

Review of Norway Myanmar Environmental Cooperation 2015-2018

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Review of Norway - Myanmar Environmental Cooperation 2015-2018

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List of Acronyms

AMBI	Arctic Migratory Bird Initiative
EAO	Ethnic Armed Organisations
ECC	Environmental Conservation Committee
ECD	Environmental Conservation Department (of MONREC)
ENRM	Environment and Natural Resource Management
FD	Forest Department (MONREC)
FRI	Forest Research Institute (FD, MONREC)
IDAS	International Development Services (KPMG)
IWUMD	Irrigation and Water Utilization, Management Department (MoALI)
IUCN	International Union for Conservation of Nature
MCDC	Mandalay City Development Committee
MCE	Ministry of Climate and Environment (Norway)
MoALI	Ministry of Agriculture, Livestock and Irrigation (Myanmar)
MOECAF*	Ministry of Environmental Conservation and Forestry (Myanmar)
MOF	Ministry of Forestry (Myanmar)
MONREC*	Ministry of Natural Resources and Environmental Conservation (Myanmar)
NCEA	National Commission for Environmental Affairs (Myanmar)
NEA	Norwegian Environment Agency (Miljødirektoratet)
NIVA	Norsk institutt for vannforskning (Norwegian Water Research Institute)
NLD	National League for Democracy
Norad	Direktoratet for utviklingssamarbeid (Norwegian Agency for Development Cooperation)
NOK	Norske Kroner (Norwegian Crowns – currency)
NSDS	National Sustainable Development Strategy (Myanmar)
NVE	Norges vassdrags- og energidirektorat (The Norwegian Water Resources and Energy Directorate)
NWCD	Nature and Wildlife Conservation Division, Forrest Department, MONREC
NWRC	National Water Resource Committee
NWRC AG	National Water Resource Committee Advisory Group
RNE	Royal Norwegian Embassy (in Myanmar)
SINTEF	Foundation for Scientific and Technical Research (Norway)
SMART	Spatial Monitoring and Reporting Tool
USDP	Union Solidarity and Development Party (Myanmar)
WMD	Watershed Management Division, Forrest Department, MONREC
YCDC	Yangon City Development Committee (Myanmar)

*Note on the use of the acronyms "MOECAF" and "MONREC"

The original grant agreement was signed between the Norwegian MFA and MOECAF (15 October 2015). MOECAF was restructured in June 2016, to become MONREC. Grant responsibilities transferred from MOECAF to MONREC without interruption to the Programme. The Review uses both acronyms, according name at the time being referenced. For general references that are not specific to time, the Review uses the new name and acronym, "MONREC".

Executive Summary

Myanmar in Transition

Myanmar is undergoing a deep transition. Relevant to the *Environmental Cooperation Programme*, the transition began in 2008 and will continue after closure of the Programme's Phase I in 2019. Myanmar implemented a policy of opening, after a lengthy period of military rule and sanctions – induced isolation. Among other results, transition has produced rapid economic growth, with a change in the structure of Myanmar's GDP, and growing public demand for improved governance of the country's environment and natural resources.

The *Norway – Myanmar Environmental Cooperation Programme* is a bilateral institution – building initiative, undertaken as part of the larger *Environment and Natural Resource Management Programme*. It was among the first bilateral cooperation initiatives between the Myanmar State and an OECD Donor, as Myanmar's opening gained momentum. Between 2012 and 2015, Norway and Myanmar made a significant investment to first to develop a cooperation framework and then launch related initiatives.

Objectives of the Environmental Cooperation Programme 2015-2018

The intended Outcome of the *Environmental Cooperation Programme* (Phase I) was to *improve environmental management in Myanmar*. The objective reflected a belief, held by Myanmar and Norwegian officials, that strong institutions are critical for effective environmental management. The Parties focused on strengthening both the national institutional framework, and Myanmar's participation in the relevant international body of conventions and norms.

The lead Myanmar institution was the Ministry of Natural Resources and Environmental Conservation, acting through the Forestry Department and the Environmental Conservation Department. The Ministry of Foreign Affairs served as the lead Norwegian institution, through the Royal Norwegian Embassy to Myanmar and with technical assistance from Norad.

From an initial meeting between Myanmar and Norwegian officials (October 2012), the Programme went through a planning and inception phase (2013 – 2014), appraisal, revision and approval (2014 – 2015) and implementation (2015 – 2018, with an extension into 2019). The final Programme comprised three projects, implemented in the areas of conserving of Myanmar's Biodiversity, developing an Integrated Water Resource Management system, and the Management of Hazardous Waste.

Norwegian and Myanmar Counterparts to the Environmental Cooperation Programme

2015 Agreement between the Norwegian Ministry of Foreign Affairs (Yanong Embassy) and the Myanmar Ministry of Environmental Conservation and Forestry (MOECAF, later MONREC) to establish the Norway – Myanmar Environmental Cooperation Programme.

Project Name	Lead Myanmar Counterpart	Lead Norwegian Counterpart
Conservation of Biodiversity and Improved Management of Protected Areas	Forestry Department, (MONREC) / Nature and Wildlife Conservation Division (NWCD)	Norwegian Environment Agency (NEA)
Integrated Water Resources Management – Institutional Building and Training	Forestry Department, Watershed Management (MONREC)	Norwegian Institute for Water Research (NIVA)
Hazardous Waste Management	Environmental Conservation Department (MONREC)	Norwegian Environment Agency (NEA), in collaboration with Foundation for Scientific and Technical Research (SINTEF).

Each of the three projects had objectives that responded to a combination of the Myanmar – determined priorities, and the competence of the counterpart Norwegian institution. An effective effort

was made during Project selection and development to identify the point where priorities and competence met. In all cases, the Projects were designed around strengthening Myanmar's institutional framework, in its formal (policy, legislation, regulation, systems and procedures, organisation capacity and human competence) and informal (norms, behaviour and collaboration) dimensions.

Objectives of the Programme Review

The Review was asked to:

- ✓ Assess the results of the Norway – Myanmar Environmental Cooperation.
- ✓ Provide the Royal Norwegian Embassy in Yangon and MONREC with inputs for possible adjustments in the last period of the 2015-2018 Programme.
- ✓ Assess and suggest changes and expansions of the existing programmes and projects and new areas of co-operation in a possible new phase.

The Review used an Outcome methodology, including to determine whether the results identified could be attributed to the Programme.

Overview of Findings

Norway – Myanmar Environmental Cooperation is a high performing programme. The Programme is achieving both its stated and higher order political objectives, as a contribution to Myanmar's transition.

The Programme has met or exceeded its objectives, targets and expectations, at the Output and Intermediate Outcome levels. Many of the Outputs comprise foundational work, building the basic knowledge and capacity needed to expand Myanmar institutions. Where activities are still pending finalisation, the performance trend is generally positive. The review did not identify an Output that is significantly off – track. Some deviations in the scope of work did not have a material impact on overall achievements.

At the Outcome level, objectives have been partially met. Most Outputs that will generate institutional changes (policy, law, regulation, or management plans, among others) are submitted to Government, generally in a decision – making track and pending revision or approval. Related decisions and implementation are not likely before project closure. However, this reflects the requirements of decision – making, usually across several Ministries, and some lack of realism in Programme design.

The Programme, therefore, is strengthening Myanmar's institutional framework for managing the environment, and deepening Myanmar's participation in, and compliance with, related international conventions. It is also changing aspects of institutional behaviour, including by strengthening coordination and cooperation between different State entities, and with the private sector and civil society. This convening capacity is essential to the *Ministry of Natural Resources and Environmental Conservation*, given the cross-cutting nature of environment issues, and the Ministry's mandate.

The findings are reached notwithstanding the significant institutional challenges that Myanmar still faces, and concerns for sustainability that result from chronic budget and personnel shortfalls within the Ministry. In part, challenges are driven by Myanmar's rapid economic growth and social change, and the scope and diversity of the problems related to environment degradation that the pace of such change generates.

Key performance variables include the good quality of: initial joint assessment and planning; Myanmar's leadership on identification of priorities, its commitment to the Programme and to the use of Outputs; the technical assistance provided by Norway; the effective institutional collaboration between the Myanmar and Norwegian counterparts, and; other assistance brought in as a result of the Projects.

Myanmar officials express a high – level of satisfaction with the results achieved and the quality of the technical assistance received. They stress the benefits of "Government to Government" cooperation, with Norwegian counterparts that understand the requirements of policy development and

implementation in the public sector. Counterparts have developed close working relationships, which exceed the scope of the projects. This is in spite of the steep learning curve that had to be managed, on both sides.

Summary of Project Performance

Conservation of Biodiversity Project

The Biodiversity Project has met or exceeded its Activity, Output and Intermediate Outcome targets, notwithstanding some deviation in the scope of work. The Project contributes to aligning Myanmar's management of biodiversity with commitment under international conventions and national policy. It also reinforces a new inter-ministerial coordinating structure, the *National Wetlands Committee*.

There is evidence that personnel use the knowledge, skill and aptitude acquired through Project education and training activities, in the performance of their routine responsibilities. The Review, therefore, finds, but cannot precisely quantify, improved capacity in the Nature and Wildlife Conservation Division, including among field staff at 20 Protected Areas. The project is also on track to improving the management of Myanmar's Protected Area, with completion of four management plans.

Outcome performance and sustainability are constrained by chronic funding and personnel shortfalls within the Nature and Wildlife Conservation Division. In particular, MONREC does not appear to have budgeted for implementation of the four management plans.

Project: Conservation of Biodiversity and Improvement Management of Protected Areas	
Result Level	Performance Assessment
Output	Very Satisfactory: The Biodiversity Project is on track to meet or exceed its Activity and Output targets. Outputs are assessed as being of high quality and relevance.
Intermediate Outcome	Satisfactory to Very Satisfactory: Evidence that the institutional capacity and competence of MONREC is strengthened, at the national level and in the Protected Areas and Ramsar Wetland Sites. These are initial results that must be reinforced and expanded to become sustainable.
Outcome	Partially achieved, with positive Outcome trend: Core policy and management Outputs are pending review, approval and implementation, following established decision-making procedures. Outcomes are aligned with, and strengthen national policy and compliance with international convention.

Integrated Water Resource Management

The *Integrated Water Resource Management project* is performing well. Activity and Output delivery meets performance targets, and the expectations of MONREC. Only one of the seven Outputs experienced a significant deviation. Early on, stakeholders decided that it was not realistic to pilot a river basin management plan for the Sittaung River. The project was revised to focus on the Bago Sub-Basin area.

The quality of the support provided NIVA is to a high technical standard. Project-related research is foundational, and contributes to the body of knowledge in MONREC on water management and quality assessment issues.

Intermediate Outcome performance is strong, and all activities reinforce Project Implementation. Site visits and three Focus Groups find that the material and equipment provided by the Project are relevant, and in use by MONREC personnel. Participants report that they use new knowledge and skills in the performance of their responsibilities, and report they are more effective and confident. The Review, therefore, finds, but cannot precisely quantify, improved capacity within MONREC and collaborating Ministries on water management.

Outcomes are partially achieved, and the performance trend is positive. However, the process for decision-making on whether and how to scale up the River Basin Management approach is unclear. Also unclear is the relationship between the IWRM model and other approaches, being provided by

international entities and under pilot by MONREC. The sustainability of Output 3 – Water Quality Laboratory – may be at risk, given concerns for financing and access to essential laboratory materials.

Project: Integrated Water Resource Management	
Result Level	Performance Assessment
Output	Very Satisfactory: The IWRM Project is on track to meet the outputs. It was decided early on that though it would be more feasible to pilot the IWRM approach at the Bago sub-basin level rather than at Sittaung River level (Output 4).
Intermediate Outcome	Satisfactory to Very Satisfactory: Evidence that the institutional capacity and competence of MONREC is strengthened, at the national levels, among field personnel and in two collaborating Ministries. The beneficiaries of training report using their new knowledge, skill and attitude in their regular performance of their responsibilities. They are more confident, and generally perceive that their performance has improved.
Outcome	Partially achieved, with positive Outcome trend: Core policy, criteria and management Outputs are in use, or pending review, approval and implementation. Outcomes are aligned with, and strengthen national water policy objectives. Notwithstanding, the process for approval and scale up of the River Basin Management approach is unclear, as is the casual linkage to an national integrated water management approach. The process is with Government, and the National Water Resource Management Committee.

Management of Hazardous Waste

Myanmar's institutional framework for the management and disposal of Hazardous Waste is in the first stage of development. The Project is doing "foundational" work, at a point when the Environmental Conservation Department is consolidating its approach and expanding capacity.

The Project has met or exceeded activity and Output targets, and delivered high quality research, baseline studies and policy drafts and proposals. These support improved compliance with Myanmar's commitments under the Basel Convention, the development of policy, law and planning related to Hazardous Waste management and disposal, and the strengthening of intra – governmental coordination, at the Union Level and with Regional Governments.

Core Outputs are now in the decision – making track, pending review and approval. The project also delivered high quality education and training activities. There is evidence that these strengthened institutional capacity in MONREC /ECD, and in other government and industry entities.

Project: Management of Hazardous Waste in Myanmar	
Result Level	Performance Assessment
Output	Very Satisfactory: The Hazardous Waste Project is on track to meet or exceed its Activity and Output targets. The project contributes to "foundational" work, as the institutional framework for Hazardous Waste in Myanmar did not previously exist.
Intermediate Outcome	Satisfactory to Very Satisfactory: Evidence that the institutional capacity and competence of MONREC /ECD is strengthened. The inclusion of a broad stakeholder group, from government and industry, in education and training activities serves as a platform to develop a common approach on Hazardous Waste.
Outcome	Partially achieved, with positive Outcome trend. The core Outputs submitted, now within the decision – making track and pending revision and /or approval. Outcomes can be expected to contribute towards the implementation and compliance with the Basel Convention, and a policy and planning for the management and disposal of Hazardous Waste.

Assessment of Evaluation Criteria

The Programme shows high and consistent achievement across the evaluation criteria.

Review Criteria	Performance Assessment
Relevance	Very Satisfactory , to the policy, priorities and objectives of the Programme counterparts, in Myanmar and Norway, and to their respective institutional arrangements and competence.
Efficiency	Satisfactory , reflecting effective Project design and the high ratio of programme Outputs that are pending conversion into tangible MONREC Outcomes. Programme level coordination is ineffective, and lacks a basic enabling structure. This adds to the coordination and administrative burden on the Yangon Embassy.
Effectiveness	Highly Satisfactory The <i>Environmental Cooperation Programme</i> is an effective initiative. It is making a tangible contribution to strengthening environmental management in Myanmar, and the institutional capacity of MONREC.
Sustainability	Satisfactory , based on strong MONREC engagement and commitment to use Programme Outputs, as contributions to strengthen environmental management in Myanmar. Notwithstanding, all of the Projects are affected by uncertain financing and budget allocations. This appears to particularly the case with the Biodiversity Project, given the chronic underfunding for Protected Areas. Accordingly, the ranking for the Biodiversity Project is Unsatisfactory .

Cross – Cutting Issues

Programme and Project documents identify gender equality, human rights and sensitivity to vulnerable population groups as cross – cutting issues. They do not set out a method for how the Programme will address related issues, or the policy and approach of MONREC. There is some evidence that the projects took related issues into consideration during activity design, including for training and processes of community consultation. There is also some reporting on gender, usually in the form of quantifying women's participation on activities. Otherwise, the Projects do not have a concept or method for addressing the cross – cutting issues set out in the Programme Document.

1. Section One: Introduction and Overview

Section One describes the status of the *Environmental Cooperation Programme* as of May 2018, the objectives of the Review and an assessment of evaluability.

1.1 A Programme for Bilateral Cooperation on the Environment

1.1.1 Overview and programme status

The *Norway – Myanmar Environmental Cooperation Programme 2015-2018* (hereafter, "the Programme") is a bilateral collaboration, between institutions of the Governments of Norway and Myanmar. The Programme was planned and implemented during a period of profound change in Myanmar. Contributing to transition, the Programme's objective is to "improve environmental management", by strengthening the institutional framework and capacity of the Ministry of *Environmental Conservation and Forestry (MOECAF)*.¹

*The Programme is one component of the Environment and Natural Resources Management (ENRM) programme; eight interventions directly involving Norwegian and Myanmar Ministries.*² The ENRM portfolio intends to strengthen Myanmar's State institutions, primarily at the Union level but also assisting sub-national institutions and non – State entities.

Programme implementation began in 2015, after a two-year planning and inception period (2012 – 2015) and signing of an agreement between the Royal Norwegian Embassy in Yangon (hereafter, the "Embassy") and *MOECAF* (28 October 2015).

Final responsibility for implementation of the Programme, and the achievement of Outcomes, rests with *MOECAF /MONREC*. The division of responsibility is set out in the framework *Programme Agreement* (2015), and reiterated in the three project-level grant and institutional cooperation agreements. Grant funding originates with the *Norwegian Ministry of Foreign Affairs (NMFA)*, which administers the Programme from the Royal Norwegian Embassy in Yangon, with technical assistance from the *Norwegian Agency of Development Cooperation (Norad)*.³

Norway provided grant funding of NOK 75.5 million to the Programme, covering all activities over the three year period 2015 to 2018. In addition, the Norwegian Ministry of Climate and Environment supported Programme development with grants totalling more than NOK 18 million to two additional projects, the first for programme planning (2012 – 2013) and the second for an inception phase (2014 – 2015). The total Norwegian investment in the Programme between 2012 and 2018, therefore, approaches NOK 96 million. This amount is exclusive of any investment, financial or institutional, made by *MONREC*.

The *Environmental Cooperation Programme* comprises three projects. Each project is designed as an institutional collaboration between a lead *MONREC* Department and a Norwegian counterpart(s). The MCE acts through the *Norwegian Environment Agency (NEA)*.⁴ However, two non-State institutions, the *Norwegian Institute for Water Research (NIVA)*⁵ and the *Foundation for Scientific and*

¹ The original grant agreement was signed between the Norwegian MFA and *MOECAF* (15 October 2015). *MOECAF* was restructured in June 2016, to become *MONREC*. Grant responsibilities transferred to the new Ministry without interruption to the Programme.

² From "Bilateral relations Norway and Myanmar", <https://www.norway.no/en/myanmar/norway-myanmar/bilateral-relations/#DevelopmentCooperation>.

³ The Embassy is competent to represent the *NMFA* in all matters pertaining to the implementation of the Programme.

⁴ The Norwegian Environment Agency is a government agency under the Ministry of Climate and Environment, <http://www.miljodirektoratet.no/en/About-us/>

⁵ The *Norwegian Institute for Water Research (NIVA)* is an institute for fundamental and applied research on marine and freshwaters, <https://www.niva.no/en>

Technical Research (SINTEF),⁶ play either a lead (NIVA) or substantive technical (SINTEF) role in two projects. Both are long – established institutions, with large international research portfolios.⁷

Table 1: Norwegian and Myanmar Counterparts to the Environmental Cooperation Programme

2015 Agreement between the Norwegian Ministry of Foreign Affairs (Yangon Embassy) and the Myanmar Ministry of Environmental Conservation and Forestry (MOECAF, later MONREC) to establish the <i>Norway – Myanmar Environmental Cooperation Programme</i> .		
Project Name	Lead Myanmar Counterpart	Lead Norwegian Counterpart
Conservation of Biodiversity and Improved Management of Protected Areas	Forestry Department, (MONREC) / Nature and Wildlife Conservation Division (NWCD)	Norwegian Environment Agency (NEA)
Integrated Water Resources Management – Institutional Building and Training	Forestry Department, Watershed Management (MONREC)	Norwegian Institute for Water Research (NIVA)
Hazardous Waste Management	Environmental Conservation Department (MONREC)	Norwegian Environment Agency (NEA), in collaboration with Foundation for Scientific and Technical Research (SINTEF). ⁸

In some parts of Myanmar, Programme implementation is constrained by communal violence or ethnic armed conflict. Access in these areas is affected by security conditions and/or by contested State authority. Notwithstanding, the institutional and geographic reach of the Programme is broad. Each project is implemented at the Union level, with issues that are cross – cutting to other Union and sub – national Government entities, the private sector and in organisations in Myanmar society. By design, therefore, the Programme is a platform that convenes multiple stakeholders, State and non – State.

The *Environment Programme* is now in its third and final year of implementation. With extensions, all three projects will close by mid – 2019. Planning for Phase II of the Programme was well advanced by April 2018, when the Review began. A second phase was anticipated in the *Decision Document* (06 July 2015), and informed by Norway's commitment to long – term engagement with institution building (*Country Strategy for Myanmar*, 2012).⁹ The principle of long – term engagement is reiterated throughout Norwegian official statements and documents, as core to Norway's approach to cooperation with Myanmar.¹⁰

At the 2018 Annual Meeting, the Norwegian Embassy announced that the Norwegian Environment Agency would not participate in Phase II. The agency is a Directorate of the Norwegian Ministry of Climate and Environment, and the Ministry had revised its priorities. Accordingly, the MCE directed the NEA to reduce its staff and concentrate its international work on fewer countries. As Myanmar was not on the MCE priority list, it was agreed between MCE and NEA that the NEA should not be a part of Phase II of the Environment Cooperation programme. This decision was partly revised, based on the letter from the MONREC Minister to MCE Minister Elvestuen. The NEA will now allocate some personnel resources to phase II of the programme (2019-2023), albeit with reductions.

⁶ SINTEF is a Norwegian research institute, working in the fields of technology, the natural sciences, and the social sciences. <https://www.sintef.no/en/>

⁷ 2015, Article IV on the "Contributions and Obligations of MOECAF".

⁸ Within the collaboration NEA has focus on Basel Convention implementation, while SINTEF engaging more broadly on the classification and management of HW.

⁹ According to the *Decision Document*, "no exit strategy has been prepared as this Programme is seen as the start of a long-term cooperation between Norway and Myanmar in the Environment sector" (06 July 2015: 10). The document refers to some activities being deferred to a second phase, for reason of funding shortage.

¹⁰ For example, see interview with Ambassador Ann Ollestad, "Norway to focus on peace, natural resources and responsible business", in *Mizzima*, 19 May 2016.

1.2 Review Objectives and Methodology

1.2.1 Objectives of the review

From the Terms of Reference, the objectives and scope of the *Review of Norway - Myanmar Environmental Cooperation 2015-2018* (hereafter, "the Review") are to:

Table 2: Objectives and Scope of the "Review of Norway - Myanmar Environmental Cooperation, 2015-2018"

Review Objectives	Scope of the Review
Assess the results of the Norway – Myanmar Environmental Cooperation.	The programme implementation period, from signing of the main agreement (October 2015) to the present (30 April 2018, and including the 2017 Annual Report and the 2018 Q1 reports as available).
Provide the Royal Norwegian Embassy in Yangon and MONREC with inputs for possible adjustments in the last period of the 2015-2018 Programme.	Activities undertaken during the programme development phase, to the extent that these are necessary for explaining programme results.
Assess and suggest changes and expansions of the existing programmes and projects and new areas of co-operation in a possible new phase.	All key issues found relevant to assessment of the status of the programme, including whether and/or how the objectives and planned results were achieved, or are likely to be achieved. ¹¹

The Review assesses results against six criteria: Efficiency; Effectiveness; Impact of the Programme; Relevance; Sustainability and Risk Management. Standard Norad review principles and criteria definitions are used.¹² Further, the *Terms of Reference* provide 29 specific questions, to guide assessment of the results against the review criteria.¹³

The *Terms of Reference* further set out crosscutting issues to be investigated, comprising: The role and contribution of participating institutions and consultants; Coordination with other environment programmes (Myanmar, Norway and international); the quality of reporting, and; programme measure for management, audit, financial management and anti-corruption.

1.2.2 Review methodology

The Review used an Outcome methodology to assess the Programme results achieved.¹⁴ The methodology followed three sequential steps:

- ✓ *Identification and assessment of project – level Outputs* (document review, site visit, interviews and Focus Groups, in Myanmar and Norway).
- ✓ *Identification and assessment of programme – level Outcomes* (document review, site visits, interviews and focus groups, and external sources).
- ✓ *Assessment of the casual pathway linking Programme Outcomes to Project Outputs*, to determine whether the Outcomes identified can be attributed to the Environmental Cooperation Programme (Process Tracing method).

¹¹ Annex A comprises the *Terms of Reference* for the Review. The above presentation of objectives, scope and crosscutting issues are paraphrased.

¹² Norad principles and criteria for evaluation are based on those developed by the Development Assistance Committee of the OECD, and can be found at <https://www.norad.no/en/front/evaluation/what-is-evaluation/basic-principles/>.

¹³ The Review does not include a section with individual responses to the 29 questions. Coverage of the questions is summarised in Annex E, with references to the location of information in the report text.

¹⁴ Annex B comprises a detailed *Overview of the Outcome Methodology* used, with sources. The methodology was originally set out and confirmed in the *Inception Report*.

The review was conducted over four phases:

Table 3: Sequencing of Review Methodology and Activities

Phase	Activity
Phase One: Inception in Norway (April 2018), leading to submission of an <i>Inception Report</i> (May 2018).	Gathering and review of documentation from primary (Programme) and secondary (external and non-Programme) sources. ¹⁵ Inception interviews with Norwegian (eight interviews conducted in Oslo and Trondheim) and some Myanmar counterparts. ¹⁶ Finalisation of the review methodology, agenda for mission to Myanmar, and assessment of evaluability.
Phase Two: Programme Review in Myanmar (03 to 22 May, 2018)	Estimate 25 interviews in Yangon, Nay Pyi Taw, Bago, Yezin and Moeyungyi, with 40 informants. Seven Focus Group discussions, with the beneficiaries of higher education and training activities, and CSO counterparts.
Phase Three: Debriefing and Follow-up in Myanmar (23 to 36 May, 2018)	Debriefing presentation to the <i>Third Annual Meeting of the Norway – Myanmar Environment Programme</i> , 23 May 2018 Naypyidaw. Follow-up interviews and information gathering in Myanmar, including to close information gaps.
Phase Four: Drafting, revision and finalisation of the report (completed November 2018)	On agreement with Project Counterparts

1.2.3 A scale to assess performance and achievement

The Review uses a four-point scale to assess Programme achievement; Very Satisfactory, Satisfactory, Unsatisfactory, Very Unsatisfactory. The values combine the total Output attainment (Quantitative, the % of a target or indicator reached) with the quality of the Outputs delivered (Qualitative interviews and/or based on physical verification).¹⁷

1.3 Limits to Evaluability of the Programme

The overall evaluability of the Programme was assessed as "Satisfactory", during the inception process. There was no significant hindrance that negatively affected the Programme Review.

The Review Team received every cooperation and assistance that it requested. Documents were made available in a timely manner, the required interviews and focus groups took place and MONREC officials assisted organising and with logistics. Most academic publications and project contributions to policy, law and regulation were made available, and the Review was able to source external information.

The most important limitation was in the quality of Project and Programme performance reporting. Reporting tends to be narrative and activity – focused, and not based on empirical monitoring. This was particularly the case for Intermediate Outcomes. Weakness in the performance reporting means that the Programme sometimes has difficulty quantifying and then communicating its achievement. This is a loss to the Programme, not least because its achievements appear to be significant.

¹⁵ Annex C comprises the *List of Documents Reviewed*.

¹⁶ Annex E comprises the Review Team's agenda and the list of persons that participated in interviews and Focus Group meetings, in Norway and Myanmar.

¹⁷ The assessment scale is included as part of Annex B on Methodology, with full information on the performance metrics used.

2. Section Two: Origins, Objectives and Structure of the Environmental Cooperation Programme

Section Two describes the origins and objectives of the Environmental Cooperation Programme, framework of agreements that enabled the Programme, and its structure.

The Programme was set in the larger context of the profound transition that occurred in Myanmar, beginning in 2018 and accelerating after 2010. Design of the Programme was shaped by the institutional requirements of the transition process in Myanmar, and a shift in Norway's approach after 2008. From a policy isolating the former military government, Norway supported positive trends in the transition process, including by providing long – term bilateral support to strengthening State institutions in the Environment and Natural Resource sectors.¹⁸

Following Myanmar's original request for assistance (2012), the two countries made a significant investment, first to normalise the enabling institutional framework for their relationship, and then complete planning for the Environment Cooperation Programme (2012 – 2015).

