - Jakarta	Dr. Sri Tantri Arundhati	Director for Climate Change Adaptation MoEF
		Tri Widayati	Deputy Director for Manmade Adaptation MoEF
		Christian Usfinit	Technical Officer - Disaster Risk Management & Climate Change Adaptation UNDP Indonesia
		Made Dwi Rani	Project Associate, SPARC project UNDP Indonesia
Tuesday, 22 January	Kupang, NTT	Dr. Evert Y. Hosang	Researcher Indonesian Agency for Agricultural Research & Development
Wednesday, 23 January	Pallanggay Village, East Sumba District	Agustinus K. Marapraing	Head of Kemas Proklim
	Waingapu, East Sumba District	Victor Danguwole Ndima Landupraing	Kepala Bidang Pemerintahan & Pembangunan Manusia, Bappeda Sumba Timur
		Umbu Bahi	District Coordinator, SPARC Project, Sumba Timur
		Deni Karanggulimu	Direktur Koppesda, Implementing NGO Sumba Timur
Thursday, 24 January	Waingapu, East Sumba Distict	Zainal Arifin Abbas	Kepala Bidang Perekonomian dan SDA (Head of Economic and Natural Resources Division)
		Monalisa Gelt	Kepala Sub Bidang SDA
		Bartholomeus Ngg. Landumetta	Head of Bappeda Sumba Timur
	Napu Village, East Sumba	Hendrik Hamba Pulu	Head of Village and of Kemas Proklim
		Umbu Herung Majangga	Secretary of Kemas Proklim
Friday, 25 January	Kupang	Dr. Welhelmus Mella	Lecturer, Climate & Development Program, University of Nusa Cendana

Date	Location	Name	Affiliation
Saturday, 26 January	Kupang		
Sunday, 27 January	Kupang		
Monday, 28 January	Seba, Sabu Raijua District	Haludin Abdullah	Secretary Bappeda
		Antonius L. Atawollo	Head Infrastructure Division (former Head of Economic Development), Bappeda Sabu Raijua
		Robert John Donulawang	CIS Timor
	Seba – Government Housing Compound	Amandus Lobo	Head of Sub Division – Agriculture Extension, Agriculture Agency of Sabu Raijua
	Seba - hotel	Marthen Luther Biha	Village Facilitator – CIS Timor
		Jusuf Novrianus Meda	Village Facilitator – CIS Timor
Tuesday, 29 January	Eiada Village	Yerison Dida Hawu	Village Leader
		Kelvin Lena Wolo	Head Kemas Proklim
		Village group	x3 women, x 5men, x3 youth (1 male, 2 female)
	Bodae Village	Yusak Danga	Head of Kemas Proklim
		Community group	x3 women, x5 men
Wednesday, 30 January	Seba - hotel	Laurensius G.M. Ola	Staff Environment Agency, Sabu Raijua District
	Molie Village	Semy Nalle	Village Head and Head of Kemas Proklim
		Hendrianus M. Djami	Secretary Kemas Proklim
		Martinus Megor	Head Fisher and Seaweed Group
	Molie Village Household	Weaving group	x2 women, x2 men
	Molie Village	Markus Lay	Previous Village Head
	Seba - hotel	Fransiska Sugi	SPARC Project Manager
Thursday, 31 January	Kupang	Apolinaris Geru	Head of Lasiana Climatology Station-Kupang, BMKG

Date	Location	Name	Affiliation
		Ir. Wayan Darmawa, MT	Head of Bappeda NTT/DNPD SPARC
		Boy R. Nunuhitu	Head Group Line Micro Business, Bank NTT
Friday, 1 February	MoEF Jakarta	Dr. Sri Tantri Arundhati	Director for Climate Change Adaptation MoEF
		Tri Widayati	Deputy Director for Manmade Adaptation MoEF
	UNDP Jakarta	Christian Usfinit	Technical Officer - Disaster Risk Management & Climate Change Adaptation UNDP Indonesia
		Made Dwi Rani	Project Associate, SPARC project UNDP Indonesia
		Hery Desa	Budget Management Associate – Environment Unit, UNDP

