

MALDIVES

EDUCATION SECTOR PLAN

2019-2023



PREPARED BY:
MINISTRY OF EDUCATION & MINISTRY OF HIGHER EDUCATION
REPUBLIC OF MALDIVES

SUPPORTED BY:
GLOBAL PARTNERSHIP FOR EDUCATION



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APRIL 2019

Acknowledgements

The Education Sector Plan (ESP) is developed by the Ministry of Education (MoE) at the onset, and with close collaboration with the Ministry of Higher Education (MoHE), later in the revision stage. This work is funded by the Global Partnership for Education (GPE), a global fund and a partnership, focused entirely on education in developing countries. The UNICEF Male' Office played the dual role of the Coordinating Agency (CA), as well as the Grant Agent (GA).

The ESP work was first carried out by the ESP team, under the leadership of the former Minister of Education, Dr. Aishath Shiham, led by Ms. Sheryna Abdul Samad, Senior Political Executive. Dr. Aglaia Zafeirakou, Senior Policy Advisor and International Expert had the overall technical responsibility of the ESP, including guidance and capacity development of the growing number of MoE staff and local experts. The MoE Staff Associate Mr. Ahmed Mausoom, Education Officer, provided managerial and administrative leadership during the whole process. However, the ESP needed significant revisions in order to align with the policies of the current Government, before it is submitted to the GPE in April 2019. For this reason, under the leadership of the current Minister, Dr. Aishath Ali, the ESP team was renewed, with Dr. Ahmed Ali Maniku leading the team, with two additional consultants, Mr. Abdul Hameed A. Hakeem and Ms. Aishath Shafina; along with the MoE ESP team headed by myself, Director of Policy Planning and Research Division (PPRD), with Education Officer (EO), Mr. Ibrahim Asif Rasheed, and Senior Administrative Officer, Ms. Aishath Jazlee and other staff from the Policy Planning and Research Division (PPRD), including the Maldives Education Management Information System (MEMIS) Team.

The ESP team gratefully acknowledges the continuous guidance, advice and support provided by the Minister of Education and Co-Chair of NECC, Dr. Aishath Ali, and Dr. Ibrahim Hassan, the Minister of Higher Education and the other Co-Chair of NECC, in the final revision phase of this ESP. Their persistent efforts and relentless determination resulted in completing the revision of the ESP in a short period of time.

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Furthermore, the ESP team is particularly thankful to the stakeholders of the education sector, the heads of schools and the professionals in various departments and divisions of MoE, who contributed wholeheartedly for the ESA and ESP at the Kick-Off workshop, as well as at the Planning Retreat. Additionally, the team would like to appreciate the support and cooperation extended by the Finance Executive and Acting Permanent Secretary of MoE Mr. Mohamed Waheed Ali, and the heads and staff of other Divisions of MoE, namely, PPRD, Finance Division (FD), Procurement Section (PrS), and Administration Division (Add).

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Yoosuf Ahmed
Director, Policy Planning and Research Division, MoE
On behalf of ESP Team 2019

FOREWORD BY THE MINISTER OF EDUCATION

The activities of the Education Sector, in the past fifty years, have always been directed by plans. In the recent past, these plans, generally known as master plans, have been the main guiding documents for educational development and advancement. However, several factors including political and social exigencies and financial and human resource-related imperatives do temper the achievement of planned goals. The current plan, the Education Sector Plan [ESP] (2019 – 2023), is the latest link in the long chain of planned sector development.



The ESP was preceded by an Education Sector Analysis [ESA] which was conducted just before the new Government, with new goals for the social sector, took office in November 2018. The ESP has been updated to reflect the Government’s manifesto to develop the sector with unprecedented initiatives. The Government continues to believe that the future development and prosperity of the Maldives lies with the quality of our school leavers and an educated citizenry. Accordingly, the Government has allocated the lion’s share of the national budget on further development of the education sector. However, without the collaboration and support of our important international partners, many of the goals of the ESP may be hard to realize.

I would like to thank the members of the team who carried out the ESA and developed the ESP 2019 – 2023 for their effort in condensing the discussions and aspirations of the parents, civil societies, the Government and other members of the school community into this Plan. The Government believes that the devolution of school administration and accountability, are key tools to further develop the education system. In the planned period, emphasis on quality teacher education and certification, wider and more relevant curriculum for schools, and better certification for school leavers will lead to improved quality of learning.

I trust that all stakeholders will embrace and support the objectives of the ESP and its goals to guide school improvement.

Dr. Aishath Ali
Minister of Education

MESSAGE FROM THE MINISTER OF HIGHER EDUCATION

The Maldives with its scattered geographical dispersion and limited size of scale, faces numerous challenges in delivering a quality higher education and training in the country. A higher education and training system to focus on equity, accessibility, quality, and worldwide recognition is the key. Ensuring mechanisms to exercise the right of every citizen to partake in quality higher education and technical and vocational education and training is the utmost priority of the Ministry of Higher Education.



The functions and roles of higher education, as well as technical and vocational education and training were rested on the Ministry of Education (MoE) when the Education Sector Analysis (ESA) and the Education Sector Plan (ESP) was initially developed in the year 2018. The change in the government and the shift in policy priorities resulted in forming the Ministry of Higher Education (MoHE) with a greater emphasis on improving educational and training opportunities for youth and adults to partake in global and national development.

The ESA and the ESP are a comprehensive analytical document; is one of its kind in the country, which has been carried out since the year 1995. The ESP is developed by the MoE in collaboration with the MoHE. This joint work is an essential effort in presenting the policies and strategies relevant to education reform in the country.

The ESA provides a critical analysis of the education sector for the past five years in examining its policies, procedures, implementation gaps and contemporary contextual issues. With the change in the demands of the knowledge-economy worldwide, the ESA will serve as an indispensable tool to benchmark the targets, track activity implementation, seek and mobilise resources for educational investment and development.

Moving forward, the ESP is a collaborative effort in outlining the new policy priorities, relevant strategies, targets and programmes, which are foreseen to have a fruitful outcome on the higher education sector of the Maldives. The ESP has broadly outlined the goals, strategies, targets and programmes related to: (a) skills for youth and adults for employment, decent work and entrepreneurship, and (b) ensuring access to youth to have an affordable and quality higher education, which are vital for development of higher education and training in the country.

Under the new administration, the higher education sector of the Maldives has taken enormous leaps forward. Providing free higher education in public universities, lowering the interest rates, and providing flexible payback mechanisms in the loan schemes offered for higher education and training are a few to mention. The government has also started to offer its scholarship opportunities to study in the OECD countries, in order to provide quality higher education and training. With these achievements, the MoHE is even more determined to tackle the challenges in the system

and expand quality higher education and training opportunities for both men and women, and youth and adults throughout the country.

I would like to thank the Global Partnership for Education (GPE) for their support to carry out this activity. Furthermore, I would also like to express my immense gratitude to the UNICEF Country Office, the World Bank, the Consultants, the members of the Technical Working Groups, Policy Planning Committee and the Local Education Group for their successful attempt in compiling and endorsing a report of this magnitude. It is my sincere hope that the report serves as a groundwork for future endeavours.

Dr Ibrahim Hassan
Minister of Higher Education

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ABBREVIATIONS

BTEC	Business and Technology Education Council
DIE	Department of Inclusive Education
DPE	Department of Public Examinations
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
EFA	Education for All
EMIS	Education Management Information System
ESAP	Education Strategic Action Plan
ESQID	Educational Supervision and Quality Improvement Division
GER	Gross Enrolment Ratio
GNI	Gross National Income
GoM	Government of Maldives
GPE	Global Partnership for Education
HDI	Human Development Index

HSE	Higher Secondary Education
ICT	Information Communication Technology
KS	Key Stage
LEG	Local Education Group
LS	Lower Secondary
MDG	Millennium Development Goal
MEMIS	Maldives Education Management Information System
M&E	Monitoring and Evaluation
MGT	Multigrade Teaching
MNQF	Maldives National Qualifications Framework
MED	Ministry of Economic Development
MoE	Ministry of Education
MoF	Ministry of Finance
MoFT	Ministry of Finance and Treasury
MoHE	Ministry of Higher Education
MP	Maldives Polytechnic
MQA	Maldives Qualifications Authority
NALO	National Assessment of Learning Outcomes
NCF	National Curriculum Framework
NDP	National Development Plan
NECC	National Education Consultation Committee
NER	Net Enrolment Ratio
NIE	National Institute of Education
NGO	Non-governmental organisation
OOSA	Out-of-school adolescents
OOSC	Out-of-school children
PPRD	Policy Planning and Research Division
QAD	Quality Assurance Department
SDG	Sustainable Development Goals
SEN	Special Education Needs
SIQAAF	School Improvement and Quality Assurance Accountability Framework
SIP	School Improvement Plan
TRC	Teacher Resource Centre
TVET	Technical and Vocational Education and Training

ESP 2019-2023

EXECUTIVE SUMMARY

The Ministry of Education (MoE) and the Ministry of Higher Education (MoHE) are committed to upholding the following core principles in the effort to provide high-quality educational services to all Maldivians:

- Equal opportunity for free and compulsory education from Pre-school to grade 10.
- Equal opportunity for free, quality education to all, from K to 12, as well as, for the first-degree level, irrespective of sex or locality, while considering education to be a basic right for all children and youth, including those with special education needs (SEN).
- All students acquire knowledge, skills and values required for successful completion of each stage of education, including the foundational skills of literacy and numeracy, as well as the curriculum competencies contained within the National Curriculum Framework (NCF) and 21st century skills for a decent life in an interconnected world, characterized by globalization and economic integration.
- Every Maldivian student is inculcated in Maldivian and Islamic values, through education programmes offered to them in schools.
- Each school has skilled teachers and an adequate level of state-of-the-art equipment, is learner-friendly, and has the capacity to provide holistic education, and cater to learners with SEN.
- Every student has the opportunity to access Higher Education (HE) in the country, by as per the guidelines set by the Maldives Qualifications Authority (MQA) that would enhance his/her career opportunities.
- The provision of higher education and (Technical and Vocation Education and Training (TVET) enhances the capacity to contribute to social well-being, poverty reduction, and shared economic growth and prosperity, while also responding to the needs of the 21st century economy.

VISION AND MISSION

VISION

Holistic and equitable quality education and lifelong learning for all.

MISSION

To provide opportunities to all girls, boys, youth and adults, to acquire knowledge and skills, as well as nurture in them values and attitudes, to thrive and actively participate in nation building, and live as responsible global citizens in an interconnected world.

GOALS, RESULTS AND KEY PERFORMANCE INDICATORS (KPIs)

Goal 1: Improved Learning for All, through Equitable Access to Quality Education.

Results: (i) Complete enrolment and retention from Kindergarten to grade 12 (K to 12) for unenrolled groups (ii) Improved learning outcomes and reduced learning gap.

Key performance indicators (KPIs):

- Gross Enrolment Ratio (GER) in free and compulsory Kindergarten 1 (KG 1) and Kindergarten 2 (KG 2).
- Net Completion Rate (NCR) in free and compulsory Lower Secondary (LS), free of charge Higher Secondary (HS), by age, sex, and location (Male' and outer islands).
- Gender parity in all levels of education.
- % of students with SEN receiving education services.
- Improved learning outcomes and reduced learning gap, by increasing the learning of the lower quartile at the end of Key Stage (KS) 1 and 2 (through National Assessment of Learning Outcomes (NALO) in Dhivehi, English, and Mathematics).
- % of students completing LS and HS certification.

Goal 2: Skilled Youth and Adults for Employment, Decent Work and Entrepreneurship.

Results: More youth and adults, female and male, in the capital and outer islands, are skilled, have the curriculum competencies (included in the 21st-century skills), and competencies through TVET; are integrated into the labour market, and demonstrate entrepreneurship.

KPIs:

- % of students, girls and boys enrolled and completed school-based skills development programmes
- % of trainees, female and male, enrolled and certified in skills development programmes in the Maldives Polytechnic and other TVET Institutions.
- % of graduates of TVET institutions, including the Maldives Polytechnic, hired and remunerated as per labour market within 6 months of programme completion.
- % of graduates of TVET institutions, including the Maldives Polytechnic, self-employed within 6 months of programme completion.
- The number of TVET programmes that meet quality assurance standards set by the TVET Authority and the MNQF.

Goal 3: Ensure Equitable Access to Lifelong, Affordable and Quality Higher Education for All.
Result: 65% GER in HE (Levels 5 to 7), by sex and geographic area, and employed within 6 months of graduation.

KPIs:

- GER in HE (Levels 5 to 7), by sex and geographic area, (transition rate from Secondary Education to HE).
- The number of students who completed HE by level, sex and geographic area.
- The number of researches published in international journals.
- % of HE graduates hired and remunerated by the labour market within six months of programme completion, in a related field and in unrelated fields.
- % of HE graduates who are self-employed.
- Additional number of scholarships, loans and financial assistance programmes equitably available to all students.

Goal 4: System Strengthening for Efficiency and Quality Schools for All.

Results: The MoE at central and decentralized levels is strengthened to support quality schools, in order to achieve measurable levels of improvements in learning, skills as well as in enhancing the learning environment.

KPIs:

- % of schools rated more than 3 on rating scales in all quality assurance modules of the School Improvement and Quality Assurance Accountability Framework (SIQAAF), which also includes implementation of School Improvement Plans (SIPs).
- The Maldives Education Management Information System (MEMIS) platform is fully implemented to support policy development and accountability.
- The SIQAAF and NALO are integrated and mainstreamed in the Quality Assurance Department (QAD).
- A comprehensive Teacher Professional Standards is developed and implemented.
- The MoE formulates human resource development plans for strengthening the technical competence of staff in selected areas.
- The Public expenditure review and the input and output efficiency are evaluated.

THEORY OF CHANGE 1

Challenge 1 (problem): How to complete equitable access and retention for the unenrolled groups and increase enrolments in Higher Secondary Education.

Challenge 2 (problem): How to improve learning outcomes and skills equitably and reduce the learning gap and pass rate and increase recognition after completion of the Lower Secondary Education.

Improve the Quality of Inputs and Outputs	Improve the Quality of Teaching and Learning Process	Improve Learning Outcomes, Reduce the Learning Gaps
<ul style="list-style-type: none"> -Equip schools and classrooms with the 21st Century state-of-the-art facilities and establish standards. -Support curricula reform by improving teaching and use of appropriate learning materials. -Strengthen in-service training and teacher support systems. -Provide appropriate and cost effective technology for enhancing teaching and learning in all schools. 	<ul style="list-style-type: none"> -Provide support to the teachers to improve teaching and learning on high-level cognitive thinking and skills, formative assessment, and corrective feedback. -Support schools/teachers on appropriate teaching and learning for the inclusion of children with SEN. -Strengthen the curricula implementation through cost-effective and innovative teaching and learning practices (E.g. Multigrade Teaching (MGT)). 	<ul style="list-style-type: none"> -Support the NALO and development of benchmarks. -Participate in international learning assessments for benchmarking.

System strengthening: Support School Improvement Plans with focus on Learning; Revitalize Teacher Resource Centers; Operationalize MEMIS and Quality Assurance Accountability Framework (SIQAAF) to monitor learning; Review impact of private lessons (tuition).

RESULTS

The result (Goal 1): Completed enrollment and retention from K to 12 for unenrolled specific groups, and (ii) Improved learning outcomes and reduced learning gap.

The result (Goal 4): The MoE at central and decentralized levels is strengthened to support quality schools to achieve measurable improvements in learning, skills and wellbeing.

GOAL 1, GOAL 4

THEORY OF CHANGE 2

Challenge 1 (problem): How to expand equitably relevant and quality TVET, within schools and out of schools, to address skills shortages, 21st century market needs and youth employment.

(Goal 2)

Challenge 2 (problem): How to expand Higher Education (HE), improve its structure and quality and ensure its economic and social relevance in a cost-effective way. **(Goal 3)**

ACTIVITIES

TVET Expansion: Review BTEC and Dhasvaaru and continue to expand TVET in schools by expanding pathways at the Secondary and Post-Secondary Education levels relevant to the labour market. Revitalize the Maldives Polytechnic, recognize the significant role of private providers and support the youth organizations; increase demand by supporting innovative delivery in the outer islands, support girls' participation in TVET; strengthen linkages with the labour market.

TVET Quality Assurance: Strengthen the quality assurance mechanisms and the regulatory role of the TVET Authority.

HE Size and Structure: Increase the public sector HE delivery, support the private HE expansion and enhance the use of innovative pedagogical practices to promote growth in various disciplines.

HE Governance: Clarify roles and responsibilities of private and public providers; address issues of autonomy of HE institutions; development of protocols and processes for accountability; strengthen the governance of HE; support HE to undertake relevant research.

HE Quality: Improve internal and external validation and audits in order to ensure quality and accountability; strengthen the quality assurance mechanisms of HE.

Economic and Social Relevance: Increase enrolment to match demand and supply by diversifying fields/disciplines; strengthen employment-related programmes; support research as an instrument of socio-economic development; develop online/distance and other modalities of learning/e-learning; facilitate lifelong/continuous learning.

Budget and Finance: Flexible modes of financial assistance to students (scholarships, student loans under revised terms); free undergraduate studies in the country, specific funding to support research and innovation; promote schemas of public-private funding and institutional versus individual funding, including funding from agencies and industries.

RESULTS

The result (Goal 2): More youth and adults, male and female, in the capital and outer islands, have the skills and competencies through TVET, and are integrated into the labour market and entrepreneurship.

The result (Goal 3): 65% GER in HE (Levels 5 -7) both by gender and geographic areas, and employed within 6 months from graduation.

GOAL 2, GOAL 3

Introduction to the development of the Education Sector Plan

The present ESP 2019-2023 is a result of comprehensive ESA and consultative work led by the MoE and later together with the MoHE of the Republic of Maldives. Historically, beyond a good number of studies and assessments, it is the first time, since 1995, that the MoE has developed a comprehensive ESA and ESP. This work is made possible with the support of the Global Partnership for Education (GPE). In 2015, the Maldivian Government expressed interest in joining the GPE and received GPE funding support to: (i) undertake a comprehensive ESA, and (ii) to develop the ESP.

Following the GPE's guidelines, the MoE formed the National Education Consultative Committee (NECC) to serve as the Local Education Group (LEG), with the participation of all key education stakeholders, including civil society, the private sector and teacher organizations. UNICEF was designated to undertake the role of the Grant Agency (GA), as well as the Coordinating Agency (CA). The ESA was developed and submitted to the GPE Secretariat in March 2018.

The ESP is clearly guided by an overall vision and mission of the Government of Maldives (GoM), in order to achieve ambitious results on human development, and especially the education of the young generation, as part of the country's 21st-century development objectives. The ESP has four overarching goals determined after a careful analysis of the sector that identified the key problems (challenges) and formulated theories of changes (ToC) to address them. Clear policies and strategies are identified on how to reach the goals. The ESP covers all key sub-sectors of education including Early Childhood Education, Primary and Secondary Education, Higher Education and TVET. The M&E framework detailed in the ESP emphasizes the development of a number of analytical works, using robust data, learning measurements and evaluations. Each of the four goals has targets that are carefully designed, taking into account, the managerial, technical, financial and political assumptions, vulnerabilities and risk assessments.

The process of developing the ESA and ESP was led by a small technical team, formed within the MoE, with international assistance. Several committees were formed to assist and guide the process of its development.

Steering Committee: The National Education Consultation Committee (NECC), also serving as the LEG, acted as the Steering Committee to give broad parameters and policy directions for this study. The responsibility to endorse the ESA and the ESP, prior to their submission to the GPE Secretariat, also lies with the NECC. The NECC/LEG comprises 19 members from a broad spectrum of stakeholders. The milestone for the NECC involvement was the kick-off workshop held on February 19, 2018. In 2019, the LEG was reconstituted, and its membership increased from 19 to 21. The Minister of Higher Education became the Co-Chair of LEG. Two State Ministers from the MoHE also became members.

Policy Planning Committee (PPC): The technical team has the opportunity to engage constantly with a smaller group other than the NECC: the PPC, comprised 7-8 policy and executive level staff

of the MoE. In the final revision phase of 2019, the PPC was also re constituted with new members. In 2019, there were representatives from the MoHE as well.

Thematic Working Committees: The thematic working committees covered the following themes: Early Childhood Education (ECE), Curriculum & Culture, Teachers & School Leadership, Quality & Equity, Inclusive Education, Technology in Education, Youth & Skills Development, Higher Education and Learning Outcomes. Their work was to prepare and present the initial issue papers that reviewed policies, programmes, targets and activities. They were consulted daily during the period of the ESA and ESP preparation.

Technical Workings Groups (TWGs): Instead of the Thematic Groups that were formed earlier, TWGs were formed during the revision period in 2019; one for each Goal of the ESP. The ESP Team from the PPRD of MoE, supported by consultants, held a series of working sessions with the TWGs. The TWGs comprised 4-5 education specialists from the sector.

Alignments: The ESA and ESP are aligned with the National Development Goals (NDGs), Sustainable Development Agenda and the GPE's strategic objectives. The ESP is fully embedded in the country's development strategy and other relevant sectors' strategic objectives aiming at creating and sharing prosperity. Inspired by the Sustainable Development Goals (SDGs) 2030: Ensuring Inclusive and Equitable Quality Education and Promoting Lifelong Learning Opportunities for All (SDG4) and the GPE objectives, the country is confident of achieving key SDG targets ahead of 2030.

Consultations and dissemination: These activities were part of the whole process, through consultative and technical workshops and other consultations with the NECC, focus groups with school principals, teachers, students and parents in selected schools in the outer islands. Other participants in the consultation process were key teams and policy officials, including from the National Institute of Education (NIE), local education authorities, kindergarten, primary and secondary school teachers, representatives from the teacher training institutions, the universities, the Maldives Polytechnic, the TVET Authority, the MQA, the private tertiary education sector, including technical and vocational training institutes, national organizations for education, including Teachers' Association and civil society organization. Development Partners (DPs), including UNICEF, the World Bank, and UNFPA actively participated in the consultative process.

The consultation process also involved two information dissemination sessions held in early 2019. The first was during the Heads Conference hosted by the MoE for school principals throughout the country. The second was at the Curriculum Symposium, also hosted by the MoE in which teachers, principals, parents and students participated. The ESP team disseminated salient ESA findings and obtained recommendations towards the formulation of the ESP goals and targets.

The ESA process: The ESA provides a description of the situation of the education system and an analysis of the causes of system weaknesses and difficulties. It analyzes the general country context, existing policies and their effectiveness, the performance of the education sector and system capacity, and cost and financing. It mainly covers the five-year period (2013-2017), but also

considers historic developments. As a diagnostic analytic document on the status of the Maldives' education sector, it includes key findings and recommendations for policy development.

The ESA is based on quantitative and qualitative analysis of a broad range of available robust data, issue papers prepared by the MoE and in-depth analytical studies. Extensive guidance and capacity building of MoE staff and the contribution of external local consultants and researchers of Higher Education entities were part of the day to day development of the ESA. Following a presentation to the PPC and presentation and feedback from NECC and GPE Secretariat, the ESA was re-submitted to NECC for final endorsement before sending it to the GPE.