2.1 Programme Objectives

The objectives of the *Environmental Cooperation Programme* are set out in the original Goal Hierarchy (*Programme Document*, 2015).¹⁹ The Programme was implemented without substantive revision to the hierarchy. Some adjustments were made at the activity level, but without material changes to the formulation of higher objectives (Outputs, Intermediate Outcomes and Outcomes).

Table 4: Objectives of the Environmental Cooperation Programme

Intended Impact: Improved environmental management in Myanmar		
Conservation of Biodiversity and Improved Management of Protected Areas	Integrated Water Resources Management – Institutional Building and Training	Management of Hazardous Waste
Intended Outcomes		
Conservation of biodiversity and management of protected areas are in line with Myanmar's National Biodiversity Strategy and Action Plan (NBSAP).	An Integrated Water Resources Management system implemented for inland waters at the national level.	Improved management of Hazardous Waste.
Management is in line with the Convention on Biological Diversity (CBD).	Management of Water Resources in line with National Water Framework Directive.	Proposed regulatory framework for the management of HW in Myanmar, including for the implementation of the Basel Convention is developed.
Management is in line with the Convention on Wetlands (Ramsar).		Proposed Master plan for Hazardous Waste management in Myanmar is developed.

¹⁸ A detailed description of the historical context to the programme and Norway's engagement is included in Annex F to this report.

¹⁹ Annex B comprises the complete Goal Hierarchy for the environmental management programme, as set out in the *Programme Document* (2015).

Intended Intermediate Outcomes

Strengthened capacity and competence within MOECAAF at all levels (FD / NWCD /Regional / PA sites).	Strengthened capacity and competence within MOECAAF, MOAI, MOT and relevant stakeholders on water management.	Strengthened Capacity within MOECAAF / ECD, other relevant Ministries, City Development Committees, industry and relevant stakeholders on management of HW.
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The Environmental Cooperation Programme was originally developed as three individual projects, rather than an integrated programme. Revisions were made to the results matrix, prior to final approval and on recommendation of the *Programme Appraisal* (2014) with technical assistance from Norad.²⁰ The revisions provided a programme – level framework, adding a common approach to the project results matrices and the addition of Outcome and Intermediate Outcome statements defining the type of institutional change being sought.²¹

The results matrix has a single Impact statement; "Improved environmental management".²² *Project Outcomes* focus on strengthening MONREC's institutional framework (alignment with international convention and treaty, strengthening policy, legislation, systems and procedure, some infrastructure and equipment, and generating new knowledge), for environmental management in three areas of sectoral focus. Interventions include aligning Myanmar's institutional framework with its international Convention and Treaty commitments.

Intermediate Outcomes intend to strengthen human resource capacity (knowledge, skill and aptitude), in MONREC and other with other stakeholders in government, industry and society. The Projects offer a suite of training and higher education opportunities, in Myanmar, countries in the region and Norway.

Intermediate Outcomes and Outcomes are under the control and responsibility of MONREC. Each Project further includes a set of supporting *Outputs*, comprised of multiple activities that fall under the control of the Project (Norway – Myanmar collaboration).

2.2 Origins of the Environmental Cooperation Programme

2.2.1 Myanmar requests Norwegian assistance

Myanmar formally requested Norwegian assistance in October 2012, during a visit to Oslo by the Minister for MOECAAF, U Win Tun.²³ The Minister presented portfolio of projects, which through discussion became the Programme. Among the criteria for selection, the Parties looked for projects on which:

- ✓ The priorities of Myanmar's Government coincided with Norway's global policy agenda.
- ✓ Norwegian State institutions had the required core competence and responsibility.²⁴

2.2.2 Programme development and supporting agreements

The Norwegian *Ministry of Climate and Environment* engaged at the request of the Norwegian Ministry of Foreign Affairs. Globally, the Ministry has a mandate to strengthen the multilateral framework for environment and climate change, with convention and treaty on bio-diversity, climate and hazardous waste in its scope. Programme collaboration with Myanmar offered a platform for dialogue, with a country that was developing its policy framework and assessed as being vulnerable to climate change and the consequences of rapid economic growth. Accordingly, they agreed to provide substantive and

²⁰ Reference from interviews. The original draft proposals were not available for citation. The appraisal concluded that projects lacked higher- level development objectives,

²¹ Programme Document 2015 – 2018.

²² The Impact statement is effectively a consolidated Outcome (institutional change) and not an Impact (societal change).

²³ In 2012, Norway was still one of the few OCED donor countries providing bilateral assistance to Myanmar state institutions.

²⁴ From Interviews with NMFA and MCE officials, and supported by the appraisal report (2015).

technical assistance through the *Norwegian Environment Agency*, and was expected to coordinate the Norwegian component of programme implementation.²⁵

Norway and Myanmar made a significant investment to first establish and then normalise the institutional framework of their relationship, and to match Myanmar's requests with the core competence and responsibilities of potential Norwegian counterparts. From the first meeting in 2012, arrangements for the *Environmental Cooperation Programme* were set out in a series of enabling agreements and documents, signed between 2013 and 2015. Bilateral discussions to establish the Programme occurred within a series of measures to deepen and institutionalise Norway's engagement in Myanmar. These were enabled by a frequent political contact and exchange, including at the highest level.²⁶

Agreement between the Norwegian Ministry of Foreign Affairs and the Ministry of Climate and Environment (2012). Work to develop the cooperation began after the high – level MOECAF delegation visited Norway in October 2012. In Norway, an inter-ministerial agreement between the NMFA and MCE was developed, setting out the terms of their cooperation during the programme development phase (2012 – 2014). A further agreement between the NMFA and the MCE was signed in 2014, involving the transfer of funds. The scope of the second agreement covered arrangements during the design and planning phase of the Programme, the costs pertaining to preparatory meetings and seminars, and reports on different aspects of the future cooperation. It did not cover the MCE's role during an implementation phase.²⁷

A Memorandum of Understanding on development cooperation prioritised the environment and natural resource management. The memorandum between Norway and Myanmar concerning development cooperation identified the "sustainable management of natural resources, energy and environment / climate change" as one of two priority areas (01 December 2014). Related issues were already integrated into Norway's *Country Strategy for Myanmar (2012)*. The Parties further agreed that "Cooperation will contribute to strengthening government institutions and their ability to manage natural resources..."²⁸

A Letter of Intent nominating the Ministry of Environmental Conservation and Forestry (Myanmar) and the Ministry of Climate and Environment (Norway). The Letter of Intent (06 February 2014) identified six potential areas of cooperation on "institutional strengthening and capacity development", of which three developed into bilateral projects.²⁹

An agreement between the Governments of Norway and Myanmar, enabling grant funding (15 October 2015).³⁰ The Agreement Concerning Norway – Myanmar Bilateral Environment Programme 2015 – 2018 sets out the overall structure and content of the Programme. The agreement designates the Embassy as the competent Norwegian representative for the MFA, and designated the Permanent Secretary of the MOECAF as the representative on the Myanmar side.

For each project, the respective Norwegian and Myanmar counterparts signed *Institutional Cooperation Agreements (ICA 2015)*, with the scope, terms and conditions of collaboration, and the results expected. The ICAs build on, and refer to, the Programme Agreement between the NMFA and

²⁵ MCE's early engagement was reconstructed from interviews. Documentation on the original exchanges between the NMFA and the MCE was requested, but not available.

²⁶ Prime Minister Jens Stoltenberg (November 2012), President Thein Sein, February 2013, King Harald and Queen Sonja (December 2014), in addition to ministerial – level meetings.

²⁷ Information from interviews. KLD/MFA/Norad could not locate the agreement. The 2012 agreement appears to have been an understanding, whereas 2014 agreement related to funding. Importantly, the implementation and coordination roles of the KLD were not specified, beyond the contribution of the NEA.

²⁸ Memorandum of Understanding between the Government of the Kingdom of Norway and the Republic of The Union of Myanmar concerning Development Cooperation (Section 2), signed in Nay Pyi Taw on 01 December 2014. The memorandum was based on, and reinforced, terms of the Nay Pyi Taw for Effective Development Cooperation (20 January 2013), between the Government of Myanmar and its Development Partners, including Norway.

²⁹ Letter of Intent between the Ministry of Environmental Conservation and Forestry of Myanmar, and the Ministry of Climate and Environment of Norway on Cooperation in the Field of Environment, signed in Nay Pyi Taw on 06 February 2014.

³⁰ Agreement between the Norwegian Ministry of Foreign Affairs and the Myanmar Ministry of Environmental Conservation and Forestry regarding development cooperation concerning Norway-Myanmar Bilateral Environmental Programme 2015-2018, 01 October 2015.

MOECAF (2015).³¹ Importantly, the agreements designate MOECAF and the collaborating MOECAF department as the "owner" of the projects, with overall responsibility for planning administration and implementation.

No programme-level governance or coordination entity was established. Such an entity would normally serve as a platform for policy dialogue between Norway and Myanmar, and be responsible for maintaining an oversight of implementation progress. However, Programme – level governance and coordination were not part of the model set out in the 2015 agreement. The Parties agreed to convene an *Annual Meeting*, during the second quarter of each programme year.

A Norwegian intra – governmental coordination mechanism was not defined. From interviews, Norwegian institutions assumed that the MCE would provide programme-level coordination, as the Norwegian implementing entity. Further, there was discussion on embedding a Norwegian *Resident Programme Coordinator* in MOECAF. However, the MCE's role did not develop into coordination, and a Resident Programme Coordinator was not hired. There was no expectation that the Norwegian Embassy in Yangon would provide coordination support, or other services outside of grant management. As an alternative, NEA (hazardous waste and biodiversity) and NIVA settled on a rotating system, where one of the three entities would take the lead coordinating the *Annual Report* submission.

As the final element of structure, the Norwegian Embassy in Yangon engaged Norad (Section for Environment and Food Safety) to provide technical assistance to the Embassy.

Table 5: Timeline for Programme Development

Date	Event
2009	Norway and Myanmar open dialogue on political, humanitarian and peacebuilding initiatives.
November 2010	Myanmar national elections, resulting in majority Union Solidarity and Development Party government. A multi-stage reform and transition plan, including negotiations to end long-standing ethnic armed conflict (2011).
2012	MOECAF established by newly elected USDP government
October 2012	Union Minister U Win Tun visits Norway. First exchange on possible cooperation between MOECAF and the Norwegian Ministry for Climate and Environment. Follow up meeting takes place in Nay Pyi Taw, January 2013.
2012	Funding agreement between the Norwegian Ministry of Foreign Affairs and the Ministry of Climate and Environment.
2012	Norway publishes a Country Strategy for Myanmar
October 2013	Royal Norwegian Embassy established in Yangon. Norway had a full- time diplomatic presence in Myanmar beginning in mid-2012, managed through the Embassy in Bangkok.
December 2012 – July 2014	The Norwegian Ministries of Foreign Affairs and Climate and Environment provide support for planning phase of possible co-operation.
2014 – 2015	<p>06 February 2014 – Norway (MCE) and Myanmar (MOECAF) sign Letter of Intent on Environmental Cooperation.</p> <p>March- May 2014 – Programme Appraisal completed.</p> <p>08 July 2014 – Agreement between the Norwegian Ministries of Foreign Affairs and Climate and Environment, on inception phase for bilateral cooperation with Myanmar.</p> <p>01 December 2014 – Norway and Myanmar sign MOU on Development Cooperation.</p>

³¹ Institutional Cooperation Agreement between the Ministry of Environmental Conservation and Forestry (MOECAF)/Environmental Conservation Department (ECD), Myanmar and the Norwegian Environment Agency regarding the Myanmar – Norway Project on Hazardous Waste Management (HWM Project), signed 01 December 2015.

Date	Event
	01 October 2015 – Norway (MFA) and Myanmar (MOECAF) sign agreement for a bilateral <i>Environmental Programme</i> (2015 – 2018). Institutional Cooperation Agreements (ICA) signed for each project.

2.2.3 Programme structure

The resulting programme structure had three levels, each with its own management requirements:

Table 6: Environmental Cooperation Programme Structure

Intergovernmental	Bilateral collaboration between the governments of Norway and Myanmar, set out in enabling agreements. The Royal Norwegian Embassy in Yangon is the agreement partner with responsibility for project follow-up.
Intra – governmental	Internal coordination, within and between the institutions of the Myanmar and Norwegian States.
	<i>For Norway</i> , between the Ministry of Foreign Affairs (Royal Norwegian Embassy to Myanmar) and the Ministry for Climate and Environment (engaging through the Norwegian Environment Agency), with the Norwegian Institute for Water Research engaged as a non-state project implementer and SINTEF providing technical services to the NEA for the Hazardous Waste Project.
	<i>For Myanmar</i> , within MOECAF / MONREC, between the three implementing departments (FD / NWCD / ECD), and with other ministries, inter-ministerial bodies, sub-national government entities and stakeholders in the private sector and society.
Joint institutional collaboration for project implementation	Joint implementation of three projects, as a collaboration between Norwegian (2) and Myanmar (3) institutions. SINTEF engaged with the NEA for the Hazardous Waste project, in a technical capacity. Each project develops its own internal management and implementation entities / processes.

2.2.4 A "whole-of-government" approach

Both Norway and Myanmar took a "whole of government" approach to Programme design. For Norway, the Programme depends on a sustained commitment from the Ministry for Climate and Environment, through the Norwegian Environment Agency. In Myanmar, environmental management is a crosscutting issue that falls under multiple ministries and jurisdiction, Union and sub-national, requiring that the Programme often serves as a convening platform.

2.3 Coordination with other International Donors and Initiatives

The *Environment Cooperation Programme* is not represented at the official forum for coordination between the Government of Myanmar, and international entities.

Since 2012, Government has worked to develop its capacity to coordinate international assistance coming into the country, and to strengthen the relevant policy and regulatory framework. Most recently, the Government approved a new *Development Assistance Policy* (January 2018) and established ten sector coordination groups (agriculture, education, energy, healthcare, nutrition, job creation, social protection and disaster, transport, information and communications technology and the environment). The groups are Chaired by a Government entity, with an international Co-Chair. They work under supervision the *Development Assistance Coordination Unit-DACU*, a unit within the *Ministry of Planning and Finance*.

It appears that all three *Environment Cooperation Programme* projects fall under the *Environmental Conservation Sector Coordination Group*. The group is chaired by MONREC, Co-Chaired by UN Habitat, and had 64 Development Partner member by the end of 2016 (most recent available membership data). The levels of participation on Water is high, with less international engagement on

Biodiversity and Hazardous Waste. From interviews, the Group has basic functionality, as an information-sharing platform. However, the overall quality of coordination can improve.

Notwithstanding, the group is intended as a platform for policy discussion, coordination between Ministries and international entities, and information sharing. The Environmental Cooperation Programme does not have representation to the Group. As such, information on the programme is not shared within the Group.

2.4 Programme Resources and Funding

Total Norwegian funding to the Programme was approximately NOK 93.4 million, comprising NOK 75 million in grant funding from Ministry of Foreign Affairs and NOK 18.4 million from the Ministry of Climate and Environment in support of planning during the inception phase.

Table 7: Financial Overview

Project	Original closure date	Expected date of closure with extension	Agreed amount	Date of signed agreement
BUR-11/0037 Agreement NMFA – MCE for planning and pilots	2012-2013	N/A	4.210.905	7.12.2012
Add 1			4.500.000	26.07.2013
Add 2			578.000	10.12.2013
MMR-13/0055 Agreement Embassy (Bangkok) – MCE for planning and inception phase	2014-2015	N/A	7.900.000	09.07.2014
Add 1			750.000	22.10.2014
Add 2			8.800	05.02.2015
MMR-15/0029 Agreement Embassy (Yangon) – MOECAF (MONREC)	2015-2018		75.500.000	15.10.2015

3. Section Three: Assessment of Programme Performance

Section Three provides an assessment of the *Environmental Cooperation Programme's* performance at the three results levels: Output, Intermediate Outcome, and Outcome.

The assessment is made on a project – basis, with a concluding assessment of Programme results and achievement. Data is taken from project work plans and reports, verified and augmented through site visits, interviews with Myanmar and Norwegian officials, and Focus Groups with programme stakeholders and beneficiaries. The Review consulted some project publications, and most contributions to policy, legislation and regulation. Information was richest at the Activity and Output levels, and increasingly limited moving to Intermediate Outcome and Outcomes.

3.1 Conservation of Biodiversity and Improved Management of Protected Areas

3.1.1 Biodiversity Project Context

Management of Myanmar's Protected Areas is a responsibility of the *Nature and Wildlife Conservation Division* (NWCD), under the Forestry Department. Myanmar had 45 Protected Areas in 2013, including some that were still proposed when development of the Biodiversity Project began. Of these, 38 were gazetted under the *Protection of Wildlife and Protected Areas Law* (1994). The number of Protected Areas sites increased to 42, by 2018. Among these, designated Ramsar Sites increased to five, from one in 2015.

The NWCD currently manages 21 Protected Areas. The Division does not yet have enough field staff or resources to cover all of the areas. NWCD officials advised that Regional or Township officers from the Forestry Department manage the remaining Protected Areas. The Division expects to assign personnel to cover all Protected Areas, although the timing and resources are pending confirmation. Until coverage is complete, the areas outside of the NWCD's responsibility are managed to a different standard.

From interviews, some Protected Areas are affected by conflict. The dynamics range from Ethnic Armed Conflict, where State authority is contested, to social conflict related primarily to landownership and use, including denial of access to natural resources within the areas. The prevalence of social conflict means that community consultation and participation in protection activities become important issue for the *Protected Area Management Plans*.

3.1.2 Myanmar's Institutional Framework for Biodiversity

At inception of the Project, Myanmar had a limited pre-existing policy and legal framework, set out in both national and international instruments. Missing elements included national policies for Protected Areas and for Wetlands. The *Project Documentation* (2015) concluded that a review of Myanmar's legislative framework was needed, to identify gaps in law or policy that should be addressed.

Myanmar previously adopted measures to align its national institutional framework with the *Convention on Biological Diversity*. Government adopted Myanmar's *National Biodiversity Strategy and Action Plan* (2012, NBSAP). Among other considerations, the strategy was done in compliance

with the *Convention on Biological Diversity* (CBD), to which Myanmar is a signatory. A revised strategy was adopted in 2015 (NBSAP 2015 – 2020), to align with the CBD's *Aichi Biodiversity Targets*.³²

Work done by the Project, therefore, was not "foundational". Design focused on expanding Myanmar's institutional framework, bringing it into closer harmony and compliance with international instruments, and strengthening MONREC / NWCD's capacity to manage, plan and enforce regulations in Protected Areas and Wetlands. These actions, took into account the sensitivity of land use issues, and the need to engage communities living in buffer zones.

Table 8: Myanmar's Institutional Framework for Biodiversity

Two International Instruments	
Instrument and Entry into Force	Myanmar Ratification
The Convention on Biological Diversity opened for signature in June 1993, and entered into by on 29 December 1993.	Myanmar ratified the <i>Convention on Biological Diversity</i> on 23 February 1995. Myanmar has since ratified or acceded to two of the three CBD Protocols. ³³
The <i>Ramsar Treaty on Wetlands of International Importance</i> was negotiated through the 1960s, and adopted in 1971. The treat came into force in 1975.	Myanmar becomes a Contracting Party to the Ramsar Convention, on 17 March 2005. Reporting (2013 and 2015) identifies significant gaps in Myanmar's institutional framework for implementation. ³⁴
Two National Policy Instruments (aligned with the Environment Conservation Law) and the Protection of Wildlife and Protected Areas Law (1994).	
<i>National Biodiversity Strategy and Action Plan</i> (2015-2020), revised from the 2011 plan to meet CBD Aichi Biodiversity Targets.	Implementation of CBD (Article 6) and Ramsar commitments.
National Wetland Policy and Actions (December 2017).	Implementation of Ramsar commitments, including Myanmar's ambition to fully implement the <i>Ramsar Convention's Fourth Strategic Plan (2016 – 2024)</i> , and Myanmar's <i>National Biodiversity Strategy and Action Plan</i> commitments.
National Policy for Protected Areas	No specific policy in place. Project did not conduct the review of Myanmar's legal framework, originally anticipated under Output 4.

3.2 Biodiversity Project Development

3.2.1 Project Design

Norway and Myanmar made a significant investment to develop the biodiversity project. The NWCD took the leadership role in identifying priorities, and the scope of work. Inception work was ongoing from late 2012 through 2014, inclusive of a pre-project assessment, project concept development, at least two bilateral expert planning meetings³⁵ and initial training activities convened in the Forestry Department in 2013.

The NWCD and NEA collaborated with the Ramsar Secretariat during the inception phase.³⁶ The Project further benefited from high quality external competence for the Wetlands component. The Ramsar Secretariat supported drafting of the *Concept Note – Wetlands and Biodiversity in Myanmar*

³² <https://www.cbd.int/sp/>

³³ <https://www.cbd.int/countries/default.shtml?country=mm>

³⁴ Officials advised that Myanmar's 2018 Ramsar report was not yet available.

³⁵ The Review only had agendas from two meetings, but understand there were additional meetings.

³⁶ The Ramsar Secretariat collaborated with the *International Union for Conservation of Nature (IUCN) Asian regional office*, to provide the technical assistance requested.

(Tallant, 2013). The note included design elements that were integrated into the *Project Document* (2015). It estimated that the project would help Myanmar meet 10 of the 20 the CBD's Aichi Protocol targets.³⁷

3.2.2 Project Management and Partnerships

The *Biodiversity Project* established a *Project Management Group* (NWCD and NEA) and *Project Management Team* (NWCD). The Review verified that the Management Group is functioning, under leadership of the MONREC. However, there was insufficient information to assess the effectiveness of management arrangements.

The *Project Document* (2015) calls for the creation of a *Project Management Group*, comprised of NWCD and NEA officials, and acting to "secure institutional coordination and national ownership". From the reporting, *Management Meetings* were convened bi-annually, in 2016, 2017 and budgeted for 2018. Otherwise, the reporting includes no information on decisions and actions taken by the Management Group. NEA advised that the group designed and revised yearly work plans with detailed descriptions of actions, budgets and responsibility.

Outside of the meetings, communication between NEA and NWCD group members were described as "frequent", by electronic platforms. Officials from both counterparts expressed satisfaction with the quality and timeliness of their exchanges.

The Project developed effective external working relationships, with the Ramsar Secretariat, the non – governmental organisations contracted to develop the *Protected Area Management Plans* and the Government of Thailand, among others. These expanded the Project's implementation capacity, and NWCD's access to technical competence.

3.2.3 The Perception of Myanmar Officials

Participating Myanmar officials consider the Biodiversity Project to be effective. They expressed high satisfaction with the quality and relevance of project Outputs, and their cooperation with Norway. Officials attribute to success to three factors:

- ✓ *The Project's responsiveness to national priorities*, and needs where Myanmar was receiving limited international assistance. Officials placed value on both the strengthening of national management and policy, and improved compliance with international instruments.
- ✓ *The high technical quality of assistance received, in all activities*. Officials stressed the importance of working directly with State (NEA) and multilateral institutions (the Ramsar Secretariat), given their close knowledge of public sector policy and management.
- ✓ The Project's focus on management planning (Management Plans) and training for enforcement (SMART) at the sub-national level, including the development of related technical standards.

3.3 Biodiversity Project Output Performance Assessment

Output Assessment: **Very Satisfactory**

3.3.1 Output Achievement

Activities supporting all four project Outputs were either complete, or appeared to be on track for delivery by Project closure, notwithstanding some deviations. Project reporting was verified as accurate during the Review mission.

The *Biodiversity Project* works to strengthen and expand the Myanmar's framework, and to develop the capacity and systems for their implementation. The project generally met or exceeded its activity targets. There were some exceptions, with the integration of Output 3 activities into Output 4. Also, the proposed review of Myanmar's legal framework did not take place (Output 4).

³⁷ The Ramsar Secretariat contributed further to the Action Plan 2016; Thailand Study Tour 2017, and; Preparation of Myanmar's tri-annual report of the Ramsar COP 2018).

There was no significant deviation from the Outputs set out in the *Project Document* (2015). The exception was a change of scope from six to four protected areas, made early in the implementation phase. Changes to the scope did not have a material effect on objectives or achievement, and were made in response to changing conditions.

MONREC / NWCD provided leadership to concept design and priority setting during the inception and implementation periods. NWCD leadership contributed to effective Project design, with clear statement of priorities relationships between the project elements; activity to output. Notwithstanding, NWCD's technical and implementation capacity is limited, as the department's capacity in field.

Assessment at the Output-level is hindered by inadequate monitoring and reporting. Project reporting does not consolidate activity data into clear findings on progress towards Output or Outcome achievement.

Output 1: General management capacity increased

Output 1 has increased the management capacity of NWCD / MONREC, and the Division's ability to meet its responsibilities. Capacity relates to implementation of international convention obligations and national policy. The Biodiversity Project is on track to achieve its Output of increasing management capacity, at the Union and local Protected Area levels. The project is expected to meet or exceed its education and training activity targets, of which two were scaled – up.

The finding is based on three factors:

- ✓ *Delivery performance*, where the Project generally met or exceed its activity targets. In particular, SMART training exceeded by four fold its target of reaching four Protected Areas (See Table 13).
- ✓ *Relevance*, noting that all education and training activities were directly related to implementation of the remaining three Project Outputs, and reinforced achievement in those areas.
- ✓ *The results of Focus Group discussions*, interviews with MONREC and NWCD officials and the site visit to the Moeyungyi Wetland Site. Overall, participating NWCD officials stated that the quality of education and training delivered through the project was high. Graduates use the new knowledge, skills and equipment acquired in the performance of their daily responsibilities, and perceive that their personal performance and level of confidence have improved. Management officials also perceive that personnel use their training, and that institutional capacity has strengthened.

As observations from the Focus Groups:

The Review interviewed the first two MSC students to complete their studies in Norway. The selection of candidates was competitive and merit – based, in compliance with both MONREC and Norwegian acceptance requirements. The graduates considered their MSc education to be a unique opportunity, of high quality and relevant to their work. They received ongoing support from NEA while in Norway, both practical and substantive.³⁸

On return to Myanmar, both were re – assigned by the Minister, and promoted into positions that require use of their education in the daily performance of their responsibilities. The graduates perceive they are better qualified to perform their work, with greater confidence. Further, their *theses were* completed in areas of policy interest, and contribute to NWCD's knowledge base. As a matter of policy for all MONREC officials receiving post-graduate education opportunities, both students have a multiyear commitment to remain with the Ministry.

SMART Training exceeded its activity target by four fold. NWCD management confirmed that, prior to the project, only five Protected Areas used SMART methodology in their patrolling. As a result of the project, SMART patrolling now occurs in 20 of the 21 Protected Areas under NWCD management. The NWCD management considers this a significant improvement. Also, the use of SMART aligns management practice in Myanmar with an international standard, used in 41 countries, including in the ASEAN region.³⁹

³⁸ One of the graduates noted that NEA gave her access to data, commented on some papers and participated in her seminar presentations.

³⁹ <http://smartconservationtools.org/smart-partnership/>

At the Moeyungyi and Poppa sites, SMART – trained field staff interviewed perceive they are generating more accurate information and reporting. Field staff at those locations perceive the training was of high quality, albeit noting that the use of English created difficulty. Prior to the training, it appeared that some officials had access to SMART, but lacked training. After SMART, the field staff interviewed advised they use the SMART software, equipment and standards, effectively and with more confidence, in the full area under their responsibility. SMART improves the quality and reach of their patrolling. Notwithstanding, enforcement capacity and infrastructure remain basic institutional challenges, that affect the quality of patrolling.⁴⁰

Output 2: Improved management of valuable wetlands

The project is on track to meet or exceed activity targets. The exception is with the Arctic Migratory Bird Initiative (AMBI).

There are gaps in some activity reporting, which make it difficult to ascertain when some activities were delivered and/or how they are being finalised and used. Notwithstanding, the Project appears on track to achieve its Output of improving management of wetlands, at the Union and PA levels.

A complete summary of progress on delivery of Output 2 is included in Table 9. The Output includes actions to strengthen Myanmar's wetland policy framework, generate the supporting data and training, and to expand the number of Ramsar designated wetland sites, which increased from one to four during the project period.

