





Final Evaluation

Low Emission Climate Resilient Development Programme (LECReD) in the Republic of Maldives

Final Repot

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List of Abbreviations

AWP	Annual Work Plan
CSES	Communication and Stakeholder Engagement Strategy
CSO	Civil Society Organisations
CBDRM	Community-based Disaster Risk Management
CERT	Community Emergency Response Team
DRR	Disaster Risk Reduction
FAO	Food and Agriculture Organization
IWG	Island Working Groups
IWRM	Integrated Water Resource Management
JAWP	Joint Annual Work Plans
LCCF	Laamu Climate Change Forum
LECReD	Low Emission Climate Resilient Development
LGA	Local Government Authority
LSA	Land and Survey Authority
LWG	Laamu Working Group
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MEE	Ministry of Environment and Energy
MOFT	Ministry of Finance and Treasury
MOU	Memorandum of Understanding
NBS	National Bureau of Statistics
NDMC	National Disaster Management Centre
NGO	Non-Governmental Organization
PB	Programme Board
PCU	Programme Coordination Unit
РТС	Programme Technical Committee
PUNOs	Participating United Nations Organizations
RCO	Resident Coordinator's Office
SDG	Sustainable Development Goals
SWM	Solid Waste Management
UN	United Nations

- UNCT United Nations Country Team
- UNDAF United Nations Development Assistance Framework
- UNDP United Nations Development Programme
- UNFPA United Nations Population Fund
- UNICEF United Nations Children Fund
- UNIFEM United Nations Development Fund for Women
- UNODC United Nations Office on Drugs and Crime
- UNOPS United Nations Office for Project Services
- VCA vulnerability capacity assessment
- WDCs Women's Development Committees
- WHO World Health Organization

Executive Summary

The report presents the findings from the final evaluation of the "Low Emission Carbon Resilient Development" Programme in the Republic of the Maldives (further in the text – the LECReD programme) conducted in November-December 2017.

The strategic approach of the joint programme is to build on the institutional and local comparative advantages of the Participating UN Organizations (PUNOs) in order to leverage the extensive skills, knowledge and operational experience of the UN County Team. The evaluation report reflects this approach and does not mention individual agency-based contributions in detail and used the ONE UN approach to present the results as joint UN work supporting Maldives' endeavours in the area of Climate Change.

The evaluation is a qualitative study based on interviews and group discussions with over 70 people, including national, island and atoll public authorities, local civil society, beneficiaries, stakeholders, PUNOs and programme staff. Overall the respondents found that the programme was highly relevant and managed to generate some positive impact (although levels vary depending on the output, see section 3 "Evaluation Findings"). Impact and sustainability are not easily identifiable at this stage and will mainly depend on the commitment of stakeholders (both public and private) to pursue change and keep up the momentum. Effectiveness and efficiency are ranked "medium".

At the global level, the evaluation concluded that LECReD has overcome many of the difficulties that delayed its kick off in November 2013. Some challenges (in particular related to governance and political context) persisted to the end. The mid-term evaluation in February 2016 noted multiple issues with regard to programme management structures and implementation arrangements. LECReD has managed to pick up pace and despite a delay of almost 15 months compared to original planning, it will have completed all major deliverables by March 2018 (the expected end date). The PCU and PUNOs have deployed a considerable effort and that is commendable.

The following are among the programme's most notable achievements:²

- The establishment and gradual strengthening of platforms for dialogue, debate and partnerships between the key stakeholders. These platforms include the island and Atoll working groups and were essential for the launching and implementing the programme activities.
- Synergies created through activities. Community members from different sectors were engaged in dialogue relating to different thematic areas (climate change, food security, water security, energy security, agriculture, fisheries, public health, waste management, governance etc.). The engagements varied from multisector dialogue sessions, targeted trainings, study tours, climate change forums and visioning exercises.
- The momentum achieved through synergies and dialogues was maintained and replicated through the Small Grants Scheme. For example, four councils submitted proposals on Solid Waste Management and won grants to implement these systems in

² LECReD's stage two focuses on Waste Management and is expected to be among the programme's achievements. At the time of the final evaluation this component has just started. Therefore, the evaluator could not include it among the activities examined in the framework of this exercise.

their islands. One councils submitted a winning proposal on improving water security and increasing resilience to climate change in the island through establishing a rainwater harvesting mechanism. LECReD supported the development of roof rain water harvesting guidelines.

- The capacity of the Health Units and Laamu community to respond to emergencies has been strengthened. LECReD provided and prepositioned an Interagency Emergency Health Kit 2015 (IEHK), which is a standardized kit of essential medicines, supplies and equipment in Laamu Atoll. This kit is designed to meet the health needs of 10,000 people for 3 months during emergencies. In addition, health workers and community have been trained on responding to emergencies including on First AID.
- Given the climatic vulnerability of the country, LECReD launched a Nationwide Vector Control Campaign jointly with the Ministry of Health, the Atoll Council and the Atoll Hospital in September 2016 to increase awareness about Dengue, Chikungunya and Zika. Through the campaign community was engaged in adopting behaviours to prevent infection, seek early treatment, and reducing vector breeding sites.
- The Local Government Authority adopted in 2016 the revised local development planning methodology, which included elements on climate change adaptation, mitigation, disaster risk reduction and gender equality. The methodology has been used nationwide to develop the Island Development Plans and Atoll Development Plans for the period 2017-2021. A planning handbook and a video on development planning and financial planning was further developed to support the local development planning process.
- The development and launching of the LaamuInfo database and information platform Laamu Koshaaru. The system will allow island and atoll authorities to manage administrative data from different sectors such as land use, energy, agriculture, and food security. The database facilitates analyses, ensure safe and secure storage of data, and renders data accessible to all. The LaamuInfo database supports evidence-based decision making by providing users with national statistical data from the past 30 years and similar studies conducted. The database complements the atoll/island development planning process.
- The "Review of the National and Local Level Institutional and Governance Arrangements and Legislative Frameworks" carried out in 2016 is the most comprehensive review of the legislative, institutional and governance arrangements conducted in the Maldives to date. The review was also accompanied by a Capacity Development Roadmap, advocacy materials, tools and recommendations for building capacity required for climate resilient development.
- The Integrated Energy Resource Assessment provides comprehensive data specific to Laamu Atoll on energy sources, usage and patterns to inform the local development planning process. The assessment brings information that has never been collected before on the different types of energy being used in Laamu Atoll while also determining the various energy use patterns by end users including households, schools, government offices and the different economic sectors.
- A survey of the natural resources available in Laamu Atoll provides data on available land, land use, terrestrial and marine resources. The information is key to local and central level planning and contributes to the National Geographic Information System.
- Solar Panel Systems were installed in 11 schools across Laamu Atoll, expected to bring an overall reduction in electricity costs of 53,000 USD per year (estimate) and saving over 840,000 litres of diesel per year. In addition, a training programme was conducted

for the local utility staff (Fenaka Island Office and Regional Office) and the school staff regarding solar energy and maintenance of the solar panel systems.

- Vulnerability and Capacity Assessments and Disaster Management plans to complement atoll/island development planning carried out in all 11 inhabited islands of Laamu atoll. Both the VCA and DM plans strengthen the capacity of communities to enhance their climate resilience by understanding the risks faced and how to address them through proper island-level planning. They also provided valuable input to the PUNO's in designing their support intervention to the LECReD programme.
- Vulnerability and Adaptation assessment laid the foundation for the LECReD work in the Laamu Atoll. High priority climate sensitive health risk identified through the assessment included diarrhoea, food borne disease, vector borne disease, nutritional problems, and mental stress. Based on the report, LECReD devised and implemented mitigation measures to protect health from climate change.
- LECReD provided technical support to conduct a survey of health care facilities vulnerability to disasters during October 2014. The Hospital Safety Index occupies a central place in local, national and global efforts to measure the functioning of hospitals in emergencies and disasters. Based on the assessment of hospital safety index, a plan has been developed for addressing urgent, medium-term, and long-term improvements to infrastructure and relevant health systems in the country.
- Challenges in the provision of drinking water in Laamu Atoll needed serious attention. To address these issues water quality monitoring and surveillance guidelines were developed, water testing kits were procured and health staffs were trained on its use. To ensure safe water in hospitals, Reverse Osmosis water purifiers have been provided and used in all health centres of the Atoll.
- LECReD provided the Ministry of Environment and Energy with air quality monitoring equipment. The country can now generate regular local information on quality of air. This information will support to identify health hazards, prioritize activities to address the issues, monitor progress and report to national and international bodies.
- A survey of the natural resources available in Laamu Atoll provides data on available land, land use, terrestrial and marine resources. The information is key to local and central level planning and contributes to the National Geographic Information System.

The evaluation noted the following **remaining challenges**:

- **Confusion around local vs national responsibilities.** No clear intent or clarity from the national level with regard to decentralization. As a consequence, the building of administrative capacity in the islands is not likely to continue. The knowledge and shift in mind-set brought by LECReD interventions in terms of planning for sustainable and climate resilient development is likely to diminish over time. The councils will most probably continue to have insufficient resources (both human and financial) to carry out planning and implementation, let alone monitoring and enforcement. None of the recommendations for actions made as a result of LECReD assessments are going to work if climate resilience, waste management and conservation efforts are not enforced. However, this represents an external risk and is beyond LECReD's programme influence.
- Weak Institutions and Coordination. One of the core LECReD's activities at the national level was coordinating with the participating ministries and national agencies. The PCU and PUNOs have put a lot of time and effort in ensuring that national stakeholders were fully on-board. Minutes of the Programme Board meetings keep track of the decisions taken and the participating officials. Nevertheless, one of the main

challenges mentioned by all respondents was the weakness of institutions in following through on prior agreements. The process largely depended on the people in charge and there were instances when it was reversed once the staff in question was no longer employed. Another aspect impeding progress was limited coordination among units within a ministry, let alone between ministries. Conflicting messages and duplicating initiatives often arose as a result of poor coordination and / or political issues.

- Lack of strong national ownership. At the local level, the level of ownership is higher due to the presence of the PCU in the Atoll and the fact that the bulk of programme activities were carried out locally. Despite reported commitment from the Atoll President and Vice President, the evaluation could not identify national 'champions' that would maintain LECReD's momentum and achievements after the programme's end. Even though the leaders of the Atoll appear to be strong advocates for LECReD, limited resources and coordination (discussed in points 1 and 2 above) will curtail these intentions in the long term.
- Limited linkage between programme components. By its design LECReD provided the overall framework for a joint programme. However, many respondents argued that internal co-ordination 'could have been better' and more efforts should have been made in executing a more comprehensive, interlinked and coherent programme. Some respondents noted that the programme is to a certain extent 'a repackaging of existing agency projects', which is not necessarily a negative thing. However, the vertical links between the programme components could have been improved in view of avoiding the impression of a patchwork of activities. The Joint Work Plan appears to be a collection of activities mainly held together by a financial framework and lacking a programmatic approach. Some activities have unclear result chains (i.e. it is unclear how it will contribute to the following activity that is logically linked to it) and overall the impression is that activities were treated in a stand-alone mode rather than as part of a comprehensive approach (i.e. the focus appears to be on "getting things done" rather than "getting things done in a sequential and coherent way").
- Need for more realistic planning. While having demonstrated some achievements, LECReD faced challenges in performing efficiently. The programme has suffered from delayed implementation and, as a consequence, from time pressure to deliver. This has resulted in performance that was sometimes overlapping and not leading to cost effectiveness or cost cutting. One of the problems highlighted by several sources was the work plan that planned activities in a 'cumbersome' way and put additional strain in terms of timeline for delivery on the agencies that already had low organisational and human resources capacity.
- Need for improved internal reporting, monitoring and evaluation. Despite the established monitoring framework, the PCU noted irregular reporting on data collection, monitoring, and evaluation from the participating PUNOs. On the other hand, respondents highlighted the absence of a clear baseline (for some activities there was no baseline to start with) and the complexity of the M&E system, with its many indicators, of which many were difficult to measure (i.e. not being SMART). It has been suggested that despite its complexity, the valuation matrix did not capture results to the full extent. Some respondents suggested that a "simpler and more practical" approach could have improved overall administration and management of the programme.
- **Co-ordination with other donors remains an area for improvement**. This is an aspect that goes beyond LECReD's control. Despite repeated efforts from the programme team and UNDP as lead implementing agency, coordination among donors in the Maldives remains very weak. This is due in part to the fact that an institutional

coordination mechanism doesn't exist (e.g. there is no national ministry taking the lead on that), and in part due to the fact that many donors only have a liaison officer in the country and no permanent official who can speak on behalf of the institution.