The ESP process: The ESP contains five key products: Programme Design; Costing and Financing; Action Plan; Implementation Arrangements and Institutional Capacity; and Monitoring and Evaluation Mechanisms. The development of ESP was undertaken by the MoE in close collaboration with all the divisions and pertinent committees of the MoE and other relevant stakeholders. All components of the plan, goals, policies and strategies to achieve targets, programmes and key activities guided by a cost-financing and simulation exercise, are products of continuous consultations, training and capacity building activities.

The ESP structure: The ESP contains the following chapters: An executive summary with the guiding principles, the vision, the mission and the overarching four goals, on learning, skills, Higher Education and system strengthening; and the expected results and KPIs for each goal.

Chapter 1 of the ESP presents an extensive summary of the analytical findings on country context, risks and vulnerabilities, the policies and achievements, remaining challenges and recommendations based on the ESA. It illustrates, through **theories of change**, how the country will overcome the challenges (problems) and implement strategies and policies to achieve the expected results.

Chapter 2 presents each one of the 4 goals with its targets, the rationale for policy options and strategies, programmes and key activities.

Chapter 3 is a presentation of the cost and financing of the ESP, based on the application of a simulation model (EPSSim) adapted to the case of the Maldives, and includes: (i) High-level funding scenario, (ii) Low-level funding scenario and (iii) The elected ESP funding option with financial gaps.

Finally, Chapter 4 describes the M&E Framework, including the Results Framework for each of the four goals.

The Annexes include an assessment of the risks together with mitigation measures and institutional capacity, a translation of the policy pledges of the new Government, output of the costing model, the implementation plan with cost estimates, a set of additional indicators for the consideration of the MoE and MoHE, and the implementation manual.

CHAPTER 1: THE CONTEXT OF THE EDUCATION SYSTEM, CHALLENGES AND TWO THEORIES OF CHANGE

1.1 Geographic, historical and cultural context

The Republic of Maldives, a multi-island nation in the Indian Ocean, of globally recognized natural beauty, consists of an archipelago of nearly 1,200 small coral islands of which 199 are inhabited by a population of approximately 400,000 inhabitants: 310,000 Maldivians and 90,000 expatriate workers. The population geography in the Maldives pose challenges to education service delivery. More than 25 percent of the population lives in Malé, the capital, while the rest are distributed among just under 200 other inhabited islands. The capital, Malé, located at the centre of the archipelago, is the single most populous island of Maldives, with a density as high as 78,690 people per square kilometre (NBS, 2018)¹, against an average of approximately 1,340 people per square kilometre in the country as a whole (UNFPA, 2016).

The unique archipelagic coral islands of the Maldives provide the country with a rich and diverse marine ecological system. The marine resources are vital for economic development, with nature-based tourism being the key driver of economic growth and fisheries; an important sector of employment for the local population.

The Maldivian people speak a unique language, Dhivehi, and use a distinct script known as Thaana, which is written from right to left. Dhivehi is the language of administration in the country. English language is widely used and is the medium of instruction in schools. The prevailing low pass percentage in English Language at the end of the Lower Secondary level has raised issues about the language of instruction in schools, along with the importance of a greater focus on improving English Language competency.

1.2 Macroeconomic context and demographic trends

The economic growth of the Maldives has been strong in recent years, with growth averaging 6% in the past 5 years. However, economic performance is heavily susceptible to shocks from both domestic and external sources, as evidenced by the dip in growth in 2015 to 2.2%. Economic growth for 2018 was initially projected to be strong at 6%. However, due to political instability, this projection was not maintained.

The economic growth of the Maldives is driven by strong performance in the Tourism sector and higher investments in the Construction sector. The Tourism sector contributes to around a fourth of the Gross Domestic Product (GDP) and the Construction and Real Estate sector together contribute over 15% to the GDP. Other main industries include Fisheries, Transportation and Telecommunications, which provide the most employment to the locals. Table 1.1 provides a snapshot of the key macroeconomic indicators.

¹ Population density of 686.9 persons per hectare in Male' (NBS, 2018). 100 square kilometres is 100 hectares.

Table 1.1: Macroeconomic indicators

	2013	2014	2015	2016	2017	2018
Gross Domestic Product (GDP)						
Nominal GDP (MVR mns)	50,633.5	56,866.7	61,565.6	64,919.3	71,676.8	77,439.4
Nominal GDP (USD mns)	3,283.6	3,687.9	3,992.6	4,210.1	4,648.3	5,022.0
GDP Growth Rate	7.3	7.3	2.2	6.2	6.9	6.0
GDP Per Capita	7,557.2	8,196.0	8,559.1	8,891.4	9,671.3	10,292.7
Prices						
Inflation (%)	3.8	2.1	1.0	0.5	3.4	3.1
Government Finance						
Revenue (MVR mns)	11,900.7	15,164.2	17,306.2	18,578.1	20,814.9	22,400.7
Revenue as a % of GDP						
Expenditure (MVR mns)	13,666.3	16,539.4	21,440.9	25,306.5	22,228.4	24,894.6
Expenditure as a % of GDP						
Deficit (MVR mns)	(1,765.5)	(1,375.1)	(4,134.7)	(6,728.4)	(1,413.5)	(2,493.9)
Deficit as a % of GDP	(3.5)	(2.4)	(6.7)	(10.4)	(2.0)	(3.2)
Public Debt						
Domestic Debt (MVR mns)	11,518	10,749	10,204	26,476	26,086	27,391
External Debt (MVR mns)	16,908	20,644	23,109	11,726	17,408	21,744
Total Debt as a % of GDP	56.1	55.2	54.1	58.8	60.7	63.5

Source: Ministry of Finance and Treasury, February 2018

Note: 2017 numbers refer to the most recent estimate. 2018 numbers are projections by the government authorities.

The inflation rate of the country has been low in the past 5 years; primarily due to lower commodity prices in the international market. Inflation rate is heavily affected by global prices due to the high propensity for imports in consumption.²

The revenue of the government has seen exponential growth since the introduction of a modern tax system in 2011. At the same time, the country has increased its public sector spending to finance the institutional structure required for a democratic form of governance, new measures of social security, and infrastructure upscaling. As a result, the Government budget deficit has widened in recent years, registering a deficit of 6.7% and 10.4% in 2015 and 2016 respectively. However, fiscal consolidation measures in 2017 meant that the deficit was drastically reduced to 2%. Government authorities estimated the deficit for 2018 to be at 3.2%³.

In addition, heavy expenditure on infrastructure has also weakened the external position of the country, in terms of the current account balance. Current account deficit drastically increased to

² See Chapter 2, ESA, Ministry of Finance and Treasury data, 2018 and Ministry of Finance data, 2019.

³ See Chapter 2, ESA

24.5% in 2016, and remained high at 21.7% at the end of 2017. Although it is estimated to fall to 17.8% in 2018, it remained high throughout. Although the current account has deteriorated, gross international reserves have increased in recent years, as inflows of foreign exchange increased in terms of tourism earnings and debt inflows. The Gross International Reserve is at USD 480 million at the end of 2017.

It is expected that the above economic forecast will have an impact on the costs and financing of the education sector (see Chapter 2, ESA).

Human Development Index (HDI): The Maldives shows remarkable performance in the HDI in recent years, with a strong, stable high ranking in South Asia (UNDP, 2016). According to the most recent report (UNDP, 2018), “Maldives’ HDI value for 2017 is 0.717— which puts the country in the high human development category—positioning it at 101 out of 189 countries and territories. The rank is shared with Botswana. Between 1995 and 2017, Maldives’ HDI value increased from 0.539 to 0.717, an increase of 33.0 percent. Between 1990 and 2017, Maldives’ life expectancy at birth increased by 16.2 years, mean years of schooling increased by 2.3 years and expected years of schooling increased by 4.1 years. Maldives’ GNI per capita increased by about 154.7 percent between 1990 and 2017.”

Maldives had attained a **Gross National Income (GNI)** per capita of USD 10,383 by 2015, showing an increase of about 216.2 percent between 1990 and 2015 (UNDP, 2017). This has reached nearly USD 11,000 in 2018 (National Bureau of Statistics, 2019).

Demographic trends impacting the human capital of children and youth

According to the results of the Population and Housing Census (2014), the Maldives has almost completed its demographic transition: the shift from high crude birth and death rates to low ones. The fall in crude death rates were due to significant reductions of infant and child mortality rates over the last two decades. This creates the first demographic dividend (DD) that is defined as “the accelerated economic growth that is triggered when the working age population is growing in relation to the number of young dependents” (0-15 years old) (UNFPA, 2016).

The estimated population of the country in 2014 is 402,071 residents, of which 63,637 were foreigners. The national residents were 341,256 (males and females representing 50.7% and 49.3%), a 14% increase since the last census in 2006. The population is distributed among Malé, 20 administrative atolls, covering 187 inhabited islands, and 237 non-administrative islands (109 resorts and 128 industrial islands) (NBS, 2015).

The most striking aspect of the population distribution is that the population of Malé represents over 38% of the total resident Maldivian population (UNFPA 2016). About 53% of the resident population is distributed in 187 inhabited islands having strong implications on the provision of services, including health, protection and education.

The annual population growth rate has been declining, which can be attributed to the falling fertility rate, from 6.4 children in 1985-1990 to 2.1 in 2014. Consequently, life expectancy at birth has

increased from 70.0% (2000) to 72.5% (2008) for males, and from 70.1% (2000) to 74.1% (2008) for females, which can be attributed to a combination of several factors such as better access to healthcare, improvements in the quality of preventive, diagnostic and curative health services, and increased levels of education and health awareness (UNICEF, 2015 & UNFPA, 2016). As a result, the percentage of the population aged 0-14 has declined from around 41% in 2000 to 31% in 2006, while the percentage of population aged 15-64 steadily increased from around 55% (2000) to 63% (2006).

At the same time, youth emerge as a significant demographic force in the 2014 census, as 47% of all resident Maldivians are less than 25 years old (UNFPA, 2016). This situation has important implications for education and training.

Policies to address Early Childhood Development (ECD) and Youth Human Capital: Demographic trends described above are expected to have direct implications on the choice of priorities for governmental policy goals and funding. Two policy goals emerge strongly:

- i. An ECD policy goal to provide well-coordinated services of education, health, and social protection, to children in Malé and the outer islands for holistic ECD.
- ii. A youth policy goal to provide all young Maldivians with the opportunities to acquire the skills and get the education that will bring them jobs. The growing numbers of adolescents also lead to the increase of the working age population and require long-term socioeconomic policies on TVET aimed at creating employment opportunities for young people and maximizing their economic potential.

1.3 The administration system of the country and education service delivery

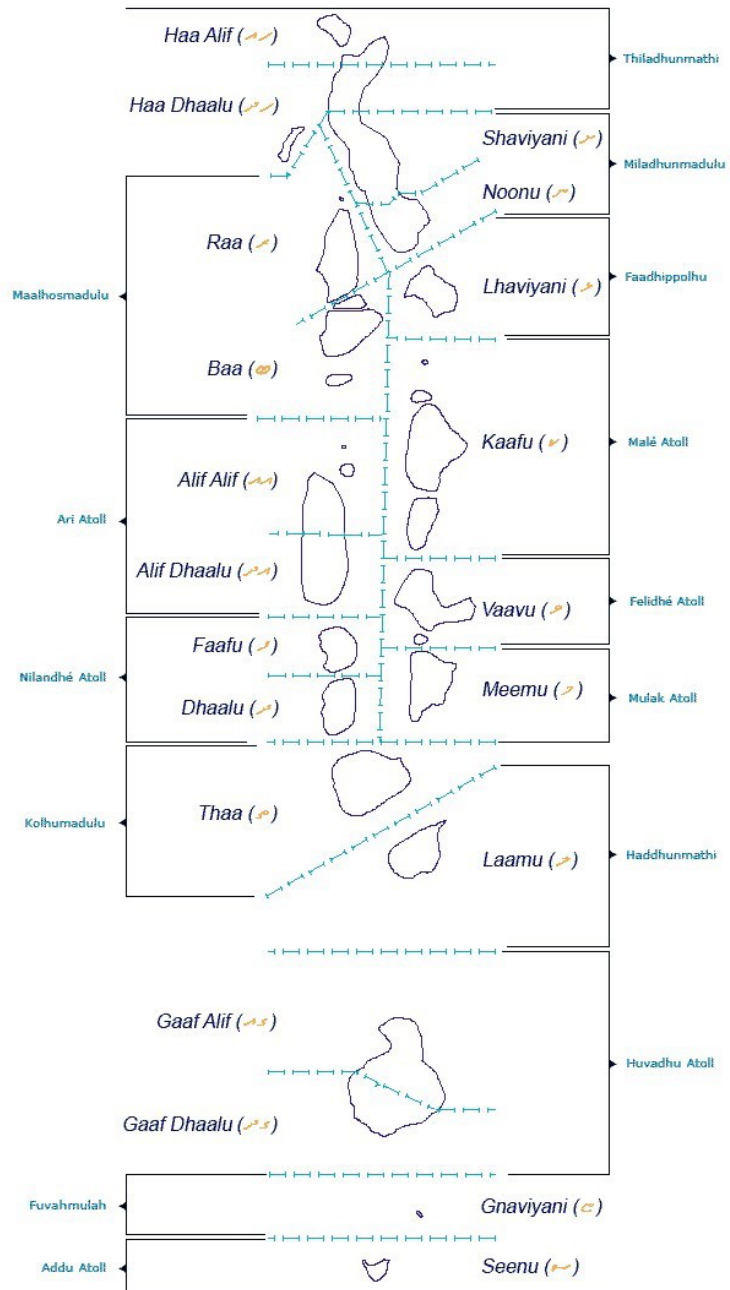
The Maldives has two spheres of government; national and local, as stipulated in the Constitution. The administrative divisions of the Maldives refers to the various units of government that provide local government services in the Maldives. According to the Decentralization Act 2010, the administrative divisions consist of atolls, islands, and cities, each administered by its own local council. Administratively, there are currently 189 islands, 19 atolls and 3 cities in the Maldives, namely: Malé City, Addu City and Fuvahmulah City. (See map below).

FIGURE 1.1: MAP OF MALDIVES

Services of the local government are delivered based on the constitution and the main legislative texts: the Decentralization Act 2010 and the Local Council Election Act 2010. The Local Government Authority (LGA) has the responsibility for local governance through the councils: three city councils (Malé, Addu, Fuvahmulah) and the 187 lower level island councils, accountable to one of 19 atoll councils. At budget level, the councils' financial income comes from: (i) Their power to charge fees or rents for the services they provide, and can seek loans as well as create financial instruments such as bonds, bills and securities to fund development activities, and (ii) The yearly allocated public funds from central government for office administration and provision of services and development projects. In addition, the authority to generate revenue from state facilities within a council jurisdiction has not yet been granted.

The responsibilities of the **Atoll Councils** are to establish and maintain a register of islands and their lands, assist island councils in seeking technical and financial assistance, as well as administer and implement projects in the atoll development plan that have not been assigned to a particular island council.

The responsibilities of the **City and Island Councils** include providing road, waste disposal, pest control, water, electricity and sewage systems; primary healthcare and preschool education; and educational and vocational programmes for adults. As a ministerial oversight, the LGA was established in late 2010 and local council elections were held in February 2011 and the year 2017.



The Decentralization Act 2010 stipulated that the councils have responsibility on preschool service delivery, and educational and vocational programmes for adults. The city councils were responsible for salaries of preschool teachers and the oversight of the preschools. However, given the research evidence on the importance of pre-primary education for holistic ECD for later success in schools, and due to the prevailing unequal service provision in preschools across the councils, MoE decided in 2015, to operationalize the Preschool Administrative Act (2012). With this decision, the two years of Pre-primary education was integrated into the public schools in the islands (except for the capital city, Malé) so as to ensure more effective and systematic management and quality support from the central government. This was followed by a reduction of central government support through the MoE to the community schools administered by the councils.

A UNICEF commissioned study undertaken in 2013 underlined that the process of decentralization was not completed, as several responsibilities to be transferred to the councils were not implemented, and its impact on service delivery regarding health and education was not readily evident. According to the report, by 2013, Atoll and Island Councils felt they have significantly less powers and less opportunities to raise revenue, and provide services than they did prior to 2008, despite the grand visions in the Decentralization Act (UNICEF, 2013).

By the year 2018, only a very few primary schools and preschools were run by the local communities (community schools). This shows that the Decentralization Act is not fully implemented, but changes were made, with the argument that this would help to offer quality services (including education services) in a more equitable way, under a more systematic management.

1.4 Sustainability of growth resilience towards economic shocks and environmental vulnerability

The Maldives graduated from a Least Economically Developed Country status in 2011, and is now categorized as a Middle-Income Country (MIC). Its economy is driven primarily by the Construction and Tourism sectors. The low elevation of the Maldivian islands makes the nation highly vulnerable to rising sea levels. The key issues of development are its high population density, dispersed geography, and limited resources. Actions that the previous government of the Maldives took to address these issues were to relocate and consolidate its population from the outer islands to the greater Malé region, with the intention of more efficient use of its resources. Given the country's vulnerability, the focus is on crucial actions to strengthen the country's resilience to climate impacts, and prioritise mitigation in energy, transport, and waste. Invest Maldives, the government investment promotion agency, has invited private investment in agribusiness, energy, financial services, and infrastructure (World Bank, 2018).

Vulnerability issues: 'Structural vulnerabilities' of the Maldives include: (i) Geographical isolation; (ii) Small size, (iii) Limited land, natural and human resources, and (iv) Vulnerability to climate change and natural disasters. 'Vulnerabilities at risk' is characterized by socio-economic transitions and changes, e.g. the Maldives graduation to become a MIC, as well as by external shocks that had

severe impacts on the Maldives' social and economic development, e.g. natural disasters, like the 2004 tsunami, and the 2008 financial crisis. These vulnerability features impact on human development dimensions of education, income and health, and challenge those institutions that are created to address these dimensions (UNICEF situation analysis 2015).

1.4.1 Geographic vulnerabilities and emergency preparedness

The Maldives is made up of over a thousand small islands. The geography of the Maldives and the population dispersion places the country in a vulnerable position. The spatial disparity between Malé and the outer islands contributes significantly to the availability of education choices. The HDI for Malé is 0.734 compared with 0.627 for the outer islands (United Nations Children's Fund, 2015). The low HDI for atolls is largely due to the low average years of schooling, in comparison with Malé. An assessment of the regional HDI and the human development dimensions indicates that Malé performs far better than the outer islands in the expected and average years of schooling (United Nations Development Programme, 2014). In fact, exploration of mean years of schooling, shows that someone who is living in Malé is likely to complete three more years of schooling than someone living in the outer islands (United Nations Development Programme, 2014). This leaves the population of outer islands more vulnerable compared to the population in Malé, from the perspective of the HDI and its related aspects.

According to the UNDP (2014), the Maldives faces other vulnerabilities due to geographical isolation, small size, climate change, and natural disasters. For example, the tsunami of 2004 was a major shock to all the systems of the Maldives, including education. The damage to the Maldives due to the tsunami included 82 deaths, 26 missing people, 30,000 displaced people, 8,500 damaged shelters, and 2,800 homes destroyed, causing an estimated loss of USD 470 million, which is equal to 62% of the National GDP (UNDP, 2014). All environmental disasters have an enormous impact on the education sector; as families, children and their livelihood are most affected by each of those environmental disasters.

Due to the huge loss caused by the tsunami in 2004, many aspects of environmental vulnerabilities have been evaluated in the Maldives. According to the UNDP (2006), the islands on the eastern fringe of the Maldives are most prone to tsunami threats. The northern atolls are more prone to cyclonic winds and storm surges, which gradually reduces as they move along the southern atolls. Earthquakes are not common to the Maldives, and the risk of it is low except for Seenu, Gnaviyani, Gaafu Dhaal and Gaafu Alif atolls (UNDP, 2006).

The other major environmental vulnerability faced by the Maldives, is climate change and sea level rise. As a result of the rise in sea levels, a variety of impacts may be expected in the Maldives where the islands are extremely low lying. These include loss of land, flooding of low-lying coastal areas, displacement of population, loss of crop yield, salinization, impacts on coastal aquaculture, and erosion of sandy beaches. In many places, a rise by 50 centimetres would imply entire beaches being washed away, together with a significant chunk of the coastline. Over 80% of the land area

in the Maldives is hardly one metre above mean sea level. For people living on low-lying islands, a rise in sea level by 50 centimetres could see significant portions of the islands being washed away by erosion or being inundated. As most of the economic activities in the Maldives are heavily dependent on the coastal ecosystem, sea-level rise will impact the social and economic development of the country. Residential areas, industry and vital infrastructure of the country lie close to the shoreline, within 0.8 to 2 metres of mean sea-level. Some islands are affected by loss, not only of shoreline, but also of houses, schools and other infrastructure, compelling the government to initiate coastal protection measures.

Hence, an integrated disaster management approach from all sectors is a necessary component for the development of the Maldives. The education sector, in particular, has addressed this issue through the 'School Emergency Operational Plan Guideline 2009' (Ministry of Education, 2009, p.12). This plan states that, "Schools must be prepared to respond to an emergency or traumatic event in an organized and timely manner so as to ensure that students and staff can continue to function effectively without additional trauma or the development of additional crises." (Ministry of Education, 2009. P.12). The country also established national and school level emergency response teams. The School Emergency Operational Plans are linked to the former National Disaster Management Center (NDMC) ⁵ and the Community Emergency Response Teams (CERT). Schools perform occasional drill exercises.

1.5 The education system: policies

National Development and Sector Plans: Starting late 1970s, the Maldives undertook development planning, and by 2006, the country had issued seven National Development Plans (NDPs) that gave place to party manifestos, replacing NDPs by 2009. Political party manifestos have, become the de facto principal national planning documents. The 7th NDP (2006-2010) which was the last of its kind was replaced by a Strategic Action Plan 2009-2013. At present, there is an initiative by the current government to develop a NDP.

Other national level policy documents that are of greater relevance to the education sector included A National Child Health Strategy, with Every Newborn Action Plan (ENAP) Maldives 2016 – 2020, as well as a National Reproductive Health Strategy 2014-2018, implemented by the Ministry of Health. The Youth Manifesto 2013-18, is also under implementation as the main goal to support youth, especially those who leave school without completing their education, to become the skilled work force of the country. The current National Gender Policy 2016-21 is founded on two key policies: (i) Political, economic, and social empowerment of women, and (ii) Zero tolerance to violence against women ⁶.

⁵ Now National Disaster Management Authority.

⁶ "El-Horr, Jana; Pande, Rohini Prabha. 2016. *Understanding Gender in Maldives: Toward Inclusive Development. Directions in Development--Countries and Regions*; Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/24118> License: CC BY 3.0 IGO."

Commitments to the SDGs: The Maldives had already achieved five out of eight Millennium Development Goals (MDGs) by 2010, making it South Asia's the only MDG+ country. Strong emphasis on the social sectors has contributed much to the efforts of the Government and its international partners, in eradicating extreme poverty and hunger (MDG-1), achieve universal Primary education (MDG-2), reduce child mortality (MDG-4), improve maternal health (MDG-5), and combating HIV/AIDS (MDG-6). The adult literacy rate of over 98% has been achieved and sustained since 1999. The Maldives achieved Education for All (EFA) / MDG targets for Primary education well ahead of the target dates. Universal Primary Education was achieved by 2002, with small gender disparity. However, progress towards the rate of improvements in achieving gender equality (MDG-3), ensuring environmental sustainability (MDG-7), and developing a global partnership for development (MDG-8) has been slower and requires intensified efforts.