The primary activity delivered is the *National Wetland Policy and Strategic Actions (2017)*, which is pending final approval. Development of the policy was coordinated by the *National Wetlands Committee* (formed 2016) and supported by the Project. As one input, the Project commissioned *Conservation of biodiversity and improvement management of protected areas in Myanmar*, a report drafted with support from Ramsar Secretariat and external technical specialists (McInnes and Hails, 2016).

The *National Wetland Policy and Strategic Actions* was drafted in the absence of a national policy on Protected Areas, and in compliance with national and Ramsar requirements. It is Myanmar's first policy directed towards wetlands, addressing an important gap. The policy, therefore, is foundational work and comprises part of Myanmar's institutional framework for climate and environment.⁴¹

Output 3: Knowledge on biodiversity in six protected areas is improved

Output 3 appears to meet (baselines and monitoring plans) or exceed (Data inventory) activity targets. The project is on track to meet its Output target of improving knowledge on biodiversity, at the Union and PA levels, and integrating the findings into management planning.

Most or all of Output 3 activities were effectively integrated into Output 4, as part of the Protected Area management planning process. These appeared to include the four plans developed with project support, and plan development at other locations.

The Review verified delivery of activities with MONREC /NWCD officials; the data inventory, baseline surveys and monitoring plan. Also, during a Focus Group meeting with three of the organisations drafting project-supported plans. Notwithstanding, reporting gaps make it difficult to fully assess activity results. The review also did not have access to any draft Management Plans, to verify whether Output 3 activities were integrated.

Output 4: Overall management of six protected areas strengthened

The Project is on track to meet the primary activity target, *Four PA Management Plans*. Here, the scope of Output 4 was expanded, to integrate Output 3 some planning activities. Activities related to

⁴⁰ As a gap, the Review did not assess how / if SMART-generated data is being consolidated and used at the Union level, or in support of PA management plans.

⁴¹ The preamble to the *National Wetland Policy and Strategic Actions* sets out its relationship to Myanmar's Ramsar commitments, and to Myanmar's *National Water Policy*, the *National Biodiversity Strategy and Action Plan* (developed in response to *Convention on Biological Diversity* requirements), and Agenda 2030, Myanmar's national sustainability strategy.

PA maps and rehabilitation of Visitor Centres were amended (reported as "partially" met) or not met. Full assessment is hindered by inadequate reporting. The activity for legal review was dropped.

The Review verified that two of the four Management Plans were near completion. The two remaining plans were expected for October 2018. MONREC /NWCD advised that it intends to consolidate and scale up the Management Plan model used by the Project.

As points from interviews and a Focus Group with representatives of the organisations:

- ✓ *The NWCD does not yet have sufficient capacity to conduct Management Planning exercises at multiple sites.* I /NGOs were retained through a competitive tender process, to conduct the planning at the four project-supported sites. NEA provided assistance to the tender process, and comments on the draft plans.
- ✓ *The NWCD does not have a standard planning template.* The Division provided guidance to I/NGOs on methodology and the Ramsar requirements, to ensure a common approach.⁴² The I/NGOs have further consulted between themselves, to ensure coherence between their templates.⁴³
- ✓ *There is a significant amount of conflict around many of the Protected Areas.* Outside of the areas affected by ethnic armed conflict, it can be generated by issues related to land ownership and use. A core element of the planning process, therefore, is consultation with communities. This activity is under-reported in the project documentation, but involved up to 10,000 residents at one of the sites. The planning process can seek to engage communities in environmental conservation activities.⁴⁴
- ✓ *The primary concern expressed by the I /NGOs is the lack of an implementation plan for the Management Plans, and confirmation of financial resources needed.* The I /NGOs were concerned that management plans might not be implemented, and that lack of financing will prevent the planning model from being scaled up. The shortage of field staff in the Protected Areas also remains a concern.

NWCD hopes to scale up the Management Planning model, and its capacity to conduct the management planning internally. As a core benefit of the model, the plans support multi – year budgeting and financial planning. The current system is single year, often leading to budget shortfalls and inflexibility. Notwithstanding, officials could not confirm when implementation and scale – up financing would become available.

Table 9: Conservation of Biodiversity and Improved Management of Protected Areas; Activity and Output Achievement

Output and Indicators	2015 Baseline	Output/activity Indicators and the Result Achieved
Output 1: General management capacity increased	<p>Output 1 activities comprise education and training, to support delivery of Outputs 2, 3 and 4. They are intended to create an Intermediate Outcome.</p> <p>Summarised from <i>Concept Note</i> (2013), <i>Grant Application</i> (2015) and <i>Project Document</i> (2015):</p> <ul style="list-style-type: none"> ▪ Basic competence and qualifications for management of protected areas and biodiversity. 	<p>The project is on track to meet or exceed activity targets. Reporting includes limited assessment of Output 1 performance. Notwithstanding, the project is on track to achieve its Output of increasing management capacity, at the Union and PA levels.</p> <p><i>Target for post-grad studies in Norway met.</i> Four students will complete their MSc at NTNU by June 2018, and one is scheduled</p>

⁴² As additional measures, the NEA /NWCD arranged workshops with the I /NGOs to evaluate progress and ensure coherence in structure of the plans. NEA also joined NGOs in field work, to provide guidance on methods.

⁴³ The Review requested, but did not receive the draft plans.

⁴⁴ Issues related to the consultation, and conflict sensitivities in general, are inadequately documented in the Project Reporting. The NEA advises local community participation was a project focus during Phase I. The project provided training courses and other support for staff from NWCD, the Projected Areas and the NGOs.

Output and Indicators	2015 Baseline	Output/activity Indicators and the Result Achieved
	<ul style="list-style-type: none"> ▪ Limited capacity to execute and implement national plans and strategies. ▪ Few key persons have relevant knowledge, competence and the qualifications needed. ▪ Related capacity is weakest at the local level, with PA staff (capacity to manage, enforce and engage with communities). <p>No baseline assessment of institutional capacity was undertaken. Project indicators measure completion of activities, and not Output achievement. For example, there were no pre / post-education or training survey for participants to assess quality or relevance, and their ability to use new knowledge and skill in the workplace.</p>	<p>to graduate in 2020.⁴⁵ Reporting verified through interviews with two beneficiary students.⁴⁶</p> <p><i>Target for training of PA personnel fully met.</i> 6 trainings completed, each involving personnel from between 18 and 21 PAs. Not possible to verify through beneficiary interviews. Evidence that planning and management training was completed and the tools are in use.</p> <p><i>Target for SMART Training in 4 PAs significantly exceeded.</i> Training scaled up to at least 7 activities, in 20 PAs. Reporting verified through beneficiary interviews, and site visit to the Moeyungyi Wetland (PA and Ramsar site).</p> <p><i>Target of 10 students completing courses at the Wildlife Institute (India) exceeded.</i> Between 2015 and 2017, 16 officials complete studies at the WII, on 10 and 3-month certificate courses. Reporting verified through multiple interviews with FD officials.</p> <p><i>Study trip to Norwegian visitor centres conducted.</i> Two study trips in Thailand for PA staff. One trip focused on wetlands while the other focused on terrestrial PAs /national parks.</p>
<p>Output 2: Improved management of valuable wetlands</p>	<p>From the Project Document (2015, Section 5.3) and the Project Concept Note (2013):</p> <ul style="list-style-type: none"> ▪ Myanmar is progressing with development of its policy and regulatory framework for wetlands. Key national and international instruments are in place. ▪ Basic policy and management instruments not in place, constraining Myanmar's ability to both manage wetlands in accordance with national policy objectives (NBSAP), and to comply with Ramsar obligations. ▪ Wetland management plans not in place. Low capacity, to develop, implement and enforce such plan.⁴⁷ 	<p>The project is on track to meet or exceed activity targets. The exception is with the Arctic Migratory Bird Initiative (AMBI). There are gaps in some activity reporting, which make it difficult to ascertain when some activities were delivered and/or how they are being finalised and used. Notwithstanding, the project is on track to achieve its Output of improving management of wetlands, at the Union and PA levels.</p> <p>The primary deliverable is <i>The National Wetland Policy and Strategic Actions</i> (Final Draft 2017, to the National Wetland Committee). Verified that the policy was completed, and is with the National Wetland Committee for approval.⁴⁸</p> <p>Establishment of the National Wetlands Committee and development of the policy supported by <i>An Action Plan for the Delivery of Improved Management and Wise Use of Valuable Wetlands</i> (June 2016). Verified. Completed with technical cooperation from the Ramsar Secretariat.</p>

⁴⁵ Two students completed their NTNU MSc studies in June 2017.

⁴⁶ Red text indicates the Review's observations in verification and results.

⁴⁷ The Project Document includes narrative statements only, with identification of priorities from MONREC.

⁴⁸ Reporting also indicates that the National Wetland Policy and Strategic Actions is before MONREC an approval and action. The relationship between MONREC

Output and Indicators	2015 Baseline	Output/activity Indicators and the Result Achieved
		<p><i>Indawgyi Lake WS as a Ramsar Site nominated.</i> No reporting on project activities related to the nomination. Review of the Ramsar website indicates that Indawgyi Lake became a Ramsar site in 2016, and has been a PA since 1999. Project role in nomination not verified. Project has assisted with Indawgyi Management Planning, and water quality testing with NIVA.</p> <p><i>Contribution to the Arctic Migratory Birds Initiative (AMBI) delivered.</i> Implementation of the AMBI delayed. NWCD participated at meeting in Singapore January 2017. 2018 report states AMBI "progressing very slowing" and no results showing. Verified that AMBI activity shows no progress.</p> <p><i>Ramsar CEPA programme in wetland areas implemented.</i>⁴⁹ Visitors centre, exhibition and other awareness raising material in place at the Moeyungyi and Indawgyi sites. Verified at Moeyungyi.</p> <p><i>Selected activities in order to implement the Ramsar Convention completed.</i> The two activities reported were <i>Study trip to Thailand</i> (conducted during March 2017 and organised with the Thailand Ramsar Authority and the Ramsar Secretariat) and MONREC's receipt of technical assistance for preparation of its Myanmar's tri-annual National Report to the upcoming Ramsar Conference of Parties (Dubai, October 2018). Verified through interviews.</p> <p><i>National Wetland Inventory for Myanmar, initiated in 2017 with draft Strategy for Designation of Ramsar Sites presented in April 2018.</i> Verified through interviews. The strategy is pending further review and approval in MONREC.</p> <p><i>Draft Management Plan for the Moeyungyi WS and Ramsar Site completed</i> (undated 2017). Verified through site visit and interviews. Plan based on Ramsar specifications and with training and technical support from the project.</p> <p><i>Preliminary report on Hg contamination in Indawgyi Lake.</i> Verified through interviews. Programme Report (2018) states that the project collaborated with NIVA and the NWCD to conduct preliminary studies at Moeyungyi and Indawgyi Lakes (2017). No supporting information provided, on how data is being used.</p> <p>Reporting states the following documents were delivered, without supporting information. Verified through interviews:</p>

⁴⁹ Ramsar Convention's "Programme on communication, capacity building, education, participation and awareness" (CEPA).

Output and Indicators	2015 Baseline	Output/activity Indicators and the Result Achieved
<p>Output 3: Knowledge on biodiversity in six protected areas is improved</p>	<p>From the <i>Project Document</i> (2015), the <i>Project Concept Note</i> (2013) and the <i>Grant Application</i> (2015), narrative statements on:</p> <ul style="list-style-type: none"> ▪ Limited availability of data on conditions in wetlands, constraining effective planning and management. ▪ Low capacity to manage and use data. 	<ul style="list-style-type: none"> ▪ <i>Guiding principles for a systematic approach to Ramsar Site identification and prioritization for designation (Draft, March 2018).</i> ▪ <i>Strategy for Ramsar Site Designation (Draft, undated)</i> <p>Output 3 appears to have meet (baselines and monitoring plans) or exceeded (Data inventory) activity targets. The project appears on track to meet its Output of improving knowledge on biodiversity, at the Union and PA levels. Notwithstanding, reporting gaps make it difficult to fully assess activity results, and/or how the results are being used by the NWCD.</p> <p><i>Data inventory, identification and prioritizing of monitoring needs in the four PAs conducted. The project exceeded its activity target. Reporting indicates that data inventory is occurring as part of management planning, in 21 PAs, and not four sites. The project provided training support and equipment. Verified at Moeyungyi site visit, and through interviews. Not able to verify with the remaining 19 sites, the quality of the data or how it is being compiled and managed by MONREC / NWCD, to generate an Output. Available information in project reporting is inadequate.⁵⁰</i></p> <p><i>Base line surveys, monitoring and training in the four PAs conducted. To support management planning, baseline surveys completed in four PAs. The NWCD confirmed that the baseline work was complete. The Review requested, but did not receive, copies of the surveys and cannot verify their quality.</i></p> <p><i>Monitoring plans in four PAs conducted. From reporting and interviews, the monitoring plans are being done under Output 4, as part of the overall management planning process. Verified this is occurring, but inadequate reporting information.</i></p>
<p>Output 4: Overall management of six protected areas strengthened</p>	<p>Baseline: From the project document (2015), narrative statements on:</p> <ul style="list-style-type: none"> ▪ No PA management plans in place ▪ Limited capacity and experience, within the NWCD and among PA officials, for PA management planning. ▪ Inadequate planning, management and data gathering tools available. 	<p>The Project is on track to meet the primary activity target, <i>Four PA Management Plans</i>. Activities related to legislation reform, PA maps and rehabilitation of Visitor Centres were changed or not met. Assessment is hindered by inadequate reporting.</p> <p><i>Legislation concerning protected areas revised. No information in project reporting, work plans or interviews on legislative</i></p>

⁵⁰ NEA advises that SMART equipment and training was provided for all 21 sites.

Output and Indicators	2015 Baseline	Output/activity Indicators and the Result Achieved
		<p>reform. Appears that the activity was dropped.</p> <p><i>Development of PAs maps completed.</i> Reporting states that the PA maps are being done as part of the overall management planning. The Review verified that a map has been developed for the Moeyungyi site. The Review cannot verify how many maps were completed during PA management planning.</p> <p><i>Two protected areas have finished draft management plan.</i> One PA completed a management. Three were in the advanced stage of preparation, and appeared on track to complete. Inception work was completed in 2017. Verified through interviews, and Round Table with the organisations drafting the management plans.</p> <p><i>Information centres in six PAs upgraded.</i> From reporting, one centre (Mt Poppa) was upgraded. Field study further confirms that the Moeyungyi Centre was updated, and NEA advised the Indawgyi site was also complete. Appears the activity target of six centres was not met.</p>

3.4 Intermediate Outcome Achievement

Intermediate Outcome Assessment: **Satisfactory**

There is evidence that the institutional capacity and competence of MONREC /NWCD is strengthened, at the national level and in the Protected Areas and Ramsar Wetland Sites. Assessment is hindered by the lack of ongoing results monitoring. The Project does not attempt to measure or quantify the institutional change achieved.

Training results are described in Table 9, under Output 1. It is not possible to quantify the scope of institutional change.⁵¹ However, there is evidence that education and training activities were designed to support project Outputs, generally met or exceeded targets, and were of high quality. MONREC /NWCD places a high value on the education and training opportunities, and they are covered by personnel. The benefits were spread to different levels of MONREC, from the national level to the Protected Area field staff. As specific evidence from interviews and the Focus Group that capacity and competence are strengthened:

- ✓ Personnel that benefited from education and training activities reported using their new knowledge, skills and aptitude, in the performance of their daily responsibilities.
- ✓ Where this occurs, the personnel interviewed report that they feel more confident, and perform their duties more effectively. Also, it contributes to an expansion of the scope of work being done, in addition to improved competence.
- ✓ There are examples of personnel being re – assigned or promoted by MONREC, to make good use of their education. This was the case for the NTNU MSc graduates.

⁵¹ The project Intermediate Outcome Indicator measure performance against sub-Output activity targets. The Project does not monitor for the strengthening of capacity and competence.

- ✓ New information and data is being generated (MSc theses, SMART data). It becomes part of the institutional knowledge base, and integrated into management planning.
- ✓ Some education and training graduate are contributing to training exercises within MONREC (The MSc graduates, diploma candidates from the Wildlife Institute of India, and SMART personnel).
- ✓ Multi-module training course for wetland managers contributing to the *National Action Plan on Wetland Management*.

Table 10: Intermediate Outcome for Biodiversity

Intermediate Outcome Desired	Intermediate Outcome Achievement
<p>Strengthened capacity and competence within MOECA (MONREC) at all level (Forestry Department/Nature and Wildlife division).</p> <p>Indicator: Training courses, education programmes and other capacity development activities are conducted, at all levels.</p>	<p>Satisfactory to Very Satisfactory: Evidence that the institutional capacity and competence of MONREC is strengthened, at the national levels and in the Protected Areas and Ramsar Wetland Sites</p> <p>The beneficiaries of training report using their new knowledge, skill and attitude in their regular performance of their responsibilities. They are more confident, and generally perceive that their performance has improved.</p>

3.4.1 Outcome Achievement

Assessment: **Partially achieved, with positive Outcome trend**

The Review does not provide a ranking for *Biodiversity Project Outcomes*. The Outcome trend is positive, building strong performance at the Output and Intermediate Outcome levels. However, it is too early in the process to identify or expect complete Outcome results.

Partial Outcomes are achieved. Core policy and management Outputs were either delivered in 2017 / 2018, or finalisation is anticipated before project closure. After submission, the Outputs become the responsibility of Government, following established approval, budget and implementation procedures. Consideration of the Outputs is in process, and related decisions were pending. However, the decisions are not likely to be taken and implemented until after the project closes. In this regard, no Outcome has been fully achieved, only the initial steps.

The Outcome trend is positive. Outputs that intended to contribute towards policy and management are submitted into a decision-making process, and have the commitment and support of Government. The outputs are aligned with the national policy and international convention instruments, cited in the *Project Documentation (2015)* and strengthen the implementation of those instruments. These deepen Myanmar's engagement with the relevant international conventions, and MONREC's capacity to collaborate with other State institutions, and affected communities.

Table 11: Biodiversity Project Outcome Achievement

Intended Outcome	Outcome Status and Achievement
<p>Conservation of biodiversity and management of protected areas are in line with Myanmar's National Biodiversity Strategy and Action Plan (NBSAP).</p> <p>Management is in line with the Convention on Biological Diversity (CBD).</p>	<p>Project design supports implementation of 10 of the 20 CBD Aichi targets, and provision of the NBSAP related to strengthening Protected Area and Wetland management. Result improve compliance with CBD commitments.</p>
<p>Management is in line with the Convention on Wetlands (Ramsar).</p>	<p>Myanmar increased the number of designated Ramsar Wetland Sites during the project period, from one to five (project indirectly contributes).</p> <p>The Myanmar <i>National Wetlands Committee</i> established and functioning (2017). Strengthens inter-ministerial coordination and management of wetlands (project provides support to committee objectives).</p>

Indicator: Activities that contribute to implementation of the Ramsar Convention.

Final Draft of the *National Wetlands Strategy* completed (2017), and is pending approval. Aligned with Ramsar commitments, and with Myanmar's national policy instruments and targets: the *National Water Policy*, the *National Biodiversity Strategy and Action Plan*, and the *2030 Agenda for Sustainable Development*.

Myanmar *National Report on the Implementation of the Ramsar Convention* pending submission, to the 14th Ramsar Conference of Parties (Dubai, October 2018).

Informal Institutional Change

Change in Institutional Norms and Behaviour

Deepens Myanmar's participation in and engagement with, international convention and normative bodies, after an extended period of isolation.

Promotes collaboration between Myanmar State institutions, on matters related to Protected Areas and Wetland Sites.

Encourages building "social licence" with communities in buffer areas surrounding Protected Areas and Wetland Sites, through consultation on protection activities.

3.5 Concluding Observations on Sustainability

Biodiversity Project Phase I achievements related to Output 1 and Output 4 are at risk. Risk factors include the lack of clarity on MONREC budgeting, and MONREC /NWCD's limited capacity.

At present, MONREC does not appear to have budgeted for implementation of the Protected Area Management Plans. Officials advised that getting an item into the Ministry budget can take several years, a matter that is partially addressed by the multi-year budgeting system introduced by the planning model. External sources also report a chronic problem with funding shortfalls to Protected Areas.⁵² It is unclear, therefore, if the project results are financially sustainable. Without action on budget and consolidation of the management planning model, some Phase I Outputs appear unsustainable and at risk of being lost.

Within the scope of the Project, the Management Planning model is still effectively a pilot. The model must be consolidated and scaled up for use in other Protected Areas. The activity would require additional technical and grant support, consistent with what the *Biodiversity Project* is already delivering. In addition, implementation of the four Management Plans from Phase I should be closely monitored, and fed back into NDCW's assessment of the model.

As an additional risk factor, NEA will have reduced capacity to participate in Phase II of the programme. The scope of reduction and its material impact on the programme is yet to be determined.

3.6 Integrated Water Resources Management – Institutional Building and Training

Project Assessment: **Very Satisfactory**

3.6.1 Output Assessment; Integrated Water Resources Project

The *Integrated Water Resource Management Project* is on track to deliver six out of its seven outputs. Output 4 (Sittoung River Basin Plan), is not on track, and will not be completed before project closure. Stakeholders concluded the plan was too ambitious to achieve in within the Project time frame.

⁵² For example, see Sustainable Financing of Protected Areas in Myanmar (2015).

3.7 Integrated Water Management Project Achievement

Summary of Project Output Performance

The *Integrated Water Resource Management Project* is a new approach, being undertaken by the Forestry department. The project functions as a pilot, with the intent to scale up in other parts of Myanmar.

The IWRM project has generally met or exceeded its Activity and Output targets. Out of the seven Project Outputs, six are either complete or on track for completion by Project closure. Output 4 is partially completed, and considered too ambitious for the Phase I period.

Key achievements are listed in Table 16. They include the sensitization of stakeholders in Myanmar on the Integrated Water Resource Management and River Basin Approach, the establishment of the Bago Sub-Basin Area Committee, the establishment of the water quality laboratory in the Forest Department and the water quality monitoring for Inlay Lake and the deployment of the Aquamonitor SI database system for water data

Using water quality as an entry point for Integrated Water Resource Management. The project has used the EU Water Directive River Basin approach as the basis for supporting Myanmar. In this initial phase, focus has primarily been on water quality and involvement of relevant stakeholders such as different government institutions and civil society, less on water for agriculture, energy and transport needs.

The project has supported important elements of IWRM:

- ✓ *Enabling environment:* the general framework of national policies, legislation and regulations and information for water resources management stakeholder.
- ✓ *The institutional roles and functions* of the various administrative levels and stakeholders.
- ✓ *Management instruments* such Bago Sub-Basin River Management Plan and water quality monitoring.

Figure 1 below uses the Global Water Partnership 'Comb' to illustrate where and how NIVA and the Government have concentrated their efforts in this first phase.

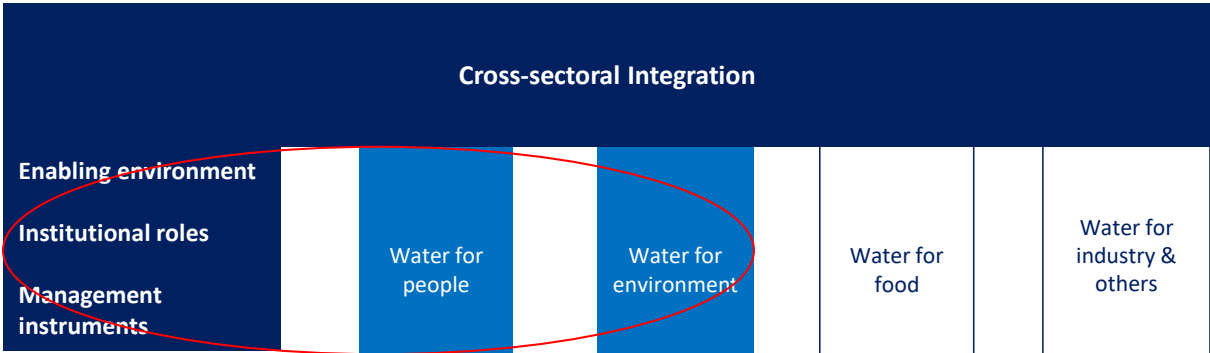


Figure 1: IWRM intervention illustration

A key issue related to scaling up the Integrated Water Resource Management approach is clarifying the role and responsibility of the River Basin Committees. The process for addressing these issues is not clear.

There is also a need for better coordination of the many initiatives on Integrated Water Resource Management in Myanmar, which has the largest number of international actors in the environment sector. NIVA advises that the project has met with a number of international entities, the Netherlands and the World Bank among them. However, the project does not participate in the *Environment Sector Working Group*, which is Chaired by MONREC.

This observation is made at the same time as noting that the Project does not appear to compete with, or duplicate other initiatives. However, other initiatives do provide MONREC with different approaches, and it appears important for the Project to be represented and engaged.