Introduction

The report contains four sections.

The first section lays out the methodology and the framework used for analysis. The LECReD final evaluation is a qualitative study building on observations, interviews and focus group discussions in Male and on 11 target islands in the Laamu Atoll.

The second section sets the context. We look at the governance and policy aspects in the Maldives in the areas relevant to LECReD intervention: governance, climate change, and gender. These elements are important because they highlight the external risks beyond the programme's control that had a direct bearing on LECReD implementation.

The third section presents the evaluation findings. First, the report looks at the programme performance globally including design and management structures, stakeholder participation, communication and knowledge sharing strategy. The report lists the programme's achievements, as well as the remaining challenges. Second, the report analyses individual programme outcomes including specific results on stated targets.

The fourth and final section draws on the lessons learnt and makes recommendations for future interventions.

1. METHODOLOGY

The Assignment

The purpose of this assignment was to conduct the final evaluation of the LECReD programme. The evaluator worked in close consultation with the RCO in the Maldives and the PCU.

The final evaluation provides stakeholders with an overall independent appraisal of LECReD programme performance and impact. It also contributes to accountability, and records achievements, good practices and lessons learnt from implementation.

Methodology

The evaluation process had three stages: desk assessment, field work, and report drafting and peer review.³ A debriefing session was held on 7 December 2017 in Male' with programme staff and the PUNOs to share preliminary conclusions and collect initial feedback.

The evaluator held meetings and site visits in Male' and on all the participating islands in Laamu Atoll from the 25th of November to the 7th of December 2017⁴. The field work focused on gathering on-site information and data. The evaluator conducted site visits with samples of beneficiaries, grantees, and stakeholders as a verification method for initial findings gathered from the desk assessment. The evaluator held key informant interviews and focus group discussions to get a first-hand exposure to the results of the programme interventions⁵. The respondents included national government officials, island and Atoll council staff, local civil society, grantees, beneficiaries, implementation partners, stakeholders, PUNOs and programme staff.⁶

Limitations

Overall the evaluator conducted the assignment without any incidents. Nevertheless, the evaluator would like to note the following limitations in the process.

The main limitation is that the final evaluation was conducted at least 4 months prior to the end of the programme (expected in March 2018). Therefore, some activities could not be assessed or included in the report (notably LECReD's second stage focusing on Waste Management). The PCU staff's contracts ended before the evaluation was completed, which was unfortunate as the PCU had the task of compiling information from all PUNOs, national and local stakeholders. At the time of writing this report, the evaluator did not have access to progress or activity reports focusing on results achieved in 2017 as they were under preparation.

³ Please refer to Appendix 2 "The Evaluation Matrix" for more details on the methods and tools used.

⁴ In Laamu Atoll, the evaluator interviewed 51 persons in total of whom 42 men in decision-making positions and only 7 women (4 WDC in Maabaidhoo, 3 assistants in council meetings).

⁵ Please refer to Appendix 1 "Interview Protocol" for the list of evaluation questions.

⁶ Please refer to Appendix 3 "Schedule of Meetings" for the full list of persons and organizations met during field work.

The evaluation findings are based largely on the views of respondents with a vested interest in the programme, and, therefore, their responses may have been potentially biased regarding impact and outcomes.

During interviews or focus group discussions, participants were, on occasion, uncomfortable or unwilling to share information that would not reflect well on them and their social environment. For example, the evaluator found that some participants hesitated to sound critical or too open about shortcomings during the group discussions on governance (e.g. relationships with central and / or atoll authorities).

In order to reduce the effect of these biases, the evaluator ensured that respondents understood the confidentiality of responses, incorporated responses from non-beneficiaries, and requested that respondents provide a rationale for their answers, including examples of specific activities and actions that contributed to reported outcomes.

Evaluation Criteria

The following OECD – DAC criteria⁷ were used during the evaluation: Relevance, Effectiveness, Efficiency, Impact and Sustainability. Table 1 below provides the assessment elements that guided the evaluation process.

Criterion	Assessment
Relevance	was assessed both in terms of alignment of programme objectives with country and UN policies for climate change and the needs of the Laamu Atoll, as well as programme design features geared to the achievement of objectives.
Effectiveness	measured the extent to which the programme's objectives were achieved taking into account their relative importance.
Efficiency	indicates how economically resources/inputs were converted into results.
Impact	refers to the changes that occurred or are expected to occur in the lives of the people in Laamu Atoll (whether positive or negative, direct or indirect, intended or unintended) as a results of programme interventions.
Sustainability	indicates the likely continuation of programme benefits beyond the phase of funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the programme's life.

Table 1. Evaluation Criteria and Assessment

In addition to the criteria listed above, the evaluator also analysed the level of involvement of stakeholders in the implementation of the programme as well as the programme's knowledge management, outreach and communication strategy.

⁷ https://goo.gl/ZH8XtB

Grading System

The colour grading system provides a quick overview of progress under each criterion. It is helpful in identifying well performing and problematic areas. A three-colour scale was used with the following categories: (i) Green – good or very good; (ii) Orange - with problems; (iii) Red – off track or with serious deficiencies.

Table 2. The Colour Grading System

Colour	What it means
	The situation is considered satisfactory overall and if some issues were
Good/very	mentioned, they did not call into question the project and were solved by
good	project team / stakeholders.
	There were issues which needed to be addressed. Necessary improvements
Medium	did not however require a major revision of the activities and/or
	implementation arrangements.
	There were serious deficiencies which required major adjustments,
Deficiencies	revisions or cancellation of activities, components, or implementation
	arrangements of the project.

Progress since mid-term evaluation

The mid-term evaluation of the LECReD programme was conducted by an external expert in February 2016. The expert formulated 22 recommendations and a set of actions for follow-up. The final evaluation concluded that most of the recommendations have been achieved, although some have been completed partially. Appendix 5 lists the recommendations made, the Management's response, and overall progress achieved by the final evaluation. The main issues raised by the mid-term evaluation are discussed in this report (the table in Appendix 6 refers to the specific sections).

2. THE PROGRAMME

The Maldives is a young democracy attempting to build on economic and human development gains, but still challenged by deep socioeconomic, environmental and political issues.

The Maldives is a widely-dispersed island country comprising 1,192 small coral islands with a population of 400,000 spread across 187 inhabited islands. Within the past decade the Maldives moved from poverty to middle-income status (largely due to a rapid expansion of high-end tourism) and was hailed as a Millennium Development Goal Plus country⁸.

Over the past decade, the authorities have launched large infrastructure investment projects. These include the expansion of the international and regional airports, development of major regional hubs and land connectivity in the greater Male' area, as well as investment in harbours, sewage systems and desalination plants. All these projects aim at addressing the country's development challenges, mitigating the impact of climate change, protecting inhabitants and physical infrastructure, as well as increasing demand for the tourism industry and ancillary services. Diversifying the economy beyond tourism and fishing, reforming public finance, improving health outcomes, increasing employment opportunities, and combating corruption, cronyism, and a growing drug problem are short-term challenges facing the government⁹.

Governance

Maldives has a complex political situation, weak government institutions, a high fiscal deficit and public debt. There is growing political instability ahead of Presidential and Parliamentary elections due in 2018 and 2019 respectively. Government institutions remain relatively weak¹⁰.

The Maldives experienced a significant set of governance changes since the adoption of a new Constitution in 2008. During 2009 seven provincial administrations were formed and the heads of these administrations were appointed by the President. In April 2010, the Decentralisation Act was passed by the parliament. This act formalised the roles and responsibilities of Atoll and Island Councils and required that they be democratically elected. However, the Decentralisation Act did not include any role for the provincial administrations. The Decentralisation Act provided for the establishment of a Local Government Authority to which Island and Atoll councils are accountable. The LGA was established in late 2010 and the first local council elections were held in February 2011.

It is in this context of decentralization and devolution of powers to sub-national entities that the LECReD programme was designed in 2011 – 2012. However, after the presidential elections in the second half of 2013, a key challenge to thinking about green growth and development in the Maldives became the question of whether the country was centralising or decentralising¹¹.

⁸ Third national MDG Report from 2010 states that Maldives has achieved five out of eight Millennium Development Goals ahead of the 2015 deadline.

⁹ Human Development Report Maldives (2014) « Bridging the Divide: Addressing Vulnerability, Reducing Inequality » http://hdr.undp.org/sites/default/files/maldives_hdr2014_full_report_0.pdf ¹⁰ World Bank Country Report, October 2017,

http://documents.worldbank.org/curated/en/737921507887264006/Maldives-Country-snapshot

¹¹ Discussed in detail in « Climate Finance and Local Development in Laamu Atoll », Final Report, October 2016, Jonathan Carter, Cornerstone Economic Research, commissioned by UNDP Maldives in the framework of LECReD.

This is indeed the biggest uncertainty LECReD has had to face in planning and delivering activities. While the Decentralization Act confers a number of powers on atoll and island councils, there is also a range of functions that were never meaningfully assigned to them even though the legislation requires it. More specifically, the abilities of councils to raise the revenues envisaged in the Decentralisation Act are doubtful. To this date, it remains unclear whether the councils would grow and expand their capability to make and support the necessary investments or whether their responsibilities would shrink. The Laamu Atoll, along with other councils in the country, has been caught in a situation where it is required to develop plans and take responsibility for future development of its islands, but it is not given the fiscal autonomy and flexibility to build its own capacity to manage and drive those development plans. This has a major bearing on LECReD's impact and sustainability as discussed in more detail in Section 3.2 of this report.

Climate Change

Climate change is a major threat to the Maldives. Rising sea levels could cause the entire country to be submerged before the end of the century as 80 % of land is less than one meter above sea level. ¹²With 42% of the population and more than 70% of critical infrastructure within 100 meters of shoreline, in the medium term, rising sea levels would have dire social and economic consequences, notably for the poorer and most vulnerable. With regards to these risks, enhancing preparedness to deal with climate change and natural disasters remains a key priority for the country¹³.

LECReD responds to the challenges and policies considered important to mitigate the impact of climate change highlighted in the *Maldives Climate Change Policy Framework*¹⁴. The Maldives is already investing in a number of areas to adapt to climate change, including food and water security, infrastructure resilience, public health, coastal protection, fishing industry, waste management and renewable energy. The government is promoting long voluntary resettlement to regional hubs and improving transport connectivity. The authorities agree that integrating risk-reduction and disaster-response programmes into the core budget, as well as carrying out public investment planning and debt management frameworks would help address climate change. LECReD activities build on and complement these efforts.