Appendix 4: Summary of Field Visits

Date	Location	Comments
Monday, 21 January	Jakarta	Startup meeting with MoEF & UNDP
Tuesday, 22 January	Travel: Jakarta to Kupang, NTT	Meeting with representative of Indonesian Agency for Agricultural Research & Development
Wednesday, 23 January	Travel Kupang to Waingapu, East Sumba District Pallanggay village	Field Visit to Pallanggay village Evening meeting with District Coordinator SPARC, Bappeda of East Sumba District, and director of Koppesda in Waingapu
Thursday, 24 January	Waingapu	Meetings with Economic Bureau and Natural Resources and Head of Bappeda
	Napu Village	Meeting with village head and Kemas Proklim
Friday, 25 January	Travel Waingapu – Kupang	Meetings in Kupang with representative of Climate & Development Program, University of Nusa Cendana
Saturday, 26 January	Travel Kupang – Ruteng flight cancelled due to rain and cloud in Ruteng	Unable to conduct field visits in Manggarai and East Manggari Districts due to ongoing rain cancelling flights
Sunday, 27 January	Kupang	
Monday, 28 January	Travel Kupang to Seba, Sabu Raijua District	Meeting with government staff (Secretary and head of infrastructure division of Bappeda Sabu Raijua, and Staff of Agriculture Agency)
Tuesday, 29 January	Field visits to Eiada Village and Bodae Village	Meetings with Head of Eiada village, Head of Kemas Proklims and Kemas Proklim members
Wednesday, 30 January	Seba and field visit to Molie Village	Meetings with Head of Molie village/ Head of Kemas Proklims, Kemas Proklim Boards, community groups.
Thursday, 31 January	Travel Seba to Kupang	Meetings in Kupang Meeting with Head of Bappeda NTT/DNPD SPARC
Friday, 1 February	Travel Kupang to Jakarta	Meetings with MoEF and UNDP debrief
Saturday 2 February	Travel Jakarta to Toronto	Arrive Toronto Sunday February 3

Appendix 5 List of Documents Reviewed

The evaluation reviewed and analyzed relevant documentation as listed in the TOR, documents reviewed include:

- Project Document: Strategic Planning and Action to strengthen climate resilience of Rural Communities in Nusa Tenggara Timur (Original 2013 and Revised 2016)
- Project Inception Report (March 2013)
- Project Implementation Review (PIR) 2014 – 2018
- Quarterly Monitoring Report (QMR) – Internal Project Assurance Reports (IPAR) 2015-2018
- Project Quality Assurance (2016-2017)
- Minutes of the Project Board Meeting (1st to 7th) including Board Resolutions
- Mid Term Review report
- Identification of an Exit Strategy
- Climate Change Adaptation and Disaster Risk Reduction (CCA-DRR) Convergence
- Science to Practice: Lesson Learnt from Community Based Adaptation In Semi Arid Region of Indonesia
- Provincial Climate Public Expenditure and Institutional Review (CPEIR) East Nusa Tenggara of Indonesia
- Indonesia Experience To Scale Up Subnational Climate Action MoEF PowerPoint
- SPARC Best Practices brief
- A SPARC for Adaptation
- Relevant government policies on Climate Change Adaptation
- Project Tracking Tool (AMAT) project's LogFrame
- UNDP Country Programme Action Plan (CPAP) 2011 - 2015
- UNDP Country Programme Document for Indonesia (2016-2020)

Appendix 6: Evaluation Questions Matrix

Evaluative Criteria Questions	Indicators	Data Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
1. Is climate change an important issue for Provincial and District government Bappeda development planning? Please explain.	Responses received from interviews.	Bappeda staff	Key stakeholder interviews
2. Is climate change included in national, provincial and district government planning and policies? Which government departments?	Responses received from interviews.	Bappeda staff Government planning and policy documents	Key stakeholder interviews Document review
3. Is it possible for Provincial and District governments to include actions and supporting budget lines to address climate change issues?	Responses received from interviews.	Bappeda staff	Key stakeholder interviews
4. Is climate change an important issue for beneficiaries living in target project communities?	Responses received from interviews and focus group discussions	Community leaders and members	Key stakeholder interviews and Focus group discussions
5. Is it important for the Provincial and District government to assist communities impacted by climate change?	Responses received from interviews and focus group discussions	Bappeda staff Community leaders and members	Key stakeholder interviews and Focus group discussions
6. Has the SPARC project included community members, including women, youth, persons with disability and elders?	Responses received from interviews and focus group discussions	Bappeda staff Implementing partners Community leaders and members	Key stakeholder interviews and Focus group discussions
Effectiveness: To what extent have/will the expected outcomes and objectives of the project been/be achieved?			
7. Has Bappeda development planning for climate change been improved by the SPARC project? Please explain how.	Responses received from interviews and focus group discussions Incorporation of CCA/DRR activities in Bappeda planning documents Budget lines included for CCA/DRR activities Capacity of Bappeda staff to understand and develop appropriate planning responses for climate change	Bappeda staff Community leaders and members Provincial and District planning documents and budgets	Key stakeholder interviews and Focus group discussions Document review