Table 12: Integrated Water Resource Management; Activity and Output Achievement

Output and Indicators	Output/activity Indicators and the Result Achieved
<p>Output 1: Training in Integrated Water Resources Management (IWRM) and IWRM tools held, resulting in competent staff.</p>	<p>The project is on track to meet or exceed activity targets.</p> <p>Staff and stakeholders at national, regional/ state and local level have been trained in this process: National Water Resources Committee (Advisory Group), Ministry of Natural Resources and Environmental Conservation, Directorate of Water Resources and Improvement of River Systems (Ministry of Transport), Irrigation, Water Utilization, Management Department (Ministry of Agriculture), Bago and Sittaung river basin stakeholders and selected civil society organizations.</p> <p>Key sub-outputs include the NIVA publication, Framework notes and recommendations for Integrated Water Resources Management (2016) as well as other publications.</p>
<p>Output 2: Water Quality Criteria established.</p>	<p>The project is on track to meet activity targets.</p> <p>Water quality criteria for the assessment of lakes (phytoplankton and macrophytes) and rivers (invertebrates) have been proposed based on water sampling and analyses in Bago river and Inlay lake.</p> <p>Workshops to discuss preliminary suggested typologies and water quality criteria have been organized in Yangon and in Taunggyi with experts and authorities.</p> <p>Key NIVA reports include: NIVA Integrated Water Resources Management in Myanmar – Water usage and introduction to water quality criteria for lakes and rivers in Myanmar, Preliminary report, 2017.</p> <p>Ongoing activity: Water usage and introduction to water quality criteria for lakes and rivers in Myanmar. A report on assessing ecological status based on phytoplankton and aquatic macrophytes, including all investigated lakes. The PhD student works on this topic in Norway, one Burmese and one Norwegian. The approval process for the criteria is unclear and whether this will be completed by March 2019.</p>
<p>Output 3: Water Quality Laboratory established.</p>	<p>The project is on track to meet activity targets.</p> <p>A water quality laboratory has been created at the Forest Research Institute, with rehabilitation of an existing infrastructure. Biochemical Oxygen Demand analysis capacity was installed, among other equipment.</p> <p>Forest Research Institute, Department of Agricultural Research, and Irrigation, Water Utilization, Management Department staff trained.</p> <p>With site visit, the Review verified that the Laboratory is fully functioning, and staff are trained. The lab is receiving samples for processing.</p> <p>The availability and cost of filters, chemicals and equipment are critical sustainability issue. From interviews, all water laboratories in Myanmar face similar problems.</p> <p>A business model to run the laboratory is being piloted, but it is unclear whether the self-sufficiency can be achieved for the laboratory in the near to medium term. There are also discussion of a permanent institutional home for the lab, which is ongoing.</p>
<p>Output 4: Pilot Case study 1 in Sittaung River Basin - Introduction of the River Basin Management Administration Approach completed.</p>	<p>Partially Complete: Two workshops in Sittaung and one at national level have been organized to discuss the River Basin Management approach.</p> <p>A key sub-output is the NIVA report: A proposal for an administrative set up for river basin management in the Sittaung. The report puts forward the approach and how to adapt it in general terms for Sittaung.</p> <p>It was originally planned to establish a Sittaung River Basin Area Committee and Authority. During implementation, the project team decided to pilot the</p>

Output and Indicators	Output/activity Indicators and the Result Achieved
	<p>river basin management approach on sub-basin level (in Bago) instead, as this was deemed more feasible as it was at a smaller scale (see Output 5).</p> <p>A report on delineation of basins and roles and responsibilities for Integrated Water Resource Management is planned for the end of the project based on the experience in Bago.</p> <p>A key challenge moving forward that has to be addressed for a potential Phase II seems to be political buy-in and coordination of other donor initiatives such as the Dutch, Swedes and World Bank/ Australia on Integrated Water Resource Management. This is especially true since a number of meetings were carried out during the project without successfully resolving the issue.</p>
<p>Output 5: Pilot Case study 2 in Bago River Basin - Performing water management work tasks in a river system completed.</p>	<p>The project is on track to meet activity targets.</p> <p>The Bago Sub-Basin Area Committee has been established. A Non-Governmental Stakeholder Group has also been formed with three representatives in the Committee. The Committee and Group have met four times each in addition to bilateral meetings. The Committee Chairperson is the Regional Minister of the Ministry of Natural Resources and Environmental Conservation. The Committee has three secretaries from Bago Forest Department, Irrigation, Water Utilization, Management Department (Agriculture), Directorate of Water Resources and Improvement of River Systems (Transport).</p> <p>A monitoring program for Bago River has been established and water sampling is undertaken by a team from the Forest Department and Irrigation, Water Utilization, Management Department. Macroinvertebrates have been sampled at 37 stations, and hydro morphology has been assessed to enable ecological status classification. A NIVA report: 'Characterization of Bago Sub-basin Area has been published (Eriksen et al. 2017).</p>
<p>Output 6: Pilot Case study 3 Monitoring programme for Inlay Lake completed</p>	<p>The project is on track to meet activity targets:</p> <p>Monitoring and analysis of chemical parameters, phytoplankton and macrophytes occur monthly in Inlay Lake.</p> <p>Equipment for analysis of biological water quality elements have been purchased to equip the laboratory in Forest Research Institute in Yezin.</p> <p>Two master students from the University of Forest are associated with the project and field work and lab training have been given.</p> <p>Key NIVA report (2017): Integrated Water Resources Management in Myanmar. Assessing ecological status in Inlay Lake. Preliminary report.</p> <p>Ongoing activities: Continuation of the taxonomic studies (morphological and genetic analysis). A final report assessing ecological status in Inlay Lake will be published.</p>
<p>Output 7: Database for monitoring and water management established</p>	<p>The project is on track to meet activity targets:</p> <p>The Aquamonitor Surveillance and Information System (Aquamonitor SI) has been adapted (NIVA product) to the water quality needs in Myanmar.</p> <p>A modern datacentre (IT Infrastructure) has been deployed at the Forest Department and training in maintenance of the datacentre has been given. The review verified that the data base is established, functioning, and that personnel have been trained. Some technical issues on access remain, given MONREC firewall requirements.</p> <p>An 'Environmental Data Laboratory' has been established in connection with the data centre. Eight workplaces are available for training and data management.</p> <p>Currently water quality analysis data from Inlay Lake and Bago River and other waterbodies are stored in Aquamonitor SI. Data are made available via the log in portal of Aquamonitor SI.</p> <p>2018 activities are: Establishment of operational routines for import of data from the Forest Research Institute laboratory and other sources of data (e.g.</p>

Output and Indicators	Output/activity Indicators and the Result Achieved
	<p>NIVA) to the data centre, Extension service agreement with the supplier (Inyaland); Establish operational routines related to maintenance of the data centre; and Further developments of Aquamonitor SI.</p> <p>Key issues seem to be internet connectivity as the gateway for the Forest Department cannot be used give current policy as well as making sure that the Aquamonitor SI is used and maintained in the future.</p>

3.8 IWRM Intermediate Outcome Achievement

Project Assessment: **Satisfactory to Very Satisfactory**

Outcome Achievement

The Integrated Water Resource Management Project met or exceeded activity targets for the education and training component of capacity development. The project does not monitor for the results of the results of activities, and the extent to which capacity is strengthened.

From three Focus Groups (Yezin and Yangon) and interviews with Senior Management, beneficiaries express high satisfaction with the quality of education, training and other NIVA support for other activities, such as water sampling, that have a training and technical support component:

- ✓ *In Yangon*, a Focus Group of eight persons (NIVA training on data, water sampling/related to irrigation and laboratory/testing of water samples) stated high level of satisfaction with the quality and relevance of the Project training. All reported acquiring new knowledge and skills that have practical application in their work. These include expanded water quality testing parameters, assessment of irrigation. Limited access to lab testing facilities remains a constraint.
- ✓ *NIVA support to graduate education is fully integrated into MONREC priorities and activities.* Selection appears to be merit based, and comes with a contractual commitment to remain in MONREC after graduation. Graduate research is an additional channel through which NIVA adds value to MONREC's foundational research.
- ✓ The training of Laboratory personnel directly relates to the operation of equipment, and was required for effective functioning.

The Review verified that training extends to the Ministry of Agriculture and Ministry of Transport. It enables collaboration, and open access to data for use in those Ministries.

Table 13: Intermediate Achievement for the Integrated Water Resource Management Project

Intermediate Outcome Desired	Intermediate Outcome Achieved Results of Focus Group
Strengthened capacity and competence within MONREC, MOAI, MOT and relevant stakeholders on water management.	Satisfactory to Very Satisfactory: Evidence that the institutional capacity and competence of MONREC is strengthened, at the national levels, among field personnel and in two collaborating Ministries. The beneficiaries of training report using their new knowledge, skill and attitude in their regular performance of their responsibilities. They are more confident, and generally perceive that their performance has improved.

3.9 IWRM Outcome Achievement

Assessment: **Partially achieved, with positive Outcome trend**

The Review does not provide a ranking for Integrated *Water Resource Management Project* Outcomes. The Outcome trend is positive, building strong performance at the Output and Intermediate Outcome levels. However, it is too early in the process to identify or expect specific Outcome results.

Partial Outcomes are achieved. Core policy, water criteria and river basin management Outputs were either delivered in 2017 / 2018, or finalisation is anticipated before project closure. The exception is with the Sittaung River Basin component, which was determined as too ambitious in scope for the Phase I IWRM management plan. Many of the activities were focused at the Intermediate Outcome level, show good results and will support Outcome achievement.

Notwithstanding, the process for approval and scale up of the River Basin Management approach is unclear, as is the casual linkage with an national integrated water management approach. The process is with Government, and the National Water Resource Management Committee. For behavioural change, the Project promotes the culture and practice of intra and inter-ministerial collaboration, and engagement with affected communities in river basin areas.

Table 14: Integrated Water Resource Management Project; Outcome Achievement

Intended Outcome	Outcome Status and Achievement
An Integrated Water Resources Management system implemented for inland waters at the national level.	The Bago river water basin management pilot is under implementation, and pending review and decision on scale up to other areas. The political interest and process for scaling up the Water Basin Management model remains unclear. It needs further consideration and clarification within MONREC and with other donors.
Management of Water Resources in line with National Water Framework Directive	The IWRM project contributed to aligning Water Resource management with the National Water Framework Directive.
Informal Institutional Change	
Change in Institutional Norms and Behaviour	<p>The project promotes:</p> <p>Intra and inter-ministerial collaboration and information sharing on water issues. Also, with community authorities in Bago.</p> <p>A community – based approach to water basin management issues, through engagement with a Non-governmental Stakeholder Group.</p>

3.10 The Hazardous Waste Project

3.10.1 Project Context

Myanmar officials described a project context with two fundamental challenges. First, rapid growth and diversification of the economy are driving an increase in the volume, complexity and impact of hazardous waste. An additional challenge is growth in the transboundary shipment of Hazardous Waste, particularly since China closed its borders to imported waste.⁵³ Officials note an increase in the diversion of waste materials into Myanmar.

Second, the Myanmar State is in the early stages of building an institutional framework to manage Hazardous Waste. MONREC /ECD has a broad mandate to lead Government efforts, and is working towards a *National Waste Management Strategy and Action Plan* (anticipated during 2018). The strategy and plan will include provisions for the management of Hazardous Waste, including measures that bring Myanmar into compliance with the Basel Convention.⁵⁴

ECD has grown significantly since it was established in 2012. Officials advise that the Department has expanded to 11 Divisions from four, including a division responsible for Hazardous Waste (under the Pollution Control Division). An additional 90 personnel will be hired by the end of 2018. Formation of a *Regulatory Working Group* (RWG) for Hazardous Waste, meeting bi-monthly and comprising 17 different entities – ministries, departments and regional governments – has improved coordination.

Achievement notwithstanding, ECD faces a significant challenge to strengthen Myanmar's institutional framework, align the pre-existing frameworks into a single national standard, and to convene the different State entities with regulatory and enforcement responsibility. Officials note the regulations are placed across multiple Union-level ministries and sub – national levels of Government, and that responsibility for regulation and enforcement jurisdictions are fragmented. In particular, regional administrations act with a high degree of independence and are further advanced with their management schemes.⁵⁵ From interviews, the convening power of ECD at the regional level is limited.

Equally, the legal obligations for industry are not always clear; which regulations are to be observed and who has the enforcement responsibility. According to an industry observer, the lack of clarity contributes to non-compliance with even existing regulation. Further, national industries generally lack the technology to reduce waste, and the expertise and resources to acquire it. Change across the public and private sectors, therefore, will be multi-dimensional, and require State leadership, resources and time.⁵⁶

3.10.2 Institutional Framework for Hazardous Waste

Work done by the project was foundational and essential. *Myanmar had no pre-existing legal framework for regulating Hazardous Waste*, and limited knowledge of the hazardous waste present in the country. During the Project's inception period, Myanmar ratified the Basel Convention (see below). The Law was approved before the inception period:

- ✓ Approved the *Environmental Conservation Law* (2012), which provides a definition of "hazardous waste" and mandated MOECF as the national regulating body.
- ✓ Ratified the *Basel Convention* (2015). While focusing on the transboundary movement of hazardous waste, the convention includes provision for the management and disposal that requires domestic regulation.

⁵³ China closed its borders to the import of waste materials in January 2018, <https://www.reuters.com/article/us-china-environment-waste-insight/china-trash-towns-cleanup-bolstered-by-import-ban-idUSKBN1FD043>

⁵⁴ As of Myanmar's last submission to the Basel Convention (January 2017), Myanmar was still developing the legal and regulatory framework necessary for compliance with the convention, <http://www.basel.int/Countries/CountryProfiles/tabid/4498/Default.aspx>

⁵⁵ The Mandalay and Yangon regions both have waste management and action strategies from 2017, which include measures for management and disposal of Hazardous Waste.

⁵⁶ Context summarised from project documents and interviews.

Law and convention provided only a minimum framework. In addition, the institutional arrangements for regulation and enforcement were fragmented, and spread across several ministries.

3.11 Hazardous Waste Project Output Assessment

Project Output Assessment: Very Satisfactory. The Hazardous Waste Project is on track to meet or exceed its Activity and Output targets.

Summary of Output Achievement

Output performance is summarised in Table 16. Project reporting was verified as accurate during the Review mission. The Hazardous Waste Project is implemented at a pivotal the moment, with MONREC /ECD consolidating as a new Department. The Project responds to an urgent need identified by MONREC; a gap in the technical capacity of MONREC /ECD, and other State entities (Union and sub – national), that constrains their ability to develop the institutional framework for Hazardous Waste.

The Project, therefore, is doing *essential foundational* and baseline work on which future policy and regulation can be built, and through which Myanmar can meet its Basel Convention obligations. A first example is the Hazardous Waste inventory. Before the project, they Myanmar had no database or inventory of types of waste present. The first generation inventory delivered by the Project creates a baseline.

The project delivered the Outputs expected, in the three areas set out in the *Project Document* (2015) and *Inception Report* (2016). Additional Outputs appear to have been added over the three-year duration of the project. These expand the original scope of work.

Outputs address the priority national regulatory, technical and coordination/ convening challenges prioritised by MONREC/ECD. They are based on broad consultation and engagement with relevant State entities, industry and with other international entities. Further, project Outputs support Myanmar's implementation of the Basel Convention (2015).

Among its core Output achievements, the Hazardous Waste Project:

- ✓ *Is led by MONREC /ECD*, and fully aligned with the Department's strategy and priorities. The Norwegian counterparts (NEA and SINTEF) work within this nationally defined this framework. The division of labour between them falls within their respective core institutional competence and responsibility.
- ✓ *Project relevance is sustained by the structures created for ongoing project management* (Project Management Group), inter-ministerial collaboration on regulation and institutional arrangements (Regulatory Working Group) and technical standards and analysis for the baseline and feasibility studies (Technical Task Force).
- ✓ Supports MONREC /ECD efforts to address regulatory gaps and the coherence of institutional arrangements (Output 2), by delivering a fourth draft of the *Baseline Report on Existing Policies, Legislation and Institutional Arrangements for Hazardous Waste in Myanmar* (NEA, March 2018).
- ✓ *Delivered a first generation inventory of Hazardous Waste* in select sectors (Output 3), with future projections up to 2030.
- ✓ *Completed the feasibility study on treatment options* for hazardous wastes (Output 4), as movement towards compliance with the Basel Convention.
- ✓ Has produced a large volume of technical documents and studies that contribute to the overall knowledge on Hazardous Waste in Myanmar.

All Output deliverables appear strengthened by the processes established for project management, and methodology that is based on broad consultation and survey, in the public a private sectors. Drafts of the major Outputs were vetted within the structure established to manage the project, and developed in broad consultation with potential stakeholders in the public and private sectors:

Table 15 Vetting of Outputs through Project Management Bodies

Output	Management Body responsible for Vetting
Output 2: 4 th draft of the Baseline Report on Existing Policies, Legislation and Institutional Arrangements for Hazardous Waste in Myanmar.	Regulatory Working Group (Ten ministries and Departments) and by YCDC, MCDC and NPTDC, among others.
Output 3: 3 rd draft of Technical Baseline study of HW in Myanmar conducted (first generation survey of generation and type of HW, as input to HW management, treatment and disposal system).	Technical Working Group (ECD, Regional ECD, Regional Directorate of Industrial Supervision and Inspection (DISI), City Development Committees in Yangon and Mandalay, Member s from Industrial Zones, SINTEF and its local consultants), in broad consultation /survey across the public and private sectors.
Output 4: Technical Feasibility study for different hazardous waste treatment solutions conducted.	Technical Working Group (ECD, Regional ECD, Regional Directorate of Industrial Supervision and Inspection (DISI), City Development Committees in Yangon and Mandalay, Member s from Industrial Zones, SINTEF and its local consultants), with consultation in the private sector.

Norway's contribution is unique. Myanmar's access to specialised technical competence is limited, at all levels of Government, and was not on offer through other bilateral or multilateral cooperation programmes. Officials advised that competence available in the private market is expensive. Under current conditions within MONREC / ECD, it is not well suited to the "whole of government" approach needed to build a comprehensive institutional framework.

MONREC/ECD officials consider the quality of the work done by NEA / SINTEF as high, followed with advice that is practical and realistic under the prevailing conditions in Myanmar. Officials consider the Project focused on priorities and achievable goals, taking into account the limited institutional and financial resources available.

Officials describe the working relationship with NEA /SINTEF as "effective", based on "confidence that is developed through results". The key success variable is "G to G" collaboration (government to government). "We are all public servants. They understand us, and we understand them ... We all respond to our ministers and to the priorities of Government, and we have to work with limited resources." Understanding contributed to "smooth" implementation and cooperation"; NEA/SINTEF was able to quickly assess the situation inside of MONREC/EDC and tailor their approach, contributing to fast start – up with low transaction difficulties between Norwegian and Myanmar institutions.

Robust communications support the project. Officials from both Norwegian and Myanmar entities describe regular communication and follow up – sometimes daily and without prior notice, when an urgent issues arises.

Senior Myanmar officials stressed that Hazardous Waste is a new issue. The waste has "always been there and was not well understood". However, volumes were smaller. Economic growth and change in society (change in consumption patterns and demand) means that the human and environmental impacts are increasing, and must be addressed. The Government has determined that education and awareness are as important as regulation, in government, society and industry.

Table 16: Hazardous Waste Project Activity and Output Achievement⁵⁷

Output and Indicators	2015 Baseline	Project Status and Result Achieved
Output 1: Inception Phase Finalised	Output 1 is a "process" result, to support project planning. Baseline is "no inception report".	Completed with presentation of the project <i>Inception Report</i> , (2016). The output is a project plan, with agreed structures for management, inter-ministerial/department

⁵⁷ Hazardous Waste project reporting and documentation had more comprehensive information on Outputs. Table 20, therefore, is Output – focused and does not track individual activities.

Output and Indicators	2015 Baseline	Project Status and Result Achieved
<p>Output 2: Baseline of existing regulatory framework and institutional arrangement for HW in Myanmar conducted. (Review of all existing regulations, orders and standards for HW, and for monitoring and enforcement)</p>	<p>No pre-existing assessment of regulation and institutional arrangements.</p> <p>Environment Conservation Law (2012), defining Hazardous Substances and giving MOECA/ ECD regulatory authority on HW.</p> <p>No pre-existing and comprehensive overview/assessment available of: a) existing regulation and division of institutional responsibility; b) overlap between ECD and the other responsible State entities.</p> <p>After Environment Conservation Law (2012) and restructuring to create MONREC (2016):</p> <ul style="list-style-type: none"> -Institutional framework for HW still fragmented, and requiring reform. -Various ministries/levels of Government have authority and duties related to hazardous waste management, based on laws and regulation in the sector under their mandate. -Basel Convention ratified 2015, but required a review and revision to national legislation and regulation to harmonise. 	<p>collaboration. Verified, with review of the report.</p> <hr/> <p>4th draft of the <i>Baseline Report on Existing Policies, Legislation and Institutional Arrangements for Hazardous Waste in Myanmar</i> completed in March 2018. Verified, with review of report and interviews. The study is now pending MONREC decision on finalisation and action.</p> <p>ECD officials express high level of satisfaction with quality of the draft report.</p> <p>Drafts reviewed by the <i>Regulatory Working Group</i> and by YCDC and MCDC, among others. Some delays and gaps receiving information from RWG member entities. Accordingly, the report is not finalised.</p> <p>RWG have discussed the scope of HW regulations required, and gaps in the existing arrangements.</p> <p>The study provides an assessment of existing regulation and institutional arrangements. Includes analysis of new legislation required to implement the Basel Convention.</p> <p>Initial desk study and draft completed in 2016, and revised with follow-up consultations during 2017, with industry and sub-national levels of government. Planning and reporting identify interaction with at least 12 other State entities, at the Union and sub-national levels.</p> <p>Some delay experienced, resulting primarily from coordination challenges and slow response to requests for information from multiple ministries, departments and sub-national government entities.</p>
	<p>Output 3: Technical Baseline study of HW in Myanmar conducted (first generation survey of generation and type of HW, as input to HW management, treatment and disposal system).</p>	<p>No pre-existing first generation inventory of HW. No definitions or classifications of HW.</p> <p>No pre-existing data on generation of HW available.</p> <p>No previous inventory or classification of HW. Limited knowledge and awareness of HW, in government and industry.</p> <p>Limits of knowledge exacerbated by:</p> <ul style="list-style-type: none"> ▪ Rapid economic expansion, and changes in the structure of the economy (introduction of new industries, processes and technology) that increase volumes and introduce new forms of HW. ▪ Lack of knowledge in the private sector about what

Output and Indicators	2015 Baseline	Project Status and Result Achieved
Output 4: Technical Feasibility study for different hazardous waste treatment solutions conducted.	constitutes a "hazardous waste".	The project has also evaluated the possible generation of hazardous wastes from SEZ and from other sources such as oil and gas (exploration, production and pipeline activities), healthcare and automobile service stations. In addition, the handling of e-wastes has been evaluated; updated information on POPs (pesticides and PCBs) has been received from UNIDO project; information on generation of tailings and other wastes especially from gold, tin, lead and copper mining have been evaluated; information on oil wastes generated from Yangon port has been collected from DMA and evaluated; and information on waste water treatment plant sludge and subsequent pollution has been received from the JICA-project. Collaboration with sub-national government entities (Yangon and Mandalay) and in the private sector.
	No previous feasibility study on HW disposal. No pre-existing data on the treatment and disposal of HW available.	The first draft of study feasible on treatment options for hazardous wastes submitted on 16 Nov 2017. Verified, with interviews and review of Master Plan. Pending MONREC decision on finalisation and action.

Two activities in support of Basel Convention Implementation were submitted to Government, and pending a revision and/ or approval. These are done by NEA, in the context overall work on the Hazardous Waste Master Plan.

The original project results framework is unclear on the Output deliverables specifically targeted to implementation of the Basel Convention. Related Outputs are delivered with assistance from NEA, and appear under "Activity 6" of the *Annual Report* template. However, the reporting includes limited information on their status. In some reporting, Basel-related activities are also referenced as contributions to Output 2 (Baseline for Myanmar's Regulatory Framework).⁵⁸

The *Annual Report 2018* notes two Output related activities. These address core Basel compliance requirements, for implementation of the convention in Myanmar and the procedures for managing transboundary movement:

Table 17: Hazardous Waste Project Outputs specific to implementation of the Basel Convention

Output	Status
A National General Regulation on Hazardous Waste Management.	A first draft was submitted to MONREC /ECD, and is pending comment. ⁵⁹ Verified, with review of report and interviews.
A draft Procedure on the Transboundary Movement of Hazardous Waste.	The Procedure is now in its third draft, and near completion. The Procedure would be presented to MONREC /ECD, which would manage the approval process. Verified, with review of report and interviews.

⁵⁸ Most or all project Outputs make at least an indirect contribution to Basel implementation.

⁵⁹ The Review understands the *National General Regulation on Hazardous Waste Management* is an Outcome, as a sector wide regulation that builds on project Outputs.

3.12 Hazardous Waste Project Intermediate Outcome Performance

Project Assessment: **Satisfactory to Very Satisfactory**

There is evidence that the institutional capacity and competence of MONREC /ECD is strengthened. The inclusion of a broad stakeholder group, from government and industry, in education and training activities serves as a platform to support coordination, and develop a common approach to Hazardous Waste Management. Assessment is hindered by the lack of ongoing results monitoring. The Project does not attempt to measure or quantify the institutional change achieved.

The Hazardous Waste project delivered a large body of capacity development activities, conducted by ECD, SINTEF and NEA. The work was done in collaboration with a broad group of stakeholders from Union – level ministries, regional governments, industry and other international entities.⁶⁰

Intermediate Outcome indicators and reporting are activity focused. The Project did not monitor for change in the capacity of MONREC /ECD, or the beneficiaries of training in Government entities or the private sector. From a Focus Group of ECD personnel, and other interviews:

- ✓ ECD Senior Management and the participating personnel considered the seminars and training activities to be of high quality and relevance.
- ✓ The activities contributed to establishing basic technical competence on Hazardous Waste within ECD.
- ✓ Information and competence has been socialised within government and industry, through outreach and broad inclusion in activities.
- ✓ The training is unique. ECD did not have access to other entities delivering comparable capacity development activities.
- ✓ Personnel report using their knowledge and skill they acquired in their daily activities, including planning, ongoing monitoring, and interaction with industry and policy development. Also, in developing a system for managing transboundary movement. They perceive that their confidence and professional capacity both increased.

⁶⁰ Activities ranged from an inter - ministerial Study Tours to Thailand (2017) and to Norway (2016), seminar presentations of Output – related research and the generation and management of Hazardous Waste from specific industrial sectors, and the transboundary management and disposal of waste. The project also delivered technical and on-the-job trainings for ECD personnel.

⁶⁰ SINTEF has designed and conducted an intensive course at Yangon Technological University (YTU) on environmentally sound management (ESM) of HW for more than 50 students from faculty of chemical & civil engineering and few participants outside of YTU.

Table 18: Hazardous Waste Project; Intermediate Outcome Summary

Intermediate Outcome Desired	Intermediate Outcome Achievement
<p>Strengthened capacity within MONREC/Environmental Conservation Department (ECD), other relevant Ministries, City Development Committees, industry and relevant stakeholders on management of HW.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Complete and documented training program conducted. ▪ Progress report given every 12 months. 	<p>Satisfactory: Evidence that the institutional capacity and competence of MONREC /ECD is strengthened.</p> <p>Education and training activities are foundational, in a new department and in a national context with a limited body of knowledge and regulation for HW.</p> <p>The beneficiaries of training report using their new knowledge, skill and attitude in their regular performance of their responsibilities. They are more confident, and generally perceive that their performance has improved.</p> <p>Education and training activities are used to convene a broad stakeholder group, from government and instructor, to social knowledge and build a common approach on HW.</p>

3.13 Hazardous Waste Outcome Achievement

Outcome Assessment: **Partially achieved, with positive Outcome trend.**

The Review does not provide a ranking for *Hazardous Waste Project* Outcomes. The Project shows partial Outcome achievement, and the Outcome trend is positive. The core Outputs were submitted to MONREC. They are within the decision – making track, and pending revision and /or approval. However, most are not likely to be approved and implemented after project closure.

The Outcome finding reflects the early stage of project implementation, and is not indicative of performance deficiencies. Phase I of the Project focused on foundational work. Consistent with planning, Output delivery required two to three years. Government processes for approval, budgeting and implementation can be expected to take a similar amount of time, including as ECD scales up its capacity. An acceleration of Outcome achievement is expected during the final months of implementation to March 2019, and is the focus of MONREC's proposal for Phase II.

The Project, therefore, is expected to contribute to improved management of Hazardous Waste in Myanmar. The forecast is driven by four factors:

- ✓ All major project Outputs were delivered and/or are pending imminent finalisation. The deliverables are with MONREC /ECD, for decision and action.
- ✓ Outcomes are positioned at the core of MONREC /ECD's institutional mandate and the priorities of Government. They have similar relevance to the other State entities that share regulatory responsibilities.
- ✓ MONREC /ECD is making a commitment to developing the institutional framework for hazardous waste, and is making regular use of the draft Outputs.
- ✓ MONREC /ECD can demonstrate the political path through which Outputs will contribute to the institutional change desired.⁶¹

Potential Outcomes are identified in both the formal and informal (norms and behaviour) dimensions of institutional change. Regarding the latter, the Project contributed to initial strengthening of MONREC

⁶¹ For example, ECD advised that the Masterplan requires a final review by the Technical Working Group and Technical Task Force, and will then be sent for a public consultation, at the national and regional levels, involving State entities, the public and industry. This has an education and consensus building function, in addition to strengthening the technical content. The process would lead to a revision and a final national consultation, prior to finalisation of a complete Master Plan. The plan would be approved the MONREC Minister, and submitted to the sub-cabinet. It may require full cabinet approval, but this is to be confirmed. Parliament must be informed.

/ECD's convening role as a regulatory entity, and to the habit and structures for coordination between Government entities, and with industry.

Table 19: Hazardous Waste Project; Outcome Achievement Expected

Intended Outcome	Outcome Status and Achievement
<p>Proposed regulatory framework for the management of HW in Myanmar, including for the implementation of the Basel Convention is developed.</p>	<p>The HW project contributes to initial implementation and compliance with the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.</p> <p>A first draft of the <i>National Regulation of Hazardous Waste</i> is complete (2018). Myanmar officials expect a final draft for the end of 2018.</p> <p>Contributing activities (the Basel implementation Plan and Procedure on Transboundary Movement) are in draft form, and appear on track. The meets a core Basel compliance requirement.</p> <p>Other activities under Outputs 2, 3 and 4 have the material effect of contributing to implementation of the Basel Convention.</p>
<p><i>Proposed Master plan for Hazardous Waste management in Myanmar is developed.</i></p>	<p>The third draft of the Master Plan is complete. The Master plan is pending some additions to finalise, followed by MONREC/ECD's approval and action for implementation.</p> <p>The plan comprises a first generation inventory of HW produced by industry.</p> <p>The plan provides a base for strengthening implementation of the <i>Environment Conservation Law</i> (2012), specifically, Chapter IV, art. 7; and Chapter VII art. 13.</p> <ul style="list-style-type: none"> ▪ <i>A sector-wide regulatory regime</i>, including technical regulation and the institutional arrangements for their management. ▪ <i>A second-generation inventory</i>, with the addition of other sectors in during Phase II (mining and other sectors).
<p>Informal Institutional Change</p>	
<p>Change in Institutional Norms and Behaviour</p>	<p>Deepens Myanmar's participation in and engagement with, international convention and normative bodies, after an extended period of isolation.</p> <p>ECD is a regulatory and oversight body. All the department does is "inter-sectoral". Means that the ECD must build the mechanisms for consulting and collaborating with other ministries.</p> <p>Through the project methodology (consultation and survey) and structures created for management (Project Management Committee) and coordination (Regulatory Working Group and the Technical Task Force), promoted:</p> <ul style="list-style-type: none"> ▪ Promoted the culture and practice of intra-governmental and industry cooperation. ▪ Developed the capacity and legitimacy to convene state and non-state entities, with duties and/or obligations for HW.