Water and Waste Management

Among the multiple environmental challenges the Maldives face, sewage and solid waste are particularly salient, as they have a direct impact on the country's most valuable natural resources – coral reefs and fisheries. Unauthorized waste disposal and floating debris are the most visible threats to the country's public health, but also to its reputation as a pristine highend tourist destination. They also affect the quality of ground water, with a direct impact on island communities. An estimated 660,000 tons of solid waste are expected to be generated by 2020. Despite the scale of the challenge, many of the 134 Island Waste Management Centres, covering 66% of the islands, are not fully functional, as programmes for transport of waste from these centres to a regional or central waste-processing centre remain to be finalized¹⁵. The

 ¹² The most recent predictions for sea level rise are included in the Laamu Atoll Climate Profile, in mm (UNDP, 2017): 2015 – 77,59; 2025 – 108,49; 2035 – 139,39; 2045 – 170,29; 2050 – 185,74.
 ¹³ UNDP Maldives

http://www.mv.undp.org/content/maldives/en/home/ourwork/environmentandenergy/in_depth.html ¹⁴ http://www.environment.gov.mv/v2/en/download/4594

¹⁵ http://www.worldbank.org/en/news/feature/2016/05/10/maldives-a-systematic-country-diagnostic

second phase of the LECReD programme deals with finding island level solutions for Waste Management.

Gender Issues

Women face little discrimination in basic aspects of life such as primary education, health and survival – unlike in much of South Asia. However, the economic and social progress has yet to be fully inclusive, and gender inequality endures, despite constitutional guarantees to the contrary. This is partly due to a shift in the nature of Islamic practice in the Maldives towards more rigidly patriarchal interpretations. Women's labour force participation is high, but limited to lower echelons of the economy. Women are slightly more likely than men to be unemployed. Within the home, women face challenges that men do not, such as high risks of domestic violence. Finally, women have limited presence in politics and governance¹⁶. Gender equality and women participation was an important challenge for LECReD (see section 3.2).

LECReD within Development Policies

In 2000, the Government of the Maldives launched its long-term development strategy, *Vision 2020*. It reflects the aspiration and provides the impetus for the Maldives to develop and become "*a top-ranking middle-income developing nation with a diversified economy, high quality education and health services, social and gender equality, democratic governance, justice, peace and security".*

The National Strategic Action Plan 2010 – 2020 (NSAP) includes Disaster Risk Reduction and Climate Change Adaptation and outlines the likely impacts from climate change (including further tsunamis, sea-level rise, coastal erosion, and reduction in food and water availability). It identifies four strategic areas of action to minimise risk from disasters and to help the Maldives adapt to climate change:

- Enabling environment towards good governance;
- Empowered and capable communities;
- Resilient communities with access to technology, knowledge and other resources;
- Risk-sensitive regional and local development.

The UNDAF 2016 - 2020 for the Maldives integrated the NSAP 2010-2020 priorities¹⁷. The legal and institutional review performed by LECReD during the inception phase illustrates that the Maldives' government is conscious of the need for response to climate change. For example, in 2015 the Ministry of Environment and Energy published the Climate Change Framework and the Guidance Manual for Climate Risk Resilient Coastal Protection in the Maldives. In 2015, the Tourism Ministry released the Baseline Analysis of Adaptation Capacity and Climate Change Vulnerability Impacts in the Tourism Sector. No similar policy documents exist for the Ministry of Fisheries and Agriculture.

 ¹⁶ "Understanding Gender in Maldives: Toward Inclusive Development. Directions in Development--Countries and Regions"; El-Horr, Jana; Pande, Rohini Prabha; Washington, DC: World Bank (2016) http://hdl.handle.net/10986/24118

¹⁷http://www.mv.undp.org/content/dam/maldives/docs/publicationsgeneral/UNDAF%20%20Maldives%2020 16-2020.pdf

Although LECReD started before the approval of the Agenda 2030 for Sustainable Development, the programme contributed to several SDGs. In particular, to Objective 6: Clean Water and Sanitation, Objective 7: Affordable and Clean Energy, Objective 13: Climate Action, Objective 14: Life Below Water, and Objective 15: Life on Land¹⁸.

2.1 Programme Objective and Expected Outputs

LECReD was conceived as a three-year ONE UN programme responding to the UNDAF Outcome 9: "Enhanced capacities at national and local levels to support low carbon lifestyles, climate change adaptation, and disaster risk reduction". It builds on the comparative strengths of the participating PUNOs who include UNDP, UNICEF, UNOPS, UNFPA, UN WOMEN, WHO and FAO. The programme was designed as an innovative and pioneering initiative aimed at bringing together the wealth of diverse developmentoriented expertise from these PUNOs with equally diverse national and local partners to address this multi-faceted development challenge. The overall budget of the programme is 9.2 million USD provided by the Danish Government (7 million USD for stage one and 2.2 million USD for the second stage of the programme focusing on Waste Management¹⁹). The initial duration was from 1 November 2013 to 1 November 2016. Following the delay in starting activities and the recommendations of the mid-term review in February 2016, the programme duration was extended to March 2018.

The programme assisted the Laamu Atoll and its islands to realize low emission and climate resilient development. The programme sought to mainstream LECReD issues into local level development planning and service delivery for greater community-level ownership and sustainability of programme benefits. Towards this objective, the programme implemented the following activities:

- supported local councils, Health sector, civil society, private sector and other local stakeholders to establish platforms for stronger partnerships, improved coordination, and enhanced participation in local planning for LECReD;
- strengthened data and knowledge systems for LECReD;
- improved local level LECReD development planning and management of service delivery; and through a learning-by-doing approach established early lessons and built demand for LECReD planning and management for replication and scaling-up.

The main objective was to ensure that the local development plans would evolve from stand-alone action plans into more strategic and evidence-based instruments, which are climate smart and able to mobilize public and private investment. The programme was linked to the existing national development planning cycle and built capacity of local and national partners engaged in these local processes. The programme rationale was that lessons learned would be used to inform replication throughout the country and directly support the national agenda.

¹⁸ http://www.un.org/sustainabledevelopment/sustainable-development-goals/

¹⁹ As decided by the LECReD Board. The Ministry of Environment and Energy designated UNDP as lead implementing agency.

The programme had the following expected outputs:

- Partnership, coordination and participation platform for local LECReD planning and action is strengthened;
- Data and knowledge systems established or identified to support evidence-based planning and policy development for LECReD at the local level;
- Improved Local Level Planning and Management for LECReD; and
- Practical local experience in LECReD interventions leads to learning and promotes replication at national level.

2.2 Strategic Approach, Design and Implementation Arrangements

The **strategic approach** of the joint programme is to build on the institutional and local comparative advantages of the Participating UN Organizations (PUNOs) in order to leverage the extensive skills, knowledge and operational experience of the UN County Team. The evaluation report reflects this approach and does not mention individual agency-based contributions in detail and used the ONE UN approach to present the results as joint UN work supporting Maldives' endeavours in the area of Climate Change. For ease of reference with the activities discussion in section 3, the table below provides an overview of relevant areas of experience of PUNOs. For a detailed account please refer to the Project Document, Annex A.

PUNOs	Core areas of expertise relevant to LECReD
UNDP	UNDP is a global leader in building resilient nations and empowering people and communities through climate change adaptation and mitigation measures, disaster risk reduction, strong governance and gender equality. One of the longest standing development partners of the country, UNDP Maldives has provided technical support to the Government in the areas of water security, energy security, waste management, ecosystem and biodiversity conservation, coastal protection, sustainable development, as well as strengthening access to justice, improving governance and institutions. UNDP Maldives has also been instrumental in enabling grass- root level action aimed towards building resilience and empowering people, mainly through the small grants schemes. UNDP has been working with national and sub-national entities on planning, results management and implementation of development activities, including the development of national development policies and plans.
WHO	WHO has a long history of providing technical assistance to the Maldives in the area of environmental health including reducing environmental hazards to health, delivery of occupational health programmes and services, and to address public health problems resulting from climate change. In particular, climate change has been addressed by identification of preventive measures to minimize the impacts of climate change on islands, and through awareness programmes on preventing public health problems resulting from climate change. This has included assessment of vulnerability and adaptation of health impacts of climate change; guidelines and materials on rainwater harvesting; guidelines for schools on water, sanitation and hygiene education; capacity building at island level for groundwater quality monitoring; awareness materials and campaigns on vector borne diseases, strengthening surveillance of non-communicable and communicable diseases, development of clinical protocols and guidelines following with

	training of health providers, assessment of hospitals for actions in emergencies, assessment of water quality and development of policy and strategy on waste management. WHO has also installed health waste autoclaves in all islands. Technical expertise was provided to the Ministry of Health to develop a National Strategic Plan on vector control and jointly with the Ministry of Environment, national meeting to develop a Safety Plan for Provision of safe water was conducted. This included the developed of research protocols to assess the relations between climate change and human health, with focus to diarrheal diseases and vector-borne diseases like malaria and dengue.
UNICEF	UNICEF has undertaken development of emergency preparedness and response plans for education and child protection sectors in Maldives. UNICEF completed a capacity mapping exercise for the education sector to determine its capacity to plan and respond to emergencies. UNICEF also conducted advocacy activities to raise awareness on DRR and emergency planning. Implementing partners include the Ministry of Education, Ministry of Gender, Family and Human Rights, and the National Disaster Management Centre.
UNOPS	UNOPS implemented several infrastructure intensive water and sanitation projects on behalf of UNICEF after the tsunami of 2004. These include rainwater harvesting systems and the installation of reverse osmosis plants to counter the water shortages in various islands. UNOPS interventions in the solid waste management sector in the Maldives had been mostly in providing technical assessments and consultation services to the Government (e.g. the Ministry of Environment and Energy).
UNFPA	UNFPA provides support in the establishment of hubs for climate and development related data collection and management, with a focus on integration of population data (particularly census data and social survey data) in development planning and disaster risk reduction associated with emerging climate impacts. In the Maldives, UNFPA has a long history of supporting the National Bureau of Statistics of the Ministry of Finance and Treasury as the national statistic organization for the implementation of population and housing censuses. UNFPA provided technical and financial support to the Ministry of Health for the successful implementation of the Demographic and Health Survey. Following the 2004 Tsunami UNFPA provided technical and financial support to carry out vulnerability and poverty assessments, and supports the development of disaster preparedness plans.
UN Women	UN Women's engagement with in the Maldives targets women, who are disproportionately affected and highly vulnerable to climate change. Their experience in Maldives includes trainings on women's rights, gender and climate change, gender analysis and mainstreaming in policies, institutions and budget, domestic violence and roles and empowerment of Women's Development Committees. UN Women also provides women-led small grants on innovative approaches that contributes to women's livelihoods. Additionally, they also conduct trainings on the issue of gender with regard to disaster preparedness and management.

FAO	Since the early 1970's, FAO has provided assistance to the government
	through national and regional programmes to address the needs and
	priorities of the country. The Ministry of Fisheries and Agriculture is the
	implementing partner of FAO projects in the Maldives.