The Maldives adopted the SDG 4 and its Framework for Action (UNESCO 2016). The MoE is opting to implement the Sustainable Development Goal 4 on Education, by building upon the successes in the implementation of the MDG/ EFA in the country.

Development partners supporting education in the Maldives: The **World Bank** is a partner in the country's development for over 35 years, assisting the country to improve its public financial management, the relevance and quality of education, and the development of the financing. The active Enhancing Education Development Project (EEDP) 2013-17 that terminated in June 2018, was focused on strengthening the education system including the establishment of the NALO; the improvement of management and leadership in the education sector; the learning environment enrichment of secondary schools and the establishment of combined curriculum streams; the establishment of the SIQAAF; strengthening of School-Based Professional Development (SBPD); the Master Plan for Higher Education (MPHE) and the consolidation of the MQA.

The **Asia Development Bank (ADB)**, since 1978, has been a major development partner of the GoM, heavily investing in the education sector. The ADB, through the Post-Secondary Education Development Project (1999 to 2007) supported the development of the Post-secondary Education in the Maldives and led to the establishment of the first university in the country, the Maldives National University (MNU) in 2011, along with the creation of the Maldives Qualifications Authority. The private sector was able to offer government-recognized courses which led to the creation of six private colleges. The ADB also provided a \$6 million loan in 2003, for the Employment Skills Training Project, which ran from August 2004 to February 2012, and aimed to get more Maldivians into work. The project established technical and vocational skills training programmes, mainly in five key sectors (transport, tourism, fishing and agriculture, social sector, and construction), and trained 5,829 youths, including 38.5% who were women.

UNICEF plays a pivotal advocacy role in implementing children and youth rights, and provides technical support through analytical work, innovations and initiatives supporting equitable quality education, children and youth well-being and inclusion of children with special needs, with special attention to various forms of discrimination. By 2016, UNICEF supported the implementation and monitoring of inclusive, child and gender-sensitive education, including

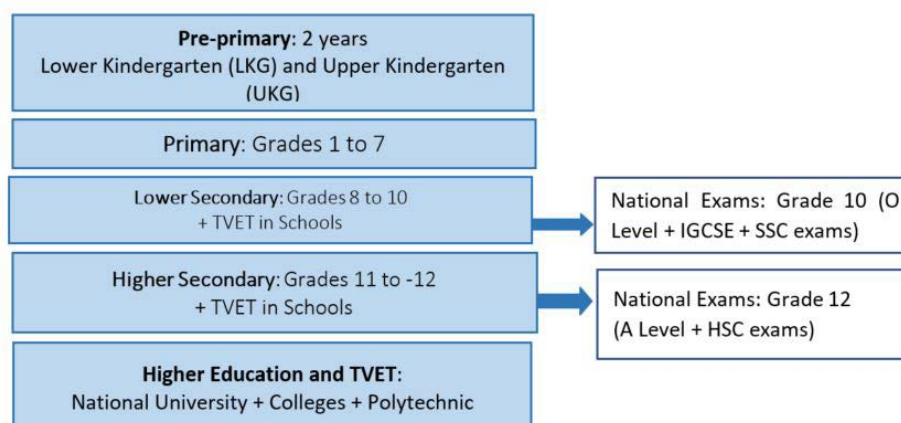
learning achievements with a focus on developing a monitoring mechanism for the implementation of the National Curriculum and operationalizing the SIQAAF. UNICEF’s Country Programme (2016 –20) advocates on the importance of Early Childhood Education (ECE), on improving transition rates to Higher Secondary Education, especially in remote islands, on inclusion and equity across sectors, on multi-hazard risk assessments into development plans at national and local levels, on supporting programmes for Out-of-School Children (OOSC) and Out-of-School-Youth (OOSY), with development of alternative and flexible learning programmes, among others.

1.6 Overview of the education system

Stages and schools of the education system in the Maldives: Until recently, education and skills have been provided in the Maldives through the following stages of the education system:

- 2 years of Preschool Education
- 7 years of Primary Education
- 5 years of Secondary Education (3 years of Lower Secondary and 2 years of Higher Secondary)
- Skills development (TVET) and Higher Education programmes through colleges and universities (Figure 1.2).

FIGURE 1.2: STRUCTURE OF THE EDUCATION SYSTEM IN THE MALDIVES



Note: IGCSE: International General Certificate of Secondary Education

SSC: Secondary School Certificate.

HSC: Higher Secondary School Certificate

However, with the introduction of a new National Curriculum Framework (NCF) in 2015, 14 years of schooling covered in the National Curriculum are divided into four distinct phases and six key stages as shown in Figure 1.3.

FIGURE 1.3: PHASES OF SCHOOLING AND KEY STAGES

Age	Grade	Key Stages	Phase	
18	12	Key Stage 5	Higher Secondary	
17	11			
16	10			
15	9	Key Stage 4	Lower Secondary	
14	8			
13	7	Key Stage 3		
12	6			
11	5	Key Stage 2		Primary
10	4			
9	3			
8	2	Key Stage 1		
7	1			
6	UKG			
5	LKG			
4		Foundation	(Foundation (Pre-Primary	

Source: National Institute of Education, 2016

The NCF identifies four main phases of schooling: foundation, primary, lower secondary and higher secondary. Each phase targets a specific age group, and thereby, developmental level. The focus of learning and its pedagogy differ from phase to phase; and each one ensures creating positive learning experiences as to foster their holistic development and promote optimum learning. At each phase, the learning outcomes that students are expected to achieve are specified. At primary, lower secondary and higher secondary levels the learning outcomes are further divided into key stages. The key stages enable to categorize the students' progress and to allow achievable future targets to be set. Two national examinations are administered at KS 4 and KS 5 (Grades 10 and 12).

The 2 years of Pre-primary, operated on behalf of the communities, have now been incorporated

into the public schools. At all levels, private providers are functioning in the delivery of education services.

The general education is delivered through a network of public and private schools. The public schools in Malé and the main islands offer a combination of Primary and Secondary Education. Overall, there are about 213 schools both public and private, offering Primary Education, 195 schools offering Lower Secondary Education, and 52 schools offering Higher Secondary Education (MoE 2018). The sum of the above schools does not add up to a total number of schools, as schools overlap in levels. All public schools (except 1), by default offer Grade 1 to 10 (Primary + Lower Secondary). However, some island schools may not have classes for LS, as children from some outer islands move to Malé or other islands, for better schooling, quite often. Thus, there are not enough students (5 is the minimum required) to make up a class. Higher Secondary is offered only in 3 designated schools, the Centre for Higher Secondary Education (CHSE) (Malé), the Addu High School (South), and the Jalaaluddin School (North).

The legal framework: With the first constitution of the Maldives (1932), the Government formally recognized its responsibility for the provision of basic education. This recognition is considered to be instrumental in driving basic social and economic development of the country. To date, there is no Education Act in the Maldives⁷. However, the 2008 Constitution of the country prescribes that everyone has the right to education without discrimination and mandates the state to provide free primary and middle school education⁸ and stipulates the provision of access to higher levels of education. Further legal requirements have stemmed from the ratification of the Convention on the Rights of the Child (1991), the enactment of the Law on the Protection of the Rights of the Child in the same year, with an amendment (2014), and the Preschool Act (2012). Furthermore, the ratification of the Convention on the Rights of Persons with Disability (2010), and the passage of the Disabilities Act (2010) have implications for the delivery of education in the country. The Local Governance Act (2010), also requires the Local Councils to organise and conduct education and vocational training programmes for adults. Additionally, the Maldives National University Act (2010) and the Islamic University Maldives Act (2015) provide a legal basis for state-funded university education in the Maldives.

In the absence of a specific Education Act, the above-mentioned Constitutional provisions, Acts, Presidential Decrees provide the legal framework for education in the Maldives. All national level educational planning must be done based on this broad legal framework. By 2014, the MoE had developed and commenced the implementation of the Education Strategic Action Plan (ESAP) for 2013-17 that was current at the time of initiating this ESP.

Education Policies and Reforms: With increased coverage and participation rate, the Maldives had placed a greater emphasis on addressing the identified quality and equity issues in education. By the time the international community migrated from MDGs to Sustainable Development Goals (SDGs) in 2015, Maldives introduced several reforms in the education sector, reflected in the 2013 -18 Education Strategic Action Plan. These reforms are supportive of SDG 4 targets for improving quality and equity in education which remain critical concerns at all levels of the system.

⁷ A draft Education Act has been in the Parliament under discussion since 2010.

⁸ Article 35 and Article 36, Clause (a) and (b) of the Constitution 2008. Subsequently the middle school requirement has been interpreted to cover secondary education.

Access, completion and achievement of learning outcomes: The overall primary Net Enrolment Rate (NER) in 2017 was 97%⁹, with 96.6% for females and 97.3% for males. For the year 2018, the primary NER is 95.9% with 96.3% for females and 95.5% for males. Gender parity is close to being achieved (at 0.94). The NER in the Lower Secondary is 90.5% with Net Enrolment for girls at 87.8% and Net Enrolment for boys at 92.9% percent¹⁰.

Despite these achievements, the system faces the challenge of a sharp drop in enrolment in Higher Secondary Education. The NER for Higher Secondary Education is 44.5%, with 50.4% for girls and 38.9% for boys in 2018 (MoE data). Policy actions are under implementation to address the issue of the drop-out between Lower Secondary and Higher Secondary (mainly through policies in establishing various educational pathways). While this does not fully address the low transition rates from the Lower to Higher Secondary Education, it offers an alternative path that provides a vocation-oriented education to students who are unable to cope with or not inclined towards a general education at this level. However, this strategy is under revision.

The quality of education at all levels is another major policy challenge for the Maldives. The analysis of the 2016 NALO shows modest results with substantial regional and gender disparities. The NALO conducted for the year 2017, shows that results dropped especially in grade 4, for Dhivehi and Mathematics, and improved slightly in English, while there is an improvement in Dhivehi and Mathematics in Grade 7. Table 1.2 provides a summary of student achievements in the above subjects for Grades 4 and 7 in 2015/2016 compared to 2017.

Table 1.2: Trends on students' achievements in Dhivehi, English and Mathematics in Grades 4 and 7 (2015-2017)

	Dhivehi			English			Mathematics		
	2016	2017	% Change	2015	2017	% Change	2015	2017	% Change
Grade 4	62.20	56.80	-5.40	52.90	53.17	0.27	57.50	57.04	-0.46
Grade 7	56.76	66.00	9.24	51.10	49.84	-1.26	44.60	49.47	4.87

Source: NALO 2017: Report QAD / MoE, April 2018.

The NALO 2017 confirms that in all cases, girls outperform boys. Also, while the majority of students are performing above the mean, there are a number of students ranging from 15% to 31%, performing below the minimum standards. The systemic issues of the learning outcomes identified through the NALO in 2016 and 2017 point to urgent action needed at lower levels in the education system. Such actions may help to retain more students in the mainstream general education in the higher grades.

⁹ From School Statistics 2018, Ministry of Education.

¹⁰NER is less than 100% as a number of students in 13-year age group are enrolled in primary. GER reaches 100%.

The NALO does not include established benchmarks on the distribution of the achievements within the maximum and minimum expected learning achievements.

There is a significant increase in students' pass percentage in GCE O' Level 5 subjects from 27% in 2009 to 77% in 2017 (MoE, 2018)¹¹. A key reason that made this possible is the channeling of students who are not performing well or not academically inclined, away from GCE O/L studies to alternative pathways. This has affected the number of students sitting the GCE O/L examinations. As such, this increase in GCE O/L pass rate needs to be viewed with caution, and while bearing in mind, the appropriate context.

While student performances at national examinations have shown improvement, geographic disparities remain and need to be addressed.

1.7 Achievements - Challenges (problem) and two theories of change

Increase in enrolments (K-12 grades) and school retention: The Maldives shows impressive achievements on equitable access to public and free of charge education services from K to 12, and free and compulsory education from K to 10, result of policies and policy initiatives implemented during the last 15 years (ESA, MoE, 2018). In Pre-Primary the NER is 92.6% for girls and 92.7% for boys. In the Primary schools (grades 1 to 7) the NER is at 95.9% with 96.3% for girls and 95.5% for boys.

The enrolment in the Lower Secondary has increased to 90.5% with 87.8% for girls and 92.9% for boys. The participation and success of students in O' level exams (end of grade 10), a ticket for the enrolment in Higher Secondary, dropped from 47% in 2014 to 46% in 2015 and rose up again to 60% in 2016. However, the pass percentage has dropped again to 58% in 2017.

There is a significant increase in the percentage of students who passed from the atolls, over the last four years for which data are available. In 2014, the percentage of students from the atolls who passed in five subjects was 38%. This percentage rose to 55% in 2016 and dropped to 51% in 2017.

Alternative paths in Lower and Higher Secondary schools produced a quick increase in school retention and in the number of students enrolled in TVET programmes (ESA chapters 3 and 5). Another notable process is the identification of students who fail to attend schooling or are at risk of abandoning schooling, with the activation of the Education Management Information System (EMIS).

The NER in Higher Secondary is low at 44.5%. The enrolment of 50.4% for girls and 38.9% for boys display a stark disparity between male and female enrolments of students above the age of 16. To ensure the continuity of education, further studies need to be carried out to identify, among others, whether the Higher Secondary education programmes provided in the Maldives are attractive or appropriate for male students.

¹¹ NALO 2017. MoE, Maldives

Challenge 1 (problem), the equitable access: how to complete access and retention for the identified small groups and increase enrolments in the Higher Secondary Education.

Despite the notable achievements on equitable access the last 15 years, from K to 10, a low enrolment of 44.5% of the age group in Higher Secondary is still persistent. On gender parity, while the country almost achieved gender parity, there is still a gap from K to 10. The gender parity is 0.94 for Pre-Primary and Primary, 0.93 for Lower Secondary, but the tendency is changing in the Higher Secondary with 1.34 with more girls enrolled in Higher Secondary than boys. While the “out-of-school students and students at risk to drop out” are largely identified, the follow-up responses are under design.

Challenge 2 (problem statement), improving learning and learning gap: how to equitably improve learning outcomes and skills by reducing the learning gap and by increasing participation and certification at the end of Lower Secondary (O' levels) as well as Higher Secondary (A' levels).

Despite key policies implemented to improve learning outcomes and skills, the NALO in English, Dhivehi and Mathematics, in grade 4 and 7 (NALO 2015, 2016, 2017), show mixed results with pronounced regional disparities, and learning gaps between those who outperform and those who perform at the lowest level (see Table 1.2). Therefore, while most students are performing over the mean, there are a number of students, ranging from 15% to 31% performing below the minimum standards.

Benchmarking with other similar countries cannot be performed accurately, since the country is not participating in the various international comparative assessments such as TIMSS and PISA among others.

Equity factor in learning: Girls outperformed boys in all 3 subjects in both grades 4 and 7 across the Maldives. A multiple regression analysis showed that in Dhivehi, students in the outer islands consistently outperformed students in Male', despite the lower percentage of qualified teachers in the outer islands. In English, students in Male' outperformed students in other islands. Results on tested competencies showed lower results in competencies based on higher order thinking. However, an improved version of the NALO instrument should include learning benchmarks to better identify the learning discrepancies and their distribution. At national examinations, student performances show strong improvement (in 2007 student pass in GCE O/Level improved from 27% in 2009 to 77% in 2017 (MoE 2018), but still with geographical disparities.

The theory of change 1 on how to improve overall learning and reduce the learning gap

The steps to change and strands of action; what we are going to do to improve the quality of education and learning? Quality education refers to learning and skills, including

socio-emotional skills for all students in the Maldives. “Learning” encompasses cognitive and non-cognitive dimensions, including language, mathematics, and socio-emotional skills and values, as defined in the NCF. Measurements on cognitive skills learning outcomes are used in the Maldives (the NALO) in the knowledge areas, English language, Dhivehi and Mathematics. Measurements of the socio-emotional skills are not yet operationalized in the Maldives.

Key factors impacting the quality of education and learning are the quality teaching and learning resources, the teaching and learning quality, the teacher qualifications, training and support, the 21st-century learning environment, and the enabling environment (Global Monitoring Report 2018, the World Bank). Considering the theories on how teachers change their practices (TALIS, OECD 2015), how students learn and perform higher level of cognitive thinking (PISA 2015, OECD; World Development Report, the World Bank 2018), policies should target the teaching and learning process in the classroom, while improving inputs, measurements and the enabling environment. The sole objective would be to improve learning and skills, including socio-emotional skills for all students and to reduce the learning gap. The framework with all factors impacting learning (ESA, Chapter 4), includes the key factors to improve learning outcomes in terms of inputs, process (in the classroom) outcomes (learning), enabling environment and system. In the case of the Maldivian education system, the key factors impacting learning are the following (see the schema below).

THEORY OF CHANGE 1

Challenge 1 (problem): How to complete equitable access and retention for the remaining groups and increase enrolments in Higher Secondary Education.

Challenge 2 (problem): How to improve learning outcomes and skills equitably and reduce the learning gap and pass rate and increase recognition after completion of the Lower Secondary Education.

Improve the Quality of Inputs and Outputs	Improve the Quality of Teaching and Learning Process	Improve Learning Outcomes, Reduce the Learning Gaps
<ul style="list-style-type: none"> -Equip schools and classrooms with the 21st Century state-of-the-art facilities and establish standards. -Support curricula reform by improving teaching and use of appropriate learning materials. -Strengthen in-service training and teacher support systems. -Provide appropriate and cost effective technology for enhancing teaching and learning in all schools. 	<ul style="list-style-type: none"> -Provide support to the teachers to improve teaching and learning on high-level cognitive thinking and skills, formative assessment, and corrective feedback. -Support schools/teachers on appropriate teaching and learning for the inclusion of children with SEN. -Strengthen the curricula implementation through cost-effective and innovative teaching and learning practices (E.g. Multigrade Teaching (MGT)). 	<ul style="list-style-type: none"> -Support the NALO and development of benchmarks. -Participate in international learning assessments for benchmarking.

System strengthening: Support School Improvement Plans with focus on Learning; Revitalize Teacher Resource Centers; Operationalize MEMIS and Quality Assurance Accountability Framework (SIQAAF) to monitor learning; Review impact of private lessons (tuition).

RESULTS

The result (Goal 1): Completed enrollment and retention from K to 12 for unenrolled specific groups, and (ii) Improved learning outcomes and reduced learning gap.

The result (Goal 4): The MoE at central and decentralized levels is strengthened to support quality schools to achieve measurable improvements in learning, skills and wellbeing.

GOAL 1, GOAL 4

Thus, the above theory of change suggests the following priority interventions to improve learning, and reduce the learning gap: use of the NALO and SIQAAF to inform on how to better implement the ongoing key policies, at the school level, through the SIPs. Since the existing policies touched already, on all factors impacting learning, there are few new policies to be introduced during the life of the ESP.

Challenge 3 (problem statement): how to expand equitably relevant and quality TVET in and out of schools in order to address skill shortages, and 21st century market needs, as well as youth unemployment.

TVET to address the skills shortage and unemployment: The Maldivian labour market with key areas, the Tourism, Construction, Fisheries, and Services, needs middle and high level managerial and technical positions to move towards sustainable development in the midst of climate change risks (World Bank, 2016). Key challenges remaining include high youth unemployment and a growing expatriate labour force, skills shortage, a mismatch of skills supply and demand, and an important number of youth, especially boys, not completing Higher Secondary following other paths, or inaction (ESA, chapter 5 and 7).

TVET in schools show tangible results, but still room for equitable expansion: Current country policies are focusing on providing alternative paths within the school system (Dhasvaaru and BTEC), to improve youth skills, including employability. As a result, a strong increase in enrolments in TVET in schools with BTEC and Dhasvaaru is tangible; however, it is often viewed as a substandard programme, and is offered through schools collaborating with local employers, with limited knowledge and facilities to conduct such programmes. A more inclusive and holistic education approach is needed to address this challenge. It is expected that in-school TVET programmes will be restructured to better suit the need. More pathways offered in higher secondary aim to retain more students to complete their education, although resources are missing in outer islands.

Revitalizing Maldives Polytechnic (MP) to stimulate access to quality TVET: By 2018, there was a clear effort to reshape and expand the TVET, through strengthening public TVET providers, with free of charge programmes, the private colleges and youth community organizations (ESA, chapter 5). Maldives is trying to revitalize the MP to boost demand, to respond to the market needs and reach out to the atolls as well as women and the economically disadvantaged. The reorganisation of the MP is aiming at enhancing the quality of TVET programmes, strengthening linkages with, and responsiveness to economic and labour market needs, and reaching out to more youth and adults in the atolls, including the most economically disadvantaged. TVET Authority is also strengthening its quality assurance and regulatory role, by refocusing its mission on implementing the quality Assurance Framework ensuring minimum quality of the various forms of TVET programs.

Challenge 4 (problem statement): How to expand Higher Education, improve the structure and quality and ensure its economic and social relevance in a cost-

effective way.

The MPHE (2017-2022) is a comprehensive document and blueprint for Higher Education. The master plan was intended to guide institutional and sector development of Higher Education. Its implicit theory of change, to address the key challenge, is to develop and implement the key policies (and activities) based on the **five** main areas of Higher Education: the desired size and structure of Higher Education, governance of Higher Education, quality of Higher Education, economic and social relevance of Higher Education, and budget and financing of Higher Education. It is expected that this Master Plan may be revised to align with the new policy pledges.

The theory of change 2 on:

(A) How to develop skills for employment, decent work and entrepreneurship in the Maldives. The ESP 2019-2023, responds to the challenges of equitable expansion of TVET, relevant to the country's 21st century economy through three strategic axes:

Axis 1: Continue to expand TVET in schools, through alternative paths and Secondary Education streams relevant to the labour market.

Axis 2: Increase expansion of TVET by revitalizing the MP's role, while recognizing the private sector, and supporting the youth organizations; boost demand for high quality TVET programmes, and include the outer islands and the financially vulnerable, and promote equality for girls and women; strengthen TVET linkages with, and responsiveness to the economic and labor sectors' needs.

Axis 3: Enhance programmes' quality delivery and impact for skilled youth and adults, by strengthening the quality assurance mechanisms and the regulatory role of TVET Authority.

(B) How to expand Higher Education, improve the structure and quality, and ensure its economic and social relevance in a cost-effective way.

The MPHE (2017-2022) is a useful document and was developed as a blueprint for Higher Education for the next 5 years. The Master Plan was intended to guide institutional and sector development of Higher Education. Its implicit theory of change to address the key challenge, is to develop and implement the key policies (and activities), based on the **five** main areas: the desired size and structure, governance, quality, economic and social relevance, and budget and financing. More recent studies have highlighted the complex scenario of gendered differentials in terms of participation, retention and completion of higher education in the small, but expanding higher education system in the Maldives (Shafina, 2019). With the expansion of the higher education sector and the widening alternative delivery modalities, (Shafina, 2019) participation, particularly among females, has improved. The Master Plan is now in need of revision due to some significant policy changes in Higher Education under the new administration (see Section 1.8, Key Policy Priorities).

HE size and structure: Spread the public sector Higher Education delivery; support the private Higher Education expansion; enhance the use of open and distance learning (ODL); promote growth in key disciplines.