4. Attribution Analysis

4.1 A Theory of Change for the Norway – Myanmar Environmental Conservation Programme

For the purpose of attributing institutional change to the Programme, the Review re-constructed a Theory of Change and assumptions underlying Programme design.⁶² The primary sources were the *Decision Document* (MFA 2015) and the approved *Programme Document* (June 2015):

Table 20: Reconstructed Theory of Change

Strong and legitimate institutions are essential to processes of political transition.
<p>Environment management can be improved through collaboration between Myanmar and Norwegian State institutions, on activities that:</p> <ul style="list-style-type: none"> ▪ Strengthen Myanmar's institutional framework and capacity for managing natural resources and hazardous waste, including implementation of both international and national commitments. ▪ Mainstream environmental conservation into national development policies, plans and processes. <p>The direct beneficiary of the Programme is the Myanmar State (Outcome).</p> <p>Through MONREC, the indirect beneficiary is Myanmar society at large, and the communities directly affected by environmental degradation and/or resource –based conflict (Impact).</p>

The theory is supported nine underlying assumptions:⁶³

Table 21: Key Assumptions Underlying Programme Design

1. Strong and legitimate institutions are critical to political transition, and to stability.	<p>Institutions are a critical channel through which societies negotiate and implement effective public policy. Strengthening institutional arrangements and frameworks, therefore, is a critical task during periods of political transitions. Aligning with international conventions, standards and good practice provides guidance to reform policy, including international convention and treaty bodies.⁶⁴</p>
2. Reform depends on determined national leadership, and is enhanced by predictable and long-term engagement with the international community.	<p>Institutional building is enhanced by a combination of determined national leadership / ownership, and a long –term engagement between institutional counterparts. For Norway, this implied that Myanmar become a priority counterpart country, that Norwegian institutions have supporting policy objectives, and right institutional core competence, and the will and resources to sustain their engagement.</p>
3. The programme causal chain should focus on actions to strengthen institutional frameworks, at the Union and sub-national levels.	<p>The causal chain of each project comprises activities to strengthen institutional knowledge, policy, legal and regulatory frameworks, and capacity (systems, procedures, technical inputs and human capacity). Programme focus is at the Union level, given their central role defining institutional frameworks. However, considering that environment is an issue that cuts across the mandates of many State and non-State entities, the programme must also serve as a convening platform.</p>

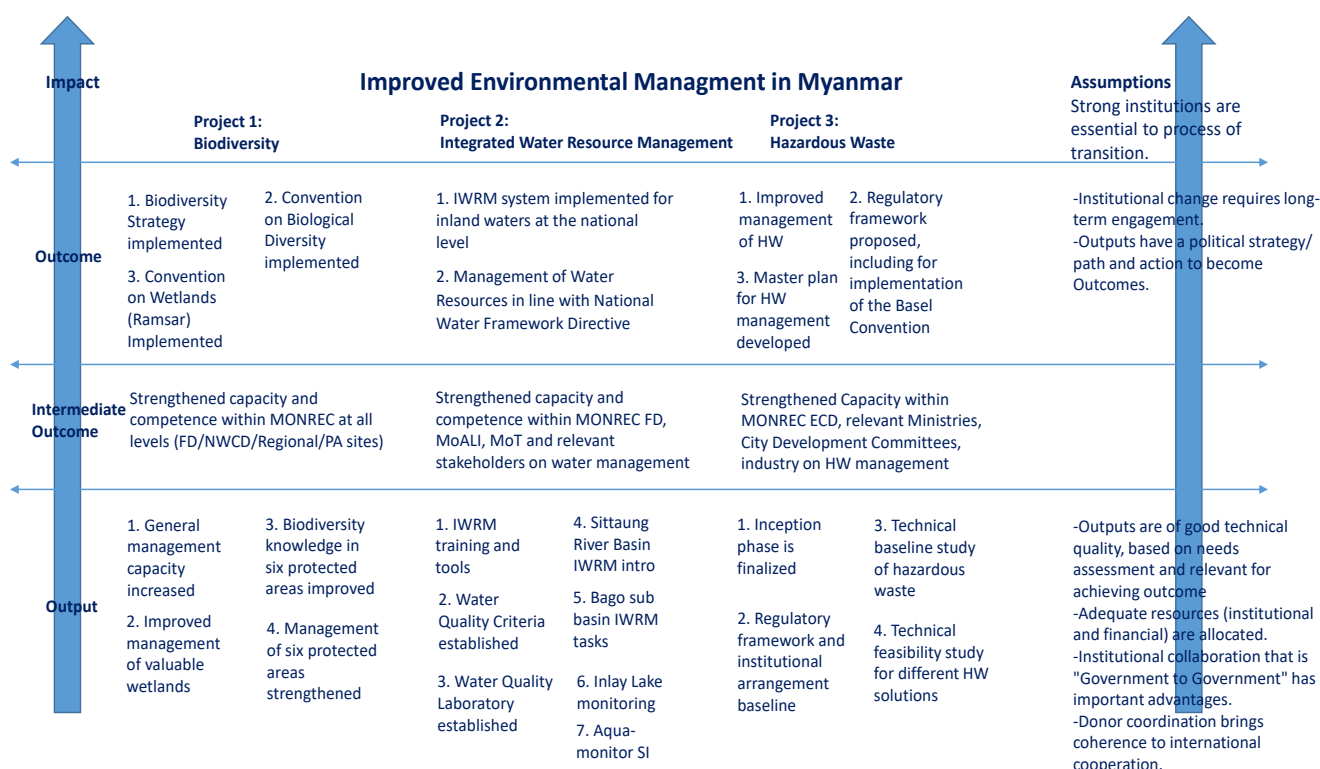
⁶² The original Programme Document did not include a Theory of Change. A Theory was re-constructed for the purpose of attribution. The Theory would require consultation with Programme stakeholders, before it could be used.

⁶³ The Review paraphrases the assumptions from both project documents and stakeholder interviews.

⁶⁴ Research reinforces the link between institutional fragility and the risk of conflict. See the World Bank's *World Development Report 2011*, https://siteresources.worldbank.org/INTWDRS/Resources/WDR2011_Full_Text.pdf

<p>4. Institutional collaboration that is "Government to Government" (bilateral) has important advantages.</p>	<p>"Government to Government" cooperation offers important advantages, as an exchange between civil servants with direct experience on institutional development in the public sector, and the resources to sustain long – term engagement.</p> <p>The Norwegian institutions have unique competence in the three project areas, and the experience to deliver effective institutional cooperation.</p> <p>MOECAAF has the experience and capacity to manage international cooperation, and to make effective use of project Outputs.</p>
<p>5. National authorities have a defined approval process and resources for Outcome achievement, using programme and other Outputs.</p>	<p>Myanmar authorities have a clear political path for the approval of Outputs (draft policy, law and regulation), and the necessary financial resources, to convert Programme Outputs into the institutional Outcomes desired, and to produce benefits for Myanmar society.</p>
<p>6. The right Outputs and sequencing of delivery, combining technical assistance and capacity development.</p>	<p>In their design, the type and sequencing of Outputs are relevant to achieving the desired Outcomes, and are of high technical quality. Also, technical assistance is combined with education and training, to strengthen the human capacity, systems and procedures needed to make effective use of those Outputs.</p>
<p>7. Coordination, collaboration and consultation are essential to support Output delivery.</p>	<p>The programme design has multiple levels of interaction, as it is a bilateral collaboration (Norway and Myanmar) on issues (state and society) and institutional interests (whole-of-government, with environment management responsibilities broadly diffused in the Myanmar State). The institutional counterparts have the approach / aptitude and resources to ensure that effective coordination occurs.</p>
<p>8. Norway's contribution to institution building does not compete with other international assistance programmes.</p>	<p>Norway's assistance is unique, and does not complete with, or duplicate, other international assistance. National authorities have the capacity to coordinate assistance, and to vet it for relevance and quality.</p>
<p>9. Conditions for Peace and Security are favourable.</p>	<p>The necessary peace and security conditions exist for Programme implementation.⁶⁵ Activities do not contribute to conflict, and are planned to avoid being disrupted by it.</p>

⁶⁵ These assumptions are likely weighted towards the Norwegian perspective.



4.2 Summary Findings from Attribution Analysis

4.2.1 Assessment of Outcome Attribution

Attribution Assessment: There is a direct and verifiable causal link, between the Activities and 15 Outputs delivered by the *Environmental Cooperation Programme* and Outcomes identified, partially achieved and expected on approval and implementation of the intended policies, law, regulation and management plans.

4.2.2 Attribution Analysis

The review assessed whether the Outcome identified could be attributed to the Programme. Outcome achievement is the responsibility of MONREC, using resources available within the Ministry, the Programme and from other sources, including international cooperation initiatives. Further, the Programme is a bilateral collaboration that integrates inputs from MONREC.

The core hypothesis of the Programme is that strong institutions are critical to processes of transition, and to improved environmental management. In turn, weak *institutions* undermine the effectiveness and legitimacy of *States*. Within this framework, the Review attributes a direct causal linkage between eight of the nine underlying Programme assumptions, and the partial Outcomes achieved and those anticipated.

The Parties' understanding of the importance of institutions provided a conceptual framework for design. In most or all cases, MONREC has placed the Outputs delivered within a decision-making track. In many cases, the Programme was the unique and sole source of technical expertise contributing an Outcome. Norway's technical competence, therefore, does not duplicate or compete with other resources. It is particularly attractive within a "whole of government" approach, combined development cooperation with the specific technical competence of a Norwegian line ministry. The Programme further served as a convening platform, to support coordination efforts that brought in external resources.

Within the Programme logic, there is a direct and causal link within the Programme logic, between the Intermediate Outcomes and Programme Outcome trend, and the project Outputs. The review did not identify an Output that was outside of the logic, and not contributing to the Outcomes intended.

Looking into a Phase II, the primary factor diminishing attribution is the lack of coherent national budgeting to support implementation of some Outcomes.

Table 22: Attribution Analysis; Assessment of Project Assumptions

Assumption	Attribution Finding
1 Strong institutions are critical to processes of transition.	Direct Attribution: The programme focuses on strengthening a new Ministry, formed after transition, based on a Government-to-Government cooperation model.
2 Reform depends on robust national leadership, and is enhanced by long-term bilateral engagement with the international community	Direct Attribution: MONREC and other participating Government entities have limited capacity and resources for implementation. Notwithstanding, MONREC provides clear leadership on national priorities and processes, and follows up on the Outputs delivered. There is no case of a core Output that is not within a decision making track. ⁶⁶ Programme designed strictly within these parameters.
3 The programme causal chain should focus on actions to strengthen institutional frameworks at the Union level.	Direct Attribution, with expansion: Programme focused at the Union- level, but with important engagements at the sub-national level of Government, and with the private sector and some organisations in civil society. Engagement necessary, given the cross-cutting nature of environmental management.
4 Institutional collaboration that is "Government to Government" (bilateral) has important advantages.	Direct Attribution: High value placed on the benefits of "Government to Government" cooperation for institution building, and identify it as a key performance variable. Outside of NEA, NIVA and SINTEF have strong experience with policy – related research and technical assistance.
5 National authorities have a political path for Outcome achievement, using programme and other outputs.	Direct Attribution, with implementation risk: For all Outputs related to policy, law and regulation, Government has placed them in within a decision – making track. Potential risk relates to implementation capacity and budgeting.
6 The right outputs and sequencing of delivery, combining technical assistance and capacity development.	Direct Attribution: There is a direct causal link within the Programme logic, between the Intermediate Outcomes and Programme Outcome trend, and the project Outputs.
7 Coordination, collaboration and consultation are essential to support Output delivery.	Direct Attribution: Project design includes broad-based cooperation, as needed, and strengthens MONREC's convening capacity and authority. The Programme, therefore, served as a platform for coordinating participation and channelling support.
8. Norway's contribution to institution building does not compete with other international assistance programmes.	Direct Attribution: The Norwegian contribution is unique: It complements but does not compete with other national and international initiatives.
9. Conditions for Peace and Security are favourable.	Partial Attribution: Some project activities are affected by ongoing armed and social conflict. Armed conflict limits the geographic scope of activities, while the Biodiversity projects has adapted for potential social conflict.

⁶⁶ The possible exception is the Biodiversity *Protected Area Management Plans*, with are not budgeted.

5. Section Five Assessment of Review Criteria

Section Five comprises an assessment and rating of the Review Criteria set out in the *Terms of Reference*. The focus is on a composite of Programme-level achievement, and not of the three projects.

5.1 Relevance

5.1.1 Assessment of Programme Relevance

Relevance of the *Norway – Myanmar Environmental Cooperation Programme* during Phase I is **Very Satisfactory** during Phase I. The *Environmental Cooperation Programme* is relevant to the policy, priorities and objectives of the Programme counterparts, in Myanmar and Norway, and to their respective institutional arrangements and competence. Notwithstanding, relevance for the Norwegian Ministry of Climate and Environment appeared to decline, looking forward to a possible Phase II.

5.1.2 Summary of Findings on Relevance

The *Environmental Cooperation Programme* is relevant to the policy, priorities and objectives of the Programme counterparts, in Myanmar and Norway, and to their respective institutional arrangements and competence.

The Programme opened with strong support from the Governments of Myanmar and Norway, as a mechanism embedded in the larger Environment and Natural Resource Management initiative and supported by the high – level policy decisions guiding their engagement. Both Parties made a significant investment to develop their relationship, creating a positive enabling framework for the Programme.

For Myanmar, priorities were embedded in the USDP's post – 2011 reform agenda, the original request for assistance shortly after MOECAF was established (2012), and Myanmar's emerging framework for the environment and natural resource management. It was also based within Myanmar commitment to deepen its participation in the multilateral system for climate and environment, and to align its national system with international norms.

For the Norwegian MFA, priorities were set out in the early dialogue between Myanmar and Norway (2008 – 2010), Norway's *Myanmar Country Strategy* (2012) and the enabling cooperation agreements (2012 – 2015), for the Programme and Norway's broader engagement cooperation assistance.

For the Norwegian Ministry of Climate and Environment, the Programme furthered its policy agenda in the areas of Biodiversity and Hazardous Waste, and building support for the multilateral system. The Programme is aligned with the mandates of NIVA and SINTEF, and fully consistent with areas of interest and aspiration.

The Programme, therefore, was fully aligned with the interests, objectives and environmental priorities of the Parties, through inception and during implementation of Phase I. It was reinforced by the selection of projects that focused at the intersection of Myanmar's priorities and Norwegian competence.

Internally, the relevance of Programme elements was also strong. Most or all Activities and Outputs were consistent with the intended Outcomes, demonstrating a clear causal relationship moving up and down the results chain.

Relevance of the Programme was sustained for all Parties through Phase I.

5.2 Programme Efficiency

5.2.1 Performance Assessment for Programme Efficiency

The Programme efficiency of the *Norway – Myanmar Environmental Cooperation programme* is **Satisfactory to Very Satisfactory**

5.2.2 Efficiency in Programme Design

A primary indicator of efficiency is that the Programme shows limited deviation from its original objectives. Most activities are completed within the expected scope, and MONREC has placed all Outputs with a policy or systems implication into the appropriate decision – making track. Accordingly, the Programme shows few instance of "lost" activities or outputs; resources are wasted as the result of poor relevance, planning, quality or lack of follow up by Government.

The efficiency rating, therefore, results from the quality of Programme design. The Programme was appraised in 2014 as "coherent, relevant and well – conceived."

Text Box: Selected Findings of the Programme Appraisal (May 2014)

- Projects are relevant, appropriate and well-conceived. They should all be considered for funding (p. iii).
- Relevance vested in the ability of projects to address high-priority challenges in the Myanmar environment sector, in an effective way (p.5)
- A comprehensive consultation process supporting programme design (p. iii/p. 6).
- Project design addresses capacity MOECAAF capacity needs, centrally and locally (p. iv).
- Projects lack explicitly formulated higher level development objective (p. iv)
- Presence of a Project Coordinator, located in MOECAAF but also reporting to the Myanmar and Norwegian counterparts (pp. 25-26).

The Programme lacked effective baselines (Fafo 2014), owing in part to the challenge of generating the data required. Regardless, efficiency in design included:

- ✓ The quality of national leadership and planning means limited waste resource loss deviation or "lost" Outputs.⁶⁷
- ✓ Most or all Outputs are being used by MONREC, institution and individual officials. Projects have coherent internal design, with clear casual linkages between project elements.
- ✓ All projects show coherent internal design, with improvement after implementation of Appraisal recommendations and with Norad technical assistance.

The exception is at the programme level. The Programme framework was not developed effectively. No formal mechanisms were developed to coordinate or monitor progress. The Programme, therefore, comprises high performing and well – managed with a weak programme-level management and coordination.

5.2.3 Programme Level Coordination

The Appraisal report noted that is good practice to have a Resident Programme Coordinator, placed in Myanmar with responsibilities for overall coordination at the Programme level. This model is used by the Norwegian Water and Energy Directorate (NVE), in another ENRM initiative. The review did not find evidence that under-developed programme-level coordination had an overall negative impact on Project implementation. This was partly offset by good collaboration across projects.

However, there is effectively no Programme level operation, resulting in:

- ✓ Many of the related coordination and administration tasks fall to the Embassy, staining the Embassy's capacity and distracting its attention from higher order cooperation issues.

⁶⁷ Activities or Outputs that are delivered and resources, but are not used by Government. Reasons may be poor quality or lack of relevance to priority.

- ✓ Weakness in engagement at the Ministry and policy levels. The programme did not have an internal mechanism to keep an overview.
- ✓ No effective monitoring and evaluation at the programme level, including promoting coherence in Project – level monitoring.
- ✓ Lack of capacity to participate in external Donor coordination.

5.2.4 Efficiency of Coordination with Other International Entities

Internally, MONREC has a system for coordination of activity with international entities. The Programme appears to function well within that system. The review did not identify an instance where the Projects duplicated or competed with other international cooperation initiatives. The finding is made noting that MONREC, through the projects, could be more effective in developing synergies.

Externally, there is a growing international presence in Myanmar, working in the environment and climate change sectors. As of 2018, UN Habitat reports 64 international entities, collaborating with government in 10 sectors.⁶⁸

Government looks to streamline aid with new *Development Assistance Policy* (01.2018). It established ten sector coordination groups for agriculture, education, energy, healthcare, nutrition, job creation, social protection and disaster, transport, information and communications technology and the environment.

Groups work under supervision the *Development Assistance Coordination Unit-DACU*, an entity of the *Ministry of Planning and Finance*. Among these, there is an Environmental Conservation Sector Coordination Group, chaired by the Union Minister for Natural Resources & Environmental Conservation. The Programme has limited or not capacity to engage in external coordination activities, or in the sector working groups.

5.3 Programme Effectiveness

5.3.1 Performance Assessment for Programme Effectiveness

Effectiveness of the *Norway – Myanmar Environmental Cooperation programme* is assessed as **Very Satisfactory**, based on performance trends.

5.3.2 Summary of Findings on Effectiveness

Effectiveness is a measure of the extent to which the Programme has strengthened environmental management in Myanmar, focusing on the joint institutional collaboration with MONREC, the other participating ministries and with industry and communities.

Discussion of effectiveness is set in the original context; a period of deep change in Myanmar, after an extended period international isolation. Norway and Myanmar and agreed to a programme that would strengthen the latter's institutions for environment and natural resource management, as a contribution to reinforcing positive trends in the larger transition process. The Programme, therefore, had political as well as institutional dimensions.

Set in this context, the Programme is an effective initiative. It is making a tangible contribution to strengthening environmental management in Myanmar, and the capacity of MONREC. Much of what the Programme has accomplished is "foundational", establishing knowledge, policy and systems and procedures for more effective management, where these previously did not exist or were assessed at inadequate. The Programme is piloting new approaches, and generally strengthening Myanmar participation, and compliance with international conventions and norms.

The Programme, therefore, is achieving both its stated and high order political objectives. Notwithstanding positive trends, Outcome accomplishment is Partial. Many Outputs related to institutional change are pending approval and decision, before they become the policy, law or

⁶⁸ Interview, Bijay Karmacharya, UN Habitat Myanmar Country Director and co-chair of the *Environmental Conservation Sector Coordination Group*.

regulation that are Outcomes. This is a function of time and realism in project design, and not a deficiency in the Programme itself.

MONREC demonstrates strong commitment to proceeding. However, implementation will remain constrained by limited capacity and financial resources to cover the related recurrent costs. Additional work, therefore, is required to consolidate Outcomes, and to institutionalise the capacity gains achieved as Intermediate Outcomes.

5.4 Sustainability

5.4.1 Performance Assessment for Programme Sustainability

Sustainability of the *Norway – Myanmar Environmental Cooperation Programme* is **Satisfactory to Unsatisfactory**, with variation across the project areas. Biodiversity least satisfactory, given the lack of clarity on MONREC budgeting for implementation of the Management Plans. Integrated Water Resource Management and Hazardous Waste are Satisfactory, with a higher probability of being sustained.

5.4.2 Summary of Findings on Sustainability

Sustainability is the likelihood that the benefits of a development intervention will continue after its completion, and resilience to risks that may diminish net benefit flows over time.⁶⁹ For the Programme, key sustainability variables include maintaining broad political and public support, the State's ability to institutionalise Outcomes, and securing the necessary implementation financing in the Ministry budget.

The Programme does not include sustainability planning, or an exit strategy. The decision document (2015) states "no exit strategy has been prepared, as this Programme is seen as the start of a long-term cooperation between Norway and Myanmar in the Environment Sector".⁷⁰ The assumption, therefore, was a long – term commitment to institution building in Myanmar and the probability that the Programme would be extended.

The Sustainability of the *Norway – Myanmar Environmental Cooperation programme* is assessed as Satisfactory, based on strong MONREC engagement and commitment use Programme Outputs, as contributions towards strengthening environmental management in Myanmar. Notwithstanding, all of the Projects are affected by uncertain financing and budget allocation, and some dependence on international financing. This appears to particularly the case with the Biodiversity Project, given the chronic underfunding for Protected Areas.

5.5 Monitoring and Cross Cutting Issues

5.5.1 Observations on Monitoring and Evaluation

Concerns for the quality of monitoring and reporting were outlined in Section One (Limits to Evaluability of the Programme). The Programme does not adhere to good practice for Norwegian development cooperation. Beyond accountability and feedback into management, the Programme is not able to describe and communicate well its achievements.

The scope and quality of Project reporting is uneven, between each of the three projects. There are four basic concerns:

- ✓ The results framework does not enable monitoring above the Activity and sometimes Output levels.
- ✓ The Projects lack the systems, tools and capacity to systematically to support monitoring activity. These would normally ensure the gathering and aggregation of data.
- ✓ There is no effort to monitor at the level of Intermediate Outcomes and Outcomes. Institutional change, therefore, cannot be described or measured.

⁶⁹ <https://www.oecd.org/dac/evaluation/2754804.pdf> 36

⁷⁰ Decision Document (2015), Section 4.3

- ✓ There is no framework to aggregate results at the Programme level. Reporting is a compilation of project Activities and Outputs.

Table 23: Observation on Programme/Project Reporting

Result level and definition	Good practice for monitoring	Observation on current Programme/Project Reporting
Activity (what the project does)	Performance indicators that measure the quantity and quality of each activity.	Quantitative reporting on some achievements (number of events/location/number of people/gender). No effort to measure for quality.
Output (what the activities produce)	Indicators that measure the products, tangible and intangible, that result from activities.	Outputs often presented completion of activities. Some reporting on output delivery (a policy / report /management plan delivered). Limited linkage back to activities.
Intermediate Outcome	Indicators that measure the changes in institutional capacity resulting from education and training outputs. Links to the quantity and quality of relevant activities.	No effort to report or monitor at the Intermediate Outcome level. Intermediate Outcomes often presented as completion of activities. Limited supporting Output data.
Outcome (what government achieves when it uses the Outputs)	Indicators that measure institutional change that results from use of the Outputs.	No Outcome indicators. No effort to monitor or at the Outcome level (responsibility of Government, in collaboration with the project.
Impact	Indicators that measure social change resulting from the Outcome.	N/A

Phase I implementation was focused on the delivery of activities, to generate Outputs. A possible Phase II will include activities to consolidate and expand those Outputs. However, Phase II will also be the period for Intermediate Outcome and Outcome achievement, as Government takes decisions and personnel use the knowledge and skill they have acquired. A Phase II will likely support these processes.

Activities and Outputs are the product of bilateral collaboration, and the joint responsibility of the Norwegian and Myanmar counterpart entities. Monitoring, therefore, should also be collaborative. The Norwegian counterpart entities currently have primary responsibility for Output monitoring and reporting to the NMFA, with contributions from the MONREC counterpart entities.

5.6 Review of Audit Procedures

5.6.1 Audit requirements

Audit requirements for the *Environment Cooperation Programme* are set out in the original agreement between NMFA and MONREC, signed on 15.10.2015. The agreement calls for annual financial statements (Article VII, Clause 5 income & expenditure and cash and bank balances, relevant notes). Article IX continues that audits shall be carried out in accordance with international auditing standards. The scope of audit comprises funding channelled through MONREC.

Capstone, a Myanmar firm retained by the MONREC, performed the annual audits. As the process of appointment, Capstone was recommended from within the ministry, based on involvement with other internationally funded projects.

5.6.2 Review of the audit process

KPMG reviewed the audit standards and reports, and interviewed the Capstone personnel performing the work. As general observations:⁷¹

- ✓ The audit leader is a member of Myanmar Institute of Certified Public Accountants, a Member of Myanmar Accounting Council and university lecturer on accounting software. Capstone is not certified to do audits according to international auditing standards.⁷²
- ✓ The audit are done at MONREC (Naypyidaw) over three weeks. Three Capstone staff are there full time and the head of Capstone (Thu Hlaing Tun).
- ✓ Capstone showed KPMG the firm's internal QRM procedures through forms and checklists, which are to a good standard
- ✓ Capstone performs a Survey of procedures for the financial management of the project, showing MONREC internal cash and back procedures, approval levels and paper flows.

5.6.3 Expenditure verification

Exchange rates are a key concern. Capstone determined that budgeting is done in USD, but with fluctuating amounts in Kyat. Extended periods can pass between making a request for funds and cash being available. Values tend to change, according to currency fluctuations. MONREC adjusts the detailed expenditure to the Kyat-amount they get from the bank. Capstone checks the sheets at the Ministry in Naypyidaw. The underlying individual receipts and papers are further out in the rural areas and not covered by the audit.

Capstone verifies the documentation for revisions, the approvals for budget revisions from NMFA. Examples shown to KPMG for project Conservation of Biodiversity and Improved Management of Protected Areas for financial year April 2016 – March 2017.

5.6.4 KPMGs reflections on the Programme audits

- ✓ Capstone is satisfied with the MONREC's internal financial controls. Recommendations are delivered to project coordinator, but not to higher levels in the Ministry.
- ✓ Capstone applies "generally accepted auditing standards". Capstone's methods designed over many years and appear consistent with good practice in Myanmar, but need modernising. This appears to be a general reflection on audit standards in Myanmar.
- ✓ The 2015 agreement requires an audit in accordance with international auditing standards, but the audit is done according to "generally accepted auditing standards" in Myanmar.
- ✓ The agreement requires an audit by either the Auditor General or independent auditor, not both. The Programme is audited by both. However, the independent auditor does not have access to the findings of the Auditor General.
- ✓ Expenditure amounts in USD are round numbers, explained because that represents the amounts taken from the bank, even though actual expenditure in Kyat varies. The Auditor also verifies Kyat expenditures.
- ✓ The Auditor is methodical and thorough. KPMG notes that the workload is large for the low fees paid (approx. USD 3,000 per audit).

⁷¹ The review was conducted by a Chartered Accountant from KPMG.

⁷² The accounting profession and standards did not develop during the period of international sanctions. Capstone advised that there are approximately 400 CPAs in Myanmar, of which only about 40 have experience from private/corporate sector. Few are certified to an international standard.