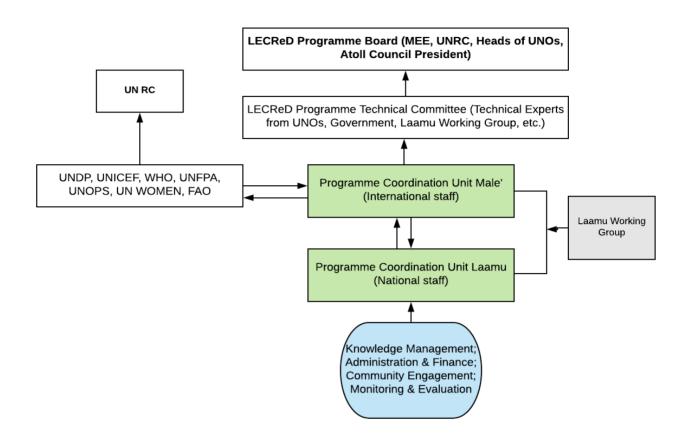
As the programme falls under UNDAF, the overall responsibility for execution rests with the government. Due to the limited capacity for delivery at the local level, in consultation with relevant authorities, it was decided that the programme would be implemented under direct management of the PUNOs. This approach, termed Direct Implementation Modality, engages the PUNOs directly in implementation of programme activities.

LECReD established the following management structures with the following responsibilities:

The Programme Board. The PB is the strategic governing entity of the programme through which the government exerts ownership and responsibility for the execution of the programme. The PB was the key decision-making body and consisted of representatives of the government, the United Nations Resident Coordinator (UNRC), the Government of Denmark (being the donor to the Maldives One UN Fund), heads of PUNOs, and programme beneficiaries including Laamu Atoll council, private sector, and Laamu Women's Development Committee representatives. The PB was co-chaired by the government and the UNRC. Heads of PUNOS had the option to delegate their representation on the PB to the UNRC. The PB met regularly (on average at least twice a year) and was responsible for approving any changes to and revisions to the programme document, reviewed progress in accordance with the monitoring and evaluation plan.

The Programme Technical Committee. The PTC provided technical and operational guidance and reported to the PB. The PTC was co-chaired by the Chief Technical Advisor (later on the position was merged with that of the Programme Coordinator) and a representative of the Ministry of Environment and Energy and included technical-level representatives from other parties involved in programme implementation (PUNOs, government counterparts, gender experts, WDCs, NGOs, private sector, other technical experts, and representatives of Laamu Working Group). The PTC was the main forum for coordination to ensure harmonization with other UN, government or other programmes.

The Programme Coordination Unit. The PCU included a Programme Coordinator (PC) based in Male' and operational staff based in the Laamu Atoll. The PC oversaw operations and, as a whole, the PCU ensured coordination, procurement, reporting, monitoring and evaluation of the programme. The PC was responsible for overall results at the outcome and output levels. However, the delivery of individual programme activities was the responsibility of the nominated PUNOs and national and local partners. The PUNOs also provided specific technical support to the PCU as and when inputs were needed for integrated actions. The PUNOs also ensured delivery, procurement, and reporting for their activities, and provided input to the PCU with regard to overall programme monitoring and evaluation.



3. EVALUATION FINDINGS

This section contains two parts.

The first part looks at the programme's performance globally. It presents findings with regard to the programme management and stakeholder participation, including the ONE UN approach, as well as the communication and knowledge sharing strategy. It also lists LECReD's achievements, as well as remaining challenges.

Individual programme outcomes including specific results on stated targets are analysed in the second part.

3.1 Overall Findings

Programme Management and Stakeholder Participation

The overall set-up of the programme was ambitious and involved seven UN agencies, the Ministry of Finance and Treasury, the Ministry of Environment and Energy, and the Laamu Atoll Council as co-signatories to the programme document. In addition, LECReD engaged with the Local Government Authority, the National Bureau of Statistics, the Disaster Management Centre, the Health Protection Agency/ Ministry of Health, and Laamu Atoll island councils among the main implementing partners. The programme adopted a bottom-up approach and focused on Laamu Atoll in view of piloting and scaling up the successful initiatives country-wide.

The specific programme objectives addressed a wide range of complex issues within an implementation period that was too short to see effective change, in particular when change refers to attitudes and practices. Activities within each output involved an array of implementing partners and stakeholders ranging from the island and atoll authorities to civil society organizations including women development councils, to the private sector. At the national level, the project interacted directly with two ministries and two government bodies. LECReD had a difficult start and experienced delays from the onset. This is in part due to the major shift that occurred in the governance and political context (see section 2.1).

Another reason was the difficulty in recruiting key personnel and setting up the programme structures. The programme document indicated November 2013 as the start date of activities. The PCU staff was recruited in March 2014 and became operational in April 2014. The position of Chief Technical Advisor was advertised two times and the recruitment process lasted overall from December 2013 to July 2014 when the selected candidate was able to start the assignment. Due to the delay in CTA recruitment, as a temporary measure, the UNDP Maldives appointed an interim CTA from April to July 2014. The objective was to provide short term technical assistance to LECReD including supporting the PCU in preparation of the Inception Report as well as preparation and implementation of selected base-line activities. After the permanent CTA joined the team and in the course of implementation, the position of CTA was merged with that of Programme Coordinator (see section 2.3). Almost a year has passed between the signature of the programme document (PD) and the recruitment of the programme staff. Implementation of activities started effectively in the first half of 2015, almost a year and a half

after the signature of the PD.

Despite documented efforts by the programme²⁰, the evaluator noted low levels of national ownership. The PB and PTC meetings, as well as bilateral exchanges with the MEE as the main governmental counterpart, did not lead to strong national ownership. At the local level, the level of ownership is higher due to the presence of the PCU in the Atoll and the fact that the bulk of programme activities were carried out locally. However, the evaluator could not identify local or national 'champions' that would maintain LECReD's momentum and achievements after the programme's end.

The ONE UN Approach

The LECReD programme was implemented following the ONE UN approach in view of enhancing coherence, efficiency and effectiveness. The results of this approach in the framework of LECReD are mixed. Some benefits were reaped, although LECReD has also demonstrated that there were clear limits to what could be achieved within existing mechanisms and accountability structures. Evidence collected during the field mission shows that the ONE UN approach posed challenges in terms of defining the right balance between strategic focus (be selective about activities) and inclusiveness (wide participation of seven UN organizations). While transaction costs for the interaction with the government may have been reduced due to the presence of one joint PCU, the transaction costs of coordinating the UN agencies have not. The PUNOs struggled with differences in operational and administrative rules and procedures, e.g. financial reporting and human resources.

Based on interviews, one of the main limitations stems from the fact that the PUNOs are independent agencies with their own governance structures, mandates and cultures. This evaluation showed that individual agencies remained the primary unit of accountability for performance and management. 'Delivering as One' does not turn the participating PUNOs into one organisation at country level. While there was a subsidiary accountability between them, the principal accountability remained within each agency. As the LECReD workload was not evenly distributed among the PUNOs, some agencies saw the PCU monthly held coordination meetings as additional functions. Despite efforts, the programme failed to develop a common approach under the brand of LECReD. Individual agencies struggle to accept that the programme name refers to overall achievements and seek to see achievements categorized per agency rather than jointly.

LECReD has pursued the "One Leader" strategy²¹, although with varying degrees of emphasis. The Resident Coordinator provided strategic leadership throughout the implementation process, but due to internal rotation the RC changed two times during the design and inception phase (up until October 2014 when the current permanent RC assumed office). This was a critical moment in LECReD's implementation. Due to delays in kicking off activities, the pressure quickly rose to start delivering fast and at the same time often against the initially agreed sequence of actions. Therefore, ensuring coherence and interlinkages and reducing duplication and overlap have remained important challenges throughout the duration of LECReD.

One related critical issue – highlighted by several sources - is to have a more comprehensive

²⁰ Minutes of PB and PTC meetings, email exchanges, official couriers.

²¹ www.undg.org (Delivering as One/One Leader)

and strategic 'definition' of a joint programme, i.e. so that the value added of doing things jointly is seen – not only in the written concepts – but also in practice. UNDP has been allocated roughly 80% of the LECReD budget, the remaining amount was distributed among the other 6 PUNOs. This may explain why the programme was perceived as an 'UNDP Project' including among other UN agencies. Another explanation could relate to the fact that most people refer to the UN as UNDP in the Maldives.

Visibility, Communication and Knowledge Sharing

In an environment of limited economic activity and investment, the programme was highly visible, on most Laamu Atoll islands LECReD was the only programme supporting such actions. All programme interventions, in particular, those involving construction works and purchase of equipment were properly labelled acknowledging the financial support from the Danish Government and stating the name of the programme. All the respondents interviewed in the course of this evaluation were aware of who the donor and implementing agencies were.

The programme's Communication and Stakeholder Engagement Strategy (CSES) provided a basis for addressing the communication and engagement needs of the programme including awareness and advocacy, programme updates and access to environmental and disaster risk management information. The overall branding and communication package and guidelines were developed for the entire programme by end of 2015. LECReD started the implementation of CSES activities in 2016.

The PCU team used various communication tools, including one-page information sheets for sub-projects, success stories, presentations, video and audio materials to disseminate information. LECReD communication activities included publication of articles in local newspapers and magazines, national and local TV and radio. The programme document and an overview of activities and expected outputs are available on the project website²². LECReD has also launched social media initiatives, including a Facebook page and a Twitter account.

The programme appears to lack a clear knowledge sharing strategy. For example, the programme website does not include updates on activities and progress, as well as other documents (or links to external websites) produced with programme support, such as Island Development Plans, training material or other types of publications or deliverables. Since the programme website is the main entry point and platform for information and knowledge sharing, it is recommended that for future interventions the website be updated regularly so that it can serve its purpose as "knowledge portal" and "best practice" sharing tool even after programme completion. It is expected that the "knowledge portal" be created in the first quarter of 2018 to consolidate all LECReD resources for possible replication of the programme.

Overall Programme Achievements

LECReD's achievements under individual outputs are discussed in section 3.2. The following are among the programme's most notable achievements:

²² http://www.mv.undp.org/content/maldives/en/home/operations/projects/environment_and_energy/Joint-programmeDoc.html

- 1. The establishment and gradual strengthening of platforms for dialogue, debate and partnerships between the key stakeholders. These platforms include the island and Atoll working groups and were essential for the launching and implementing the programme activities.
- 2. Synergies created through activities. Community members from different sectors were engaged in dialogue relating to different thematic areas (climate change, food security, water security, energy security, agriculture, fisheries, public health, waste management, governance etc.). The engagements varied from multisector dialogue sessions, targeted trainings, study tours, climate change forums and visioning exercises.
- 3. The momentum achieved through synergies and dialogues was maintained and replicated through the Small Grants Scheme. For example, four councils submitted proposals on Solid Waste Management and won grants to implement these systems in their islands. One councils submitted a winning proposal on improving water security and increasing resilience to climate change in the island through establishing a rainwater harvesting mechanism. LECReD supported the development of roof rain water harvesting guidelines.
- 4. The capacity of the Health Units and Laamu community to respond to emergencies has been strengthened. LECReD provided and prepositioned an Interagency Emergency Health Kit 2015 (IEHK), which is a standardized kit of essential medicines, supplies and equipment in Laamu Atoll. This kit is designed to meet the health needs of 10,000 people for 3 months during emergencies. In addition, health workers and community have been trained on responding to emergencies including on First AID.
- 5. Given the climatic vulnerability of the country, LECReD launched a Nationwide Vector Control Campaign jointly with the Ministry of Health, the Atoll Council and the Atoll Hospital in September 2016 to increase awareness about Dengue, Chikungunya and Zika. Through the campaign community was engaged in adopting behaviours to prevent infection, seek early treatment, and reducing vector breeding sites.
- 6. The Local Government Authority adopted in 2016 the revised local development planning methodology, which included elements on climate change adaptation, mitigation, disaster risk reduction and gender equality. The methodology has been used nationwide to develop the Island Development Plans and Atoll Development Plans for the period 2017-2021. A planning handbook and a video on development planning and financial planning was further developed to support the local development planning process.
- 7. The development and launching of the LaamuInfo database and information platform Laamu Koshaaru. The system will allow island and atoll authorities to manage administrative data from different sectors such as land use, energy, agriculture, and food security. The database facilitates analyses, ensure safe and secure storage of data, and renders data accessible to all. The LaamuInfo database supports evidence-based decision making by providing users with national statistical data from the past 30 years and similar studies conducted. The database complements the atoll/island development planning process.
- 8. The "Review of the National and Local Level Institutional and Governance Arrangements and Legislative Frameworks" carried out in 2016 is the most comprehensive review of the legislative, institutional and governance arrangements conducted in the Maldives to date. The review was also accompanied by a Capacity Development Roadmap, advocacy materials, tools and recommendations for building capacity required for climate resilient development.
- 9. The Integrated Energy Resource Assessment provides comprehensive data specific to Laamu Atoll on energy sources, usage and patterns to inform the local development planning process. The assessment brings information that has never been collected before on the different types of energy being used in Laamu Atoll while also determining the

various energy use patterns by end users including households, schools, government offices and the different economic sectors.