HE governance: Clarify roles and responsibilities of private and public providers; the autonomy of higher education institutions (HEIs); development of protocols and processes for accountability; strengthen the governance of HEIs; support the HEIs to undertake relevant research.

HE quality: Improve internal and external validation and audits to ensure quality; strengthen the quality assurance mechanisms of Higher Education;

Economic and social relevance: Increase enrolment, matching demand and supply, by diversifying fields/disciplines, strengthen employment-related programmes; support research as an instrument of socio-economic development; develop online programmes/e-learning; facilitate lifelong/continuous learning.

Budget and finance: Flexible modes on financial assistance to students (scholarships, student loans under revised terms); free undergraduate studies in the country, specific funding to support research and innovation; promote schemas of public-private funding, and institutional versus individual funding, including funding from agencies and industries.

It is expected that the action on the above areas will help to achieve the expected result: 65% GER in Higher Education (Levels 5-7) by sex and geographic areas, and employed within 6 months from graduation.

The theory of change 2 encompasses both, the TVET challenge and the Higher Education challenge (see schema below):

THEORY OF CHANGE 2

Challenge 1 (problem): How to expand equitably relevant and quality TVET, within schools and out of schools, to address skills shortages, 21st century market needs and youth employment.

(Goal 2)

Challenge 2 (problem): How to expand Higher Education (HE), improve its structure and quality and ensure its economic and social relevance in a cost-effective way. **(Goal 3)**

ACTIVITIES

TVET Expansion: Review BTEC and Dhasvaaru and continue to expand TVET in schools by expanding pathways at the Secondary and Post-Secondary Education levels relevant to the labour market. Revitalize the Maldives Polytechnic, recognize the significant role of private providers and support the youth organizations; increase demand by supporting innovative delivery in the outer islands, support girls' participation in TVET; strengthen linkages with the labour market.

TVET Quality Assurance: Strengthen the quality assurance mechanisms and the regulatory role of the TVET Authority.

HE Size and Structure: Increase the public sector HE delivery, support the private HE expansion and enhance the use of innovative pedagogical practices to promote growth in various disciplines.

HE Governance: Clarify roles and responsibilities of private and public providers; address issues of autonomy of HE institutions; development of protocols and processes for accountability; strengthen the governance of HE; support HE to undertake relevant research.

HE Quality: Improve internal and external validation and audits in order to ensure quality and accountability; strengthen the quality assurance mechanisms of HE.

Economic and Social Relevance: Increase enrolment to match demand and supply by diversifying fields/disciplines; strengthen employment-related programmes; support research as an instrument of socio-economic development; develop online/distance and other modalities of learning/e-learning; facilitate lifelong/continuous learning.

Budget and Finance: Flexible modes of financial assistance to students (scholarships, student loans under revised terms); free undergraduate studies in the country, specific funding to support research and innovation; promote schemas of public-private funding and institutional versus individual funding, including funding from agencies and industries.

RESULTS

The result (Goal 2): More youth and adults, male and female, in the capital and outer islands, have the skills and competencies through TVET, and are integrated into the labour market and entrepreneurship.

The result (Goal 3): 65% GER in HE (Levels 5 -7) both by gender and geographic areas, and employed within 6 months from graduation.

GOAL 2, GOAL 3

1.8 Development and maintenance of a credible EMIS

The EMIS system was initially developed and launched in mid-2017 in response to the requirements of the MoE and relevant international partner organizations to facilitate education data collection, evaluation, and to inform policy-planning and education programming initiatives in the country. The system was customised and branded as the Maldives Education Management Information System (MEMIS). Chapter 8 of the ESA examined and discussed the launching of the MEMIS, its value, its designing and implementation routine for data collection from schools, and integration of databases for decision making to improve learning outcomes. The chapter identified a set of 16 recommendations to further develop and make the MEMIS more effective and sustainable.

As the agendas of the MoE, MoHE, and international partners, as well as technological possibilities change, the utility and efficiency of the MEMIS system are bound to be affected. As a result, it is important that the MoE, who manages and operates the MEMIS system, regularly and comprehensively reviews the system and the applicable limitations. At present, the MoHE is planning to develop its own EMIS platform. Both Ministries have expressed their commitment to addressing the findings of the ESA with respect to further development of EMIS systems.

The monitoring and evaluation of the ESP is highly dependent on a well-functioning EMIS platform. The MoE recognizes this need and at the time of completion of the ESP, the MEMIS team has been in the process of preparing an Action Plan to address many of the issues identified with the system. One of the major challenges in the process of implementation was found to be to make the system usage to the schools' culture. A lot of effort is still required to make sure that every school and relevant departments use the system more regularly. Lack of familiarity and inadequate training appear to be causes and will be addressed through the action. The functional use of MEMIS will be improved. In addition, the delay and duplication of work, identified by the current users will also be addressed. Developing MEMIS to the specific needs of schools and MOE, is identified as an important activity to make it fully functional within the education system.

More specifically, Sections 3.2.1 to 3.2.4 of the ESP Implementation Manual (Annex 6) discusses in detail the status of the EMIS system at MoE and identifies ways for the integration of the EMIS platforms with data systems in major departments/divisions at the MoE and MoHE. It is also suggested that at least once towards the end of the ESP implementation period, the MoE should review the technical suitability of the MEMIS system and consider acquiring or commissioning an improved version. With technological and analytical progress, newer systems can usually offer faster, more reliable data processing, increased analytical functions, and improved user-friendliness.

The new developmental programs will focus mainly on customizing MEMIS for the active use within schools and departments of the MoE. MEMIS captures required data up to grade 12. Within the MoE, for the management and administration, no other system is being used. However, there is a need to enhance MEMIS to fill the data gaps for the relevant KPIs.

The development and maintenance of EMIS across the sub-education systems in the proposed manner is estimated to cost USD 50,000 to 100,000 per annum. This includes the s cost for the

various capacity building activities as well.

1.9 Key policy priorities: an overview

With increased coverage and participation rate, the Maldives has placed a greater emphasis on addressing the identified quality and equity issues in education. By the time the international community migrated from MDGs to SDGs in 2015, the Maldives had introduced several reforms in the education sector, reflected in the 2013-18 ESAP and 2017 MPHE. These reforms are supportive of SDG 4 targets for improving quality and equity in education, which remain critical concerns at all levels of the system. With the change in government in November 2018, new policies have been proposed to reform the education system. Presented below are the existing and new policy priorities. Some of these policy priorities will guide the development of the ESP for the next five years, focusing on equity, quality, inclusion, and gender. A special emphasis of the ESP will be for improving the learning outcomes of all children and youth. The provision of Higher Education and TVET aims at enhancing economic growth of the country through expanding job opportunities; and responds to the needs of the 21st-century economy, including the use of ICT for enhancing the provision of 21st century skills for economic development, shared prosperity and reducing poverty.

Holistic Education Policy

The Holistic Education Policy was first introduced in 2009, but abruptly stopped later. The new Government aims to revive this policy from 2019 onwards. The purpose of holistic education is to offer a broad and balanced education that provides rich experiences in learning, with an equal emphasis on creating knowledge, developing skills and demonstrating values and positive attitude. It focuses on enhancing students' spiritual, moral, social, cultural, physical and mental development, and thereby, the overall wellbeing of the individual. Under the Holistic Education Policy, schools will be changed to single session schools. This policy also mandates schools to implement the national curriculum framework in response to constructive feedback received at regional, as well as the national level broad-based consultations held in February 2019. Schools will be assisted to review and develop more meaningful School Improvement Plans and implement them. The Holistic Education Policy also requires all schools to conduct life skills programmes, career guidance sessions, health education, hygiene and safety sessions and sports and co-curricular activities.

Inclusive Education Policy

The Inclusive Education Policy was first implemented in 2013. The policy is formulated for the inclusion of all children in education, including those who, due to various teaching and learning factors, achieve the curriculum targets and goals at an exceptionally high speed and those children who are unable to achieve the objectives in the most desirable manner. This policy outlines modifications to teaching methods, equipment and materials required, which need to be provided. It identifies the roles and responsibilities of stakeholders, in order to provide formal education to children with special needs, children who need additional learning support, and children under special circumstances. All matters relating to this policy is to be monitored and evaluated by the newly established Department of Inclusive Education.

Single-session Schooling Policy

The policy of making all schools in the country single-session was first initiated in 2009. Between the beginning of 2009 and the end of 2011, more than 45% of the government schools were made single-session. However, with the change of government in 2012, this policy was rolled back, and many single-session schools changed to double session. With an emphasis on changing all schools to single-session schools again, in 2019, the government initiated a schools' audit throughout the country. It was revealed that 134 schools already had the infrastructure and capacity to accommodate the needs of a Single-Session School. Needs such as additional classrooms, science laboratories, libraries, audio visual rooms, mess rooms, along with human capacity development needs to reach this target has been identified.

'Hen'dhunuge Naasthaa' (school breakfast) Programme

Provision of free breakfast in all school is one of the major pledges of the presidential campaign in 2018, of the coalition partners who won the election, and came to power in November 2018. This is a completely new policy shift in the history of the Maldives. This policy pledge was launched in January 2019, as a pilot programme in 25 of the 213 state schools in the country. The programme is being undertaken as a collaborative effort from ESQID, SA Division, Corporate Service Division, Finance Division and Procurement Division of the MoE. A committee has been established in each school to coordinate the activities at the school level to provide breakfast to the students. This committee consists of the school principal, a teacher, a leading teacher, a representative of parents and the school captain. Parental consent is obtained from the schools prior to implementing this programme. With support from health and nutrition experts, a healthy menu for breakfast was designed and developed. Well-nourished children are more active and alert, and have a longer attention span to concentrate on their learning tasks. In short, they are more educable and show greater readiness for learning. Health and wellbeing of the children are considered as the top priority of programme delivery. Following the implementation of this pilot programme in the first term of 2019, it is expected that this programme will be expanded to include all government schools from the second term of 2019 onwards. All aspects of this feeding programme will be closely monitored and evaluated during the pilot phase, prior to a decision on expansion and scaling up of this programme.

School-Based Management Policy

This policy was implemented in 2015. The objective of the School-Based Management Policy is to devolve more responsibilities to the schools; provide them with greater autonomy and flexibility in managing school operations and resources, and planning for school development. The School-Based Management Policy is expected to embrace the values of participatory governance, by involving all stakeholders of the school in decision-making, to ensure transparency and accountability, as well as the effective operation of the school. Key elements of the School-Based Management approach are: defining responsibilities, widening participation, developing professionalism, setting goals, evaluating the effectiveness and developing school specific

characteristics. The governance framework of the School-Based Management Policy rests with the school boards. Further development and refining of this policy is anticipated.

Multigrade Teaching (MGT) Policy

This policy was first implemented in 2016. The purpose of the MGT policy is to teach the grade-curriculum level of students, in two or more consecutive grades by one teacher. A primary purpose of teaching in multigrade modality is to develop students' social skills as they interact with their classmates, who are of different ages and of different grade levels. Furthermore, students can have greater opportunities for breadth in their studies, be exposed to differentiated teaching across the two grades and be able to engage in a more democratic learning environment. The adoption of this approach is also expected to contribute to cost effectiveness in terms of teacher utilization, especially in small schools while at the same time maximizing benefits to students. The NIE will undertake the monitoring and evaluation of implementation. It is expected that this policy will be further revised to better align with the objective of the policy pledges to deliver cost-effective innovative teaching and learning practices throughout the country.

Policy on Extra Support Systems in Schools

This policy was launched in 2016. This policy aims to assist students in achieving expected competencies in the curriculum through extra support. The extra support system of schools incorporates remedial support/class, extra class and enrichment programmes. Furthermore, through the extra support system implementation, students will be provided with additional support in three main categories; (a) Remediation, (b) For students who need further assistance to achieve the expected competencies in the curriculum, (c) to assist gifted and talented high achievers through more advanced and accelerated instruction, in order to enable them to achieve curriculum competencies at a higher level. It is expected that this Policy may be revised with a greater focus on diagnosing learning difficulties of students, so as to arrive at more targeted and effective interventions. In addition, the policy will focus on psychosocial support mechanisms to assist students in achieving expected competencies in the curriculum.

Health and Safety Policy

This policy was first implemented in the year 2011. The purpose of the School Health Policy is to promote a healthy lifestyle among students, by providing them with knowledge and skills that will enable them to take responsible decisions, to protect their own health and wellbeing. In addition, this policy will also improve the school and family environment, to enable the protection of the health and wellbeing of the students. To enhance the role of students in contributing actively and positively to the national health situation, and to ensure health and wellbeing is a key learning area, and healthy practices are key competencies to be instilled from the national curriculum, are some of the goals of the Health and Safety Policy. In addition to continuing health screening, medical checkups will commence in one grade (to be determined) during 2019.

Major programme to review and revise curriculum

Based on very constructive feedback received from large scale consultations held recently,

significant reforms are expected in the curriculum implementation, development and/or availability of teaching/learning materials and other resources, as well as training and/or re-training of teachers. Teacher professional development issues were highlighted strongly as a cause for poor implementation of the curriculum that resulted in poor learning in schools. Some specific points raised in the consultative forums include the following:

- Inadequate understanding of a new and conceptually more complex curriculum.
- Insufficient emphasis on curriculum-related training in the pre-service teacher education course, by the teacher training institutions.
- Insufficient attention given to practicum, and to the practicing of teaching skills in a micro-teaching situation during pre-service training of teachers.
- Teachers lack the skills needed to conduct student-centred teaching effectively.
- Lack of competence/fluency in the language of instruction (English).
- Questionable mode of teacher training by the providers (especially the focus on block-mode training).
- Inability to attract capable and talented candidates due to teaching not being perceived as an attractive profession.
- The inability of many teachers to undertake student assessment regarding certain competencies, some of which they do not fully comprehend.
- The limited ability of teachers to contextualize curriculum content to be taught, to facilitate student learning.

Free Higher Education Policy

With a new policy pledge, the government has introduced the Free Higher Education Policy in February 2019. Under this scheme, the two government universities will provide completely free courses for students who have been offered placement to study for a degree. Furthermore, under this policy, there is a certain percentage of the course fee for degree programmes offered by private colleges, that are to be subsidized by the government. The scheme may apply to twinning programmes, provided that a student is completing a longer duration of the degree coursework in the Maldives. Students studying under this scheme are expected to be full-time students, and upon course completion, will serve the country for a specified period of time.

Loan Scheme

The Ministry of Higher Education has introduced a revised loan scheme in January 2019. Maldivian students studying under the Higher Education student loan scheme will be given consolation in paying back the student loan, with a decrease in interest rate (and administrative charge) by 3 percent. Before the revision, the interest rate was 6 percent. Furthermore, the change in policy has also now given the students flexibility to pay back the loan in an extension of 25 percent of the initial time period.

High Achievers' Scholarship Scheme

According to the guidelines which were published in May 2017, the Higher Achievers' Scholarship was awarded to study in SAARC countries, China, Philippines, Malaysia, and Indonesia. The High Achievers' Scholarship is awarded to students who complete their GCE A/L, with A grades in three subjects, and A grades in Islam and Dhivehi. However, with a recent change in policy pledge, the government has changed the offerings in January 2019, to include programmes from OECD countries.

The Teacher Code of Conduct, the National Assessment Policy and the Teacher Licensing Policy will come into effect in the year 2019. Some policy pledges that have also surfaced due to the change in policy direction in the education sector. Such policies may include Decentralization Policy, School Transport Policy, and Teacher Training Policy, Junior College Policy, Lifelong Learning Policy and Residential Learning Policy.

Similarly, there are also policy pledges that may be formulated in the Higher Education sector, based on the policy direction of the Government. These may include Regional Training Centre Policy, TVET Policy, Distance Education Policy, Research Policy, Lifelong Learning Policy and policies relevant to the quality of Higher Education.

Other policies which are currently in place, and are expected to be revisited: They relate to: (a) Anti-Bullying, (b) Attendance, (c) School-Based Professional Development, (d) Behavior Management, (e) School Field Trips, (f) Risk Assessment, and (h) School Boards.

Other policies which are expected: (a) MQA Act, (b), Lifelong Learning/ Non-Formal and Informal Learning Policy, (c) and the Early Childhood Care and Education (ECCE) Policy.

CHAPTER 2: THE GOALS

The ESP is developed around **4 goals**; meant to mobilize resources to attain higher levels of achievements. They address the overall challenges in bringing about a system of excellence in learning, skills, and well-being for all children and youth in the Maldives. Each of the 4 goals addresses a well-defined specific objective addressed to the concerned challenge in, while linked to a measurable target.

2.1 Goal 1: Improved Learning for all, through equitable access to quality education

Target 1: (i) Complete enrolment and retention from K¹² to 12 for specific groups, and (ii) improve learning outcomes and standards by 20% and reduce the learning gap by 5%.

Key challenges (problem statement): How to: (i) Equitably complete, access and retention for all, and (ii) Improve learning outcomes and skills for all students equitably, and reduce the learning gap.

The Theory of Change 1 responds to the above 2 challenges (problems) as following:

Challenge (i): Equitably complete, access and retention for all. Data collection to better inform policy implementation for equitable access under the “Inclusive and Holistic Education” will be promoted. Encourage schools to place a greater focus on screening/identifying children at risk or falling behind, to diagnose the problems and take the appropriate remedial actions ¹³ especially in the outer islands. Additional analysis during the lifetime of the ESP is required to provide valuable inputs, in order to formulate new policies in the areas of responding to the needs of students at risk, of reducing the gender gap for both boys and girls, and of covering students with SEN in a cost-effective way.

Challenge (ii): Improve learning outcomes and skills for all students equitably, and reduce the learning gap. Improving learning outcomes will be driven by the implementation of the new curricula, the production of teaching and learning materials from K to10, the school-based professional development of teachers and other targeted training, the introduction of the SIPs as part of the SIQAAF. Despite the progress achieved in access and completion, the NALO 2016 and 2017 show mixed results on learning outcomes, with a pronounced learning gap between those who outperform and those performing poorly at the bottom.

The **Theory of change 1** ¹⁴ responds to the challenge (ii), through further interventions to improve learning outcomes by 20%, and reduce the learning gap by 5% during the ESP timeframe. This will happen by improving the implementation of national curricula taking into consideration the

¹² K1 refers to Kindergarten 1 or first class. This is also known as Lower Kindergarten (LKG) in the Maldives.

¹³ Quality Assurance Department, 2018. *A Snapshot of the Maldivian School System. Analytical Report of Issues and Challenges from the External School Reviews of 2016 and 2017.* QAD/MoE, Male, Maldives.

¹⁴ See schema Theory of Change 1, page 37.

constructive feedback received at the recently held National Curriculum Symposium, as related to content knowledge, values, skills and competencies; through assessment and revision of textbooks and teacher guides to better facilitate teaching and learning; strengthening teaching competencies such as: daily lesson plan preparation, formative assessment with remedial feedback, to help students who lag behind, improvement of content knowledge, systematic use of critical thinking processes; introduction of the above pedagogical and teaching methods into the initial and in-service training. At the system level, SIPs, as well as findings from the SIQAAF should be better oriented towards the improvement of learning. On strategies to address gender parity, since male students seem to have a disadvantage on learning outcomes, further analysis is needed on causes of male students performing lower, compared to girls. Strategies to address geographical disparities regarding learning performances will also be developed during the lifetime of the ESP. Finally, policies to improve equitably, performances at the national examinations (grades 10 and 12) should continue to be monitored to inform implementation (see Theory of Change page 37).

To address the challenges (i) and (ii), five policies are proposed:

Policy 1.1: Equitable access and completion from K to 12, especially for girls and boys, and children with SEN and at risk.

Target 1.1: 100% enrolment and retention from K1-K2, Primary and Lower Secondary for girls and children with SEN. And increase Higher Secondary enrolments for boys.

The ESA showed strong improvements in terms of equitable access to public and free education services. The new challenge is to complete access and retention for the identified specific groups, including girls, children with SEN, and students at risk, and increase enrolments in the Higher Secondary Education, especially for boys. Grounded on the ESA recommendations, key strategies to implement are:

Strategy 1: Identify reasons for the gender gap and develop a framework to address it for both boys and girls.

Strategy 2: Integrate the monitoring of children at risk of failing/dropping out, into the MEMIS, and use the lessons learnt to improve the implementation of existing policies.

Strategy 3: Develop and continue to implement the flexible and additional frameworks/ pathways established for students with SEN, exceptionalities (gifted, talented, etc.), at-risk, OOSC with a focus on outer islands, and measurement of results of these students.

Strategy 4: Strengthen public schools in the outer islands, through hiring quality teachers and providing effective methodologies of teaching and learning using ICTs.

Strategy 5: Strengthen educational programmes for children with exceptionalities and SEN through early identification, diagnosis and targeted interventions.

Policy 1.2: Improve learning equitably and reduce the learning gap, through effective curricula implementation

The **theory of change 1** identifies factors impacting learning and skills development, and it explains that, in order to achieve the learning target, the existing implementation policies should be monitored and assessed, to determine the extent to which they contribute to improving learning. For instance, in the light of the NALO results, curricula implementation should be improved with focus on more effective teaching practices, such as better lesson planning and school-based assessment for diagnosis of learning difficulties, remedial education, specific and appropriate use of technology to improve the teaching and learning process. The key strategies grounded in the ESA 2018 are:

Target 1.2

Strategy 1: Monitor, assess and revise curricula implementation, especially the teaching and learning materials and process in classrooms, from K to 12, including the MGT classes.

Strategy 2: Support teachers for better curricula implementation through SBPD with a focus on strengthening subject content, improving teaching methodologies including preparing better lesson plans, formative assessment, and effective learning strategies for teaching and learning higher level cognitive competencies and socio-emotional skills.

Strategy 3: Strengthen technology-based teaching and learning, for improved cognitive and non-cognitive learning outcomes, values, skills, attitudes and competencies.

Strategy 4: Enable access to assistive technology and other appropriate ICT tools for children with exceptionalities and SEN.

Policy 1.3: Learning assessment for improved, equitable learning and skills development and reduction of the learning gap

With the integration of K1 and K2 into the public schools in the outer islands, all young children of 3 to 5 years have access to the Pre-Primary education services. With this policy shift regarding access, the focus will be on the quality of the Pre-Primary services, ensured by appropriate inputs, curricula, teacher quality, pedagogical materials and enabling environment. During the life of the ESP 2019-23, a holistic early learning measurement (proxy) at the end of Pre-Primary should be developed to measure the impact of the Pre-Primary services for early childhood development.

Despite the strong results on access and completion, the NALO (2016 and 2017) show mixed results on learning outcomes with pronounced learning gap between those who outperform and those performing poorly at the bottom. In order to better measure the distribution of learning outcomes, the NALO instrument should develop learning benchmarks in the 3 subject areas: Dhivehi, English

and Mathematics.

Target 1.3: (i) Early learning standards (K2: end of Foundation Stage) are developed, piloted, revised, and regular use commenced in schools; (ii) learning benchmark is included in the NALO measurement tool.

Strategy 1: Establish holistic early learning standards at the end of Foundation Stage.

Strategy 2: Introduce learning benchmarks in the NALO instrument, to inform policies and actions to improve curricula and MGT implementations.

Strategy 3: Participate in international learning assessments for benchmarking.