5.6.5 Mainstreaming gender and human rights

The *Programme Document* (2015: Section 4.2) identifies gender and human rights as cross-cutting issues. In addition to a context description of female employment in MONREC, the document states that promotion and assurance will be done for "participation of women and vulnerable groups in all relevant project activities." Further, attention will be given to local sensitivities, especially ethnic minorities and rural areas in project activity areas.

The Programme and individual Project documents include limited or no detail on the method to ensure participation and respect for local communities. This concern was raised in the *Appraisal Report* (2014). The related policies and practice in MONREC as not identified. Some method does emerge in the plans and reports for the Biodiversity and Integrated Water Projects, related to processes of community – based consultation and activity governance.

Further, the *Programme Document* does not cover all the intended cross – cutting issues: human rights, with a particular focus on participation, accountability and non-discrimination; Women's rights and gender equality; Climate and environment; Anti-corruption. The contractual obligations of the project partners do not stipulate a requirement to report on cross – cutting issues, other than financial irregularities and anti-corruption.⁷³

5.6.6 Monitoring and reporting on cross-cutting issues

The *Programme Reports* (2017/2018) include brief considerations of cross-cutting issues. The report states that the projects have taken actions to ensure participation of women and other vulnerable groups. Further, that project implementation has respected local sensitivities, including ethnic minorities in rural communities. The importance of awareness and consideration of gender, human rights aspects, and ethnic or minority groups rights to influence, is also mentioned. Since environment and climate are the main programme objectives, they refer to sectorial Myanmar legislation. For anti-corruption, the report states that there are no suspicion of any corruption and that economic transfers, to their knowledge, have been done according to "common accepted codes of conduct".

Notwithstanding notice, there is limited or no information on how the observance of gender equality and rights occurred. Where gender is reported, it is usually in the form of numbers and participation, and not as description of how a gendered approach was implemented. Again, such an approach would be conditioned by the policy and approach of MONREC itself.

At project level, some disaggregated data on gender attendance has been reported. The 2017 and 2018 reports for IWRM mention that gender balance has been "relatively good" in training sessions. Disaggregated data on gender was presented for training courses, and for advanced education supported by the project. There was no mention of the other cross-cutting issues.

The inception report for Management of Hazardous Waste mentions the gender context and that the MONREC work force almost has an equal balance between men and women. Further, the training activities, and other activities, under the project will target participation for both genders. In the 2018 annual report, the average gender ratio in workshops and seminar is 40 % women and 60 % men. SINTEF has provided percentage of female attendance in all their workshops and capacity building activities throughout the project period. The annual project reports for 2016 and 2017 do not cover any of the cross-cutting issues.

In the project reporting for Biodiversity, there was no reporting on cross-cutting issues, or disaggregated data by gender, in their annual reports 2016, 2017 or 2018.

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6. Recommendations

6.1 Focus of Recommendations

The review focused on forward looking recommendations, which address the third objective of the Terms of Reference.⁷⁴ The Review does not offer recommendations on the second objective, for adjustments needed to bring Phase I to an effective completion:⁷⁵

- ✓ The Review found that most project activities are on track to meet or exceed their Activity targets, and Output and Intermediate Outcome objectives. There were no significant deviations requiring corrective action. Concern was more for consolidation and Outcome achievements.
- ✓ By May 2018, most project activities were near completion, and the project budgets largely expended. The counterparts were already well into planning for a Phase II. The scope for recommendations.

The Review Team, therefore, did not identify any substantive adjustments required for Phase I conclusion. Recommendations focus instead on Phase II design: measures to consolidate Phase I accomplishment, and strengthen Outcome achievement within the existing programme areas.

6.2 Summary of Recommendations

Collaboration on a possible Phase II of the Environmental Cooperation Programme

1. The Review recommends that Norway and Myanmar continue their collaboration into a second Phase of the *Environmental Cooperation Programme*. The recommendation is based on the mutual commitment to institution building made by Norway and Myanmar in 2015, the high achievement of Phase I, and the opportunity for consolidation of that achievement in a Phase II.
2. The programme should continue with existing structure, focused on MONREC institutional development, with a capacity – focused Intermediate Outcome and an institutional Outcome.
3. Noting capacity and resource limitations, the scaling back of the Norwegian Environment Agency's engagement and mindful of MONREC's priorities, the Review recommends a focus on consolidating the achievements of Phase I as MONREC Outcomes. This may include:
 - ✓ The scaling – up of relevant initiatives, among them the Protected Area Management Plans, the River Basin Management model and implementation the Hazardous Waste Management Plan.
 - ✓ On – going education and training activities, linked to Project Objectives.
 - ✓ Support to Outcome achievement (the further development and implementation of policy, regulation and planning, and participation in international conventions, among the other Outcomes sought in Phase I).
4. With a focus on consolidating and achieving Outcomes, the Review does not recommend a significant expansion of the Programme outside of its existing scope, to include new sectors.

⁷⁴ Assess (and suggest) changes and expansions of the existing programmes & projects and new areas of co-operation in a possible new phase.

⁷⁵ To provide the Royal Norwegian Embassy in Yangon and MONREC with input for possible adjustments in the last period of the 2015-2018 Programme.

Strengthening Coordination with other International Entities

5. The Programme should be represented on the *Environmental Conservation Sector Coordination Group*, Chaired by the Union Minister for Natural Resources & Environmental Conservation. There should be particular interest in sharing information on approaches to policy and management planning, noting that MONREC received different and sometimes conflicting advice from international donors and organisations.

Biodiversity project to focus on scaling up the Protected Area Management planning, and consolidating training.

The Biodiversity Project should remain focused on development of policy, systems and procedures, and training within Nature and Wildlife Conservation Division (Forrest Department, MONREC). The Phase II project document will need to clarify the role and responsibilities of the Norwegian Environment Agency, given the reduction of available resources. This will require focusing on core activities.

As specific recommendations, Phase II of the Biodiversity Project should:

6. Consolidate work on the four existing Protected Area Management Plans, including support to implementation planning and monitoring to document results and lessons learned. The target should be to ensure these four become "areas of success", that inspire and can be replicated elsewhere. The project should not engage directly with developing more management plans.
7. Support the Nature and Wildlife Conservation Division in deciding on a Management Planning model to scale up nationally, taking into account the results of Phase I, the experience with the planning models used in other Protected Areas and international good practice. The model should include guidance for community consultation, to strengthen social license.
8. Provide technical assistance to the Nature and Wildlife Conservation Division, to:
 - ✓ Scale up of a national management-planning model, including with training on the model and other assistance as required.
 - ✓ Clarify the budget and other resource requirements to implement and sustain the plans, and a medium term financing strategy.
 - ✓ Develop a capacity within the Division for ongoing monitoring and reporting on plan implementation progress, including the necessary information and knowledge management systems.⁷⁶
9. Conduct a needs assessment for the education and training of Division personnel and related stakeholders, for development and implementation of the Plans, and ongoing monitoring of the Protected Areas. The assessment is an information base for the project to develop and deliver its Phase II education and training programme, that builds on Phase I and the requirements of scaling up a national planning model.
10. Continue providing support to Myanmar's engagement with the Ramsar Convention, and to the National Wetlands Committee.

Integrated Water Resource Management project to focus on consolidation of the River Basin Management model, and technical assistance to water quality.

During Phase II, the *Integrated Water Resource Management* project should focus on consolidation of the existing River Basin Management pilot, and working with MONREC to determine whether the model will be scaled-up. The pilot should not expand into new river basins, beyond the original scope of Phase I. Otherwise, the project should focus on the core area of water quality. The Water Quality laboratory remains a principle area of concern.

As specific recommendations, Phase II of the IWRM Project should:

⁷⁶ The Integrated Water Resource Management project can provide inspiration and advice, based on its experience with the *Aquamonitor Surveillance and Information System* during Phase I.

11. Focus on finalisation and documenting the current River Basin Management pilot and documenting the model, providing technical assistance and advice to ongoing implementation of the pilot, and monitoring to document results and lessons learned. The pilot should not expand to new river basins, beyond the original scope of Phase I.
12. Document the results of the Phase I pilot, and work with MONREC to decide whether to scale up the pilot for implementation elsewhere. If there is a decision to scale up, the IWRM Project can provide technical advice, support and monitor for results, but should not have direct implementation responsibility.
13. The IWRM Project should share results of the pilot results in the *Environmental Conservation Sector Coordination Group*, where other international entities are presenting water management approaches to MONREC. Generally, the IWRM Project should be represented at group meetings.
14. Otherwise, Phase II should focus on advancing the core technical, information management and institution building activities related to water quality begun in Phase I.
15. The Environmental Conservation Department appears to be the most appropriate long-term location for the Water Quality Laboratory, based on the Department's mandate. This observation is made noting that MONREC decided to host the laboratory in the Forest Research Institute.
16. There is an urgent need to address the sustainability of the Water Quality Laboratory. The laboratory requires a sustainability plan that coincides with its movement into a new host location. The plan needs to include measures that ensure:
 - ✓ The financial sustainability of operations, preferably as a recurrent item in MONREC's annual budget.
 - ✓ Access to laboratory materials and servicing for equipment, which are currently not available in Myanmar. Access will require assistance from other Government entities, on issues such as customs and imports.
17. The current sustainability plan anticipates generating operational revenue through the sale of services, including to international organisations, I/NGOs and the private sector. The Review advises against the strategy, as a medium term financing solution. It creates the conditions for a conflict of interest, and reduces the laboratory capacity available within Government.

Consolidation and dissemination of Hazardous Waste achievement:

The most Hazardous Waste outputs were pending decisions from government, for approval and implementation. At its core, Phase II should focus on Outcome achievement in Government, and broader dissemination of the project's research results. The project also appears to have capacity to expand the scope of its research during Phase II, in addition to supporting on – going education and training activities.

18. Phase II should focus finalisation of the:
 - ✓ A *National General Regulation on Hazardous Waste Management*, and implementation requirements.
 - ✓ The *Procedure on the Transboundary Movement of Hazardous Waste*, and implementation requirements.
 - ✓ The *Hazardous Waste Master Plan*, supporting studies and activities, and the requirements for implementation of the Master Plan recommendations.
19. Phase II should include measures to disseminate the results of research under taken to *Hazardous Waste Master Plan*, including in the private sector and to organisations in civil society.
20. The project may conduct a rapid needs assessment, of the education and training requirements for ECD, as the Department expands its capacity and scope of work. An element of the assessment should be capacity to coordinate with regional offices and sub – national and regional levels of government.

Recruit a Resident Programme Coordinator embedded in MONREC

21. Recruit a Resident Programme Coordinator for Phase II, embedded in MONREC and supporting all counterparts.
22. The Resident Coordinator would not be an intermediary in the Project-level relationships, which are already trusted and high functioning. Rather, the Resident Coordinator would focus at the Programme level, to support, coordinate, enable and facilitate on, among other tasks:
 - ✓ Programme and project planning and reporting.
 - ✓ Monitoring and evaluation, focused with MONREC at the Intermediate Outcome and Outcome level and on cross – cutting issues. A Resident Coordinator may also provide support to the Projects on data gathering and aggregation, including with monitoring software.
 - ✓ Liaison and coordination with external stakeholders, including participation in Donor Coordination forums with Government.
 - ✓ Liaison with the Norwegian Embassy in Yangon, with the appropriate support to Grant management tasks.

Strengthen monitoring at all results levels, with special consideration in Phase II on Intermediate Outcomes and Outcomes.

23. Under the leadership of MONREC, Phase II design should include an explicit Theory of Change. Norad may provide technical assistance in adapting a model to the needs of the Programme, and facilitation to the counterpart institutions as they draft.
24. The Programme and Projects should revise their results frameworks in preparation for a Phase II, to align with good practice for the monitoring of Norwegian development cooperation.
25. Phase II should place particular focus on strengthening its monitoring capacity Intermediate Outcome and Outcome levels.
26. Monitoring should be a collaborative activity, with the Myanmar counterparts playing a role in data gathering, aggregation and assessment. This may require additional training in methodology. .
27. The Programme should consider the use monitoring software, to systematize data gathering. "Off the shelf" products are available.
28. Both software and training for monitoring can be consider as an Intermediate Outcome.

Improve performance on cross – cutting issues.

29. Programme design should include specific measures to strengthen performance on cross cutting. Those measures should note MONREC's policy and approach, and include a specific method for how cross – cutting objectives will be achieved. Also, include respect of, procedures to ensure and risk assessment with mitigating actions.

A study of the Norwegian approach to peace and transition, using institution building in Myanmar as a Case Study.

30. Norway made a significant investment to support transition in Myanmar, with an integrated approach that included early engagement with the pre-transition Government and post-transition support to strengthening State institutions. The approach is worthy of a study in its own right. A study:
 - ✓ May include all institution-building initiatives in the *Environment and Natural Resource Management* sector, and not just the collaboration on the environment.
 - ✓ Can be timed to build on the results of the Phase II final evaluation. Scope to 2008 and 2023, but would require initial conceptual work and research in 2019, to mitigate the loss of institutional memory from the early period.
 - ✓ Consider transition objectives and the interaction/alignment between political and programme objectives.
 - ✓ The results achieved, and the extent to which they supported the transitional objectives.

Annexes

Annex A Terms of Reference

Terms of Reference for the Review of the Norway - Myanmar Environmental Cooperation 2015-2018, February 20th 2018⁷⁷

1. Introduction

Background

Discussions on environmental cooperation between Norway and Myanmar began late 2012. The Norwegian Ministry of Foreign Affairs (MFA) provided support for planning of possible co-operation from December 2012, and to an inception phase from July 2014.

Myanmar Ministry of Environmental Conservation and Forestry (MOECAF) and the Norwegian Ministry of Climate and Environment (Klima- og miljødepartementet, KLD) signed a Letter of Intent on Environmental Cooperation 6 February 2014.

The period of preparations and appraisals ended with finalisation of project planning in 2015. In an agreement signed on 15 October 2015, the Royal Norwegian Embassy in Yangon (RNE) made available to MOECAF a financial grant of NOK 75 500 000 to be used to finance the Programme on Environment Cooperation for the period 2015-2018.

The Programme consists of three projects:

1. Conservation of Biodiversity and Improved Management of Protected Areas
2. Integrated Water Resources Management – Institutional Building and Training
3. Management of Hazardous Waste

According to Article X in the agreement “An end review focusing on progress to date and the effectiveness of the Programme, i.e. the extent to which the outcomes has been achieved, shall be carried out by February 2018. An assessment of the Programme’s impact may also be included in the review.”

MOECAF was superseded by Ministry of Natural Resources and Environmental Conservation (MONREC) in 2016, through merger of several ministries/departments. All responsibilities that previously was under MOECAF is now transferred to MONREC. In this document, the term “MOECAF” is used when referring to historic activities, events or agreements signed by this institution, while “MONREC” is used when referring to present and future follow-up of the programme.

Overall Programme Goal

The expected impact of the programme is “Improved environmental management in Myanmar.” The overall “Programme logic” is to “contribute towards a sustainable economic development of Myanmar through an approach/programme that builds capacities of stakeholders and strengthens institutional frameworks in the context of managing rich water and biological resources and hazardous waste, as well as mainstreaming environmental conservation into national development policies, plans and processes.”

Programme Outcomes

The programme consists of the three projects / programme areas:

1. Conservation of Biodiversity and Improved Management of Protected Areas, with the following expected outcomes:
 - ✓ Conservation of biodiversity and management of protected areas are in line with Myanmar’s National Biodiversity Strategy and Action Plan (NBSAP)
 - ✓ Management is in line with the Convention on Biological Diversity (CBD)

⁷⁷ The only change to the ToR is the formatting to fit into the rest of the report format. Content is unchanged.

- ✓ Management is in line with the Convention on Wetlands (Ramsar)
2. Integrated Water Resources Management – Institutional Building and Training, with the following expected outcomes:
 - ✓ An Integrated Water Resources Management system implemented for inland waters at the national level
 - ✓ Management of Water Resources in line with National Water Framework Directive
 3. Management of Hazardous Waste, with the following expected outcomes:
 - ✓ Improved management of Hazardous Waste (HW);
 - ✓ Proposed regulatory framework for the management of HW in Myanmar, including for the implementation of the Basel Convention is developed.
 - ✓ Proposed Master plan for Hazardous Waste management in Myanmar is developed

The three projects are outlined in three separate project documents.

MOECAAF-MONREC has been responsible for implementing the Programme, and has hereunder entered into the following institutional cooperation contracts between:

- ✓ MOECAAF, represented by the Forestry Department (FD) and the Norwegian Environment Agency (NEA) regarding the project “Conservation of Biodiversity and Improved Management of Protected Areas”
- ✓ MOECAAF, represented by the FD and the Norwegian Institute of Water Research (NIVA) regarding the project “Integrated Water Resources Management – Institutional Building and Training”
- ✓ MOECAAF, represented by the Environmental Conservation Department (ECD) and NEA regarding the project “Management of Hazardous Waste”, who subsequently has a sub-contract with SINTEF.

2. Review Purpose

The purpose of this assignment is to:

- ✓ Assess the results of the existing cooperation
- ✓ Provide the RNE in Yangon and MONREC with input for possible adjustments in the last period of the 2015-2018 Program
- ✓ Assess (and suggest) changes and expansions of the existing programmes & projects and new areas of co-operation in a possible new phase.

3. Scope of work

In general, the review team shall assess all key issues found to be pertinent for the team to do a sufficient assessment of the status of the Programme including whether and how the objectives and planned results will be achieved.

The review shall cover the period from signing of the main agreement in Oct. 2015 (the running Programme) up to today, taking adequate note of what was pursued and achieved in prior, introductory phases.

The review shall assess, but not necessarily be limited to the following issues, items and questions:

Efficiency

- ✓ Progress and efficiency of activities carried out. Measure how efficiently resources and input, funds, expertise, time etc. are converted to outputs.
- ✓ Is the expenditure so far justifiable when compared to plans, progress and outputs?

Effectiveness

- ✓ The achievement of results of the programme as set forth in the MOU, the Letter of Intent, the Program Agreement, the Program Document, the three Project Documents and the three Institutional Cooperation Agreements.
- ✓ The performance and results of the Programme based on planned outputs and outcomes, and their indicators (the results chain).
- ✓ The quality of the results reporting. To what extent can reported results be verified?
- ✓ To what extent the professional level and knowledge of the staff at the involved institutions has been increased as intended?
- ✓ What deviations of plans and budgets have occurred and what were the causing factors? Have adequate measures for avoiding reiteration of deviations been implemented?
- ✓ How have the roles and responsibilities of Norwegian and Myanmar implementing institutions contributed to or impeded the achievement of outputs and outcomes?

Impact of the Program

- ✓ What are the main outcomes, and impacts (if possible to measure) of the Program? Does the results matrix make sense, and are outcomes and indicators possible to verify?
- ✓ To what extent do the intended target groups benefit?
- ✓ To what extent have the agreed outputs and outcomes been achieved and reported so far, and how has this contributed to the overall Programme logic?
- ✓ If lack of achievement of results are observed, - to what extent can it be expected that the overall objectives will be reached in the remaining programme period?
- ✓ To which extent has the work of the program fed into the overall development of work on environment in Myanmar?

Relevance

- ✓ Assess the extent to which the Program addresses (immediate & long term) needs in the identified project areas of environment in Myanmar?
- ✓ Discuss and assess the added value of the Norwegian support in perspective of other donor initiatives in Myanmar on environment issues.

Sustainability

- ✓ To what extent the activities undertaken have contributed to strengthening the institutional capacity of the relevant Myanmar institutions and in making the institutions more sustainable?
- ✓ How the enabling environment has contributed to sustainable capacity building, taking competency profile, salary level, staff turnover etc. into account

Risk management

- ✓ Assess the major risks experienced during the implementation of the Program, and to what extent the Program have addressed and mitigated these risks. Identify possible future risk factors and present recommendations for how to handle these.
- ✓ What are the critical issues at organizational, institutional and on program/project level?
- ✓ Assess whether the corruption risks are managed properly (by considering the fund flow mechanisms and control procedures).

Other particular issues to be investigated

The review team should also assess and give its views on the following issues:

- ✓ Cross-cutting issues
 - How are issues of social/cultural/gender equality addressed in the Program, and reported? Are disaggregated data on gender included in the reporting?
 - How are anti-corruption, environment and climate change issues, and human rights addressed and reported?
- ✓ Institutions / Consultants
 - Discuss the role of the Norwegian institutional advisors
 - Discuss the program coordination function on the Norwegian and Myanmar side
 - Discuss the use of other institutions, (International) Non-Governmental Institutions and consultants in the programme, and assess whether these have provided long term capacity building or only gap-filling for MOECAF-MONREC?
- ✓ Coordination with other environment programs
 - How well is the Norwegian supported programme coordinated with other programmes or initiatives financed by the Government of Myanmar or other donors?
- ✓ Reporting
 - To what extent do programme and project reports reflect the planned activities, challenges, risks and achievements?
 - To what extent have the partners in Norway and Myanmar complied with obligations as stated in the agreements and Programme documents?
- ✓ Management
 - Consider the merit of the approved changes and adjustments in the Programme made in annual meetings and in-between meetings
 - Consider to which extent the partners (MOECAF-MONREC/RNE/Norwegian institutions) have requested and made adjustments based on changing realities on the ground during the programme, to make the programme flexible and relevant. Is the results framework used as a management tool?
- ✓ Audit
 - Verify whether audits have been carried out in accordance with the agreement, and assess opinions, if any, from the auditors.
- ✓ Financial management and anti-corruption measures
 - Do the financial management systems and capabilities prove themselves sufficient?
 - To what extent are the programs designed to fight corruption? Are measures implemented to avoid and detect corruption functioning satisfactorily?
- ✓ Remaining program period and possible next phase
 - Need for adjustments for the remaining programme period
 - What are the main lessons learned, and how should these lessons inform a possible new phase of co-operation? Which areas are ready for termination, and where are needs for expansion? Which issues and areas of cooperation (existing or new) are the most important for further support by Norway? Where could Norwegian stakeholders add value?
 - The relevance of a possible next phase and duration (years)?

The team shall review any additional issues they find relevant to the purpose of this assignment.

4. Expected Review Outputs

The expected review outputs are:

1. A mission preparation note to be submitted to Norad prior to the field visit to Myanmar.
2. A travel plan and budget, which must be approved by Norad prior to departure.
3. A wrap-up seminar in Yangon or Naypyidaw with MONREC, NIV A, NEA and the RNE, where preliminary findings and assessments are presented to and discussed with stakeholders.

4. A draft final review report.
5. A final review report including the observations, analyses, conclusions and recommendations of the Consultant.
6. 5. Timetable for preparation, field work, reporting and indicative volume of assignment

Indicative timeline for the review:

- ✓ Contract signed in March 2018.
- ✓ Preparatory work, fieldwork and report writing during April – primo June 2018.
- ✓ Wrap-up seminar prior to departure from Myanmar, preferably to be held just ahead of the annual meeting in the programme. This meeting is tentatively scheduled for second half of May. The Consultant shall preferably present the major findings in the meeting with the RNE, MONREC and stakeholders.
- ✓ Draft report writing during May-June 2018. The Consultant shall present a draft report to the programme partners, the embassy and Norad, including summary of main findings, conclusions and recommendations within 12 days after the field work in Myanmar. The partners, the embassy and Norad shall give their comments to the draft report within 2 weeks.
- ✓ Final report after comments to be completed by medio June 2018. The final report should be finalised within max. 1 week after the parties have delivered their comments to the draft report.

Preparations: Upon signing of the contract, the Consultant will study relevant documents, perform interviews with key informants (involved institutions) in Norway (Oslo and Trondheim) and work out a mission preparation note (including identification of key issues and a detailed field visit plan). The RNE and Norwegian Agency for Development Cooperation (Norad) can provide suggestions regarding meeting schedule, logistics and field trips, but the arrangement is the responsibility of the consultant, including obtaining visa.

Fieldwork: The review team shall undertake a 2-week mission (approximately) to Myanmar, tentatively May 2018, to conduct meetings and interviews, review documentation, and make field visits. The team will meet with key informants, relevant partners and stakeholders in Myanmar (Yangon, Nay Pyi Taw and other locations), and with the Norwegian Embassy in Yangon. MONREC is mainly working out of Nay Pyi Taw, hence most of the field visit will take place there.

Reporting: The final review report shall be written in English and shall preferably not exceed 30 effective pages, plus an executive summary and attachments. The report shall be submitted electronically. A suggested report format is shown in appendix.

The final report shall include recommendations for possible improvements of the existing Program in the remaining program period, and identify projects or areas of cooperation in a possible next phase or possible new programs. The final report shall also make recommendations on, if relevant, cooperation areas which should be terminated and not continued in a possible next phase of the cooperation.

Indicative volume of the assignment: The review team should preferably be two international experts and one Myanmar national, but it is up to Supplier to propose the team composition.

The review has a maximum budget of 700,000 NOK ex. VAT. The final budget, together with a work plan with a time schedule is however to be proposed by the Consultant.

6. Documentation

The members of the review team shall make themselves familiar with all relevant and available background information.

Non-exhaustive list of documents to be available for the review team:

- ✓ The programme document and the three project documents
- ✓ Appraisals
- ✓ The decision/appropriation document

- ✓ Agreements
- ✓ Mandates and minutes from annual meetings
- ✓ Programme and project reports
- ✓ Work plans, progress reports
- ✓ Financial reports
- ✓ Audit reports
- ✓ Other relevant documentation including to be found at the web and Facebook

The Consultant will have access to all relevant documents at the Norwegian Embassy in Yangon and from the Norwegian institutions.

7. Other information

One representative from Norad might take part in the fieldwork of the review.

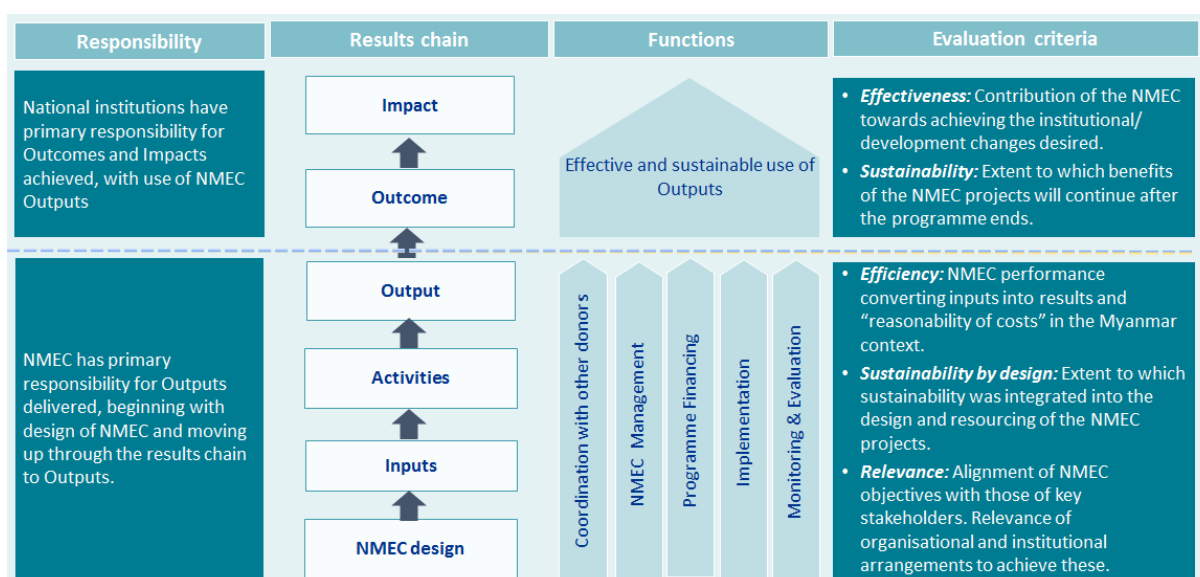
Annex B Review Methodology

An Outcome Methodology

The Review uses an Outcome methodology, adapted from OECD, United Nations and World Bank sources. The principle methodology reference is *Outcome Level Evaluation* (UNDP 2011). Also referenced are *Measuring Regulatory Performance* (Coglianese 2012) and *Process Tracing: Draft Protocol* (Oxfam Policy and Practice, undated).⁷⁸

The Review quantifies the results achieved, at the Programme and individual Project levels. These results exist as **Outcomes** and **Intermediate Outcomes** (Programme-level), achieved when MONREC and other Government institutions use **Outputs** from the three individual Projects, and from the synergies between the Projects.