- 10. A survey of the natural resources available in Laamu Atoll provides data on available land, land use, terrestrial and marine resources. The information is key to local and central level planning and contributes to the National Geographic Information System.
- 11. Solar Panel Systems were installed in 11 schools across Laamu Atoll, expected to bring an overall reduction in electricity costs of 53,000 USD per year (estimate) and saving over 840,000 litres of diesel per year. In addition, a training programme was conducted for the local utility staff (Fenaka Island Office and Regional Office) and the school staff regarding solar energy and maintenance of the solar panel systems.
- 12. Vulnerability and Capacity Assessments and Disaster Management plans to complement atoll/island development planning carried out in all 11 inhabited islands of Laamu atoll. Both the VCA and DM plans strengthen the capacity of communities to enhance their climate resilience by understanding the risks faced and how to address them through proper island-level planning. They also provided valuable input to the PUNO's in designing their support intervention to the LECReD programme.
- 13. Vulnerability and Adaptation assessment laid the foundation for the LECReD work in the Laamu Atoll. High priority climate sensitive health risk identified through the assessment included diarrhoea, food borne disease, vector borne disease, nutritional problems, and mental stress. Based on the report, LECReD devised and implemented mitigation measures to protect health from climate change.
- 14. LECReD provided technical support to conduct a survey of health care facilities vulnerability to disasters during October 2014. The Hospital Safety Index occupies a central place in local, national and global efforts to measure the functioning of hospitals in emergencies and disasters. Based on the assessment of hospital safety index, a plan has been developed for addressing urgent, medium-term, and long-term improvements to infrastructure and relevant health systems in the country.
- 15. Challenges in the provision of drinking water in Laamu Atoll needed serious attention. To address these issues water quality monitoring and surveillance guidelines were developed, water testing kits were procured and health staffs were trained on its use. To ensure safe water in hospitals, Reverse Osmosis water purifiers have been provided and used in all health centres of the Atoll.
- 16. LECReD provided the Ministry of Environment and Energy with air quality monitoring equipment. The country can now generate regular local information on quality of air. This information will support to identify health hazards, prioritize activities to address the issues, monitor progress and report to national and international bodies.
- 17. A survey of the natural resources available in Laamu Atoll provides data on available land, land use, terrestrial and marine resources. The information is key to local and central level planning and contributes to the National Geographic Information System.

Remaining Challenges:

One of the objectives of the evaluation was to formulate recommendations as part of the learning process the UN is committed to. Section 4 of the report discusses the lessons learnt and suggests recommendations for future similar interventions. The elements listed below concern overall programme design and work processes. The first three aspects discussed in this section are beyond LECReD's or UN's control but have had a direct impact on implementation and may influence the programme's impact and sustainability.

- 1. **Confusion around local vs national responsibilities.** The evaluator concluded that at the moment of writing of this report there was no clear intent or clarity from the national level with regard to decentralization. As a consequence, the building of administrative capacity in the islands is not likely to continue. The knowledge and shift in mind-set brought by LECReD interventions in terms of planning for sustainable and climate resilient development is likely to diminish over time. The councils will most probably continue to have insufficient resources (both human and financial) to carry out planning and implementation, let alone monitoring and enforcement. None of the recommendations for actions made as a result of LECReD assessments are going to work if climate resilience, waste management and conservation efforts are not enforced. However, this represents an external risk and is beyond LECReD's programme influence.
- 2. Weak Institutions and Coordination. One of the core LECReD's activities at the national level was coordinating with the participating ministries and national agencies. The PCU and PUNOs have put a lot of time and effort in ensuring that national stakeholders were fully onboard. Minutes of the Programme Board meetings keep track of the decisions taken and the participating officials. Nevertheless, one of the main challenges mentioned by all respondents was the weakness of institutions in following through on prior agreements. The process largely depended on the people in charge and there were instances when it was reversed once the staff in question was no longer employed. Another aspect impeding progress was limited coordination among units within a ministry, let alone between ministries. Conflicting messages and duplicating initiatives often arose as a result of poor coordination and / or political issues.
- 3. Lack of strong national ownership. At the local level, the level of ownership is higher due to the presence of the PCU in the Atoll and the fact that the bulk of programme activities were carried out locally. Despite reported commitment from the Atoll President and Vice President, the evaluation could not identify national 'champions' that would maintain LECReD's momentum and achievements after the programme's end. Even though the leaders of the Atoll appear to be strong advocates for LECReD, limited resources and coordination (discussed in points 1 and 2 above) will curtail these intentions in the long term.
- 4. Limited linkage between programme components. By its design LECReD provided the overall framework for a joint programme. However, many respondents argued that internal co-ordination 'could have been better' and more efforts should have been made in executing a more comprehensive, interlinked and coherent programme. Some respondents noted that the programme is to a certain extent 'a repackaging of existing agency projects', which is not necessarily a negative thing. However, the vertical links between the programme components could have been improved in view of avoiding the impression of a patchwork of activities. The Joint Work Plan appears to be a collection of activities mainly held together by a financial framework and lacking a programmatic approach. Some activities have unclear result chains (i.e. it is unclear how it will contribute to the following activity that is logically linked to it) and overall the impression is that activities were treated in a standalone mode rather than as part of a comprehensive approach (i.e. the focus appears to be on "getting things done" rather than "getting things done in a sequential and coherent way").
- 5. **Need for more realistic planning.** While having demonstrated some achievements, LECReD faced challenges in performing efficiently. The programme has suffered from delayed implementation and, as a consequence, from time pressure to deliver. This has resulted in performance that was sometimes overlapping and not leading to cost effectiveness or cost cutting. One of the problems highlighted by several sources was the work plan that planned activities in a 'cumbersome' way and put additional strain in terms of timeline for delivery on the agencies that already had low organisational and human

resources capacity.

- 6. **Need for improved internal reporting, monitoring and evaluation.** Despite the established monitoring framework, the PCU noted irregular reporting on data collection, monitoring, and evaluation from the participating PUNOs. On the other hand, respondents highlighted the absence of a clear baseline (for some activities there was no baseline to start with) and the complexity of the M&E system, with its many indicators, of which many were difficult to measure (i.e. not being SMART). It has been suggested that despite its complexity, the valuation matrix did not capture results to the full extent. Some respondents suggested that a "simpler and more practical" approach could have improved overall administration and management of the programme.
- 7. **Co-ordination with other donors remains an area for improvement**. This is an aspect that goes beyond LECReD's control. Despite repeated efforts from the programme team and UNDP as lead implementing agency, coordination among donors in the Maldives remains very weak. This is due in part to the fact that an institutional coordination mechanism doesn't exist (e.g. there is no national ministry taking the lead on that), and in part due to the fact that many donors only have a liaison officer in the country and no permanent official who can speak on behalf of the institution.

Table 1 below shows the overall programme grading according to the evaluation criteria.

Criterion	Status	Comments
Relevance	Very Good	The programme is highly relevant to the needs of the country and is in line with national development strategies and the SDGs. On the sub-national level, the programme addressed the most pressing issues such as climate resilient development and waste management. The programme also undertook considerable efforts in building the knowledge base of island and atoll authorities, communities and non-governmental sector with regard to low carbon and climate resilient lifestyle, private-public partnerships and multi-sector dialogue. Financing local initiatives stemming from development plans through the small grants scheme reinforced the 'soft' components of the programme. Overall the evaluator estimates that the programme relevance is "very good".
Effectiveness	Medium	While the main targets were achieved, overall the programme experienced bottlenecks and delays throughout its implementation. The original timeframe could not be maintained, and the programme duration had to be extended by at least 15 months. Nevertheless, respondents were usually satisfied with the quality of support provided (whether it was expertise / soft or equipment & works / hard). In particular, the respondents noted the high level of commitment and availability of the PCU area team throughout the

Table 1. LECReD Programme Grading – Evaluation Criteria

		programme implementation. Therefore, effectiveness is rated as "medium".
Efficiency	Medium Low	It is difficult to gauge whether the project was good value for money. On the one hand, the Maldives is a very expensive country due to lack of local production and high reliance on imported goods. On the other hand, PUNOs and island / Atoll councils alike noted that there was scope for improvement in terms of cost sharing and efficiency and there was certainly some overlap of activities. In order to be able to measure the added value of the money spent, an evaluation would have to be carried out a few years from now. Some respondents noted lengthy procurement procedures, but this may also be due to external factors such as unavailability of specialized equipment or difficulties in identifying suppliers that can provide the best quality-price ratio. Overall, efficiency is rated as "medium low".
Impact	Medium	Although it is too early to determine whether the received knowledge will be applied at the local and national levels in the long term, some short-term impact of the programme is visible. Respondents were overall positive about the various activities carried out by all PUNOs. Nevertheless, it has been difficult to gauge impact in terms of development indicators. This is in part due to lack of baseline indicators, but also because statistical data, notably at the sub-national level, lack or are not objectively verifiable. Long term impact in terms of shift in attitudes among authorities, the private sector and the population at large is also difficult to estimate, but due to limited human capacity and financial resources it is likely to be low. Overall short-term programme impact is ranked "medium".
Sustainability	Low	Sustainability is rated "low" because the evaluator found that many activities were unlikely to continue or may lose momentum after programme completion. This remark refers in particular to the soft measures such as local planning & monitoring, Atoll Working Group, the multi-sector dialogues. The outlook for sustainability of the initiatives supported through grants is better, but whether or not this assumption holds true remains to be seen in two-three years' time. It was too early for the evaluator team to establish this aspect in December 2017.

3.2 Output Findings

During the inception phase, the PCU grouped the main planned activities under several categories for ease of reference and traceability. Figure 2 below gives an overview of the thinking strategy behind the joint work plan approach²³.



This section looks at the key results per individual programme output. The tables under each output summarize the main deliverables per target. The narrative part discusses the main achievements and challenges faced during implementation.

Output 1. Partnership, coordination and participation platform for local LECReD planning and action is strengthened

Target	Key Results
1.1 Legal and	 Conducted review of existing legal and institutional
institutional	arrangements for environmental, LECReD and DRM
arrangements for	governance and produced capacity development
LECReD and Disaster	"roadmap" recommendations and local language advocacy
Risk Management	tools for use by local councils, WDCs, LGA, MOFT, and line
(DRM) governance at	ministries.