Strategy 4: Strengthen coordination and joint work between the QAD and the NIE to inform curricula implementation on the NALO findings.

Policy 1.4: Enhancing teaching and leadership quality for improved teaching and learning

Within this policy priority area, teachers will strengthen their pedagogical practices, knowledge on the content of the curricula, and formative evaluation practices, that will help them to support weaker students to learn and build the needed skills. The training of teachers will be SPBD and ad hoc training on specific themes. The methodology used to train teachers will be evidence-based, practical and hands-on.

Target 1.4: Teacher quality and school leadership quality are improved by increasing the percentage of teachers who attain required professional standards. The percentage of teachers participating in the SBPD, and using selected key pedagogical practices will increase. The percentage of schools implementing SIPs to improve learning outcomes also increases.

Strategy 1: Revise benchmarks developed for teacher quality in identifying the Teacher Professional Standards. (May consider integrating the World Bank's "TEACH" approach into the framework indicators).

Strategy 2: Support schools on subject based in-service training and participation in the SBPD, to reduce the learning gap (develop modules, conduct training for relief teachers by the Teacher Resource Centres (TRCs)).

Strategy 3: Recognize positive school leadership and strengthen school leadership for the development of SIPs and mobilize community support to improve learning.

Policy 1.5: Enhancing the learning environment for effective curriculum implementation

Target 1.5: Ensure availability of library services, independent learning spaces and other study support mechanisms, and regularly utilize the internet for teaching and learning. Standards to achieve curricular competencies are developed.

Strategy 1: Monitor and improve physical accessibility, as well as health and safety conditions for all schools, including identification and readiness to address risk factors for students.

Strategy 2: Ensure library services and independent learning spaces in all schools.

Strategy 3: Ensure the availability of internet connectivity for learning.

Strategy 4: Create standards for schools for creating and sustaining effective learning environment.

The programmes stated below are developed through the lenses of equitable access and quality with a focus on improving learning outcomes and skills for all.

Table 2.1: Programmes and key activities

Programmes	Key Activities
<p>Programme 1: Holistic Pre-Primary Education (equitable access)</p>	<ol style="list-style-type: none"> 1. Access: Develop and implement a monitoring programme to ensure access to Pre-primary by creating additional learning pathways for those who may opt not to enroll. 2. Quality: Conduct training for teachers to orient them to the new curriculum, focusing on the needed pedagogical shift in teaching and learning. 3. Provide classroom focused support and in-school mentoring. 4. Develop policy guidelines and related materials (e.g. teacher professional resources) to promote holistic EFA, at the Foundation Stage. 5. Develop and implement a mechanism for monitoring teaching and learning, by focusing on instructional practices for students who may require extra support (focus on planning learning, delivery and assessment). 6. Conduct a programme to develop teaching and learning resources (flash-cards, audio, video, hands-on materials) for various levels and subjects, to learn how to use locally available materials. 7. Conduct a programme to support teachers on classroom practices on assessment. 8. Develop modules and conduct in-service training for curricular content upgrading, assessment and early intervention.
<p>Programme 2: Holistic Education for Primary and Lower Secondary Levels</p>	<ol style="list-style-type: none"> 1. Access: Develop and implement a monitoring programme to ensure access to Primary and Secondary Education by creating additional learning pathways for non-enrolled groups. 2. Quality: Conduct a comprehensive review of the teaching-learning process (along with a focus on school-based assessments) at these levels, for

	<p>identifying gaps in the learning process and areas to address on. (This could be done for selective subjects).</p> <ol style="list-style-type: none"> 3. Develop policy guidelines and related materials to promote holistic education at the Primary and Lower Secondary Levels. 4. Develop and conduct a literacy and numeracy programme in relevant key stages starting from Foundation Stage, that emphasizes screening children with learning difficulties, and introduce interventions to rectify them (addressing the results of the NALO and External School Reviews). 5. Conduct an analysis of the teaching and learning process and school-based assessments. 6. Identify patterns of students' instructional needs (based on lowest results) for remedial education. 7. Coordinate with relevant stakeholders and develop modules for teacher training, linked to the NCF (pre-service and in-service). 8. Assess and revise teaching and learning materials. 9. Develop teaching and learning materials for teachers in selected subject areas. 10. Review and revise alternative pathways (especially the Dhasvaaru programme) for their selection of students, subjects on offer, and how programmes are managed. 11. Develop study support services, such as career guidance, mentorship, and counselling in schools.
<p>Programme 3: Higher Secondary Education</p>	<ol style="list-style-type: none"> 1. Access: Develop and implement a monitoring programme to ensure access to Higher Secondary Education by creating additional learning pathways. 2. Develop a mechanism to systematically collect enrolment data of students in additional learning pathways at this level, including those who do

	<p>foundation/other programmes instead of regular grades 11 and 12 studies.</p> <ol style="list-style-type: none"> 3. Develop policies and procedures for the establishment of flexible and additional learning pathways for students with exceptionalities. 4. Review the achievement gaps between the results of grades 10 and 12 and identify factors inhibiting learning and progression. 5. Develop and implement a programme to offer Instructional support offered to teachers on selected subjects on planning, delivery and assessment with respect to the intended national curriculum.
<p>Programme 4: Teacher training and Professional development for improved teaching and learning</p>	<ol style="list-style-type: none"> 1. Engage with pre-service teacher trainers to review and revise the curriculum to incorporate effective curriculum pedagogies of the NCF. (This may require an audit of the existing programmes). 2. Conduct regular professional development programmes for teachers and relevant stakeholders for better curricula implementation (pedagogical shift, pedagogical practices, subject-based and MGT where appropriate). 3. Develop and assist in implementing modules for teacher training, including SBPD, with additional forms of delivery.
<p>Programme 5: Equitable access to quality education for students with Exceptionalities and Special Educational Needs.</p>	<ol style="list-style-type: none"> 1. Develop and apply learning framework (for students with SEN: curriculum and learning pathways) 2. Conduct specialised teacher (inclusive coaching) training on: <ul style="list-style-type: none"> • Autism spectrum disorders; • Behaviour modifications; • Specific Learning Disability (SpLD); • Functional assessment of children with SEN.

	<ol style="list-style-type: none"> 3. Establish an early identification and intervention system at school level, including age category (0-3 years). 4. Provide school-based therapy services for children with SEN (speech therapy, occupational therapy and behaviour modifications). 5. Strengthen the current MEMIS to track the progress of students with SEN, based on: (a) Curriculum outcomes, and (b) IEP goals. 6. Establish a mechanism to provide assistive technologies for children with SEN. 7. Revise and strengthen human resource capacity at the Department of Inclusive Education (DIE), to implement the Inclusive Education Policy with necessary revisions.
<p>Programme 6: Strengthening the existing school learning environment to reflect safety, health, conducive and technology-based, teaching and learning, to reduce risk factors for students.</p>	<ol style="list-style-type: none"> 1. Develop a set of (optimal) standards for classrooms to provide a holistic and inclusive education, ready for effective implementation of the NCF. (E.g. Design and develop a model school to offer holistic, inclusive, and equitable quality education in a single session environment.) 2. Ensure internet connectivity and technical support in all schools. 3. Continue the risk assessment as part of the school health screening and developmental screening programme. 4. Commence and conduct medical checkups in schools, commencing at the appropriate/practical grade level, in addition to school health screening. 5. Develop/revise and implement an anti-bullying policy. 6. Conduct awareness and orientation sessions on anti-bullying to the school community, including students, teachers, and parents.

<p>Programme 7: Free breakfast</p> <p>Free breakfast in all schools (all government schools).</p>	<ol style="list-style-type: none"> 1. Conduct a pilot programme with a method of studying the selected aspects (such as administering and managing the programme, eating habits, appropriateness of food menu, health and well-being, soft skills, etc.) of this new scheme. 2. Evaluate the pilot breakfast programme to learn lessons for the full roll out. 3. Scale up the programme to all 213 schools (from term 2 of 2019 (June 2019).
<p>Programme 8: Single session schooling</p>	<ol style="list-style-type: none"> 1. Conduct an audit of school infrastructure needs, to make all schools single-session schools in five years. 2. Prepare a physical facilities development plan for the next five years. 3. Conduct a human resource needs assessment and develop an HR plan for schools, in conjunction with the plan, to make all schools a single-session school. 4. Convert 5 schools into single session in 2019 using existing buildings and bringing necessary modifications and refurbishment.
<p>Programme 9: Extra support systems in school</p>	<ol style="list-style-type: none"> 1. Develop a policy for extra support systems in schools. 2. Develop activities to provide additional support in three main categories: (a) For those who need remedial classes, (b) For students who need further assistance to achieve the expected competencies in the curriculum to achieve the expected competencies in the curriculum, (c) To assist students who have exceeded beyond the expected competencies in the curriculum, to achieve a higher target. 3. Conduct remedial/extra classes and enrichment programmes as needed in schools.

2.2 Goal 2: Skills for Youth and Adults through equitable expansion of the TVET programmes, responding to the socio-economic and development needs of the Maldives

Target 1: 40% increase of skilled students through TVET, inside and outside the school, and increase their integration in the labour market by 40%.

Challenge 3 (problem statement): How to expand equitably relevant and quality TVET inside schools and outside schools to address skill shortages and curriculum competencies pertaining to 21st century market needs and youth unemployment.

The theory of change 2 responds to the above challenge (problem) through three strategic axes:

Axis 1: Continue to expand TVET in schools, through additional pathways and Secondary Education streams relevant to the labour market.

Axis 2: Increase expansion of TVET by revitalizing the role of the Maldives Polytechnic while also recognizing the important part played by the private sector; support youth organizations involved in TVET provision; strengthen demand for high quality TVET programmes; and include the outer islands, the social and financially vulnerable; and promote equality for girls and women; and strengthen TVET linkages with, and responsiveness to the economic and labor sectors' needs.

Axis 3: Enhance programme quality, delivery and impact for skilled youth and adults, by strengthening the quality assurance mechanisms and enforcing the regulatory role of the TVET Authority.

Five Policy areas for Goal 2 are defined below:

Policy 2.1: Expand equitable access to TVET, inside and outside schools

Target 2.1: 40% increase in enrolment and completion of students through TVET, inside and outside the school, while addressing equity in terms of geography, gender, and socio-economic background of learners.

The need for equitable expansion of quality TVET programmes is confirmed from the analysis of the labour market and economic demand for high-level skilled persons, the development model of the Maldives for the 21st century, the high percentage of youth unemployment, education or training needs, and the coverage of the labour market needs by a significant number of expatriates. The analysis of existing policies indicates the need to revisit policy initiatives and strategies to create demand for TVET and entrepreneurship programmes that bring more girls and women, as well as the socio-economically disadvantaged, to high-quality TVET programmes, and use

incentives to reach all islands, including the use of technology. At the same time, the status of TVET will be improved by building learning pathways between different education streams.

Strategy 1: Expand TVET up to Higher Education: Increasing opportunities for Higher Education by supporting learning pathways between different education streams (further studies and training opportunities), through need-based and merit-based scholarships and loans, as well as expanding vocational education courses at diploma and degree level.

Strategy 2: Expand pre-vocational and life skills down to lower grades through sampler¹⁵ courses for younger girls and boys: Introducing vocational education to younger students (e.g. grades 4-8) as sampler courses would help in familiarizing students to vocational education, and enable informed decision making for these students, when it comes to choosing a field of study.

Strategy 3: Expand TVET programmes in the Maldives Polytechnic and other decentralized units, through: (i) Resource mapping of the country, (ii) Trainers' availability to meet the demand across the geographical spectrum, and (iii) Conducting a training needs analysis.

Strategy 4: Develop behaviour change and communication strategies to reach out to the outer islands, and to attract and retain females and youth.

Strategy 5: Devise and implement a career path for people who have entered the workforce without any formal training, through appropriate instruments for recognition of prior learning.

Strategy 6: Develop policies relevant to Post-Secondary Education and provide a pathway for TVET and Higher Education.

Policy 2.2: Ensure high quality of TVET programmes and curricula focusing on both, work-related skills and soft skills, including entrepreneurial and ICT skills, through innovative and more flexible delivery modes and qualified trainers, through research and innovation

Target 2.2: 100% of TVET programmes have revised curricula/standards: use of flexible delivery modes and integration of technology; 60% trainers use innovative pedagogical practices, including assessments; and 20% reduction of dropouts.

The quality of the TVET services: As the analysis shows, the quality of existing TVET services needs to be improved, so that they become more attractive for youth, and more relevant for employers. The Government has conducted TVET Programmes through the Maldives Polytechnic with the aim of creating a skilled workforce that meets labour market demands. The programme has been diversified to offer training in hospitality and tourism, construction and building, agriculture, electrical wiring and engineering, and handicrafts. In addition, there are more than 80 training providers in the country. However, the quality of these TVET programmes is considered inadequate and youth graduating with technical and vocational qualifications can face lengthy job search periods.

¹⁵ Short course/sessions/classes that offer a sampling of what the longer, in-depth courses will offer.

A narrow focus on work-specific skills reduces graduates' abilities to adapt to the fast-changing demands of the labour market. Therefore, beyond work-specific skills, emphasis must be given to soft skills, to be used across a range of occupational skills. Learners should also have the opportunity for lifelong learning. In the Maldives, the development of high-quality curricula/standards and modes of delivery should aim to help students to acquire skills for work, and soft skills, ICT skills and capacity for lifelong learning. For that, courses should have up-to-date curricula, standards, innovative and more flexible delivery modes (including blended modes of learning and assessments, as well as study online from home, while continuing to provide mandatory practical sessions, through guided apprenticeships). The availability of various assessments adapted to learning profiles of students will help them to thrive.

Strategy 1: Modernize and renew TVET curricula/standards programmes for work-related skills, soft and ICT skills, and relevance, through: resource mapping, research and innovation, stakeholder participation, and with international industry benchmarks.

Strategy 2: Modernize and innovate the teaching and learning process, by including more blended learning techniques which are tailored to the needs of individual students, including a variety of assessment approaches; and promote the development of different forms of employer-based and institution-based training and learning, where possible.

Strategy 3: Increased use of appropriate technology in course delivery and assessment to support the mandatory practical sessions, and to reach students in the outer islands.

Strategy 4: Train qualified teachers on blended learning techniques; and usage of appropriate ICT for teaching purposes, including a variety of assessments tailored to the needs of students.

Strategy 5: Monitor and support students to complete TVET courses with success.

Policy 2.3: Ensure employability, retention, and relevance of TVET courses for the economic and labour sectors

Target 2.3: Increase the number of skilled youth and adults that seek and find a job, and engage in entrepreneurship after one year of completing the TVET programme, by 20%.

Given the need for skilled youth and adults, including employer-based skills, soft skills, ICT and entrepreneurial skills, in the Maldivian economy, the TVET providers should further strengthen TVET linkages with, and responsiveness to, the economic and labour sectoral needs. The need to first and foremost establish a baseline for this target is essential. There is a need to track students and help the qualified youth and adults who complete the qualifications to find jobs as well as to monitor their job retention status etc. Reaching out to those who are less motivated and encouraging them to complete the training, and bringing them back to complete the training is also vital. It is recommended to strengthen linkages with training, work and employment. Strong monitoring team is required to analyze the outcome of the training constantly, how the trained persons used their skills after their training, and their itinerary in the workspace, employment

and entrepreneurship.

Strategy 1: Reinforce institutes to provide TVET programmes with more relevant, updated curricula, and appropriate modes of delivery, for skills development through trade certifications, licenses, connections with employers (e.g. for work experience and other needs), employer-based training, and support of students for self-employment.

Strategy 2: Reviewing programme curricula and standards to provide work-based skills, soft skills, ICT and entrepreneurial skills.

Strategy 3: Develop a strong and sustainable job portal (e.g. Guraha) with a user-friendly interface, to reach all atolls and islands, and develop mechanisms for employment-seeker benefits.

Strategy 4: Provide pathways for trade licenses, trade certificates and credits, for prior- learning/ work experiences in skill areas, and inform relevant parties in a timely manner.

Strategy 5: Encourage the introduction of job retention strategies.

Policy 2.4: Quality assurance mechanism established through monitoring and evaluation, and flexible credentials for non-formal courses

Target 2.4: Operate standardized internal reviews on all TVET institutes/programmes using the quality assurance framework, and 80% of programmes will be externally audited.

The key functions of the TVET Authority are to enforce quality assurance systems in all TVET providers (public, private and community based), through the development of National Vocational Standards, the validation of the skills, and competence acquisition of students and the flexible recognition of non-formal forms of TVET (credits). The National Vocational Standards developed by TVET Authority are aligned to the levels described in the MNQF and approved by the MQA. Given the ongoing expansion of TVET to strengthen skills for employment, decent jobs and entrepreneurship, in the framework of the ESP 2019-2023, the implementation of the Quality Assurance Framework will be the central piece to achieve the quality TVET programmes relevant to the market economy. Quality assurance should include internal reviews and annual external audits to make sure that the standards and quality of programmes, teachers and trainers, as well as facilities, the interactivity of environment, and access to technologies are available and are of good quality.

Key strategies to implement the Quality Assurance Framework 2018-22 supporting equity, quality and relevance of TVET programmes are:

Strategy 1: Develop, review, and update and share the Quality Assurance Framework widely in a transparent way, including external audits, and internal reviews and standards.

Strategy 2: Ensure the quality, the availability and the update of facilities and other resources, including online access to such resources and facilities.

Strategy 3: Strengthen Teachers'/Trainers' quality through higher qualifications, as well as training and monitoring, to introduce a mentorship role, and a more interactive, blended learning and assessment models adapted to the students' profiles.

Strategy 4: Create a common platform for all institutes to share and integrate TVET data into a database.

Policy 2.5: Strengthening the capacity of the TVET system

Target 2.5: The Maldives Polytechnic, as well as its out-reach centres, and the TVET Authority are reinforced with managerial and technical expertise, while a platform for quality assurance is established.

The ambitious mission to make “every youth and adult skilled for the 21st century” through equitable, quality and relevant TVET programmes, requires a sound system of managerial and technical capacity (both in the center and in the outer islands) that is up-to-date on latest evidence-based practices on TVET programmes, for developing needed skills. The TVET leadership teams of the MoHE will need to commission research such as surveys, impact evaluation, and ex-post evaluations; to monitor impact and provide recommendations to improve or refocus the policy and strategies to achieve the vision. Thus, strengthening strategies to achieve system strengthening at central and decentralized levels needed are:

Strategy 1: Support TVET teams on establishing and implementing sound research practices, innovations, and impact evaluations, to better monitor implementation and refocus policies and strategies as needed.

Strategy 2: Strengthening the managerial capacity of the TVET providers and TVET regulatory authorities, including how to efficiently reach the TVET decentralised centres, using incentives, innovative information, communication technologies.

Strategy 3: Inform and support institutes and decentralised structures on the common platform for quality assurance, technical support and monitoring.

The above policy priorities, targets and key strategies are turned into results-based specific outcomes, programmes, and activities. Programmes address the underlying cause of the challenge, and are linked to targets as intermediary outcomes. The activities with their corresponding activity targets are also the outputs.

Below, the programmes are developed through lenses of equitable access and quality, with a focus on skills for youth and adults, for decent work, employment, and entrepreneurship.

Table 2.2: Programmes and key activities

Programmes	Key Activities
<p>Programme 1: TVET in schools: upstream and downstream expansion, with equity, quality, and gender and geographic equality and pathways between streams.</p>	<ol style="list-style-type: none"> 1. Evaluate the impact of BTEC and Dhasvaaru/internship programme. 2. Review the BTEC and Dhasvaaru pathways with a view to extending these options to all students. 3. Design and set up skills-based teaching/learning facilities for students in schools, based on the review and impact assessment. 4. Develop policies relevant to Post-secondary Education to build pathways for TVET and Higher Education.
<p>Programme 2: Skills Maldives: Expansion of equitable, quality TVET programmes by the Maldives Polytechnic and institutes for youth and adults, with gender, economic and geographic lenses.</p>	<ol style="list-style-type: none"> 1. Rebranding TVET to skills development. (e.g. Skills Maldives). 2. Carry out intensive promotional and awareness activities, to reach out to the outer islands, on access and benefits to the individuals and the community. 3. Conduct career guidance sessions to all stakeholders at decentralized levels. 4. Offer scholarships or financing opportunities to lessen the financial burden of the trainees in order to reach the vulnerable group of young adults. 5. Establish support groups and support activities for students from different communities, groups (especially women and vulnerable groups). 6. Provide free of charge courses to attract youth and adults to fill the demand 7. Introduce innovative pedagogical practices in the TVET programmes to attract students. 8. Develop and conduct vocational therapy classes for SEN students (could be considered a MP activity in collaboration with MoE).
<p>Programme 3:</p>	<ol style="list-style-type: none"> 1. Establish a quality assurance framework.

<p>Strengthen quality assurance mechanism and monitoring for TVET programmes.</p>	<ol style="list-style-type: none"> 2. Establish and support institutes for internal reviews and external audits. 3. Develop, review and update standards. 4. Strengthen the quality of the facilities and resources. 5. Reinforce and monitor the trainers' and assessor's quality. 6. Increase the capacity of the regulatory bodies. 7. Develop good governance policies and procedures for TVET institutes. 8. Conduct training programmes on good governance, develop and implement strategic plans to TVET based institutes and periodically monitor their implementation. 9. Publish annual statistics of TVET and graduate integration into the labour market.
<p>Programme 4: Ensuring employability of skilled youth and adults, girls, the economically vulnerable and geographically isolated.</p>	<ol style="list-style-type: none"> 1. Support TVET institutes to develop relevant and up-to-date high-quality programmes (with local and international industry accepted standards) and licenses based on international standards. 2. Establish a monitoring team within the TVET Authority, to analyze the outcomes of the training for job insertion. 3. Conduct a study on self-employability. 4. Develop a dynamic job portal (e.g. https://guraha.mv), with possibilities of matching skills and jobs 5. Develop policies and standards on setting up startup incubators.
<p>Programme 5: TVET system to be strengthened through better management and resource allocation at the centre, and outreach centres in atolls.</p>	<ol style="list-style-type: none"> 1. Support TVET teams to develop research, undertake innovative practices and conduct impact evaluations and monitor programmes. 2. Strengthen the capacity of the TVET institutes and regulatory authorities through exposure, training, and resource allocation. 3. Develop a common information and communication management platform to strengthen and support all institutes and decentralized structures. 4. Initiate regular meetings on the proposed platform.

2.3 Goal 3: Ensure equitable access to lifelong, affordable, and quality HE for all

Target 1: 65% in GER in Higher Education (Levels 5 to 7), by gender and geographic areas, and 15% employed after six months of graduation from Higher Education.

The Theory of change 2¹⁶, includes the chain of change for Higher Education.

The key challenge (problem statement): how to expand Higher Education, improve its structure and quality, and ensure its economic and social relevance in a cost-effective way

The MPHE (2017-2022) is a useful blueprint intended to guide institutional and sector development of Higher Education. However, the document first published in 2017 is now in need of revision, with significant policy changes since its publication. The overall objective of the master plan was to respond to the above challenge, by developing key policies in five main areas of Higher Education: the desired size and structure, governance, quality, economic and social relevance, and budget and financing.