Figure 1: Outcome Evaluation Methodology



Although technically a "review", the *Terms of Reference* call for an assessment of programme Outcomes, and the supporting project-level Outputs.

An **Output** is "the products, capital goods and services which result from a development intervention." Outputs are usually achieved through the delivery of **Activities**, "actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilized to produce specific outputs."⁷⁹ For the Environmental Programme, both activities and outputs related to institutional development within MONREC.

Between Outputs and Outcomes, an **Intermediate Outcome** is the result that must occur for the higher-level Outcome to be achieved. For the Environmental Cooperation Programme, Intermediate Outcomes derive from the education and training activities, provided through the three projects. As with Outcomes, responsibility for Intermediate Outcome achievement rests with Government, and in the manner that newly acquired knowledge and skill is used by MONREC to improve institutional performance.

Outcomes are *the medium-term results achieved by MONREC, at the programme level*. For the Programme, Outcomes are usually expressed as changes to institutional capacity, behaviour/values and effectiveness. These can include the existence and performance of policy, legislative and regulatory frameworks, systems and procedures, and the other aspects of an "institution" targeted by

⁷⁸ The complete citations are found in Annex C, List of Documents.

⁷⁹ Development Assistance Committee of the OECD, Evaluation Criteria, <https://www.oecd.org/dac/evaluation/dcdndep/43184177.pdf>

an intervention. By extension, **Impacts** are the boarder changes in conditions that result from Outcomes.

MONREC achieves Outcome and Intermediate Outcomes by using:

- ✓ The Outputs delivered in each of the three project areas, and achieved through the collaboration between Myanmar and Norwegian institutions.
- ✓ Other resources and inputs available to MONREC, from national sources and international cooperation.

Outputs fall within the scope of Project operations, and are the direct result of the actions taken by the Project. MONREC and the Norwegian counterparts produce outputs jointly, by their individual contributions and through collaboration between Myanmar and Norwegian institutions. Outputs, therefore, are within the internal control of the three projects. It is possible to attribute, and identify a causal relationship between the inputs delivered by the Norwegian and Myanmar institutions, the efficiency of resource use, and the Output results archived.

The responsibility for **Intermediate Outcomes and Outcomes** and their sustainability rests solely with the Myanmar Government and institutions. The ability of Government to transition Outputs into Outcomes depends, in part, on the quality of the Outputs delivered. In addition, Outcomes are influenced by multiple inputs and variables that are external to the Programme. The casual relations is more complex and difficult to map. Attribution of Outcome achievements to a Programme, therefore, tends to be indirect and relative to other external factors. Change is usually measured against a **Baseline**, developed during the design phase of a Programme.

As the elements guiding methodology design:

- ✓ The Review will respond to the results framework and baselines set out in the original programme and project documents, taking into account revisions made over time.
- ✓ For the baselines, the review will take into account both the results of the *Baseline Study* (Fafo 2015) and the methodology used to generate the baselines. From inception interview in Norway, the Fafo AIS report was a reference document, but not used as a practical input to the design of the programme. The Fafo report focuses more broadly social conditions, with limited baseline data on project design. It does not appear that project baselines were developed during the design phase. Performance baselines, therefore, are reconstructed from the project documents, interviews and external literature.
- ✓ The methodology with will consider programme and project results, related to institutional change in at least three domains: Changes in the overarching *Institutional* and enabling conditions (policy, legislation and regulation, among other factors); the *Organisational* structure, systems and procedures; and with the capacity of *Individual* staff members (aptitude, knowledge and skill). This three-level hierarchy is consistent with the Fafo AIS approach, and allows for comparison against the 2015 baseline (where information exists).
- ✓ The primary Outcomes assessed will be changes with institutional capacity performance of MONREC, focusing on the three project areas and the participating departments. The intermediate Outcome will be changes in the capacity of the individuals that participated in the education and training components of the project. The review may consider Outcomes achieved within Norwegian institutions, where information is available.
- ✓ Outputs will be the results achieved, through the joint effort of Norwegian and Myanmar collaboration, in the three project areas and assessed against the results framework.

The review will identify and consider external factors influencing performance at both levels. From the initial document review and interviews in Norway, these may include:

- ✓ *The transitional context.* Both Norway and the Myanmar counterparts were in the early stages of establishing diplomatic relations and the structure and culture for international and institutional cooperation. The context had implications for the effectiveness of planning, and early programme implementations.

- ✓ *The broader national context.* Issues related to the environment and natural resource management moved to the centre of the peace process, and social dialogue. In this regard, they assumed political significance, which affects the decisions of stakeholders.
- ✓ *Practical factors,* such as capacity, that influence efficiency.

Performance Assessment Method

The Review used a simple UNEP performance-scoring scheme. The scheme combines an assessment of total output attainment (the % of a target or indicator reached) with the quality of the outputs delivered. The scheme is project focused, and does not assess outcomes. The evaluation considered outcome-level information, where available.

Performance Score	Performance Criteria
Very Satisfactory	Almost all (>80%) outputs were delivered and the quality (>80% of planned indicator targets met) of outputs was good.
Satisfactory	The majority (60-80%) of outputs were delivered and the quality (60-80% of planned indicator targets met) of outputs was fair.
Unsatisfactory	Some (40-60%) of the outputs were delivered and/or there was a problem with the quality (40-60% of planned indicator targets met) of outputs.
Very Unsatisfactory	Few (<40%) outputs were delivered and/or there was a serious problem with the quality (<40% of planned indicator targets met) of outputs.

Definition of "Institution"

Neither the *Programme Document* (2015) nor the *Baseline Study* (Fafo 2015) provide a definition of "institution" against which the Review can conduct its assessment. The Review uses the definition used by the United Nations' *Sustainable Development Agenda*, which is consistent with design of the projects:

Institutions comprise "the rules, laws and organisations, along with informal norms and behaviours" that enable and mediate human interaction. The effect of institutions is to create incentives for certain kinds of behaviour and results.

The definition allows the Review to consider Outcomes in their formal (policy, legislation, regulation, systems and procedures, organisation capacity and human competence) and informal (norms and behaviour) dimensions.

The definition of "institution" is set out in the United Nations *Sustainable Development Agenda* (2016 – 2030). The United Nations' definition is consistent with the design of the Programme, and the OECD approach used in the Baseline Study Fafo 2015.

Paraphrased from the preparatory work done by the *Secretary-General's High-Level Panel on the Post 2015 Development Agenda*, institutions comprise the rules, laws and organisations, along with informal norms and behaviours that mediate human interactions. Without sound institutions, there can be no chance of sustainable development. The Panel believes that creating them is a central part of the transformation needed to eradicate poverty irreversibly and enable countries across the world, especially those prone to or emerging from conflict.

United Nations, *A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development: The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda* (2015),

https://www.un.org/sg/sites/www.un.org.sg/files/files/HLP_P2015_Report.pdf

Defining "Theory of Change"

Norwegian and international good practice is to base programme development within an explicit *Theory of Change*. Related practice was well advanced by 2013, when design work began (Vogel 2012).

A Theory of Change explains how an intervention will produce change. It describes the relationship between the context and programme (situation analysis), and the causal logic / relationships through which programme deliverables (inputs and activities to Outputs) will produce the result desired (Intermediate Outcomes to Outcomes to Impacts).

Elements of a Theory of Change

A Theory of Change demonstrates how an intervention programme understands:

- The context for the intervention, and the factors, events and actors that might influence change.
- The long-term change that the intervention seeks to support, who will benefit from that change.
- Process (sequence) of change anticipated in order to create the conditions for the desired long-term outcome. These are the actions and casual mechanisms that produce change.
- Assumptions about how these changes might happen, as a check on whether the activities and outputs are appropriate for influencing change in the desired direction in this context.⁸⁰

A Theory of Change, therefore, explains how a programme understands the context for implementation, the change desired and the intended beneficiaries, the type and sequencing of interventions that will bring about that change, and the assumptions that underlie programme design. Simply, if a programme does X, under condition(s) Y, then it should produce result Z.

Assumptions are the analytical conclusions of programme designers, about the conditions needed for the causal chain to be effective. Every programme is based on assumptions and hypotheses about how change happens. A Theory of Change makes the underlying assumptions explicit, and requires that the assumptions are supported with evidence. For the *Norway – Myanmar Environment Cooperation Programme*, assumptions would explain how people, institutions and political systems function, in a situation of transition. Also, the role and unique contribution of international cooperation.

Finally, a Theory of Change helps decide what should be monitored, evaluated and fed back into management and planning. Setting out the causal chain and assumptions also enables the assessment of whether the changes observed can be attributed to the programme; whether there is evidence of cause and effect.

⁸⁰ The Review referenced from the Fafo source (Vogel 2012: 9), and paraphrased from the *Fafo Baseline Study* (2014: 21).

Annex C Myanmar-Norway Environmental Programme 2015-2017: Goal Hierarchy

Original programme goal hierarchy (Programme Document, 2015)

Impact

Conservation of Biodiversity and Improved Management of Protected Areas:	Integrated Water Resources Management – Institutional Building and Training:	Management of Hazardous Waste:
<p>Outcomes:</p> <ul style="list-style-type: none"> Conservation of biodiversity and management of protected areas are in line with Myanmar’s National Biodiversity Strategy and Action Plan (NBSAP) Management is in line with the Convention on Biological Diversity (CBD) Management is in line with the Convention on Wetlands (Ramsar) <p>Indicators:</p> <ul style="list-style-type: none"> Biodiversity conservation efforts are executed and draft PA management plans are developed according to the National Biodiversity Strategy and Action Plan and regularly reported by MOECAF Activities that contribute to the implementation of the CBD, including relevant Aichi targets, are accomplished and regularly reported to the Convention Activities that contribute to the implementation of the Ramsar Convention are conducted and regularly reported in Myanmar’s National Reports to COP 	<p>Outcomes:</p> <ul style="list-style-type: none"> An Integrated Water Resources Management system implemented for inland waters at the national level Management of Water Resources in line with National Water Framework Directive <p>Indicators:</p> <ul style="list-style-type: none"> An Integrated Water Resources Management plan in the Bago River is developed and accepted at MOECAF MOECAF staff uses water quality criteria for management of rivers and lakes The Integrated Water Resources Management plan for Bago River is developed through a participatory approach with key stakeholders, here also including women representation 	<p>Outcomes:</p> <ul style="list-style-type: none"> Improved management of Hazardous Waste (HW); Proposed regulatory framework for the management of HW in Myanmar, including for the implementation of the Basel Convention is developed. Proposed Master plan for Hazardous Waste management in Myanmar is developed <p>Indicators:</p> <ul style="list-style-type: none"> Perception of authorities, industry and other stakeholders on whether capacity in HW-management has improved in MOECAF/ECD after project implementation. Regulations developed and proposed Master Plan for Hazardous Waste Management developed and proposed. Progress report every 12 months
<p>Intermediate Outcome:</p> <p>Strengthened capacity and competence within MOECAF at all levels (FD/NWCD/Regional/PA sites)</p> <p>Indicators:</p> <ul style="list-style-type: none"> Training courses, education programs, as well as other capacity building activities for staff at all levels within MOECAF are conducted 	<p>Intermediate Outcome:</p> <p>Strengthened capacity and competence within MOECAF, MOAI, MOT and relevant stakeholders on water management.</p> <p>Indicators:</p> <ul style="list-style-type: none"> MOECAF has been trained in the use of water quality criteria in river and lake ecology Monitoring of freshwater quality in Myanmar is undertaken according to international standards 	<p>Intermediate Outcome:</p> <p>Strengthened Capacity within MOECAF/ ECD, other relevant Ministries, City Development Committees, industry and relevant stakeholders on management of HW.</p> <p>Indicators:</p> <ul style="list-style-type: none"> Complete and documented training program conducted. Progress report given every 12 months.

Conservation of Biodiversity and Improved Management of Protected Areas:	Integrated Water Resources Management – Institutional Building and Training:	Management of Hazardous Waste:
<p>Output 1:</p> <p>General management capacity increased.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ MSc program at NTNU, Norway by MOECAAF staff completed. ▪ Two yearly training courses for staff from 20 protected areas and NWCD attended. ▪ Training courses (Spatial Monitoring and Reporting Tool - SMART) in six selected PAs attended. ▪ Courses on wildlife management at the Wildlife Institute of India by staff from protected areas attended. ▪ Study trip to Norwegian visitor centres conducted. ▪ Norwegian-Myanmar exchange of experience in patrolling conducted ▪ Study trips to Thailand/other country conducted. 	<p>Output 1:</p> <p>Training in Integrated Water Resources Management (IWRM) and IWRM tools held, resulting in competent staff.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Attendance by MOECAAF, MOAI, and MOT staff on IWRM courses ▪ Attendance by MOECAAF and MOAI in Aquamonitor Surveillance and Information training courses ▪ Participation by women on government and local level in training courses and workshops organized through the whole project period ▪ Participation by sector, local and regional authorities and by local and regional stakeholders in workshops and meetings for discussion of the River Basin Management approach in Sittaung RB. 	<p>Output 1:</p> <p>Inception phase finalized.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Final inception report developed and approved. ▪ Finalized within 9 months from start of project.
<p>Output 2:</p> <p>Improved management of valuable wetlands.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Guidelines/rules for wetland management and conservation developed. ▪ Indawgyi Lake WS as a Ramsar Site nominated. ▪ Contribution to the Arctic Migratory Birds Initiative (AMBI) delivered. ▪ Ramsar CEPA programme in wetland areas implemented. ▪ Selected activities in order to implement the Ramsar Convention completed. ▪ Visitors centre, exhibition and other awareness raising material at Moeyungyi Ramsar Site and Indawgyi Lake WS in place. 	<p>Output 2:</p> <p>Water Quality Criteria established.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Input to the National Water Framework Directive is provided to the Advisory Group of the National Water Resources Committee in the form of annual meetings ▪ A PhD student is linked to the project and is working on the development of a biological classification system for Myanmar 	<p>Output 2:</p> <p>Baseline for existing regulatory framework and institutional arrangement for HW in Myanmar conducted.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Report presenting baseline on existing regulatory framework and institutional arrangements, and an assessment on needs for adjustments and improvements. ▪ Finalized within 12 months from start of project.
<p>Output 3:</p> <p>Knowledge of biodiversity in six protected areas is improved.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Data review, identification and prioritizing of monitoring needs in the six PAs conducted. ▪ Base line surveys, monitoring and training in the six PAs conducted. ▪ Initial meetings concerning monitoring plans in six PAs conducted. 	<p>Output 3:</p> <p>Water Quality Laboratory established.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ The laboratory at the Forest Research Institute has been upgraded and lab equipment procured and installed in the laboratory. ▪ Personnel have attended laboratory training courses from MOECAAF resulting in capability to undertake water quality analysis in good laboratory facilities. 	<p>Output 3:</p> <p>Technical Baseline study of HW in Myanmar conducted.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Report produced compiling information on current handling practices, environmental impacts of hazardous waste pollution and a waste inventory. ▪ Finalized within 24 months from start of project.

Conservation of Biodiversity and Improved Management of Protected Areas:	Integrated Water Resources Management – Institutional Building and Training:	Management of Hazardous Waste:
<p>Output 4:</p> <p>Overall management in six protected areas strengthened.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Initial meeting (NEA and NWCD) concerning management plan processes conducted. ▪ Initial meeting (local stakeholders) concerning management plan processes in the six PAs. ▪ Management plan processes in six PAs started. ▪ Legislation concerning protected areas revised. ▪ Development of PAs maps completed ▪ Two protected areas have finished draft management plans. ▪ Information centres in six PAs upgraded. 	<p>Output 4:</p> <p>Pilot Case study 1 in Sittaung River Basin - Introduction of the River Basin Management Administration Approach completed.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Workshops for the discussion of the River Basin (RB) Administrative Approach in the Sittaung RB have been organized ▪ A report suggesting how administrative units and sector authorities within the Sittaung RB can be coordinated for the development of a RB management plan, has been completed (draft at 12 months, updated draft at 24 months, final 36 months) ▪ A report suggesting a set up for public and stakeholder involvement in the preparation of RB management plans (draft at 24 months, final at 36 months). 	<p>Output 4:</p> <p>Technical Feasibility study for different hazardous waste treatment solutions is conducted.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Completed feasibility studies for the different hazardous waste treatment options. ▪ Progress report every 12 months from the start of the project. ▪ Finalized after 30 months from start of project.
	<p>Output 5:</p> <p>Pilot Case study 2 in Bago River Basin - Performing water management work tasks in a river system completed.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ An Integrated Water Resources Management plan for parts of the Bago River Basin based on all the practical tasks accomplished, is developed through a participatory approach with key stakeholders, here also including women representation 	
	<p>Output 6:</p> <p>Pilot Case study 3 Monitoring programme for Inlay Lake completed.</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ A monitoring programme for Inlay Lake is established 	
	<p>Output 7:</p> <p>Database for monitoring and water management established</p> <p>Indicators:</p> <ul style="list-style-type: none"> ▪ Aquamonitor SI is working at MOECF or MOAI and environmental measurements have been imported 	

Annex D List of Documents Reviewed

General Reference and Websites

World Bank, *Myanmar Economic Monitor*, May 2018, <http://documents.worldbank.org/curated/en/927611527011225438/pdf/126403-v2-REVISED-PUBLIC-20180531-MEM-MASTER-clean-with-cover.pdf>

Stave, Svein Erik, Marte Nilsen and Kristin Dalen, *Evaluation of Norwegian Efforts to Ensure Policy Coherence for Development*, Norad Evaluation Department, January 2008, <https://www.norad.no/om-bistand/publikasjon/2018/evaluation-of-norwegian-efforts-to-ensure-policy-coherence-for-development/>

International Monetary Fund, *2017 Article VI Consultation; Myanmar Country Report*, March 2018, <http://www.imf.org/en/Publications/CR/Issues/2018/03/28/Myanmar-2017-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-45763>

Vakulchuk, Roman, Indra Øverland and Kristian Stokke, *Myanmar: A Political Economy Analysis*, Norwegian Institute for International Affairs (NUPI), 2018, <http://www.nupi.no/Publikasjoner/CRISTin-Pub/Myanmar-A-Political-Economy-Analysis>

Particip and Menon, *Myanmar: Country Evaluation Brief*, Norad, December 2017, https://www.norad.no/contentassets/78b11e8127234ae48125b4a211d62252/10.17-country-evaluation-brief_myanmar.pdf

Burke, Adam et. al., *The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development*, The Asia Foundation, October 2017, <https://asiafoundation.org/wp-content/uploads/2017/10/ContestedAreasMyanmarReport.pdf>

Interview with Ambassador Ann Ollestad, "Norway to focus on peace, natural resources and responsible business", in *Mizzima*, 19 May 2016.

Xu, Beina and Eleanor Albert, *Understanding Myanmar*, Council on Foreign Relations, March 2016, <https://www.cfr.org/backgrounder/understanding-myanmar>

Myanmar Times, *NLD proposes merging economic ministries into powerhouses*, 18 March 2016, <https://www.mmtimes.com/business/19540-nld-proposes-merging-economic-ministries-into-powerhouses.html>

[Olsen, Birgitte Moe](#), Norway's constructive engagement in Myanmar: a small state as norm entrepreneur, 2016, <https://brage.bibsys.no/xmlui/handle/11250/2436751>

Thet Aung Lynn and Mari Oye, *Natural Resources and Subnational Governments in Myanmar: Key considerations for wealth sharing*, Asia Foundation, June 2014

[Stokke](#), Kristian Peace-building as Small State Foreign Policy, *Norway's Peace Engagement in a Changing International Context*, *Journal of International Studies*, Vol 49, Issue 3-4, 2012, <http://journals.sagepub.com/doi/pdf/10.1177/0020881714532334>

International Crisis Group, *Myanmar: A New Peace Initiative*, Asia Report No. 214, 30 November 2011

International Crisis Group, *Myanmar: Major Reforms Underway*, Asia Briefing No. 127, 22 September 2011

Norwegian Burma Committee (*Den Norske Burmakomite*), news, 2010 – 2011 http://www.burma.no/noop/page.php?p=Recycle_bin/News/index.html&d=1

International Crisis Group, *the Myanmar Elections: Update Briefing*, Asia Briefing No. 105, 27 May 2010

International Crisis Group, *Myanmar: Towards the Elections*, Asia Report No. 174 – 20, August 2009

TwoCircles.net, "Norway critical of sanctions against Myanmar", May 16 2008, http://twocircles.net/2008may16/norway_critical_sanctions_against_myanmar.html

Address by Minister for International Development and Human Rights, Hilde F. Johnson, Norway's Burma Policy: Opportunities and Means, 19 Mar 1998, <http://www.burmalibrary.org/reg.burma/archives/199803/msg00257.html>

Review Methodology

Norwegian Ministry of Foreign Affairs, Grant Management Manual; Management of Grants by the Ministry of Foreign Affairs and Norad, March 2014

Coglianesi, Cary, *Measuring the Impact of Regulation and Regulatory Policy*, Expert Paper No.1, OECD, August 2012, https://www.oecd.org/gov/regulatory-policy/1_coglianesi%20web.pdf

Vogel, Isabel, *Review of the use of 'Theory of Change' in international development; Review Report*, for the UK Department of International Development, April 2012

UNDP, *Outcome Level Evaluation: A Companion Guide to the Handbook on Planning Monitoring and Evaluation for Development Results*, December 2011, <http://web.undp.org/evaluation/handbook/>

Process Tracing: Draft Protocol, Oxfam Policy and Practice (undated), https://www.betterevaluation.org/en/resources/guide/process-tracing_draft_protocol

Policy and Legal Documents

VO4 Guide to assessment of results and risk management, including cross-cutting issues, Norwegian Ministry of Foreign Affairs, revised, final version 6 June 2017

Grant Management Manual – Management of Grants by the Ministry of Foreign Affairs and Norad, Norwegian Ministry of Foreign Affairs, March 2014

The Republic of the Union of Myanmar, *Environmental Conservation Law*, 2012

National Commission for Environmental Affairs and Ministry of Forestry, *National Sustainable Development Strategy (NSDS)*, Union Government of Myanmar, 2009, <http://extwprlegs1.fao.org/docs/pdf/mya152933.pdf>

Programme Documents

Institutional Cooperation Agreement between the Ministry of Environmental Conservation and Forestry (MOECAFF)/Environmental Conservation Department (ECD), Myanmar and the Norwegian Environment Agency regarding the Myanmar – Norway Project on Hazardous Waste Management (HWM Project), signed 01 December 2015

Agreement between the Norwegian Ministry of Foreign Affairs and the Myanmar Ministry of Environmental Conservation and Forestry regarding development cooperation concerning Norway-Myanmar Bilateral Environmental Programme 2015-2018, 01 October 2015

Decision Document, Norway-Myanmar Bilateral Environmental Programme 2015-2018, the Royal Norwegian Embassy in Yangon on behalf of the MFA, 6 July 2015

Norway – Myanmar Bilateral Environmental Programme 2015 – 2018, June 2015 (Original Programme Document)

Memorandum of Understanding between the Government of Norway and the Republic of The Union of Myanmar concerning Development Cooperation, done in Naypyidaw, Myanmar, 01 December 2014

Nordic Consulting Group, *Appraisal of MMR-13/0055, Environmental Cooperation Norway Myanmar*, May 2014

Letter of Intent between the Ministry of Environmental Conservation and Forestry of Myanmar and the Ministry of Climate and Energy of Norway on cooperation in the field of Environment, done in Naypyidaw, Myanmar, 6 February 2014

Norwegian Environment Agency, *Application for Grant from the Norwegian Ministry of Foreign Affairs, Conservation of Biodiversity and Improved Management of Wetlands in Myanmar*, (undated draft) 2014

NIVA, *Forprosjekt: Institusjonsbygging innen vannforvaltning i Myanmar. Rapport fra perioden juli – desember 2013*, 14 February 2014

Government of the Republic of the Union of Myanmar, *Nay Pyi Taw Accord for Effective Development Cooperation*, acclaimed at the First Myanmar Development Cooperation Forum, Nay Pyi Taw, 20 January, 2013

Key Project Documents: Conservation of Biodiversity and Improved Management of Protected Areas

MONREC, NEA and NIVA, Myanmar - Norwegian Cooperation on the Bilateral Environmental Program: Program Reporting – 2018, May 2018

Myanmar Centre for Responsible Business, *Biodiversity in Myanmar, including Protected Areas and Key Biodiversity Areas*, <http://www.myanmar-responsiblebusiness.org/pdf/resources/Biodiversity-Myanmar-Further-Reading-and-Maps.pdf>

SMART: A guide getting started, (undated), http://smartconservationtools.org/wp-content/uploads/2017/11/SMART_GettingStarted2017_English_sm.pdf

Norway-Myanmar Bilateral Environment Programme, *Conservation of biodiversity and improved management of protected areas in Myanmar; Annual Report, 2017- 2018*, 23 May 2018

Norway-Myanmar Bilateral Environment Programme, *Conservation of biodiversity and improved management of protected areas in Myanmar; Annual Workplan 2017*, March 2017

Republic of the Union of Myanmar, *National Wetland Policy and Strategic Actions (Final Draft, December 2017)*, 2017

Norway-Myanmar Bilateral Environment Programme, *Conservation of biodiversity and improved management of protected areas in Myanmar; Annual Report, 01 January to 31 August 2016*, 2016

Norway-Myanmar Bilateral Environment Programme, *Conservation of biodiversity and improved management of protected areas in Myanmar; Annual Workplan 2016*, March 2016

McInnes, Davidson and Hails, *Conservation of biodiversity and improved management of protected areas in Myanmar; An action plan for the improved management of protected areas*, RM Wetlands and Environment Ltd., June 2016

Ramsar Convention, *The Ramsar Strategic Plan 2016–2040*, 2016, https://www.ramsar.org/sites/default/files/hb2_5ed_strategic_plan_2016_24_e.pdf

NEA-MOECAF, *Conservation of Biodiversity and Improved Management of Protected Areas in Myanmar, Institutional Cooperation Agreement*, 2015

Republic of the Union of Myanmar, Ministry of Environmental Conservation and Forestry, *National Biodiversity Strategy and Action Plan, 2015-2020*, October 2015, <https://www.cbd.int/doc/world/mm/mm-nbsap-v2-en.pdf>

Norwegian Environment Agency and MOECAF, *Conservation of biodiversity and improved management of protected areas in Myanmar; Project Document 2015-2018*, June 2015

Ramsar, *The 4th Strategic Plan 2016 – 2024 The Convention on Wetlands of International Importance especially as Waterfowl Habitat – the “Ramsar Convention”*, 2015

https://www.ramsar.org/sites/default/files/documents/library/4th_strategic_plan_2016_2024_e.pdf

MOECAF and NEA, *Biodiversity and Nature Management in Myanmar; Training, capacity building and baseline studies, Draft Agenda, Trondheim, 21-26 October 2013*

Norwegian Environment Agency, *Application for Grant from the Norwegian MFA; Conservation of Biodiversity and Improved Management of Protected Areas in Myanmar* (undated draft, 2015)

Tallant, James, *Concept Note; Wetlands and Biodiversity in Myanmar, Final Draft*, 12 July 2013.