²³ Source: LECReD Brochure

local level clarified and more inclusive	 Provided training to PTC, LWGs, programme staff, atoll and local councils and conducted training of trainers for CBOs on gender issues and the role of women in addressing climate change. Building on partnerships and through a collaborative approach, WHO has worked extensively with the Ministry of Health, Ministry of Environment and Energy, Local Government Authorities, Atolls and Island Councils, NGOS and UN partners to address vulnerabilities essential to adapt, mitigate and build resilience to climate change impacts of Human Health in the Maldives. Provided training to local councils, health facilities, WDC, CSOs and community leaders on conflict mediation techniques, leadership, negotiation and consensus building.
1.2 Public Awareness and access to information on LECReD and DRM at local-level strengthened	 Undertook a detailed stakeholder survey and provided age and gender disaggregated quantitative and qualitative analysis of public information needs, information channels and access, and perceptions for LECReD and DRM. Prepared and implemented Communication and Stakeholder Engagement Strategy using, amongst other things, community meetings, local media, existing public information channels, mobile phone and web-based services to provide updates on programme implementation, and up-to-date access to important environmental, LECReD and DRM related information. Conducted age and gender specific advocacy on child centred and community-based disaster risk reduction in Laamu Atoll. Conducted age and gender specific advocacy on gender and climate change and the role of women in local planning and LECReD. Raised awareness of communities on solid waste management, vector control, disasters, safe drinking water, sanitation and good hygiene. Developed a video on vector control which was launched during the LCCF 3 that explains community on steps required to protect themselves from Dengue, Zika, and Chikungunya.
1.3 Inclusive Platform for LECReD and DRM Planning and Management Established	 Established a regular Laamu Atoll Climate Change Forum in accordance with CSES as a locally-led mechanism for multi-stakeholder dialogue (with linkages to national level), promotion of local investment and business opportunities, and to showcase local LECReD actions whilst ensure participation of youth and women. Established a multi-sector public/private Laamu Working Group (LWG) with agreed TOR and work plan involving

 local and national membership, as and when required, and including youth and women. Supported multi-sector dialogue between islands, and between local and national levels on energy, coastal zones, marine resources, water and waste management, applearment constant and local economic development.
employment generation and local economic development; public health management, DRM, and agriculture.

One of the main achievements under this component was the creation of the Laamu Working Group consisting of representatives from Island and Atoll Council, Women's Development Committees, sector focal points, civil society, private sector and other key stakeholders. Through its work, the Group sought to ensure effective coordination and support LECReD at the local level by providing guidance on the local perspective. The LWG started to hold regular meetings in 2015 and its members have participated in key discussions and meetings such as the PTC, validation workshops and programme level discussions held both in Laamu and in Male'. According to PCU and PUNO staff, the LWG gave "valuable insight" into community perceptions and expectations and allowed staff to better align and deliver programme activities.

Another important deliverable was the national adoption of the revised local development planning methodology by the LGA in 2016. The timing coincided with the second local planning cycle under the Decentralization Act and provided the opportunity to integrate principles of climate change adaptation, mitigation, disaster risk reduction, gender equality and other cross cutting issues into the planning methodology, templates and tools. A handbook and video were also produced in Divehi to guide local council members step by step in the planning process. Council members rated the trainings and tools "very useful" and noted that the transfer of Toolkit at the end of the programme was "very important".²⁴

"At first, I was rather sceptical... here we go again, I said to myself, another meeting where I have to sit, listen and nod along. Who cares about a small island like mine, I thought... But it turned out to be the opposite! The atmosphere was a working one where everyone could speak and I can truly say that the decisions we reached satisfied everyone who participated" representative of island council, anonymous

A series of *Multi Sector Dialogues (MSDs)* was initiated at the First Laamu Climate Change Forum in 2015 to facilitate a well-informed Local Development Plan. The second cycle saw a 20% increase in the total participation rate, and a 13% increase in female participation from the first cycle. A total of 95 participants joined the island level MSDs out of which 31.5% were female. At the Atoll level dialogue, a total of 38 participants (31.6% females) attended²⁵. The increase in participation is attributed to the change in the approach to invite participants. Rather than obtaining participant names from the local councils, the participants were pre-identified from other workshops and meetings and also through directly contacting government offices, Women's Development Committees, schools and local NGOs. This method of directly contacting participants was more effective and more engaging.

²⁴ At the moment of writing of this report, the Toolkit has not yet been handed over to the island and Atoll councils.

²⁵ Source: quarterly and yearly programme reports.

An *International Study Tou*r to the Seychelles was carried out in April 2016 to mitigate the lack of practical know-how in the Atoll, which remained a challenge throughout the implementation. Prior to the tour, the participating councillors carried out an institutional audit of their respective councils to identify environmental problems specific to their islands. A predeparture workshop helped the councillors reflect on the environmental issues, as well as strengths and weaknesses of local councils. In the Seychelles, participants were exposed to various management strategies employed by local councils in the country, particularly to UNDP projects on renewable energy, waste management, water conservation, and managing marine reserves. The study tour helped Council members and planners from Laamu Atoll to identify strategies, projects and programmes that could be adopted and replicated in their respective islands, through their local development plans, the small grants programme, and other means of funding. This was an activity that was remembered by a lot of island councillors interviewed during the field mission. All respondents ranked such exchanges as "very useful" and highlighted the importance of learning how other countries deal with similar issues.

Box 1. Laamu Climate Change Forum (LCCF)

For the first time in the Maldives, the LCCF provided an opportunity and platform to share knowledge and experience in development planning geared towards innovation, climate change adaptation and building resilience. The forum's broader objective also included stimulating and enhancing the understanding of scientific elements influencing climate resilient development. All PUNOs actively contributed to and participated in the LCCF.

LECReD held three editions of the LCCF in Laamu Atoll, in April and December 2015 and in October 2016. The LCCFs ultimate objective was to identify opportunities presented by climate change to invest in green growth and sustainable livelihood opportunities to pave way for low carbon lifestyles.

<u>The first edition</u> was held on 20-21 April 2015 in Laamu Fonadhoo under the theme "Climate Resilience and Laamu". Over 60 council representatives from all communities of Laamu Atoll along with technical experts from UN agencies in Maldives and relevant Government Agencies including Ministry of Environment and Energy, Health Protection Agency, Ministry of Fisheries and Agriculture, Local Government Authority, National Bureau of Statistics and National Disaster Management Centre attended the Forum.

<u>The second edition</u> was held on 16-17 December 2015 in Laamu Gan under the theme "Green Growth and Climate Resilience". The forum gathered some one hundred participants from the island and Atoll councils, Government bodies, the PUNOs and concluded with a Multi Sector Dialogue Session presenting issues raised through the island and atoll level multi sector dialogue sessions. The forum also hosted a Fair to showcase green products and services and facilitate networking opportunities. The exhibitors included businesses and NGOs from Male', Baa, Seenu, Lhaviyani and Laamu Atoll. The forum has received considerable media attention including the national news.

<u>The third and final edition</u> of the LCCF was held in Laamu Gan on 16-18 October 2016 under the theme "Learning from Laamu". This was the opportunity for LECReD to look back at the activities conducted during the course of the programme and reflect on the lessons learnt and how they could be replicated in other parts of the country. More than 120 participants, including representatives from 18 Atolls, attended the Forum. Stakeholders in Laamu Atoll were given the opportunity to showcase their success stories and challenges they faced in implementing activities. The forum created a platform where participants had the chance to share knowledge and ideas, and gave opportunity for participants from other atolls to provide constructive feedback based on experiences in their atolls.

Output 2: Data and knowledge systems established or identified to support evidence-based planning and policy development for LECReD at the local level

Target	Key Results
2.1 Data management system and tools enhance	 Laamu development planning database established with technical support from UNICEF. LaamuInfo provides data on major indicators of Social and Economic sector. It extracted data from all major surveys carried in the country including censuses, poverty and vulnerability assessment and Demographic health survey. Conducted data needs and capacity assessment on collection, compilation and analysis of data in Atoll and Island Councils. Defined national standards for data and indicators, including environmental statistics in coordination with ESCAP, UNSD and UNFPA HQ. Established intra governmental data sharing agreement to allow NBS to consolidate data. Collected additional data or establish data collection processes as needed as per data needs assessment. Built and consolidated available data into 'Laamu Development Planning Platform' (LaamuInfo, reports, climate profile, NGIS, knowledge products). LaamuInfo provide up to date information on major indicators of development of Laamu Atoll. Primary aim of the activity is that evidence is made available and used for policy advocacy and planning. Strengthened capacity for data collection, management and use in planning and policy making at local level: e.g. trained relevant stakeholders using Microsoft Excel for data management; train relevant stakeholders in using LaamuInfo/ web portal for planning and understanding and using data/ report; IT capacity strengthening for data management. Instituted data analysis, reporting and knowledge management instruments at local level: developed census component of Climate and Island Profiles (CIPS) with demographic forecast; enabled LaamuInfo or other data system to generate CIPs; prepared local level risk and vulnerability assessment guidelines (including for environmental, climate change and DRR related assessments); supported integration of water related

	 climate sensitive variables and resources into planning at local level. Supported integration of public health and DRR related climate sensitive variables and resources into activities and provide associated training, including on health sector climate vulnerability and adaptation (V&A) assessment, and support preparation of V&A assessment at Atoll level using WHO methodology. Epidemiological analysis, utilization and dissemination of data training workshop were conducted for 30 health care professionals from all Atolls. The skills of the health workers were enhanced on disease surveillance and use of data for action, identification of mosquito larvae and vector control, detect disease outbreak and immediately respond. In addition, best performing health workers were identified for supporting similar training at other Atolls and island health centres and disseminate analytical thinking at Laamu Atoll. Supported integration of agriculture related climate sensitive variables and resources into activities and provide associated training, including collection of site specific agricultural data by farmers to understand the effects of climate change.
2.2: Laamu Atoll climate profile prepared	 Prepared LECReD baseline including inventory of development priorities and initiatives. Developed programme logic, monitoring and evaluation plan including indicators for measuring changes in vulnerability and produce guidance manual for data collection; Conducted training for the use of the monitoring and evaluation planning, data collection techniques and analysis approaches. Undertook island level integrated energy resource assessment, and energy use survey and analysis and, if required undertook measurements or otherwise, characterizing energy sources, energy use patterns for different stakeholders, and identified opportunities for renewable energy and energy efficiency measures in key sectors. Reviewed available information and conducted Integrated Water Resource Management (IWRM) and Waste Management (WM) assessment for each island and prepared Atoll IWRM and WM Plan. WHO engaged NEERI to support assessment clearly identifies risks and recommended action required to ensure safe water to consumers. Undertook survey/review of environmental resources including agriculture, fisheries, and biodiversity with

	 emphasis on climate sensitive elements and prepared resource maps for the NGIS. Supported councils to review status of land use maps, assess vulnerable coastal zones and Environmental Protection Zones (EPZ) and updated land use database. Conducted quantitative and qualitative assessment of economic and socially vulnerable groups and reviewed existing social and economic safety nets. Identified localized climate change and demographic forecasts. Prepared risk and vulnerability maps for all islands and atoll-wide. Prepared Laamu Atoll Climate Profile.
2.3: LECReD options identified and analysed	 Identified LECReD options and opportunities for key sectors at island and atoll level and prepared appropriate financial and economic analysis (e.g. cost-benefit) and comparison. WHO supported assessment of feasibility and cost effectiveness of installing Solar Power generated energy system in Laamu Regional Hospital and an Island Health Centre. The assessment reports that as Maldives depends on imported diesel to generate electricity, solar PV system is a cost effective and sustainable alternative for health centres. Analysed potential synergies between sectors and between adaptation and mitigation options. Undertook analysis of institutional, governance and financial actions required to implement priority options and opportunities and determined viability. Identified options for financial, policy and legal instruments to address LECReD options and opportunities.