Size and structure of Higher Education: With the increasing number of students who complete Secondary and Higher Secondary Education, the size and structure of Higher Education have become an important issue. The target of the Government is to increase the GER to a level where the Higher Education system should cater to at least 40% of the students who complete their Secondary Education. Accordingly, two public universities have been established in the Maldives through separate legislations; the MNU Act (03/2011), and the IUM Act (11/2015) and policies are being enacted to increase the share of growth in the private sector.

Below are the specified policies in relation to the GER in Higher Education, the percentage of share of growth in the public and private sectors, and the spread of public sector growth between the MNU, the Maldives Polytechnic and the IUM. The analysis in the master plan highlights how much expansion can be achieved by greater use of innovative pedagogical practices. Moreover, this master plan features the disciplines in which the national Human Resource Development Plan stipulates that growth is required.

Governance in Higher Education: Advances in the governance of Higher Education is one of the core points to be addressed in the MPHE. The focus is on the roles and responsibilities of the state and the private sector; the extent and nature of the autonomy of institutions engaged in the delivery of Higher Education services; the protocols and processes for the accountability of the various agencies in the Higher Education sector; and the management and organization of HEIs (World Bank, 2011). The MPHE identifies key policies and strategies for: (i) Strengthening the governance of the Higher Education sector, (ii) Role of the Government in encouraging HEIs to undertake relevant research, and (iii) Strategies the Government can put in place to strengthen its management of the HE sector, and hold the HEIs accountable.

¹⁶ See schema Theory of Change 2, pages 39-41.

Quality of Higher Education: According to the World Bank (2011), quality is at the heart of Higher Education. Quality of Higher Education is based on the effectiveness of the learning opportunities available to students, and ensuring that appropriate and effective teaching, support, assessment and learning opportunities are provided for them (ENQA, 2009). The MPHE's focus is on challenges faced in quality assurance and the recommendation of key policies and strategies for improving internal and external validation as well as audits to ensure quality assurance, and the strategies to strengthen quality assurance in Higher Education.

Economic and social relevance of Higher Education: Higher Education is a key determinant of the social and economic development of a country. Higher Education is the most powerful tool in alleviating poverty, enriching economic growth, producing a skilled human resource, creating a healthy and enlightened social environment, and creating independent nations (Malik, 2014). The MPHE recommends policies and strategies for increasing enrolment, matching demand and supply, diversifying fields/disciplines of study, strengthening employment-related programmes of study, incorporating core/generic knowledge and skills into academic programmes, supporting research as an instrument of socio-economic development, developing online/e-learning, and facilitating lifelong/continuous learning.

Budget and Finance of Higher Education: Higher Education financing plays an important role in improving the overall quality of HE (European Centre for Strategic Management of Universities, 2008). Likewise, streamlining and ensuring effective utilization of public funds allocated for the development of HE is very important (Malik, 2014). The focus of the MPHE is on policies and strategies for funding for scholarships, funding for research and innovation, public versus private funding, institutional versus individual funding, and funding from agencies and industries.

Policy priorities in five key areas

Following a substantial research and analysis of the Higher Education sector, in conjunction with the relevant literature, a number of policies and strategies have been recommended for each of these five areas. The recommended policies are:

Policy 3.1: Size and structure of Higher Education

Target 3.1.1: Achieve 65% GER in Higher Education over the next five-year period, while reducing the regional imbalance and gender inequality in Higher Education.

Strategy 1: Utilize various funding to steer HEIs to create additional Higher Education capacity, particularly at the regional level with a method of distributing programmes to various locations.

Strategy 2: Offer seed funding and physical resources, through a public-private partnership arrangement, to create avenues and cater to the students residing in the outer islands.

Strategy 3: Widen flexible learning opportunities by providing technical and professional support to both public and private sector HEIs to utilize innovative pedagogical practices, with the focus of expanding access to Higher Education across the country.

Strategy 4: Reduce communication costs and other learning support costs, for students and institutions.

Strategy 5: Take gender mainstreaming into account when expanding Higher Education opportunities nation-wide.

Strategy 6: Expanding Higher Education opportunities to students with SEN.

Target 3.1.2: Facilitate the development of specialized colleges/schools/institutes in fields in which the Maldives commands comparative advantage in Higher Education.

Strategy 1: Encourage public-private partnerships within the country and across the globe.

Strategy 2: Establish a mechanism for knowledge exchange and transfer, to facilitate the development of study fields, through specialised colleges.

Target 3.1.3: Develop a streamlined institutional structure of HEIs, which would enable increasing enrolment while catering to the diverse needs of students.

Strategy 1: Conduct broad stakeholder-based consultations on the proposed institutional structure, and periodically review them.

Policy 3.2: Governance of Higher Education

Target 3.2.1: Develop, govern and regulate Higher Education through appropriate legislation.

Strategy 1: Endorse the Higher Education Act.

Strategy 2: Review and revise the existing MPHE.

Strategy 3: Review and revise the existing Strategic Plan to formulate an action plan.

Strategy 4: Reinstate the Higher Education Council, to reflect various stakeholders contributing to the socio-economic development of the country.

Target 3.2.2: Strengthen the MoHE that consolidates all functions of Higher Education governance.

Strategy 1: Streamline the initiatives and the mandate of existing bodies, including the MoHE, the MQA and the TVET Authority, with a view to supporting the revised/updated MPHE and the

priorities identified by the revised/updated Strategic Action Plan.

Strategy 2: Develop the system of policy planning and governance of the HEIs through a consultative process.

Target 3.2.3: Enhance public accountability and management of HEIs.

Strategy 1: Train and encourage all HEIs to develop strategic plans.

Strategy 2: Require submission of annual reports of HEIs.

Strategy 3: Ensure public accountability and transparency of public HEIs through better management and achievement of performance targets.

Target 3.2.4: Support internal institutional governance of HEIs through regulation, technical support and guidance to promote good governance, and share experience and knowledge of good governance practices.

Strategy 1: Facilitate good governance and management structure (council and academic senate) of all the HEIs.

Strategy 2: Conduct good governance training which is mandatory to all the HEIs.

Strategy 3: Develop a guidance document on the core values and principles of institutional governance.

Strategy 4: Encourage to hold information dissemination sessions on good governance.

Policy 3.3: Quality in Higher Education

Target 3.3.1: Strengthen institutional auditing policies and procedures.

Strategy 1: Review and revise institutional auditing policies, guidelines and Standard Operating Procedures (SOPs).

Strategy 2: Ensure that quality assurance (QA) based auditing policies, summary reports and evaluations are publicly available and accessible.

Strategy 3: Develop mechanisms to follow up on the findings of institutional audit reports.

Target 3.3.2 Strengthen programme accreditation procedures and policies.

Strategy 1: Review and revise programme accreditation procedures and policies.

Strategy 2: Require HEIs to make policies relevant to programme accreditation, summary reports and evaluations based on QA activities, and encourage to make the documents publicly available.

Strategy 3: Develop mechanisms to follow up on the findings of the programme accreditation reports.

Target 3.3.3 Revise and strengthen the QA functions of the MQA, under the MQA Act.

Strategy 1: Endorse the MQA Act.

Strategy 2: Establish and maintain links and affiliations with reputable QA agencies and universities abroad, to get timely updates and information on good practices and innovations in QA.

Strategy 3: Involve key stakeholders including the HEIs in the development of external QA processes and procedures.

Strategy 4: Review and revise the guidelines and criteria for external QA.

Strategy 5: Conduct regular orientation programmes for HEIs on external QA policies, processes and procedures.

Strategy 6: Conduct annual training/refresher programmes for institutional and programme reviewers.

Strategy 7: Develop expertise across all HEIs to convene suitably qualified and experienced professionals to serve on external QA audit panels.

Target 3.3.4 Increase the capacity of the regulatory bodies, including the MQA, the MoHE and the TVET Authority.

Strategy 1: Equip the MoHE, the MQA, and the TVET Authority with appropriate resources and facilities.

Strategy 2: Address staff and skill shortage through the development of expertise.

Strategy 3: Train the MoHE staff with the relevant skills to carry out pre-registration functions effectively.

Strategy 4: Establish international partnerships for knowledge and resource exchange.

Target 3.3.5: Review and revise the MNQF.

Strategy 1: Consult with experts, HEIs and other stakeholders to revise the MNQF.

Strategy 2: Revise the MNQF and conduct orientation programmes for the HEIs.

Strategy 3: Implement and monitor the revised framework.

Strategy 4: The MNQF to be developed, to align MNQF with TVET pathways.

Target 3.3.6: Develop experts in specialized fields.

Strategy 1: Increase experts in specialized fields and develop teaching skills in experts

Strategy 2: Collaborate and establish links with foreign universities and quality assurance agencies to share resources and expertise.

Target 3.3.7: Develop occupational standards.

Strategy 1: Identify training needs in the country.

Strategy 2: Consult with key stakeholders, including industry representatives and the HEIs.

Strategy 3: Develop and design National Occupational Standards for the key areas identified in the Training Needs Analysis.

Strategy 4: Ensure integration of National Occupational Standards into learning programmes.

Strategy 5: Monitor implementation of such programmes, and periodically review and revise the programme to address the evolving changes and needs.

Strategy 6: Evaluate and recognize competencies learnt outside of formal education, including the trade certifications.

Target 3.3.8: Develop the ICT capacity of the regulatory bodies, including the MoHE, the MQA, and the TVETA.

Strategy 1: Establish facilities in the MQA, the MoHE, and the TVET Authority for collection and dissemination of information to its stakeholders.

Strategy 2: The MQA, the MoHE and the TVETA to develop and implement mechanisms to advise any person, body, institution, organization or interest groups, on matters pertaining to Higher Education regulation and QA.

Strategy 3: Acquire international certification such as ISO to ensure accountability of the MQA.

Policy 3.4: Economic and social relevance of Higher Education

Target 3.4.1: Collect and annually publish enrolment, retention and completion statistics, and systematically monitor demand and future training needs.

Strategy 1: Conduct a survey every three years; for school leavers to identify students' career and academic interests, to assess demand for various disciplines/areas of study.

Strategy 2: Conduct a national survey every five years to identify public and private sector employment needs; the disciplines/ areas (including TVET) required for the future labour market.

Strategy 3: Publish five-year projections of Higher Education (including TVET) demand and training needs; based on employment needs, economic development patterns, and the Government's development initiatives. These projections will be revised every three years.

Target 3.4.2: Initiate and facilitate the development of new academic programmes based on Higher Education needs projections.

Strategy 1: Provide seed funding and technical support to public and private institutions to initiate programmes based on the findings of the Training Needs Analysis.

Strategy 2: Develop a policy of public-private sector support mechanism.

Strategy 3: Invite and provide incentives to international institutions and investors, to collaborate with public and private sector HEIs to provide academic programmes in specialized fields.

Target 3.4.3: Develop industry-focused curricula to enhance curriculum relevancy and employability of graduates, and enhance the status, curriculum and delivery of the TVET qualifications.

Strategy 1: Conduct a national campaign to enhance the perception of TVET programmes and qualifications.

Strategy 2: Develop the concept of a twin approach to Higher Education that values both, academic and technical/vocational programmes equally.

Strategy 3: Encourage and enable providers of TVET programmes to obtain international recognition and accreditation from international bodies such as the UNEVOC.

Strategy 4: Facilitate diversification of TVET programmes through seed funding and technical support, and ensure that such diversification is in line with training requirements.

Strategy 5: Lead and liaise with institutions and industry partners to develop industry-focused

curriculum, to enhance curriculum relevancy of programmes, and the employability of graduates through training and upskilling.

Strategy 6: Create and maintain a database of industry-based experts and engage them in the Higher Education (including TVET) delivery.

Target 3.4.4: Develop a National Research Council to allocate, manage and fund research, and to ensure research becomes an instrument of socio-economic development of the country.

Strategy 1: Develop a National Research Council with sufficient funding and technical capacity to support the development of research, as an instrument for national development.

Strategy 2: Identify areas of research for national development.

Strategy 3: Establish a research fund with a sustainable mechanism to support research.

Target 3.4.5: Create an open, flexible and integrated Higher Education system that values prior learning, encourages credit transfer between local and international institutions, as well as TVET and academic strands, and facilitates life-long learning.

Strategy 1: Through the MNQF, establish and promote policies and procedures to enable the transfer of credit between the HEIs, locally and internationally. These policies and procedures will also include credit transfer between academic and technical/vocational strands of study.

Strategy 2: Establish a clear framework for HE entry for adults who have dropped out of the school system without achieving standard entry qualifications.

Strategy 3: Review and enhance the MQA's policy and procedures on acceptance and recognition of prior learning.

Strategy 4: Encourage and facilitate the integration of work-based (practicum) or experiential learning into Higher Education curricula.

Strategy 5: Develop and publish a set of core knowledge, values and skills that need to be incorporated into different levels of courses.

Policy 3.5: Budget and finance of Higher Education

Target 3.5.1: Creating and implementing a sustainable financing and investment model for Higher Education and Training

Strategy 1: Deploy innovative technologies that are more resource efficient.

Strategy 2: Ensure resources are allocated in a streamlined manner, with a focus on objectivity and sustainability.

Strategy 3: Integrate 'Green TVET' concepts into training and development.

Strategy 4: Create avenues to attract international students to niche areas such as Islamic finance, marine science, water sports, wellness etc.

Target 3.5.2: Increase the share of private sector participation in the provision of Higher Education in the Maldives.

Strategy 1: Increase the share of private sector contribution.

Strategy 2: Publicize and promote good industry practices and CSR initiatives, and encourage private-public sector partnerships.

Strategy 3: Facilitate investment capital for HEIs from the private sector through public-private sector partnerships.

Strategy 4: Encourage local and foreign educational investments.

Target 3.5.3: Extend equitable access to Higher Education.

Strategy 1: Strengthen the student financial support mechanism to increase participation in Higher Education.

Strategy 2: Develop a policy mechanism for regulating Higher Education costs, especially tuition fees.

Below, the programmes are developed through lenses of equitable access and quality with a focus on the increase of gross equitable access to quality Higher Education programmes.

Table 2.3: Programmes and key activities

Programmes	Key Activities
<p>Programme 1: Size and structure of Higher Education</p>	<ol style="list-style-type: none"> 1. Undertake a situational review to determine the current capacity of HEIs. 2. Develop a streamlined institutional structure. 3. Identify the key areas in which the Maldives commands comparative advantage in Higher Education and develop the areas (e.g. tourism, fisheries, Islamic finance, wellness, marine science, etc.) 4. Develop the guidelines/policies for innovative pedagogical practices. 5. Access: Provide free higher education for first-degree programmes. (Completely free in 2 state universities, up to 60% subsidized in private HEIs). 6. Revise higher education loan scheme to lower administrative charge, and extend the payback period. (Charge reduced from 6% to 3% and payback period made flexible, with an extension of 25% of the initial time period). 7. Develop mechanisms and guidelines, to assist youth and adults in higher education with SEN.
<p>Programme 2: Governance of Higher Education</p>	<ol style="list-style-type: none"> 1. Develop the appropriate legislation. 2. Review the MPHE through a consultative process. 3. Reconstitute Higher Education Council to reflect representatives from various fields. 4. Develop a guidance document on the core values and principles of institutional governance. 5. Conduct orientation programmes for HEIs on how to develop and publish strategic plans and action plans. 6. Conduct a workshop/seminar on good governance to all HEIs.
<p>Programme 3: Quality in Higher Education</p>	<ol style="list-style-type: none"> 1. Commence a programme to revise and strengthen the institutional audit, and the programme accreditation policies and procedures. 2. Undertake a comprehensive review of the MNQF.

	<ol style="list-style-type: none"> 3. Conduct a training programme for the staff of the MQA, on institutional auditing and programme accreditation. 4. Conduct a training programme for the staff of the MoHE on institutional registration and management of schemes/funds. 5. Train experts in specialized areas for curriculum review. 6. Develop professional/occupational standards in the core areas which are relevant to the current labour market. 7. Review High Achievers Scholarship Scheme. (List of countries allowed extended from SAARC countries, China, Philippines, Malaysia, and Indonesia, to cover OECD countries as well).
<p>Programme 4: Economic and social relevance of Higher Education</p>	<ol style="list-style-type: none"> 1. Create an ICT enabled working environment in the MoHE, the MQA, and in the TVET Authority by creating an information management system. 2. Conduct a Higher Education needs analysis. 3. Reactivate Sector Councils under the TVET Authority and develop industry-based curricula. 4. Establish a Research Council. 5. Establish a national fund for research. 6. Develop policies and guidelines for innovative pedagogical practices. 7. Develop policies for recognition of prior learning (RPL). 8. Develop policies for lifelong learning.
<p>Programme 5: Budget and finance of Higher Education</p>	<ol style="list-style-type: none"> 1. Seek local and international funding for Higher Education and research. 2. Consult with key stakeholders of the industry, and share good practices to encourage public-private sector partnerships.

2.4 Goal 4: System Strengthening for Efficiency and Quality Schools and Training Services

Target 4: 100% of schools implementing School Self Evaluation (SSE) and SIPs leading to measurable improvements in learning and skills development.

The theory of change ¹⁷ System strengthening will ensure that the MoE at central and decentralised levels, evaluates and monitors the work done by every school in the Maldives; and ensures that all schools implement SIPs with a focus on learning skills and well-being, are equipped with competent staff, have sufficient resources, financial stability and a conducive learning environment, and deliver towards learning improvement.

The key challenge (problem statement): How to strengthen the education system at central, decentralized and school levels, to implement SIPs, focused on how to improve teaching, learning, and skills for every student.

The overall policy is strengthening and focusing the whole system management and technical capacity at the MoE, including targeted departments, as well as all the TRCs to support SIPs towards improving learning, skills and soft skills for all students.

Policy 4.1: Strengthen the capacity of the system at the MoE and the decentralized entities (TRCs), to support schools for the development of 3-year strategic plans, learning-oriented SIPs, defining subject improvement plans, and for evidence-based innovation; to reduce learning gap, to succeed in the inclusion and development of skills, soft skills and wellbeing of students.

Target 4.1: 100% of schools undertake SSE and implement SIPs to carry out the supportive activities, comprising a focus on improving teaching, learning and skills with the technical expertise of the MoE and the TRCs.

Strategy 1: Strengthen the technical capacity of the key departments of the MoE on evidence-based innovations, to improve teaching and learning.

Strategy 2: Reinforce the financing mechanism of the MoE through sub-sector allocation, including to schools, with a mechanism to review allocation, expenditure, and impact evaluation, on learning.

Strategy 3: Increase staff and strengthen the technical staff capacity of the TRCs on evidence-based innovations; to improve teaching and learning, by upgrading their internet connectivity and

¹⁷ See schema Theory of Change, 1 page 37..

efficient usage of ICTs.

Strategy 4: Schools are supported to develop and implement the SIPs, with a strong component on improving learning outcomes, life skills and wellbeing, to promote holistic development of all girls and boys.

Strategy 5: Allocate an appropriate budget for the implementation of SIPs in respective schools.

Strategy 6: Guide schools to develop their 3-year strategic plans and SIP to the needs of the respective school to succeed in inclusion, and development of skills and wellbeing of the students.

Policy 4.2: Strengthening the Maldives Education Management Information System (MEMIS) for policy development and implementation to improve learning for all.

Target 4.2: The MEMIS is to be developed with the focus on sustainability, technicality, decentralisation and stakeholder partnership. Indicators are produced based on the MEMIS data collected, which are user-friendly, and shared with all the MoE departments (including QAD, NIE, and DIE) for policy development, and with all stakeholders and schools, to develop and implement SIPs, with key components on learning skills/soft skills improvement.

Strategy 1: Consolidate the MEMIS team and the facility, including school-based trained staff.

Strategy 2: Consolidate the indicators of the MEMIS database.

Strategy 3: Operationalize the MEMIS by providing access to all required departments. E.g. ESQID, QAD, NIE, DIE, TVET Authority).

Strategy 4: Strengthen school-based monitoring and support, through classroom observations, SSE, analysis of results, comparing national outcomes with international standards, strengthening school level assessments, and national level assessments.

Strategy 5: The system to be efficiently and cost-effectively customizable to serve the needs of its stakeholders.

Strategy 6: Continuous orientation and training at decentralized levels are necessary to self-sustain the system.

Policy 4.3: Implement SIPs focused on the adequate response to at-risk students, equitable access, and improve learning outcomes, skills/soft skills and wellbeing, through the SSE and external school reviews and the NALO results in accountability.

Target 4.3: 100% of schools in which a system of quality assurance self-evaluations is established, and findings incorporated in the implementation of the SIPs.

Strategy 1: Consolidate the SIQAAF for easier implementation through appropriate ICT support, and improving the usage of results by schools.

Strategy 2: Institute joint teams from QAD/NIE/DIE and have co-responsibility to understand and use the results of the NALO and external school reviews to improve curricula and training implementation.

Policy 4.4: Effective use of technology in the education system for the improved services delivery.

Target 4.4: 100% of effective use of educational technology (including ICTs) in schools, while all classrooms have internet connectivity for teaching and learning purposes, including the development of skills and soft skills.

Strategy 1: Schools to be well equipped with resources. (E.g. Human resources, physical resources, and continuous and efficient technical support.)

Strategy 2: Efficient integration of educational technology (including ICT) in the teaching and learning process of the NCF.

Strategy 3: Provide hands-on practical training for teachers, on the use of educational technology, (including ICTs) in the teaching-learning process, and to help students to overcome learning difficulties.

Table 2.4: Programmes and activities

Programmes	Activities
<p>Programme 1: Strengthening the MoE and TRCs’ teams to support SIPs focused on holistic learning outcomes and inclusion.</p>	<ol style="list-style-type: none"> 1. Institutional capacity at the NIE is comprehensively assessed and strengthened, to support the effective implementation of the NCF. 2. Undertake an audit of the existing infrastructure in schools. 3. Strengthening the capacity of staff of the NIE, QAD, ESQID and DIE, on evidence-based practices on learning, skills acquisition, inclusion, SBPD, through appropriate in-country workshops, and overseas workshops, short training and exposure trips. 4. Upgrading of educational technology (including ICTs) capacity of the TRCs and strengthening of human resources capability of the TRCs. 5. Monitoring SIPs implementation, and sharing results among all relevant departments of the MoE.
<p>Programme 2: The MoE’s Financial management to improve cost-effectiveness towards holistic learning for all.</p>	<ol style="list-style-type: none"> 1. Prepare cost-benefit analysis for learning outcomes. 2. Revision of financial reporting systems and practices, according to levels of the education system (e.g. Pre-primary, Primary, Lower Secondary, Higher Secondary, TVET, Higher Education).
<p>Programme 3: MEMIS strengthening for improved holistic learning for all.</p>	<ol style="list-style-type: none"> 1. Complete the revision and endorsement of the MEMIS Action Plan, and commence its implementation. 2. Consolidate the MEMIS team and the facility. 3. Consolidate the indicators from the MEMIS database. 4. Train at least 2 staff from each school and the MoE departments on MEMIS feed and use. 5. Operationalize MEMIS by providing access to all key departments of the MoE. 6. Continuous orientation and training programmes of the MEMIS. 7. Assess and analyze the financial sustainability of the MEMIS, with the scope for expansion.