Evaluative Criteria Questions	Indicators	Data Sources	Methodology
8. Has the project increased the dialogue on climate change among government agencies, among communities members and between government and communities?	Responses received from interviews and focus group discussions	Bappeda staff Community leaders and members Meeting minutes	Key stakeholder interviews and Focus group discussions Document review
9. Have community members identified the current and future climate change impacts? What are they?	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
10. Have communities adapted subsistence farming practices to the climate change impacts identified? Please explain how.	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
11. Have communities adopted alternative sources of income that are less sensitive to climate change impacts? Please explain how.	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
12. Have communities improved water resource management and infrastructure to address current and future climate change impacts? Please explain how.	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
13. Where there any unexpected results (positive and negative) from the SPARC project? What were they?	Responses received from interviews and focus group discussions	Bappeda staff Implementing partners Community leaders and members	Key stakeholder interviews and Focus group discussions
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
14. From a "*value for money*" perspective, have SPARC project activities delivered the intended results? Could anything be done differently to improve delivery of the intended results?	Responses received from interviews and focus group discussions	Implementing partners Project budgets	Key stakeholder interviews and Focus group discussions
15. Has the SPARC project included at-risk and most vulnerable communities and community members, including ethnic minorities, women, youth, children, persons with disability and elders?	Responses received from interviews and focus group discussions	Implementing partners Community leaders and members	Key stakeholder interviews and Focus group discussions
16. Did the SPARC project include effective monitoring and evaluation with a responsive adaptive management approach?	Responses received from interviews and focus group discussions	Implementing partners	Key stakeholder interviews and Focus group discussions
Results: What are the current actual, and potential long-term, results of activities supported by the project?			

Evaluative Criteria Questions	Indicators	Data Sources	Methodology
17. Has climate change been included in provincial and district government planning and policies? Which policies?	Responses received from interviews.	Bappeda staff Government planning and policy documents	Key stakeholder interviews Document review
18. Has climate change been included in provincial and district government budgets? Please specify.	Responses received from interviews.	Bappeda staff Government planning and policy documents	Key stakeholder interviews Document review
19. Which government departments are involved the response to climate change?	Responses received from interviews.	Bappeda staff Government planning and policy documents	Key stakeholder interviews Document review
20. How do provincial and district governments assist communities impacted by climate change?	Responses received from interviews and focus group discussions Government planning documents and Budget lines Capacity of provincial and district government staff	Government staff Community leaders and members Provincial and District planning documents and budgets	Key stakeholder interviews and Focus group discussions Document review
21. What evidence is there that communities are implementing a climate risk information system?	Responses received from interviews and focus group discussions Community climate change risk management plans and/or minutes from regular meetings	Community leaders and members Documents	Key stakeholder interviews and Focus group discussions Document review
22. What climate change adaptation measures have been implemented by community members for subsistence agriculture?	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
23. What alternative income generation activities resilient to climate change impacts have community members initiated?	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
24. What water resource management and infrastructure responsive to climate change impacts have community members initiated?	Responses received from interviews and focus group discussions	Community leaders and members Direct observations	Key stakeholder interviews and Focus group discussions Village walks
Sustainability: Are the conditions in place for project-related benefits and results to be sustained?			

Evaluative Criteria Questions	Indicators	Data Sources	Methodology
25. Was a SPARC project sustainability plan developed and implemented?	Actions identified in sustainability plan implemented	Implementing partners Sustainability plan	Key stakeholder interviews and Focus group discussions Document review
26. Will provincial and district government planning documents and budgets continue to include climate change actions in the future?	Responses received from interviews	Bappeda staff	Key stakeholder interviews
27. How has local capacity been enhanced to enable climate change planning and implementation in provincial and district governments?	Responses received from interviews and focus group discussions	Bappeda staff Implementing staff	Key stakeholder interviews and Focus group discussions
28. When project funding ends, what climate change activities initiated by the SPARC project will continue to be implemented and maintained in the community?	Responses received from interviews and focus group discussions	Community leaders and members	
29. Do communities have the technical, economic and political capabilities of sustaining the positive results of the SPARC project?	Responses received from interviews and focus group discussions	Community leaders and members	Key stakeholder interviews and Focus group discussions
30. Is there evidence of scaling up and/or replication of project activities?	Responses received from interviews and focus group discussions	Bappeda staff Implementing staff Community leaders and members	Key stakeholder interviews and Focus group discussions

Appendix 7: Evaluation Consultant Code of Conduct & Agreement

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form

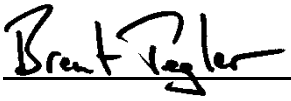
Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Brent Tegler

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *place* on *date*: Fergus, ON Canada 21 January, 2019

Signature: 

Appendix 8: Report Clearance Form

Evaluation Report Reviewed and Cleared by:

UNDP Country Office Indonesia

Name: Christian Ustinit

Signature: _____ Date: April 2019

UNDP GEF Regional Technical Advisor

Name: Yusuke Taishi

Signature: _____ Date: 31 May 2019