The data information system (DIS) piloted by LECReD consists of an interface titled *Laamu Koshaaru* and the accompanying database titled *LaamuInfo*. The system will allow island and atoll authorities to manage administrative data. The DIS builds on previous efforts by the NBS to formulate a data collection system for the Island Councils and includes data from different sectors such as land use, energy, agriculture, and food security. The purpose is to create a database that facilitates analyses, ensure safe and secure storage of data, and renders data accessible to all. The tool supports evidence-based decision-making process and should feed data into the Island and Atoll Development Plans. The tool also generates maps, graphs and tables.

LECReD trained 17 staff from all councils, as well as staff from NBS, the National Centre for Information Technology, and the LGA. At the time of writing this report, several local councils were still finalizing transcription of data and the portal is expected to become fully operational by the end of the programme in March 2018. The data encoding exercise takes time since the system will contain some 112 indicators and 2,707 data values from five national censuses, 25

years of statistical data, eight national surveys and reports regarding the Tsunami. The system will contribute to streamlining and standardizing Laamu Atoll statistic with national statistics.

One of the main challenges under this component was the low level of understanding at first among island and Atoll council staff on the utility and long-term benefit of the data management system. As a result, PCU noted that initially some island councils refused outright to introduce historical data and only agreed to start introducing current data. It took considerable advocacy efforts from LECReD staff with support from the NBS to convince council staff of the need to treat data collection and entry as a priority and explain that data management was part of the councils' responsibilities.

LECReD also assisted MoFA to improve the data collection systems by introducing a log book system to be used by farmers in the region. Four training modules, a trainer's manual and data tabulation and analysis formats were developed as a capacity building tool to strengthening data collection systems. The log book was pre-tested at the island level before introduction to the farmers. Training was provided on data collection to 170 farmers, six administrative staff of the local councils. Six staff from Statistics Unit at MoFA were also trained on tabulation and analysis.

The assessments conducted by LECReD under this component fed into the planning of activities under the other programme components and contributed to establishing a baseline for LECReD:

- The *review of national and local level institutional and governance arrangements* and legislative framework allowed the PCU and island councils to take stock of existing laws, regulations, policies and institutional arrangements that are relevant for environmental management, DRR and low emission, and climate resilient development. The review also revealed the overlaps in mandates and roles of national ministries and authorities and gaps in the governance system. A subsequent Capacity Development Roadmap and advocacy materials, tools and recommendations were prepared.
- The *household survey* and the resulting *vulnerability reduction assessment methodology* providing the missing information in determining the levels of social and economic vulnerability as well as vulnerability to climate change in the Atoll. The methodology is part of the Toolkit and can be applied to other islands and atolls.
- The *Integrated Energy Resource Assessment* provided previously unavailable information on different types of energy being used in Laamu Atoll while also determining the various energy use patterns by end users including households, schools, government offices and the different economic sectors. At Atoll and Island level, this information will provide evidence-based foundation to develop proposals for renewable energy projects that will build on specific renewable energy opportunities, in addition to informing the local development planning process. It would further support the central government for the development of the energy sector and realization of national renewable energy targets.
- The *Land Survey* was carried out setting the base for the preparation of Land Use Plans (LUP). In 2017, LECReD attempted to prepare LUPs for selected islands, but this activity could not be completed due to lack of commitment from the Housing Ministry on account of limited staff on their side. LECReD has consequently redirected the funds towards the construction of waste management centres.
- An *analysis of climate financing* looking at various funding streams available to support local development plans within the existing legal and administrative frameworks. The

cost benefits analysis of the different funds and the possible synergies between the key sectors was also conducted. Furthermore, the existing Laamu Development Trust Fund, administered by the Atoll Council, was reviewed to identify measures to link with LECReD principles.

Output 3: Improved Local Level Planning and Management for LECReD

Target	Key Results
3.1 Guidelines, tools, and systems identified or developed for local LECReD planning and management	 Prepared a guidance manual for adopting national policy, standards or best practices into local level planning and management for councils and service providers. Supported preparation of guidelines for adopting national standards on buildings and energy efficiency. Supported preparation of guidelines for preventative measures for flooding and erosion including dialogue sessions on guidelines for Flooding and Erosion Risk Management (FERM) to finalize guidelines. Developed and implemented community-based disaster resilient plans and training of community members on the plans including emergency drills including: National Consultation workshop on revising existing Community Based Disaster Risk Management / Vulnerability and Capacity Assessment Guidelines; Established and trained Community Emergency Response Teams (CERT) in 4 target islands of Laamu Atoll; Developed Laamu Atoll Disaster Management Plan; Monitored and evaluated community-based disaster resilient planning carried out in Laamu; Developed Laamu Atoll Disaster Outlook (report). Supported preparation of guidelines/SOPs for health facilities on mass casualty management, disaster preparedness plans and conducted emergency drills in hospital and 1 health centre in Laamu Atoll, and supported replication in other health centres. Supported preparation of local-level guidelines for planning health interventions based on WHO guidelines including establishment of Lab, trainings, and surveillance; Prepared guidelines for local level integrated water management, rainwater harvesting, water resources management and groundwater contamination.

3.2 Capacity for integrated development planning and management for LECReD strengthened	 Identified participatory integrated LECReD and DRR planning methodology and ensured integration with existing local development planning methodology; Prepared guidance materials and tools for preparation for LECReD planning, providing training of trainers, and facilitate trainers to conduct training for councils, WDC, CSO and community leaders; Provided training for councils on the development of bylaws, policy, standard operating procedures for bylaws and their enforcement; Strengthened local capacities to regulate public health (licensing, water quality) and health service providers to comply with health regulations; Trained council and health service personnel on communication, management, entomological and epidemiological surveillance, laboratory technology and disaster management.
3.3 Integrated atoll LECReD plan developed and priority LECReD actions support	 Supported LGA and local councils in the preparation of the Local Development Plans including the Policy and Investment Plans, while incorporating the agreed LECReD planning approach; Facilitated capacity self-assessment for councillors, WDCs, CSO and sectoral focal points for integrated local planning and management for LECReD's and prepare Capacity Development Action Plan (CDAP); Supported councils to prepare Policy and Investment Plan including priority CDAP actions, policy developments, and priority investment projects; Undertook preparation of backable project ideas with feasibility studies, identify sources of finance and/or capacity support, and undertake project concept marketing and partnership building Support Programme Board to identify priority projects from actions identified in LLDP/PIP.

As a result of LECReD intervention, 7 island development plans and 1 atoll development plan were completed. One island did not manage to finalize the development plan due to very low capacities. One of the key challenges in implementing this activity is the fact that the levels of knowledge sharing are low within island councils. The capacity building activities conducted throughout this (and other) component were conceived as a 'training of trainers' type of activity. However, upon return to their home councils, participants seldom convey the information or methods acquired and there is no culture of documenting lessons learnt or good practices within island or Atoll councils. This observation has been confirmed during all interviews held with island council staff. When asked about 'institutional memory' one of the answers often provided was that the person who participated in the training was no longer there and left no training materials behind. "For me personally the greatest added value of trainings organised within the LECReD programme was the understanding that my island's development plan is not something that will come from the central government, but work in progress. It is my job and the job of my colleagues from other council departments to revisit the document regularly and make sure that it reflects the needs of our people." Councillor, anonymous

Under this component, jointly with NDMC, *Community Based Disaster Risk Management trainings* were carried out in all 11 islands in the atoll and a total of 228 community members took part. The CBDRM process included a *Vulnerability and Capacity Assessment* (VCA) identifying hazard vulnerability and available resources, and capacity to mitigate and respond to hazard impacts, incorporating youth and women (308 community members in total). A community-based disaster mitigation plan and disaster response plan fed into the *Disaster Management Plan* that was developed through the CBDRM process in each community. An emergency simulation exercise was carried out in each island to test out the DM plan. The CBDRM process allowed island councils and community members to understand importance of climate-sensitive development planning to strengthen climate resilience. The process was meant to complement the island development planning process rather than be a stand-alone exercise.

LECReD also conducted a Study on Groundwater Quality Assessment of Laamu atoll to Assess Feasibility for Drinking Purposes and the report will be included in the final Toolkit to be transmitted to island and atoll authorities.

Target	Key Results
4.1 Establish Laamu atoll LECReD small grants scheme	 Established a small grants facility to provide enabling grants for community-based organisations, councils and SMEs for: community-based disaster risk reduction projects; locally appropriate low-cost coastal remediation and reef protection measures; innovative low emission climate resilient income generating activities; low cost behaviour change initiatives for LECReD and DRR. Prepared guidance materials and tools and provide training and support to relevant small grant projects. Prepared guidance materials and tools to provide training and support and promote women-focused small grant projects.
4.2 "No-Regret" Actions implemented in priority sectors	• Prepared feasibility studies for the upgrade of electricity distribution networks and integration of an appropriate mix of renewable energy into selected islands including detailed engineering studies and review of governance, financial

Output 4: Practical local experience in LECReD's interventions leads to learning and promotes replication

	 capacity, procurement capacity and related capacity support for the project implementer, as required (in accordance with the requirements of the ADB SREP project) for financing via the SPREP Investment Plan. Implemented project in selected islands to improve energy efficiency and promote water saving practices for residential, commercial and government end-users by providing energy and water audits, awareness raising, and performance-based subsidy on efficient technology retrofits. Implemented immediate opportunities in selected islands for improving the utilization of rainwater harvesting (RWH) by refurbishing and optimizing existing residential and communal facilities. Assisted community and council or utility in selected islands to develop solid waste management systems in accordance with waste regulations including assignment of roles and responsibilities; establishment of user pay scheme; value adding through recycling and composting; training; household separation. Strengthened surveillance system at island and atoll levels to monitor climatic conditions related communicable and non-communicable diseases. Conducted a household level Water Audit to determine water consumption rates by source to improve demand response management and promote water saving practices for residential, commercial and government end-users.
4.3 Knowledge products prepared and lessons disseminated	 Identified and documented lessons learned in particular from small grants and no-regret actions targeting local and national level for showcasing at the Laamu Climate Change Forum. Established a series of issue-based study tours for relevant stakeholders/participants to experience on-going projects, programmes and best practices in other atolls and countries relevant to low emission and climate resilient development and disaster risk reduction. Developed a knowledge management system to capture knowledge products and lessons learned and to promote programme results and replication.
4.4 Actions to improve water safety and security	 Proper systems in place for waste segregation, composting, recycling, transport and storage in Laamu Atoll including procurement of machinery, tools and equipment for the waste management systems; procurement of solar panels and transport vehicles for the waste management systems. Conducted trainings for council staff on proper systems developed for the management of Medical Waste in Laamu: Construction of Medical Waste Management Systems including procurement of equipment.