<p>Programme 4: Strengthening the implementation SIQAAF and NALO.</p>	<ol style="list-style-type: none"> 1. Publish SIQAAF implementation policy and supporting documents by the end of Term 1 of 2019. 2. Build capacity of QAD team to implement the SIQAAF by the end of 2019 through a series of training programmes /workshops. 3. Provide training and guidance to schools regarding the SIQAAF and the NALO implementation by the end of 2019. 4. Publish the NALO implementation policy and the National Assessment Framework, including benchmarks and standards, by the end of Term 1 of 2019. 5. Conduct the NALO through MEMIS by the end of 2020. 6. Prepare and make available (online), guidelines for the use of the NALO data, for instructional purposes at the system and national level.
<p>Programme 5: Educational technology integration for quality holistic learning for all.</p>	<ol style="list-style-type: none"> 1. Train all teachers on the integration of educational technology (including ICTs) in teaching and learning, by the end of 2020. 2. Equip all schools with educational technology (including ICTs) related materials by the end of 2020. 3. Allocate a separate code in the schools' budgets of 2019 onwards, for the maintenance of the educational technology (including ICTs) equipment. 4. Train a selected group of school staff for ICT maintenance by the end of 2019.
<p>Programme 6: Empowering schools for effective school leadership and management.</p>	<ol style="list-style-type: none"> 1. Develop and conduct a training programme for school principals, for the enhancement of leadership skills and competence (especially new principals and deputies). 2. Develop standards for teachers' working conditions and work environment, including the availability of resources.

	<ol style="list-style-type: none">3. Conduct school-based management workshops (e.g. delegating of authority, the involvement of school community/parents, initiative taking, etc.).4. Conduct a training programme to upskill Leading Teachers. (This may require a total reconceptualisation of the role of Leading Teachers from compliance checking, monitoring and a focus on checklists, to a more professional and supportive role for teachers).
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CHAPTER 3: COST AND FINANCING

3.1 Introduction

This part discusses the cost projections for the ESP 2019-2023 for the Maldives. For this chapter, a cost projection model was developed based on the logic of the models widely used for education sector planning (such as the EPSSim model)¹⁸ and data availability, and structure of education spending in the Maldives. The chapter discusses the findings from this costing model, to achieve the goals outlined in this plan.

Since the ESP focuses on the MoHE, and its departments, as well as the MoE, and its schools and departments, the spending from the education sector is assumed as spending by the above-mentioned authorities, as the focus of this study is on the spending of these authorities. Throughout this chapter, any reference to the ministry is supposed to include both the MoE and MoHE. Public universities, budgeted training programmes from various organisations, and other training institutes vested in various government organizations are not included in the education spending. However, a crude estimation is made for spending, on HEIs, to estimate the functional cost of education.

The costing was originally made in 2018, calibrated to 2017's actual data. The model was updated with the new programmes of the new government in March 2019. The input data for 2018 were updated where possible. However, the model was not calibrated for 2018 actual outturn, and hence, the 2018 data in this chapter are estimates from the model.

This chapter is organized as follows: section 1 will discuss the methodology adopted in the cost projection model, followed by data and assumptions in section 2. In section 3, the discussion will be on real variables driving the cost, such as enrolment and teachers, and other key features. Section 4 will provide a discussion on the cost projections, including a discussion on 3 different scenarios for the levels of funding.

3.2 Methodology

A financial model was developed for the spending specificities in the Maldivian education system, with considerations of the modelling techniques and logic applied in widely used ESP costing models, such as the EPSSim. The model is better equipped to engage in a policy dialogue with the relevant parties, as it uses available data and spending structure, as well as specificities of the Maldivian education system. The level of sophistication and disaggregation is based on the policy interventions proposed in the ESP, and the availability of disaggregated data to set the baseline and targets.

The objective of the model is to project the financial resources required for all the operations under the ministry(ies) of the Maldives. The government provides for teachers' salaries, goods

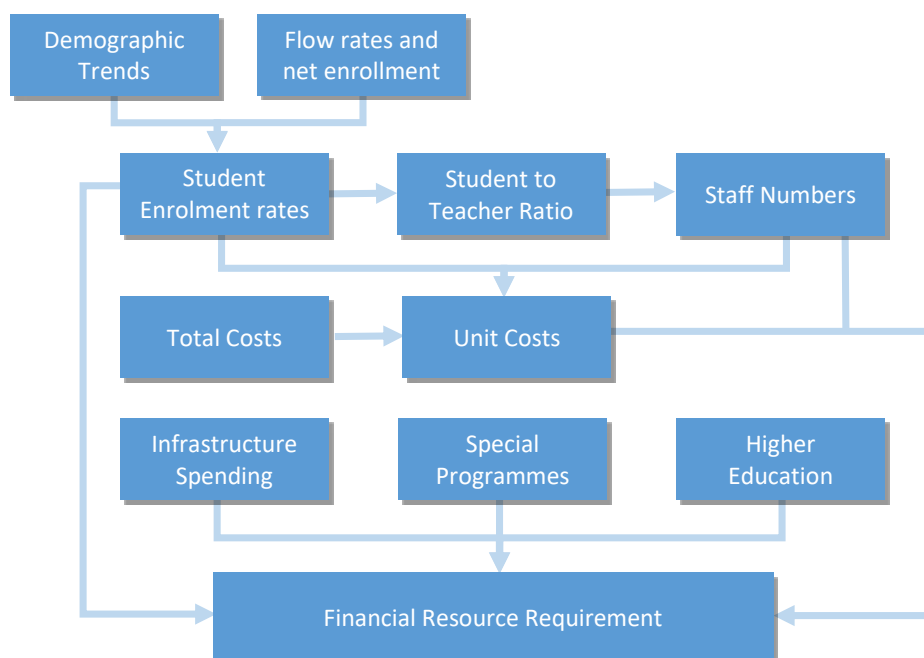
¹⁸ EPSSim Model

<http://www.unescobkk.org/resources/e-library/publications/article/epssim-user-guide-education-policy-strategy-simulation-model-versions-29b-and-29c-part-one-pl>

and services for schools and departments, school infrastructure, and trainings provided for teachers. Furthermore, the government provides free textbooks and stationeries to students in the form of subsidies. The government previously provided grants to preschools, although it is now internalized to the MoE as public schools are currently starting to provide preschool education. The spending on textbooks and stationeries is likely to change significantly in the near future as the government has embarked on a school digitization project, whereby there is an increasing push towards the use of digital resources in the delivery of education. Similarly, the government provides for lecturers' salaries, goods and services for national universities and the Maldives Polytechnic, and infrastructure of public HEIs. Furthermore, the government now provides free Higher Education in public HEIs, and a specified percentage of funding in private HEIs for those studying a bachelor's degree. Moreover, the government is also spending on loan schemes and scholarships for Higher Education.

The model is built using a demographic approach, instead of a budgetary approach. Population estimation has been made using the same mini model in the EPSSim framework, with flow rates and education objectives used as estimates for enrolments. Staff estimations are made using the pupil-to-teacher ratio as a policy variable, for both teaching and non-teaching staff. Past cost data and unit costs, and spending structure were estimated. These data are used to estimate the recurrent costs of the sector. Furthermore, mini-models were developed to estimate the infrastructure investments, based on the past and current spending data. Impacts of special programmes that are currently being implemented are estimated separately, as these programmes are not reflected in the past data. In addition, Higher Education is estimated separately, as the spending on Higher Education is incurred via scholarships and loan schemes (refer to Figure 3.1).

Figure 3.1: Financial modeling framework



The ESP timeframe is 2019 to 2023. However, forecasts are made for a 10-year period from 2018 to 2028.

3.3 Data and Financial Framework

Key inputs to the model are demographic data, baseline enrolment and staff data, public spending on education, past infrastructure stock in the education sector, and costing of special ongoing programmes.

The financial projection is made after the estimation of quantitative variables, such as enrolment and staff data, multiplied by either unit costs (based on enrolment or staff numbers) or structure of the spending with respect to salary expenditure.

Population data

Population data is obtained via the Census 2014, conducted by the National Bureau of Statistics (NBS) of the Maldives. The data used are updated data for 2017. Population projection is made by using the mini model as designed in the EPSSim Model.

Enrolment and staff data

Enrolment and staff data are used to set the baseline for the required projections. The data is mostly obtained from the School Statistics 2017, where it is available. Otherwise, it is obtained from the MoE and via consultations with the ministry officials.

Education infrastructure stock data

Infrastructure stock is the net book value of the cumulative investments made in the education sector. This series is maintained by the NBS for GDP estimation purposes, and is obtained from the NBS. This data is used to estimate the repairs and maintenance expenditure, and to set targets for the future infrastructure investment targets.

Public finance data related to the education sector

Public finance data for the education sector is used to calculate unit costs and the structure of spending. This information is obtained from the Ministry of Finance of the Maldives. The same data was used for the ESA conducted prior to the formulation of the ESP. Revised estimates of the fiscal outturn from the year 2018 were used to update the unit costs.

Costing of special programmes

The education sector is undergoing significant changes that will affect the structure of spending in the future. Specifically, the school digitization project will alter the spending, away from subsidies given to students for textbooks, towards much more capital and maintenance related spending. The cost estimate for such programmes is obtained via consultation with senior officials at the MoE.

Similarly, the MoHE is also expanding its services to include decentralized units to offer TVET/

polytechnic programmes. At the same time, the ministry has also announced its new programme under the Free Higher Education scheme, to fund students studying in bachelors degree programmes.

3.4 Financial model and assumptions

The design of the financial model is discussed in the methodology section above. It follows the logic and techniques used in the EPSSim Model, where data is available, but is tweaked in some respects to fit the context of the Maldivian education system better.

The following assumptions are made:

- **Population:**
 - Population projection is made using the approach in the EPSSim Model. Population growth specified in census 2014 – 1.65% per annum – is used.

- **Enrolment:**
 - Model estimation is based on the population projections and flow rates.
 - Private sector enrolments are estimated from the information available from school statistics, and constant share is assumed for each level of education, as available from the data.
 - Percentage of the population not enrolled is used to calibrate the initial model estimates with the baseline numbers. It is found that the “not enrolled” share is negative for Pre-primary and Primary levels (as corroborated by net enrolment ratio being higher than 100% in school statistics). However, it is also found that, on average, 9% of the Lower Secondary age and 55% of Higher Secondary age students are not enrolled.
 - The target levels of enrolment are that all school-age population to be enrolled from K to 10. Further, 60% of the age-specific population of students completing Lower Secondary Education will be enrolled in grades 11 and 12.
 - Promotion rates are assumed to be 99% and repetition rate as 1%, as the Ministry practices a policy that discourages grade repetition, it was informed that repetition rate would be less than 1%.
 - SEN enrolment (in a separate classroom setting) is 2.1% of the total enrolment in 2019 (updated as per the new data), and the same share is assumed across the projection period. It is also assumed that 15% of the enrolled students will require special attention, whether in a classroom or separate setting.
 - Polytechnic enrolment is calculated to be 0.8% of the 17-23 aged population. Since the ESP aims to increase the polytechnic enrolment, a target of 5% is assumed.

- **Staff:**
 - Teaching staff estimates are based on the student-teacher ratio. The national average

is 9 students per teacher. Preschool ratio is almost double this level, and hence, it is assumed that more teachers will be recruited in preschool level, to bring the ratio close to the national average.

- To accommodate the need for more teachers in KS 3 to fully migrate to the new curriculum, the student-teacher ratio is further improved in primary and lower secondary levels of education. In primary education, the ratio is decreased (i.e., fewer students per teacher, or an increase in a number of teachers for a given number of students) from 10.7 to 10 over a 5-year period. In lower secondary education, the ratio is decreased from 5.4 to 5 over 5 years. This will increase the number of teachers, to accommodate the additional teachers required to implement the new curriculum as per the key stages.
- Where there are untrained teachers, it is assumed that all teachers will become trained teachers in the 10-year projection period.
- 2% attrition rate is assumed.
- Non-teaching staff is projected based on teacher/non-teacher ratio, and apportioned across levels of education as per the proportion of enrolments.
- Salary expenditure breakdown considers the wage differential across levels of education, based on perceived levels and teacher qualifications required for each level.

- **Unit costs**

- Unit costs are calculated for goods and services, staff training, repairs and maintenance, subsidies and capital equipment spending.
- Unit costs for repairs are increased by 33% compared to the baseline, to accommodate future needs for repairs.
- The percentage share of salary expenditure (salary spending is related to enrolment via student/teacher ratios) for goods and services and capital equipment. This indicator is chosen because it has been consistent over the past 4 years.
- Teacher and staff training cost per staff (both teaching and non-teaching staff) are calculated to project cost of training.

- **Infrastructure and programmes:**

- Infrastructure stock is used to calculate the repairs and maintenance expenditure. It is assumed that 2% of the closing net book value of the education infrastructure shall be spent on repairs and maintenance.
- Infrastructure mainly consists of classrooms, and it is assumed that the useful life of a classroom is 20 years. Hence, the depreciation rate is 5%.
- 0.41% of the Nominal GDP is currently spent on education infrastructure. Since the spending on infrastructure is at an all-time high in the past 3 years, it is assumed that spending as a percent of Nominal GDP will go down within next 10 years to 0.20% in the normal path (excluding infrastructure scale-ups). This will provide space for the additional infrastructure required to accommodate the changes in the student enrolment in the future. In addition, an infrastructure upscale is required to achieve

the goals of this plan over the next 5 years. These include additional infrastructure required for single-session schools and the commencement junior colleges programme. Recurrent costs of the junior college programme were included in the special programmes section separately.

- Programme costs are estimated after consulting with ministry officials, after understanding the main cost drivers.
- The infrastructure needed for single session schools are included in the infrastructure programme. The MoE estimates that MVR 7.1 billion will be required as additional infrastructure investment, to change all schools to single-session schools.
- The costing for the ESP's Action Plan is included separately. The update of March 2019 included several new consultancies. To incorporate these consultancies and training and soft development activities, 5% growth is included in consultancy and training components of the ESP Implementation Programme.

- **Special programmes included in the model are:**

- **School Digitization Project:** The Ministry has decided to continue with the project in a changed scope. Costs remain unchanged, as the scope changes included cost decrements in some areas and increments in other areas. For example, there will be a heavy emphasis on network and connectivity.
- **Enhancing teacher resource centres:** This programme will seek to bridge the gap in training and development required for teachers, as planned in this document.
- **New technology adoption:** This programme will facilitate investment in the effective application of ICT tools, to facilitate learning and teaching as envisioned in this plan.
- **ESP Action Plan Implementation:** This programme is for specific and costed programmes under the ESP Action Plan that needs additional funding.
- **Student breakfast programme:** The Government elected in 2018 has already embarked on a feeding (breakfast) programme in schools, to provide good nutrition, which in turn can enhance educability, better learning and wellbeing, and hence, it is included in the plan.
- **Junior college recurrent costs:** To capture additional costs incurred by additional infrastructure investment in junior colleges.

- **Higher Education:**

- The estimates used in the MPHE 2017-2022 are used for Higher Education projections. While the universities have their own separate budgets, Higher Education expenditure is incurred for the MoHE via scholarships and loans. Hence, university spending is not estimated using numbers.
- It is estimated that 5% of the students enrolled in Higher Education will apply for the loan and scholarship schemes. 5% is calibrated using the baseline estimates and may not reflect the actual scenario, but is a calculation basis for the future years. As the Government is focusing on building a revolving fund for higher education, it is assumed that the direct contribution of the Government will fall to 5% of the total spending via the fund. The rest of the funds will come through the repayment of student loans to

the fund.

- It is estimated that 65% of the population between the 17-23 age group will be enrolled in Higher Education by 2023. In 2017, this ratio was 27.3%. The target is based on the target of Higher Education enrolment outlined in this plan. Of the total enrolment in Higher Education, 40% is attributed to the public sector, and it is assumed that this will grow to 50% in 10 years.
- To account for the changes in the loan schemes (longer loan repayment period and lower interest rates), government contribution to loan schemes has been extended, following a comparative analysis with the previous estimate.
- First-degree programmes estimate that enrolment of students of age 17-23, apart from those on the loan scheme, will be pursuing the first degree in the Maldives. The split of students to public and private institutions is assumed to be 50% each. Weighted average fee, derived from existing data (private – MVR 20,138, public – MVR 10,745) is used. It is planned that the Government will subsidize 40-60% of the private tuition fee under this programme.
- High Achievers' Scholarship is assumed to be based on the current spending scenario. It is assumed that 35 new students will be eligible for this scholarship scheme, in addition to existing 100 students pursuing studies under this scheme. The annual number of recipients will grow gradually to 100 in 15 years. It is also assumed that per student cost is MVR 200,000 per year, and it will grow by 1% every year.
- Research grants will be awarded to 15 parties in 2019, and will gradually increase to 50 recipients in 10 years. Average award size is MVR 65,000. It is expected that the average award size will also grow to a minimum of 10% within 10 years.
- Furthermore, consultancies and development programmes related to Higher Education are included separately.

- **High funding scenario:**

- High funding scenario is assumed by committing to a constant percent of nominal GDP, specifically 5%. Baseline estimate is 3.9%.

- **Low funding scenario:**

- Low funding scenario assumes at least the current level of actual education spending, adjusted for inflation. Inflation is assumed to be 2.5% per annum. This approach reflects a situation with significant budgetary constraints, and no additional fiscal space for new programmes.

- All estimations are nominal; unless otherwise specified.

- Inflation of 2.5% is assumed.

- Expected salaries increase of 15% in 2019 for teachers.

- Salaries will increase every 3 years by 5%.

3.5 Financial Model Logics

Based on the above assumptions, table 3.1, shows the estimation logic used for the expenditure breakdowns.

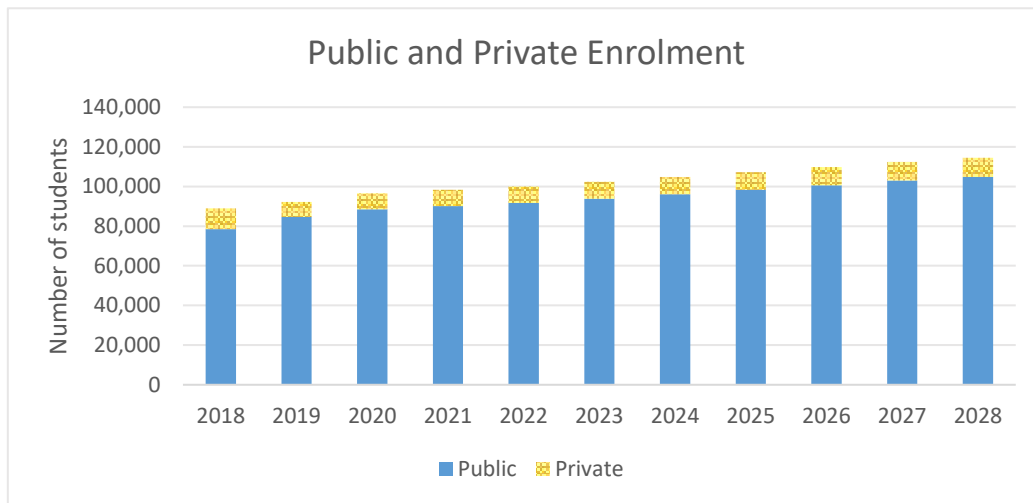
Table 3.1: Estimation logics for expenditure types

Expenditure Type	Estimation Logic
Teaching Staffs' Salary	Based on teaching staff breakdown and unit cost.
Non-Teaching Staff Salary	Based on non-teaching staff breakdown estimate and unit cost.
Goods and Services	% of salary expenditure (spending structure).
Teacher and Staff Training	Based on unit cost per staff and staff numbers.
Repairs and Maintenance	2% of the infrastructure stock.
Subsidies	Based on unit costs and student enrolment, assumed to reduce drastically due to digitization project.
Capital Equipment	% of salary expenditure.
Infrastructure	% of GDP + additional infrastructure needed for single-session schools.
Special Programmes	Specific costing for each programme.
Loans and scholarships	% of Higher Education enrolment applying for loans and scholarships, and gradual reduction in government contribution to the funding scheme. Scholarship programmes are also included, and each of the loan or scholarship programme is separately costed.

Key cost drivers

As the approach for modeling is on a demographic approach, the main factor influencing the cost is the enrolment of students in the public sector, based on the population. As per the school statistics, 15% of the school-age population is enrolled in private schools. It is estimated that the public share of enrolment will slightly increase, as the public share of enrolment as pre-primary enrolment is likely to increase due to more involvement of the public sector in this level of education (refer to Figure 3.2). Enrolment data will capture the effect of all changes, including policy-induced changes in enrolment to the costs.

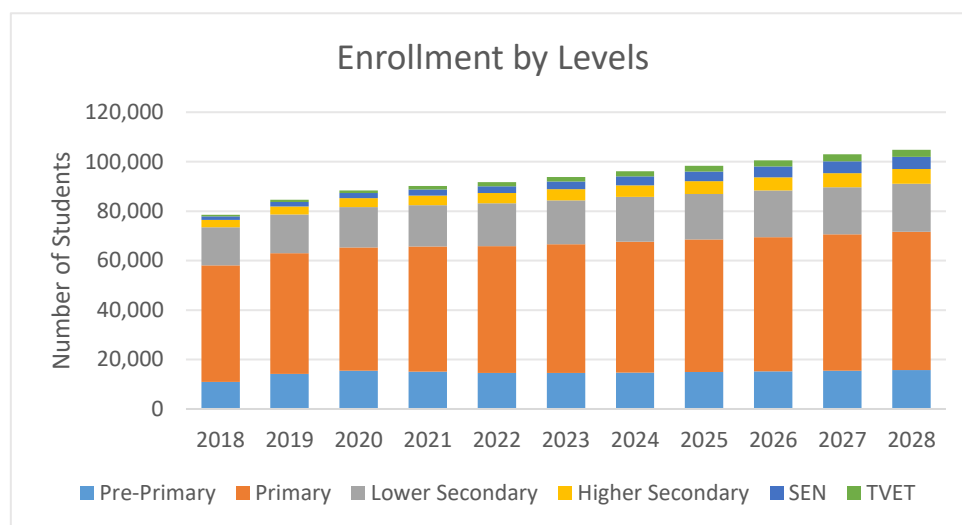
Figure 3.2: Public and private enrolments



There are 72,855 students enrolled in public schools of the Maldives, and a further 481 students enrolled in SEN classes and 501 students in polytechnic facilities in 2017. The MoE as a policy discourages grade retention, and hence, the repetition rate is extremely low for K to 12. SEN enrolments represent 2.1% of the enrolment. Polytechnic enrolments represent 0.8% of the 17-23 age group.

Enrolment grows at an average of 2.2% per annum over the 10-year projection period. K to 12 and total public enrolment is estimated to reach 97,345 by 2022 and 108,925 by 2028 (refer to Figure 3.3).