MOECAF and NEA, *Concept Note: Environmental Cooperation between Myanmar and Norway; Workshop in Nay Pyi Daw, 29-30 January 2013*

Young, Lew, *Ramsar Convention Travel Report*, 1-5 July 2013

International Cooperation Agreement between the Ministry of Environmental Cooperation and Forestry (MOECAF) and the Norwegian Environmental Cooperation Agency, regarding the Myanmar-Norwegian Project on Conservation of Biodiversity and Improved Management of Protected Areas in Myanmar, (undated 2014)

Republic of the Union of Myanmar, *National Biodiversity Strategy and Action Plan Myanmar 2011, 2011*, <https://www.cbd.int/doc/world/mm/mm-nbsap-01-en.pdf>

Beffasti, Lara and Valeria Galanti, *Myanmar Protected Areas, Context, Current Status and Challenges*, co-financed by the European Union, 2011

Republic of the Union of Myanmar, Ministry of Forestry, *National Sustainable Development Strategy for Myanmar*, 2009, <http://extwprlegs1.fao.org/docs/pdf/mya152933.pdf>

United Nations, Convention on Biological Diversity, 1992, <https://www.cbd.int/doc/legal/cbd-en.pdf>

Key Project Documents: Integrated Water Resources Management

Ingrid Nesheim (NIVA), Bo Ni and Toe Aung (FD), IWRM Progress Report Presentation, Annual Meeting, Nay Pyi Taw, 23rd of May 2018

NIVA, Integrated Water Resources Management – Institutional building and Training, Project reporting 2018

NIVA, Integrated Water Resources Management – Institutional building and Training, Project reporting 2017

NIVA, Integrated Water Resources Management – Institutional building and Training, Project reporting 2016

NIVA, Forprosjekt: Institusjonsbygging innen vannforvaltning i Myanmar. Rapport fra perioden juli 2014 – januar 2015, 2015

NIVA, Integrated Water Resources Management Institutional Building and Training, Project Document, 2015

NIVA, Integrated Water Resources Management in Myanmar. Water usage and introduction to water quality criteria for lakes and rivers in Myanmar. Preliminary report. NIVA-report 7163-2017, <https://www.niva.no/en/projectweb/myanmar/publications>

NIVA, Integrated Water Resources Management in Myanmar. Assessing ecological status in Inlay Lake. Preliminary report. NIVA-report 7162-2017, <https://www.niva.no/en/projectweb/myanmar/publications>

Framework notes and recommendations for Integrated Water Resource Management in Myanmar (2016). NIVA-report 7027-2016, <https://www.niva.no/en/projectweb/myanmar/publications>

A proposal for an administrative set up of river basin management in the Sittaung River Basin (2016). NIVA-report 7103-2016, <https://www.niva.no/en/projectweb/myanmar/publications>

Characterization of the Bago Sub-basin Pilot implementing the EU Water Framework Directive (2017). NIVA-report 7194-2017, <https://www.niva.no/en/projectweb/myanmar/publications>

Environmental objectives and abatement measures for a healthy Bago River, A contribution to the Bago River Sub-basin Management Plan (2018). NIVA-report 7271-2018, <https://www.niva.no/en/projectweb/myanmar/publications>

Key Project Documents: Management of Hazardous Waste

DOWA, *Company Profile; Hazardous Waste Treatment in Myanmar*, undated 2018

MONREC, NEA and SINTEF, *Myanmar-Norwegian Cooperation on the Management of Hazardous Waste in Myanmar; Project Reporting 2018*, Presentation to the 3rd Annual Meeting, Nay Pyi Daw, 23 May 2018

MONREC, NEA and SINTEF, *Myanmar-Norwegian Cooperation on the Management of Hazardous Waste in Myanmar; Project Reporting 2018*, May 2018

MONREC, *The Development of National Waste Management Strategy and Action Plan in Myanmar*, Presentation of U Min Maw, Director, Pollution Control Division to the 8th Regional 3R Forum, 9 April 2018

Saha, Palash Kumar, Kåre Helge Karstensen, Khing Thwe Oo, Yin Yin Mar, *Report; Capacity Building Workshops Conducted under HWM Project*, SINTEF, 03 April 2018

The Government of the Republic of the Union of Myanmar Ministry of Natural Resources and Environmental Conservation Environmental Conservation, *Department Master Plan for Hazardous Waste Management in Myanmar, Draft for Consultation Version III - 20 March 2018*, Norwegian Environment Agency and SINTEF, March 2018

Kyam Myo, "President Calls for Nationwide Revamp of Waste-Management Practices", in the *Irrawaddy*, 05 June 2018, <https://www.irrawaddy.com/news/burma/president-calls-nationwide-revamp-waste-management-practices.html>

Mandalay City Development Committee and the Environmental Conservation Department (MONREC), *Waste Management Strategy and Action Plan for Mandalay City (2017-2030)*, 2017, <https://pub.iges.or.jp/pub/waste-management-strategy-and-action-plan>

MONREC, NEA and SINTEF, *Myanmar-Norwegian Cooperation on the Management of Hazardous Waste in Myanmar; Project Reporting Half Year 2017*, October 2017

MONREC, NEA and SINTEF, *Myanmar-Norwegian Cooperation on the Management of Hazardous Waste in Myanmar; Project Reporting 2017*, (updated version) August 2017

Htoo Tant, "President wants plans to control waste" in *The Myanmar Times*, 06 June 2017, <https://www.mmtimes.com/news/president-wants-plans-control-waste.html>

SINTEF, *Masterplan for Hazardous Waste in Myanmar; First workshop for developing the National and City Waste Management Strategies in Myanmar*, 13-15 June 2016, June 2016

MONREC, NEA and SINTEF, *Myanmar-Norwegian Cooperation on the Management of Hazardous Waste in Myanmar; Project Reporting 2016*, May 2016

MONREC, *Norwegian Environment Agency and SINTEF, Inception Report; Myanmar – Norwegian Cooperation on Management of Hazardous Waste in Myanmar*, (undated) 2016.

Norwegian Environment Agency and SINTEF, *Project Document, Management of Hazardous Waste in Myanmar*, 2015

Annex E Meeting Agenda (Norway and Myanmar)

Pre-travel meeting schedule

Date	Meeting partner	Project
Friday 13 April	Ingrid Nesheim, NIVA	IWRM
Thursday, 26 April 2018	Norad, Semund Haukland and Helle Biseth, Norad	Norad
	NIVA meeting, Ingrid Nesheim	IWRM
Friday, 27 April 2018	NEA meeting Oslo, Jon Fonnliid Larsen and Kristine Eine	HWM
Monday, 30 April 2018	MCE, Jan-Petter Borring	Environment Programme Coordination/Implementation. HWM and Biodiversity
Wednesday, 2 May 2018	NEA Trondheim, Jan-Petter Huberth Hansen	Biodiversity
Friday, 4 May 2018	SINTEF, Kåre Helge Karstensen	HWM

Meetings in Myanmar

Date	Meeting	Project
Friday, 4 May 2018	Yangon	
	Internal team meeting KPMG (David Gairdner) and EcoDev (Win Myo Thu)	Environment Programme
Monday 7 May	Internal team meeting KPMG/EcoDev	All
Tuesday 8 May	Internal team meeting KPMG/EcoDev	All
	Kei Nagata, Golden Dowa	SINTEF component (HWM)
Wednesday 9 May	Inception meeting RNE, Harald Mathisen (Counsellor Development), Lise Mordgaard (Minister Counsellor), Tone Tinnes (Ambassador).	Environment Programme
	Dr. Sonia Leonard, EcoDev Water Specialist	Water sector overview
	Professor Khin, NWRC member	Water sector overview – IWRM
Thursday 10 May	Bago	
	Kyaw Min San, former MONREC Minister Bago Region, current Hluttaw member Bago Region (former Chair of Committee, now NGO Group)	IWRM
	Zaw Win Myint, Director FD Bago Region	IWRM
	CSO representatives. Bago Sub-basin Area Committee, and in a Non-Governmental Stakeholder	IWRM

Date	Meeting	Project	
	Group meeting, Mr Aung Myo Htut, Secretary (social welfare organization of Bago), Dr. Hein Thant Zaw, Vice secretary (NLD committee of Bago), Mr. Mg Mg Kyi, Vice secretary (USDP Party).		
	Naypyidaw		
	Forest Department (FD): Director General Dr. Nyi Nyi Kyaw	Program Level – Biodiversity and IWRM	
	Director, Mr. Boni and Assistant Director, Toe Aung, Watershed Management Division (WMD)	IWRM	
	Phyo Thet Naing, Range Officer, Watershed Management Division; Swuam Pyaye Aye Aung, Ranger Officer; Zaw Myo Aung, Range Officer.	Focus Group IWRM	
	Si Thu Aung, Staff Officer	IWRM trained: database focal point	
	U Zaw Min Thant, Staff Officer, NWCD, Forest Dept., MONREC	Biodiversity NTNU student (finalized studies 2017)	
	Friday 11 May	Bago/ Moeyungyi	
	Moeyungyi Wildlife Sanctuary and first Myanmar Ramsar site. Meeting with Park Warden, Ms. Thin Thin Yu, Mr. Sai Wanna Kyi, Ranger	Biodiversity	
	Naypyidaw		
Zaw Lwin Tun, Deputy Director General of Irrigation and Water Utilization, Management Department - IWUMD, MoALI	IWRM, Irrigation and Water Utilization Management Department, Ministry of Agriculture, Livestock and Irrigation		
Khin Nyein San, NWCD	Biodiversity NTNU student (finalized studies 2017)		
Tin Zar Kywe, Assistant Director Nature and Wildlife Conservation Division	Biodiversity, Forest Department HQ Ministry of Natural Resources and Environmental Conservation		
Dr. Htun Lwin Oo, DG at the Department of Water Resources and Improvement of River Systems, Ministry of Transport and Communications, and Secretary at the National Water Resources Committee	IWRM		
Sunday 13 May	Working meeting with EcoDev		
Monday 14 May	Yezin		
Thida Swe, PhD Student Nang Yu War, MA student May Thazin Phoo, MA student	IWRM, focus group Forrest Research Institute (FRI) staff (trained by IWRM project)		
Kyawt Yin Mon Lwin Lwin Aung	IWRM, second focus group: FRI Water Lab trained.		

Date	Meeting	Project
Tuesday 15 May	Dr. Thida Cho Thida Swe	
	Water lab visit	IWRM
	Naypyidaw	
	NWCD 3 staff who attended WII	Focus group NWCD, FD
	Catch-up questions with NWCD – Ass. Director and responsible for Wetland,	Biodiversity
	Catch-up questions with Mr. Boni, Director WMD	IWRM
	Mr. Hein Latt, Assistant Director Urban Pollution Control Division, Mr. Yin Yin Mar, Desk Officer PCD, Mr. Tin Min Htoo, Assistant Director EIA Division, Ms. Thae Nu Htun, Staff Officer EIA Division, Ms. Aye Ma Deputy Staff Officer PCD, Ms. Yuzana Wai Deputy Staff Officer EIA Division	HWM, focus group ECD
	Thea Schøyen, Country Programme Coordinator	NVE
	Joint ECD meeting – U Min Maw – Director, Ass. Director Mr. Hein, ECD	HWM
	Group discussion with Regulatory Working Group: Dr. Tin Aung Win, Assistant Director, Environment Quality and Standard Division (Previously Pollution Control Division) and Ms. Kt Oo	HWM
Review team: Debrief and work planning	All	
Wednesday 16 May	ECD DG U Hla Maung Thein	HWM
Thursday 17 May	Yangon	
CSO Focus Group: Biodiversity and Nature Conservation Association (BANCA), Program Director, Dr. Thiri Dae We Aung; Myanmar Forest Association (MFA), Executive Committee member, Dr. Thein Aung; Ecosystem Conservation and Community Development Initiative (ECCDI), Field Assistance, Mr. Wai Yan Kyaw; Myanmar Environment Rehabilitation-conservation Network (MERN), Chief Executive Officer (CEO), Mr. Aung Thant Zin; Mangrove Service Network (MSN),	Stakeholder meeting for Biodiversity. Led by Ecology and Economic Development Co., Ltd. (EcoDev), Executive Director, Mr. Win Myo Thu	

Date	Meeting	Project
Friday 18 May	Chairman, Mr. Win Sein Naing; Friends of Wildlife (FOW), Executive Director, Mr. Myint Aung; The Nature Conservancy (TNC), Program Manager, Mr. Ohn Win; Marine Biodiversity and Consultant, Mr. Tint Tun; Fauna & Flora International (FFI), Tanintharyi program manager, Mr. Mark Grinocey; Ecology and Economic Development Co., Ltd. (EcoDev), Technical Associate, Ms. Myat Thandar Oo; Ecology and Economic Development Co., Ltd. (EcoDev), Senior Program Officer, Ms. Mo Aung Nay Chi, Mr. Lwin Mg Mg Swe, Ecology and Economic Development Co., Ltd. (EcoDev), Program Director	
	MoALI Yangon-based, Daw Myint Myint Than, Assistance Director, Soil Survey Section. Focus group: U Khaing Zay Latt, Staff Officer, Soil; U Mya Het Aung, Assistant Officer, Soil; U Phyo Wai, Staff Officer, Soil; Daw May Aye Lwin, Staff Officer, Lab; Aung Ko Win, Supervisor, Soil; U Alay Kywe, Supervisor, Soil, and; Daw Khin Myo Kyi, Supervisor, Soil	IWRM, focus group: MoALI Yangon training participants (water sampling – officials, technician analysis)
	JICA: Dr Itaru Okura, Nippon Koei, Project Manager, and Ms. Tome Takeda, Environment Engineer	Some work related to HWM
Saturday 19 May	EQM – Managing Director Ohnmar, local SINTEF consultant	HWM
Monday 21 May	ECD Yangon region, Aung Aung Lay and YCDC Director of Pollution control	HWM
Tuesday 22 May	Debrief of the evaluation by David and Win at the RNE and Helle	
	Engineer responsible for HW work and an engineer that attended the training in Thailand	
Wednesday 23 May	U Win Htin, Secretary General, Myanmar Industries Association.	HWM
Wednesday 23 May	Naypyidaw	
	Annual meeting RNE and all project partners. Evaluation debrief	Environment Programme

Date	Meeting	Project
Thursday 24 May	Yangon	
	Bijay Karmacharya, Country Programme Manager UN-Habitat, Myanmar	Donor Coordination
Friday 25 May	Auditor Thu Hlaing Tun and staff	Environment Programme Auditor

Annex F Programme Context; Myanmar in Transition

Myanmar in Transition (2008 – 2018)

Myanmar passed through a deep transition during the Programme period (2015 – 2018), the years leading to the Programme's approval (2012 – 2015), and starting with initial engagement between Norway and the pre-transition Government (2008 – 2011). Transition provided the conditions and rationale for the Programme, and determined its design.

The historical period for Norway's engagement with Myanmar dates to suppression of the Pro-democracy Movement (1988) and the military Government's refusal to transfer power to the National League for Democracy (NLD), after the NLD won a majority in the 1990 elections. A period of self – imposed isolation⁸¹ and international sanctions followed, contributing to a decline in Myanmar's key human development and economic rankings, which were the lowest in the ASEAN region at the point of transition in 2010.⁸²

Over the next two decades, the Myanmar Government developed a roadmap for transition to civilian authority, to extend military influence and "discipline [Myanmar's] flourishing democracy" (Clapp 2015). The year 2008 was pivotal. Cyclone Nargis struck Myanmar on 27 April, with 140,000 lives lost and 800,000 persons displaced. Two weeks later (15 May 2008), the Government held a long-planned referendum on Constitutional reform.

The cyclone created the conditions for re-engaging with the international community through humanitarian action, while the 2008 Constitution provided political and legal guarantees that made transition acceptable to the military. It set out a gradual handover of power, with the State institutions and policies of the military government remaining largely intact.

The 2008 Constitution entrenched aspects of military power into Myanmar's institutional arrangements. At the same time, it restructured Myanmar's political system; a Presidential system, with a bi-cameral legislature and state and regional governments. While criticised by some Western Governments and United Nations Security Council, some observers noted that the 2008 Constitution was an opportunity to push reform. Moving away from a centralised system, the constitution diffused political power into a new structure that allowed greater political competition and participation (ICG: 2009). Reform to sub – national government was cited as opening new political space, despite their narrow scope of responsibility and limited capacity (Asia Foundation: 2013). Also, changes opened the possibility of more rationale decision-making, based on technical input from State institutions (ICG: 2010).

Constitutional reform was followed by national elections (2010) and transition to an elected, quasi-civilian government (2011), led by the Union Solidarity and Development Party (USDP). In his inaugural address (31 March 2011), former President U Thein Sein announced a broad agenda of economic and political reforms, followed by a second wave of reforms in 2012. Related actions including the release of political prisoners, including NLD Leader and future State Counsellor Aung San Suu Kyi (November 2010), and the lifting of some restrictions on the political opposition, civil society organisations and the media.

Also in 2011, the USDP Government opened peace negotiations with Myanmar's Ethnic Armed Organisations (EAO). Bilateral ceasefires with the individual armed organisations would lead to a *Nationwide Ceasefire Agreement* (NCA), then negotiations towards a political resolution for Myanmar 60 year – old intrastate conflicts. Natural resource governance is source of conflict in Myanmar, and central to peace negotiations on a decentralised federal political model.⁸³ Their importance is amplified by Myanmar's economic dependence on natural resource extraction. The issues of peace,

⁸¹ See International Crisis Group, Myanmar: *The Military Regime's View of the World*, Asia Report No. 20, 7 December 2001

⁸² Myanmar's HDI value stagnated over the sanctions period. In 2010, at the point of national elections, Myanmar's HDI ranking was 132 out of the 169 countries. Myanmar was assessed as a "Low Human Development" country, with the lowest HDI in the region (See UNDP *Human Development Report 2010*, Statistical Annex, http://hdr.undp.org/sites/default/files/reports/270/hdr_2010_en_complete_reprint.pdf)

⁸³ The current negotiating structure includes a "Land, Natural Resources and Environmental Sector Working Committee", focused on resource and land management issues.

development, political reform, resource management and conservation of Myanmar's environment are, therefore, intertwined.

Combined, these actions led to the phased withdrawal of international sanctions (2012 – 2016), and the normalisation of diplomatic and commercial relations between Myanmar and Western Governments. Norway's new Embassy in Myanmar opened in October 2013, with representation moving from the Embassy in Bangkok. The years between 2011 and 2018 subsequently produced a dynamic albeit incomplete transition. Political space and the economy both expanded quickly. As selected indicators:

Select Change Indicators for Myanmar	
Myanmar's economy is grown rapidly	Economic growth is driven by the combination of rising incomes, pent up demand after isolation and the country's re-integration into regional and global markets. Annual GDP growth was between 8.4% (2013/14) and 6.4% (2017/18), with the IMF projecting growth rates over 7% through to 2019/20. ⁸⁴ These rates are among the highest in the ASEAN region, and constitute a 70 percent increase in the total value of Myanmar's GDP, between 2009 and 2017.
Rapid economic expansion is driven by a change in the structure of Myanmar's GDP	Growth is driven by resource extraction (oil, gas and petro chemicals, which now attract 40% of FDI), the emergence of new industries (manufacturing and garments) and the service economy. MONREC anticipates that industrial growth will increase significantly in the coming years, driven by foreign investments and the opening of additional new sectors. ⁸⁵
Social change is reflected in declining poverty levels	From a baseline of 32.1% in 2004, poverty declined to 25.6% in 2009 and 19.4% in 2015. ⁸⁶ Urban areas have benefited the most, with national poverty levels in rural areas being almost twice as high. Improved living standards reflect in growth and change in the composition of household consumption, and a marked increase in the ownership of consumer goods such motorcycles and televisions. ⁸⁷
Connectivity is as proxy indicator for social change	From almost zero in 2008, 80 percent of the population has access to a mobile phone, and 26 percent are regular internet users. Myanmar is still the least internet penetrated country in the region (26%) but caught up to Laos with 97 percent growth during 2016/2017. Given weak physical infrastructure, much the connectivity is through mobile data.
Reform, poverty reduction and connection contribute to the conditions for expanding political participation	Social activism and demands on Government, beginning during the early years of the USDP administration. ⁸⁸ The environment and natural resource development are focal issue for advocacy, particularly in the extractive sector and on large infrastructure development, such as the hydropower sector. In a politically competitive environment, Government institutions are under pressure to respond.

Transition and the Environment

Environmental Cooperation Programme documents from the development and approval phase highlight a similar issues; change is driving an acceleration of environmental degradation, an increase in the number and types of threats to the environment, with growing public demand for action. In the

⁸⁴ IMF (Table 1, 2018).
⁸⁵ From Interviews, and IMF (2018).
⁸⁶ Notwithstanding improvements, 37% of the population still live near or below the poverty line, and are considered vulnerable.
⁸⁷ Statistics from the World Bank (2017), based on Integrated Household and Living Conditions survey method.
⁸⁸ See Forbes <https://www.forbes.com/sites/chynes/2017/09/22/internet-use-is-on-the-rise-in-myanmar-but-better-options-are-needed/#666ce400448e> or We Are Social, <https://www.slideshare.net/wearesocial/digital-in-2018-in-southeast-asia-part-1-northwest-86866386>

background, environment and natural resource governance were also key issues to the peace process, as it was emerging.

Transition, therefore, set the context. From interviews, the pre – transition on environment and resource management was extractive, as the primary source of State revenues. Myanmar's legal framework was limited, prior to *Environment Conservation Law* of 2012, and based on policy approved during the 1990s.

Myanmar's Core Institutional Framework for the Environment	
Year	Environmental Convention, Policy, Strategy, Legislation, Regulation and/or Organisational Change
2018	Myanmar Sustainable Development Plan (MSDP)
2017	Revised National Environment Policy (NEP)
2017	National Wetland Policy and Strategic Actions
2017	Myanmar Climate Change Strategy and Action Plan (MCCSAP)
2016	MOECAF restructured to become the Ministry of Natural Resources and Environmental Conservation (MONREC)
2015	National Biodiversity Strategy and Action Plan (NBSAP)
2015	Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (entry in force in Myanmar, 06 April 2015)
2014	National Water Policy
2012	Environment Conservation Law
2011	Ministry of Environmental Conservation and Forestry (MOECAF) established, integrating and expanding the Ministry of Forestry
2009	Myanmar National Sustainable Development Strategy (National Commission for Environmental Affairs, Ministry of Forestry)
2005	Ramsar Convention on Wetlands of International Significance (entry in force in Myanmar, 17 March 2005)
2000	National Code and Practice for Forest Harvesting
1997	Agenda 21 (National Commission for Environmental Affairs, Ministry of Forestry)
1995	Convention on Biological Diversity (entry into force in Myanmar, 23 February 1995)
1994	Forest Policy

During the period 2011 to 2018, Government accelerated efforts to reform the State's institutional framework for the environment; its organisational structure, and Myanmar's policy, legal and regulatory framework, and the underlying body of knowledge. The trend created positive conditions for the *Environmental Cooperation Programme*, and continues to reinforce the Programme's relevance.

Much of the institutional framework is new. MOECAF was established in 2011 by the former USDP Government, expanding and re – orienting the former Ministry of Forestry. MOECAF was again restructured in 2016 by the NLD Government, to become MONREC by integrating the Ministry of Mines. During both restructurings, existing Departments and Divisions were re – mandated and new ones created. Table 6 further shows the acceleration of enabling policy, laws, regulation and knowledge, reinforced by commitments under international convention and treaty.

The actions of Myanmar's two post – transition Governments have been interpreted re-orienting the State's approach to the natural resource sector, seeking a new balance between economic development and efforts to protect and conserve the environment. According to one media report, the

creation of MONREC was "a signal that Myanmar's natural resources need to be exploited and regulated in a more sustainable way..."⁸⁹

A Shift in Norway's Approach: From Isolation to Constructive Engagement

"Norwegian real political interests have been extended due to globalization. Norwegian engagement politics, within human rights, aid, peace and reconciliation, humanitarian efforts, are ethically justified but in addition also in Norway's interest." (Støre 2009)

Engaging with processes of conflict resolution and peace are institutionalised as a core element of Norway's foreign policy. Through the post-World War II era, Norway has tied its interests to the promotion of peace abroad, and strengthening the multilateral system. Norway's approach has evolved, driven by changing international conditions. From the original basis in identity and values, "policies for peace are part of our security policy", as an interest-based rationale for engaging with the resolution of conflict and building peace. Norway has maintained a domestic political consensus on this role, which in turn enhances its relevance and influence within the international community.⁹⁰

Norway's engagement with Myanmar, and the *Environmental Cooperation Programme* are set in this policy framework. Norway's diplomatic and commercial ties with Myanmar were limited, prior to 1988. Engagement deepened with suppression of Myanmar pro-democracy movement (1988), and the military government's refusal to transfer power to the National League for Democracy (NLD), after it won the 1990 election.

Between 1988 and 2008, successive Norwegian governments joined an international effort to isolate and pressure the Myanmar Government. The Minister for International Development and Human Rights set out Norway's strategy, in a 1996 speech: "Firstly, public criticism of the Burmese regime in the context of human rights and democracy. Secondly, active efforts to achieve international sanctions against the regime. Thirdly, implementation of unilateral Norwegian measures if the basis for international sanctions is lacking. Fourthly, political and economic support for the Burmese democratic forces."⁹¹ In these actions, the Norwegian Government also cultivated an active domestic constituency for its Myanmar policy.

Norwegian policy shifted in the late 2000s, from isolation to "constructive engagement" with Myanmar's military government. As early as 2008, the Norwegian Foreign Minister stated publicly that international sanctions were not working, and that a new approach was needed.⁹² The shift reflected Norway's assessment that reformists within the Government could create an opening, leading towards national elections scheduled for 2010. After significant internal discussion, Norway chose to reinforce positive trends with direct engagement.⁹³

The humanitarian response to Cyclone Nargis (2008) provided an opening for dialogue. Over time, Norway developed close communications with the Myanmar Government, offering symbolic, political and material incentives for reform. First, with the objective of influencing the process leading to the 2010 elections, then subsequently to: i) support the newly – elected Government's reform agenda, and; ii) build support for engagement within the international community. Regarding the latter, Norway's actions tested the commitment and the capacity to the Myanmar government for change, and created an opening for larger countries and organisations (principally, the United State and the European Union).

The shift of approach involved risk for both the Norwegian and Myanmar Governments. Domestically, the Norwegian Government was accused of working too closely with military and then transitional

89 Myanmar Times "NLD proposes merging economic ministries into powerhouses", 18 March 2016

90 The paragraph draws on Stokke (2014) and Olsen (2016). The quotes from Jonas Gahr Støre are lifted from Stokke (2014), and were made in the context of presenting to Parliament during the period when Norway's engagement with Myanmar was being decided (Ministry of Foreign Affairs, 2009b. Report no. 15 to the Storting (2008-2009): Interesser, ansvar og muligheter. Hovedlinjer i norsk utenrikspolitikk. Oslo: Ministry of Foreign Affairs).

91 Address by Minister for International Development and Human Rights, Hilde F. Johnson, Norway's Burma Policy: Opportunities and Means, 19 Mar 1998, <http://www.burmalibrary.org/reg.burma/archives/199803/msg00257.html>

92 REFERENCE, Aftenposten May 2008 [confirm citation]

93 From interviews with MFA and Norad officials.

governments whose democratic credentials were unproven, while reducing its support to the pro-democracy movement and ethnic minorities. Later, Norway was criticised for using its privileged access to the Myanmar Government for commercial advantage.⁹⁴ Internationally, Norway was also criticised for moving too quickly, and not getting sufficient leverage for reform in exchange for its support.

Norway, therefore, made a significant political investment in its approach to supporting Myanmar's transition. Between 2011 and 2015, the Governments of Norway and Myanmar developed a broad framework for cooperation, around the peace process, institutional cooperation and capacity development, and for private sector development. The objectives and priority sectors for cooperation were set out in *Norway's Strategy for Development Cooperation with Myanmar (2012)*,⁹⁵ and formalised in a *Memorandum of Understanding between the two countries on Development Cooperation (2014)*. Before signing the *Environmental Cooperation Programme Agreement*, Norway further designated Myanmar as one of 12 focus countries for its development cooperation.⁹⁶ These actions were intended to signal Norway's long – term commitment to its engagement with Myanmar.

Priorities for Norwegian Development Cooperation in Myanmar

Peace, Democracy and the Reform Process

Sustainable Management of Natural Resource (Energy, Environment and Climate Change)

Responsible Business⁹⁷

94 For example, see Myat, Mon Mon, "Norway's Changing role in Burma: Driven by Peace or Business?" in *Irrawaddy*, 05 December 2014.

95 <http://www.myanmar.norway.info/NorwayMayanmar/DevelopmentCooperation/#.VR61-2Y4W70>

96 <https://www.regjeringen.no/no/dokumenter/prop.-1-s-ud-20172018/id2574542/sec6>. The designation is set out in a white paper from 2016/2017, where Norwegian Development Cooperation was reorganised to be more thematically and geographically concentrated: <https://www.regjeringen.no/no/dokumenter/meld.-st.-24-20162017/id2547573/sec5?q=myanmar#KAP5-5-3>

97 "Responsible business" is not identified in the Norway – Myanmar MOU, but has been a priority of Norwegian assistance.



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