	• LECReD provided all health facilities in the Laamu with a Reverse Osmosis water purifier in an attempt to reduce water borne diseases.
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The *Small Grants Scheme* (see Appendix 4 for a detailed account) was launched in 2015 to provide enabling grants to the community to undertake small-scale projects falling in line with the LECReD principles. The main objective was to promote practical local experience interventions leading to learning and promoting replication. The grant facility funded the Laamu Atoll Council, Laamu Island Councils, Women's Development Committees, Community Based Organizations, Small-Medium Enterprises, female entrepreneurs, farmers and fishermen to undertake locally led initiatives. The projects awarded during the first call started implementation in 2016. The second call was launched in 2016 and most of the awarded projects completed their activities by end of 2017. The second call for proposals attracted a higher level of participation from the community. There was a 73% increase in the number of concept notes submitted and a 103% increase in participation in the outreach programmes compared to the first call. Female participation also increased by 106%. The grant manager noted an increase in the quality of the concept notes submitted which could be attributed to the overall increase in the level of understanding of climate related issues, but also to the preparatory work conducted during the preparation workshops. The second call also saw more diverse projects including areas such as business and innovation, coastal bio-shield/tree planting/reef protection, disaster risk reduction, fisheries, hydroponics/auto pot farming, renewable energy, mangroves and natural resource conservation, organic farming, street lighting, waste management and behavioural change, and innovative and sustainable organic farming.

LECReD has supported Health Protection Agency to develop the Healthcare Waste Management (HCWM) Policy and Strategy for the country for the year 2016-2021. This was driven from the pilot initiative in Laamu to manage medical waste supplies through LECReD programme. To support the piloting, 11 autoclaves and supporting logistics have been procured and distributed to all health facilities in the Atoll. The Pilot project has been launched on 23 October, 2017 as a component of the general waste management strategy. Outcome of the piloting will decide methodology for medical waste management throughout the country.

Under this output, over 500 people from the farming community from seven islands (55% women) received *trainings on climate smart sustainable agriculture practices* including water harvesting and irrigation, good agriculture practices, integrated soil fertility management, integrated pest management and safe use of pesticide, to assist them in promoting better management of agricultural activities and small grants projects.

LECReD financed the construction and refurbishment of *Community Rain Water Harvesting (CRWH) systems* in 29 sites on 9 islands. Several island councils requested additional storage capacity and LECReD Programme Board approved an additional 214,000 USD to replace tanks, RWH site relocations, and walls to shield some RWH shelters on some islands. LECReD also provided capacity building for the operators and caretakers of these CRWH facilities, including a maintenance manual developed in partnership with MEE.

The *Water Audit* which identified consumption rate and demand for various water sources, and estimated wastage of water at a household level, through a household survey. Awareness

materials on water security, usage, and water saving practices were developed and disseminated.

A *Water Management Plan* for the atoll was developed and includes information on the water use profile of the communities, water management responsibility, water quality, data gathering and monitoring, opportunities to improve water management, recommendations for water conservation and improvement of efficiencies. A *guideline on RWH* was developed through LECReD with information gathered from the islands.

As part of the waste management component, LECReD supported the development of *solid waste management (SWM) plans* for 11 islands. These plans were revised by the Waste Management and Pollution Control Department of MEE and EPA. The SWM plans were developed in consultation with island communities, and it provided island level solid waste management options in consultation with atoll council and relevant partners. Additionally, an *Investment Plan* was developed providing recommendations on the investments needed for the waste management system proposed for Laamu atoll, while identifying existing resources. Implementation of the investment plan will be carried out as part of the LECReD Stage 2 activities.

Trainings for women on Solid Waste Management (SWM) with a focus on waste segregation at household level were conducted. Given that women are involved in waste management at a number of levels including handling day-to-day household waste and waste generated from sweeping/cleaning the islands, they are disproportionately exposed to risks associated with exposure to harmful waste products related to improper and inefficient handling of waste. The main objective of these trainings was to equip women with the skills to manage waste effectively at the same time becoming agents of change by passing down the information and knowledge they have acquired whilst advocating for proper SWM plans to reduce the impact of climate change and improve the lives of island communities.

LECReD programme offered Laamu Atoll clean energy solutions by installing solar panels in 11 schools. The intention was to provide an alternative source of energy that would reduce dependency on fossil fuels. Specifically, the solar panels should help the schools to consume less energy and meet 30% of the peak load. The total electricity costs in 8 of these schools should have been completely covered through the energy that was generated from the solar panels. It was estimated that the project could bring an annual saving of 53,000 USD for the whole Atoll. LECReD also conducted training on the maintenance of the solar panels for schools and Fenaka staff²⁶. 40 people were trained while the installations were ongoing in the islands.

Unfortunately, while this activity is one of the achievements of the programme, it also represents one of the biggest contentious issues. Fenaka, a public utility company that provides electricity to more than 150 islands, has backed out after only one month of using the solar panels refusing to buy the extra energy generated by the solar panels. Feneka never issued an official reason but stated in early 2017 that they would review the drawings and technical specifications. The company noted that all documentation submitted by LECReD appeared to be technically correct and in line with national standards. To date, the programme has been

²⁶ Fenaka is a company owned by the government established in 2012 with the mandate to provide electricity, sewerage and clean water to the outer islands of Maldives.

unable to receive a reply to multiple communications or get an appointment with the Feneka officials. Nevertheless, according to some respondents, the reason behind this stalemate is that the company does not accept to connect the solar panels as it would financial generate loss for them²⁷. At the moment of writing of this report, none of the solar panels installed in schools were functioning. This example proves that there is still a big gap to bridge between political declarations on climate resilience and green development and the actual actions supporting these statements.

²⁷ The state auditor published in September 2017 a report revealing that Fenaka is mired in mass corruption, see https://raajje.mv/en/news/18058 and http://maldivesindependent.com/politics/fenaka-audit-exposesrampant-corruption-at-utility-corporation-132694.

4. LESSONS LEARNT AND RECOMMENDATIONS

This section builds on the lessons learnt during the implementation of the programme and makes some recommendations for future similar interventions.

4.1 Overall lessons learnt and recommendations:

- National authorities should walk the talk. LECReD has shown that for some salient issues, in particular those that have financial implication, such as the installation of solar panels in schools, programmes should deploy stronger efforts in terms of governance and advocacy at the national level. Such interventions are not easy to steer and would require a coordinated effort among multiple UN agencies and other development partners. However, if change is to happen at the local level and if the level of outreach and quality of public services is to be increased across the country, such efforts are indispensable. Short term localized interventions are not going to provide enough incentives for change. Authorities need to demonstrate by concrete actions that they are willing to support actions aimed at promoting low carbon emission lifestyles.
- The programme should include exit strategies. LECReD does not have an exit strategy in place. However, sustainability of the programme activities was discussed at length at the last PB meeting as well as the final LWG meeting where PUNOs presented their activities and councils discussed on how to sustain them. Ideally, planning for exit strategies should start at least six months prior to the estimated end date to ensure the adoption and institutionalisation of new processes. Close monitoring is also needed for some time to maintain momentum to keep things going in the right direction.
- Joint programme should be coherent, aim for reduced transaction costs. At the very core of a joint programme should be an overall vision and strategy that brings together multiple existing initiatives and projects. Despite some joint work, it is not fully clear how LECReD has been doing business in a joint way in terms of programme design, implementation and management. Donors and stakeholders expect that joint programme will result in reduced transaction cost, increased effectiveness and the creation of synergy effect. However, clear quantitative information is not available at the moment of writing on what has been reduced and saved or where the value added is to be found. In fact, to some degree, it appears that the LECReD programme has resulted in an increase in internal UN transaction costs as more time and resources were spent in coordination between various agencies.
- **Mutual accountability and responsibility for achieving results.** All the UN agencies participating in LECReD have demonstrated commitment to work together in planning and implementing the programme activities within existing accountability and reporting structures. However, the LECReD management structures did not have formal authority to secure implementation and results. The PCU role was limited to coordination. During LECReD implementation, the working relations between agencies depended a lot on individual goodwill and too little on institutional accountability.

• Monitoring and evaluation in a multi-stakeholder programme. PUNOs have the capacity to deliver on LECReD. Nevertheless, technical capacity to plan, monitor, analyse, report and evaluate the activities individually and as part of a joint programme need to be improved. It is critical that a simple M&E architecture be built around and effective set of performance-based indicators to guide planning of activities and progress. In that sense, establishing a baseline and setting realistic, identifiable and measurable indicators is crucial.

4.2 Output related lessons learnt and recommendations:

• **Development Plans Lack Financial Means.** Support to planning and monitoring for climate resilient sustainable development involves a lot of soft measures that are difficult to quantify and gauge in terms of results and impact. In that sense, the relevance of such components is difficult to justify without knowledge of how much of the learning will be actually applied in real life especially after the project ends. Part of the reason lies in the turn-over of staff due to elections or other reasons (an aspect that is beyond any project's control), another reason is that changes that require adaptation of attitudes and behaviour take time to happen, something that cannot be achieved during three years of project implementation. Another key challenge is the financing available to implement development priorities. Even though the Decentralization Act calls for both administrative and fiscal decentralization, due to the infancy of the governance structure, economic situation and limitations in resources, financial decentralization has not been adopted by the country. All matters relating to the government budget and finance is centralized in the capital island, with heavy control measures in place.

LECReD supported multiple workshops to **explore methods of generating revenues** within the existing legislation, such as public private partnership models, crowdfunding, grants, and funding through local and international investors. For example, LECReD carried out a consultancy that explored and identified different options for climate financing, performed CBAs, established synergies between sectors, revised the management and governance of the existing Fund in the Atoll Council and prepared necessary tools for managing the Fund. A future project could continue these efforts based on the local development plans in place. For example, one option would be involving the local private sector and/or diaspora around specific projects (e.g. refurbishment or maintenance of local infrastructure, etc.). Another important opportunity is working with young people, both women and men, in particular offering them the opportunity to acquire professional skills that would render them employable beyond manual labour or seasonal labour. Special attention should be given to rural youth, in particular women.

• Low Capacity of Local Authorities and Local Entities. LECReD staff and PUNOs reported numerous difficulties in recruiting competent local individuals and firms to undertake activities. Considerable amount of time was spent on the recruitment process as candidates with the right set of qualification and experience were not attracted to advertisements. Moreover, once contracted, delays in meeting deliverables also caused delays in programme implementation. As many of the activities were sequenced in a way that the output of one activity was supposed to feed into the following activity, a delay in any deliverable caused interruptions in other activities.

Local councils also noted limitations in their human resource. For example, one or few capable individuals would have to be involved in various activities such as workshops or trainings. Given that LECReD programme had a strong focus on capacity building through participation in training activities that required council staff to leave their islands for several days in a row, the participation level was at times low. A lesson learnt during implementation and a good practice was to **plan training activities in advance** preferably at the beginning of the year so that council staff could schedule in advance.

- **Gender (Un)Balance.** As noted throughout this report, the programme staff reported low participation of women in workshops and trainings. Participants usually quoted family and other domestic responsibilities as the main reasons inhibiting them to travel to another island for trainings. Despite continued efforts, participation levels varied greatly and depended on activities (e.g. those concerning women's activities directly such as waste management saw a higher rate of participation than activities such as study tours that involved leaving their households for a period of time. The study tour to the Seychelles only counted 3 women among 17 participants). A lesson learnt and good practice was conducting meetings (such as multi-sector dialogues) within a single day so that participants would not have to stay overnight. This method proved to be effective, for example the second round of MSDs saw an increase of 13% in women participation compared to the first rounds of dialogues.
- **Regulatory Barriers.** All interviewed staff from island councils who were awarded projects under the small grants component noted constraints faced by government entities in carrying out procurement procedures according to national rules resulting in delays in implementation. One of the reasons is the lengthy procedures required to obtain approvals and permits from the relevant government entities. This may be linked to the limited human resources within the island councils themselves. Combined with the low capacities among local firms as discussed above, the interviewed local councillors found it difficult to identify and select a suitable contractor within the allocated budget and timeframe.