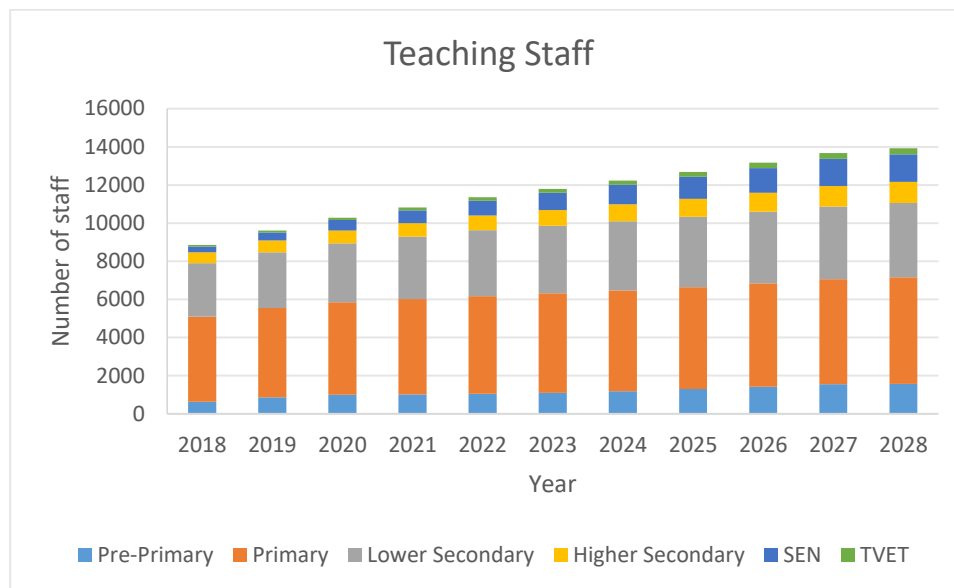
Figure 3.3: Public sector enrolment by the level of education



The largest portion of education spending goes to staff salaries. In 2017, 63% of the spending went to staff emoluments, higher than the past 4-year average of 58%. Hence, staff estimation is a key driver of the costs.

The teaching staff is estimated using student-teacher ratios by levels of education. Table 3.4 shows the student-teacher ratios at various levels of education. At an aggregate level, this ratio stood at 9.1:1 in 2017. As it is assumed that the current student-teacher ratio in Pre-Primary education will be reduced, the aggregate student-teacher ratio will reduce to 8.8:1 by 2027. The Maldives has an exceptionally low student-teacher ratio, largely due to the geographically scattered population across many islands (refer to Figure 3.4).

Figure 3.4: Number of teaching staff



In 2017, the number of non-teaching staff was at 4,339. There are 1.8 teachers to every non-teaching staff working in the education sector. It is estimated this ratio will be maintained over the next 10 years (refer to Figure 3.5), except for KS 3 of the education system. The new curriculum demands more subjects to be taught at KE 3 than before, and hence, more teachers will be required for grades 7 and 8. Hence, the student-teacher ratio is improved for primary and lower secondary levels of education.

Figure 3.5: Number of non-teaching staff

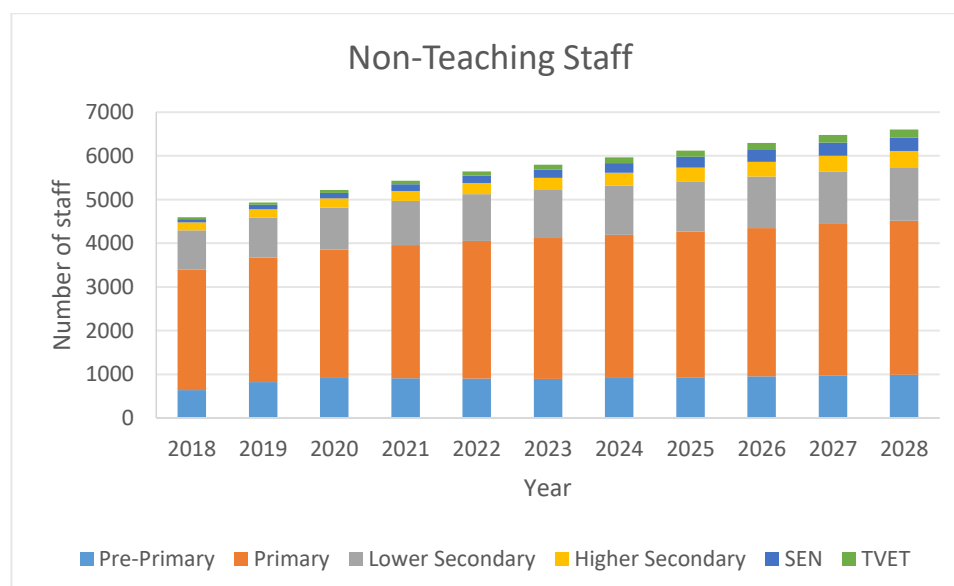


Table 3.2: Unit costs and spending structure

	Unit	2014	2015	2016	2017	2018	Average
% of Salary Spending							
Goods and Services		18%	24%	25%	22%	21%	22%
Teacher and Staff Training		1%	2%	2%	3%	2%	2%
Repairs and Maintenance		2%	2%	22%	3%	2%	6%
Subsidies		14%	23%	0%	17%	10%	13%
Capital Equipment		1%	3%	2%	4%	11%	4%
Unit Recurrent Costs							
Goods and Services	Students	3,933.9	4,992.8	4,524.0	3,715.9	3,446.3	4,122.6
Teacher and Staff Training	Students	181.7	323.5	427.2	483.0	290.8	341.2
Repairs and Maintenance	Students	342.7	477.7	4,025.8	514.7	295.8	1,131.3
Subsidies	Students	3,095.9	4,925.0	-	2,997.8	1,610.8	2,525.9
Capital Equipment	Students	311.5	542.0	361.3	723.7	1,867.4	761.2
Teacher and Staff Training	Staff	878.6	1,596.1	2,418.5	2,913.5	1,851.9	1,931.7

Table 3.3: Key indicators for levels of education

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Pre-Primary											
Total Number of students	16,461	16,641	18,226	17,729	17,212	17,088	17,370	17,656	17,947	18,243	18,544
o/w Public	10,947	14,145	15,492	15,070	14,630	14,525	14,765	15,008	15,255	15,507	15,762
o/w Private	5,514	2,496	2,734	2,659	2,582	2,563	2,606	2,648	2,692	2,736	2,782
Number of Teachers	639	866	997	1,021	1,048	1,103	1,193	1,295	1,413	1,550	1,576
Non-teaching Staff (apportioned)	641	825	914	908	901	898	916	935	955	976	993
Student-Teacher Ratio	17	16	16	15	14	13	12	12	11	10	10
Primary											
Total Number of students	49,594	51,346	52,496	53,295	53,947	54,873	55,615	56,336	57,116	57,958	58,864
o/w Public	47,115	48,779	49,872	50,630	51,250	52,129	52,834	53,520	54,260	55,060	55,921
o/w Private	2,480	2,567	2,625	2,665	2,697	2,744	2,781	2,817	2,856	2,898	2,943
Number of Teachers	4,456	4,677	4,848	4,991	5,124	5,212	5,283	5,351	5,425	5,505	5,592
Non-teaching Staff (apportioned)	2,757	2,845	2,942	3,050	3,156	3,224	3,279	3,333	3,395	3,464	3,522
Student-Teacher Ratio	11	10	10	10	10	10	10	10	10	10	10
Lower Secondary											
Total Number of students	16,355	16,668	17,231	17,759	18,299	18,764	19,156	19,472	19,793	20,120	20,466
o/w Public	15,390	15,701	16,249	16,765	17,292	17,751	18,141	18,459	18,784	19,114	19,443
o/w Private	965	967	982	995	1,006	1,013	1,015	1,013	1,009	1,006	1,023
Number of Teachers	2,806	2,927	3,099	3,273	3,458	3,550	3,628	3,691	3,756	3,822	3,888
Non-teaching Staff (apportioned)	901	916	959	1,010	1,065	1,098	1,126	1,150	1,175	1,203	1,225
Student-Teacher Ratio	5	5	5	5	5	5	5	5	5	5	5
Higher Secondary											
Total Number of students	4,519	4,933	5,338	5,753	6,179	6,621	7,083	7,558	8,047	8,549	8,877
o/w Public	3,028	3,305	3,576	3,854	4,140	4,436	4,746	5,064	5,391	5,728	5,948
o/w Private	1,491	1,628	1,762	1,898	2,039	2,185	2,337	2,494	2,655	2,821	2,929
Number of Teachers	564	615	665	716	769	823	880	939	999	1,060	1,101
Non-teaching Staff (apportioned)	177	193	211	232	255	274	295	315	337	360	375
Student-Teacher Ratio	5	5	5	5	5	5	5	5	5	5	5
SEN											
SEN Students - Public	1,019	1,346	1,736	2,112	2,451	2,793	3,162	3,547	3,939	4,347	4,770
SEN Teachers - Public	309	431	551	664	778	900	1,026	1,156	1,291	1,431	1,456
Non-teaching Staff (apportioned)	79	101	125	148	172	196	220	245	272	300	306
Polytechnic											
Polytechnic Students - Public	701	907	1,120	1,339	1,566	1,800	2,041	2,289	2,545	2,809	2,855
Polytechnic Teachers - Public	77	100	124	148	174	200	226	254	282	312	317
Non-teaching Staff (apportioned)	41	53	66	81	96	111	127	143	159	177	180
Higher Education											
HE Enrolment	20,339	24,550	28,895	33,376	37,999	42,763	43,468	44,186	44,915	45,656	46,409
o/w public enrollment	8,339	10,311	12,425	14,685	17,100	19,671	20,430	21,209	22,008	22,828	23,669
Loan scheme students	1,017	1,228	1,445	1,669	1,900	2,138	2,173	2,209	2,246	2,283	2,320
First degree students	12,000	14,239	16,470	18,690	20,899	23,092	23,038	22,976	22,906	22,828	22,740

Note:

Non-teaching staff is apportioned based on teacher/non-teaching staff ratio and student enrolments.

Spending on infrastructure has seen a hike in recent years. In the past 3 years, 0.46% of the nominal GDP was spent on education infrastructure, compared to an average of 0.15% of the nominal GDP in the preceding 7 years. It is estimated that the current level of spending on infrastructure will fall gradually to 0.20% over the 10-year projection period for infrastructure required as per the enrolment growth (refer to Table 3.4 and Figure 3.6). Infrastructure requirement to support the programmes of this plan are included incrementally.

Furthermore, infrastructure scale-up is required to change the schools to single-session schools. The MoE's analysis of the investment required shows that it needs over MVR 7.1 billion in infrastructure spending, to upgrade schools to accommodate all students and staff in a single session. This investment is included in the infrastructure program and is spent over 4 years, starting from 2020.

Table 3.4: Education PSIP spending and stock

Year	PSIP Spending	Capital Stock	PSIP/GDP
2008	35.53	676.02	0.12%
2009	81.65	712.35	0.27%
2010	35.10	742.27	0.11%
2011	50.37	771.36	0.12%
2012	99.17	779.55	0.22%
2013	60.18	802.11	0.12%
2014	62.32	852.87	0.11%
2015	221.82	1,038.06	0.36%
2016	387.06	1,358.33	0.60%
2017	296.99	1,655.32	0.41%

PSIP = Public Sector Investment Programme

Figure 3.6: The Education PSIP as a % of Nominal GDP

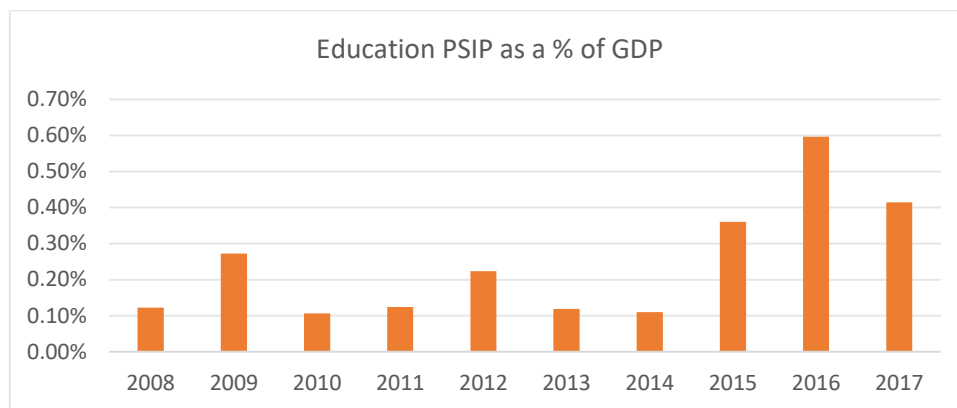
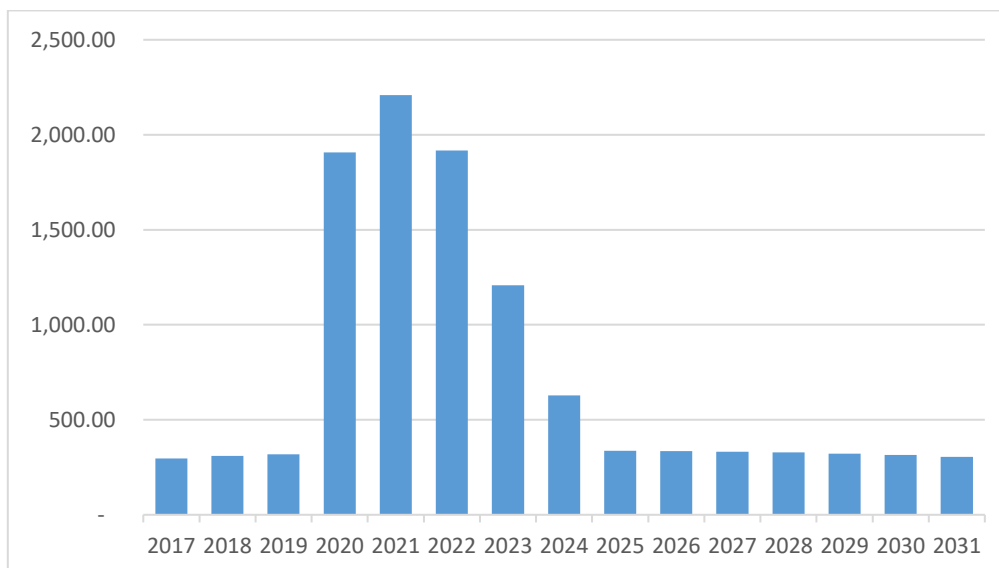


Figure 3.7: Infrastructure for the ESP



There are 6 special programmes designed to achieve the objectives of the ESP.

- 1- School Digitization Project
- 2- Enhancing Teacher Resource Centres
- 3- New technology adoption
- 4- ESP Action Plan
- 5- Student breakfast
- 6- Junior college recurrent costs
- 7- Air conditioning the classrooms

Table 3.5 shows the total costs for these programmes.

Table 3.5: Special programmes costs

<i>In MVR millions</i>	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
School digitization	230.2	104.9	89.9	92.8	46.5	47.2	46.8	46.7	46.9	47.1
Teacher resource centres	20.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0
New technology adoption	-	-	87.0	94.2	102.7	111.9	121.9	132.5	143.6	155.7
ESP Action Plan	67.1	69.9	76.2	61.1	62.8	63.4	64.1	64.7	65.4	66.0
Student breakfast	-	185.0	386.2	406.3	426.6	449.3	472.0	495.1	519.7	545.7
Junior college rec costs	-	-	-	2.2	6.6	11.0	17.6	17.8	17.8	17.8
Air conditioning the classrooms	-	-	37.2	48.9	15.6	16.0	16.4	16.8	17.3	17.7
Total	317.3	381.8	699.5	729.5	685.9	724.9	765.9	801.7	839.6	880.1

3.6 Cost projections

Cost projections are made according to the model built, based on the above-mentioned assumptions and logics. The estimates can show projections by functional classification, the spending and economic classification of the spending.

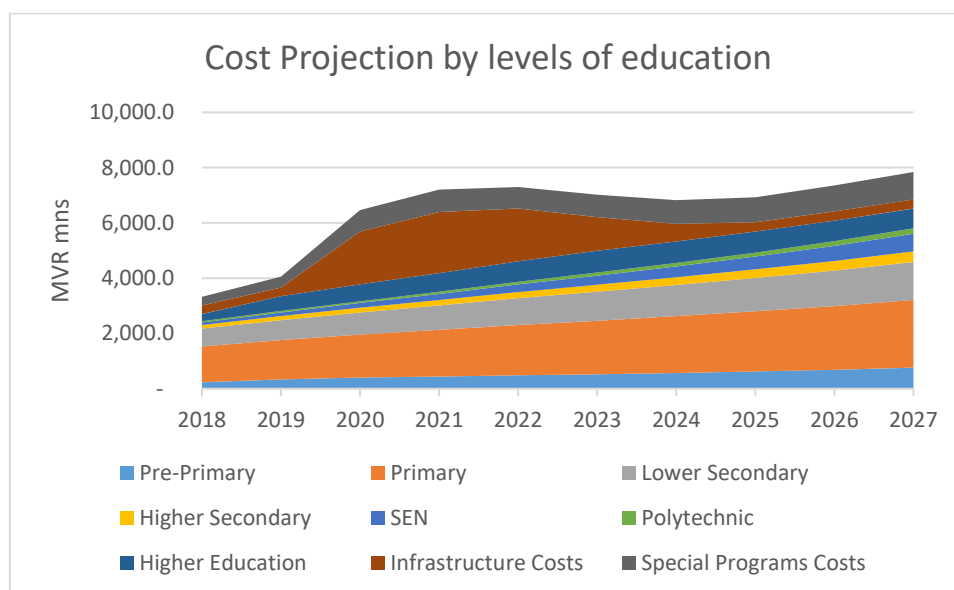
Table 3.6 shows the projections by the level of education.

Table 3.6: Cost Projections by Functional Classification

<i>In MVR millions</i>	2018	2019	2020	2021	2022	2023	2027
Pre-Primary	234.2	336.1	409.6	445.3	482.5	515.9	761.0
Primary	1,292.6	1,427.5	1,553.7	1,686.8	1,822.4	1,943.7	2,450.5
Lower Secondary	647.8	714.3	793.3	881.1	977.8	1,054.5	1,372.4
Higher Secondary	129.4	150.2	171.4	195.3	221.7	249.3	387.8
SEN	88.4	129.8	173.9	220.1	271.1	329.1	634.3
Polytechnic	51.0	53.7	66.0	79.1	93.9	110.2	194.9
Higher Education	258.7	532.4	609.0	674.6	737.3	795.8	716.6
Infrastructure Costs	309.8	318.2	1,906.9	2,208.2	1,917.8	1,207.6	332.4
Special Programmes	317.3	397.1	782.6	809.4	768.4	812.6	991.8
Total	3,329.2	4,059.1	6,466.4	7,199.9	7,293.0	7,018.6	7,841.7

A large portion of the spending goes to primary education and Lower Secondary education, as demographic trends show that the bulk of the student population over the next 10 years will be for these age groups. Furthermore, Higher Education, infrastructure and programmes also depict significant spending over the projection period (refer to Figure 3.7).

Figure 3.8: Cost projection by the level of education

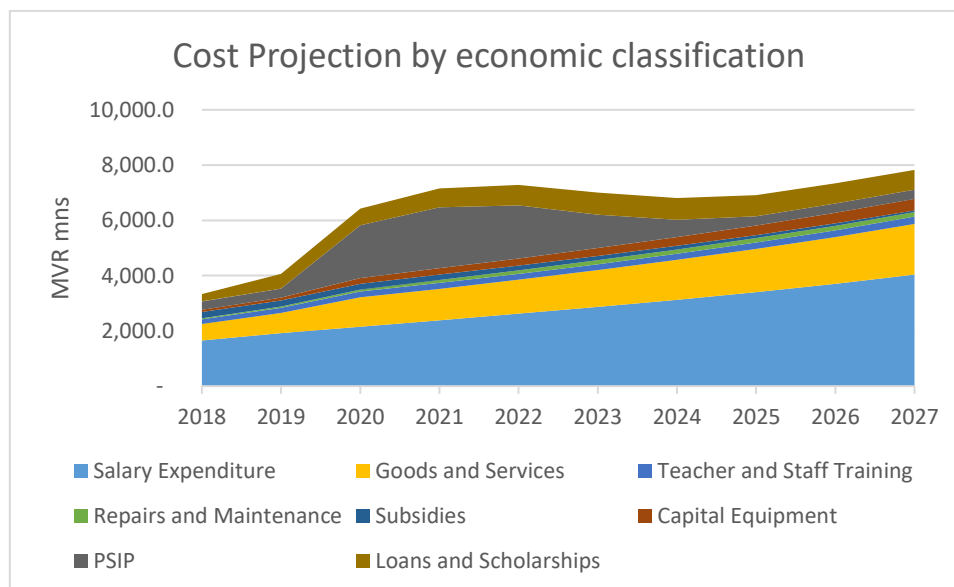


The economic classification shows the information from a different perspective. Table 3.7 shows projections in economic classification. The main component of expenditure is salaries, especially salary spending incurred for teachers. On average, it depicts a share of 38% over the projection period. The PSIP, including capital projects and special programs, also represents a sizeable expenditure over the projection period, primarily due to the investment in infrastructure, needed to change all schools to single-session schools. Subsidies are expected to fall, as assistance to students for textbooks and stationeries are likely to fall over the projection period, due to the digitization project.

Table 3.7: Economic classification of the cost projections

<i>In MVR millions</i>	2018	2019	2020	2021	2022	2023	2027
Salary Expenditure	1,652.9	1,920.6	2,155.7	2,380.3	2,625.5	2,864.3	4,037.7
<i>Teaching Staffs' Salary</i>	1,130.8	1,320.9	1,489.8	1,652.2	1,829.7	2,004.7	2,869.6
<i>Non-Teaching Staff Salary</i>	522.1	599.6	665.9	728.1	795.8	859.6	1,168.1
Goods and Services	596.9	730.9	1,057.1	1,134.7	1,232.9	1,333.3	1,833.0
Staff Training	165.3	185.5	207.2	223.6	199.5	210.0	265.7
Repairs and Maintenance	40.2	46.0	72.6	105.0	132.4	149.7	161.9
Subsidies	227.2	217.6	208.8	192.7	174.7	156.1	61.3
Capital Equipment	78.2	108.1	212.1	231.9	257.1	285.8	417.0
PSIP	309.8	318.2	1,906.9	2,208.2	1,917.8	1,207.6	332.4
Loans and Scholarships	258.7	532.4	609.0	674.6	737.3	795.8	716.6
Total Costs	3,329.2	4,059.1	6,429.2	7,151.1	7,277.4	7,002.6	7,825.6

Figure 3.9: Cost projection by economic classification



As a percentage of nominal GDP, the education spending required represents 4.0% in 2018, and the spending as a percent of GDP increases as additional investments are made.

As the above estimations do not include the full costing for the education sector, as it excludes the public spending on universities and polytechnic, an estimate was made for universities and polytechnic spending as well. When this is incorporated, the spending required for education increases to 4.3% in 2018. There is a marked increase in spending for 2019, as depicted by 21.0% growth in the required funding, due to the special programmes and infrastructure needs that are being included.

Table 3.8: Key indicators of the cost projection

	2018	2019	2020	2021	2022	2023	2027
Education spending as % of GDP	4.0%	4.5%	6.5%	6.7%	6.3%	5.7%	5.1%
Total education spending as a % of GDP	4.3%	4.7%	6.7%	6.9%	6.6%	5.9%	5.2%
Share of recurrent costs	88.3%	89.5%	67.0%	65.9%	70.1%	78.7%	90.4%
Share of capital costs	11.7%	10.5%	33.0%	34.1%	29.9%	21.3%	9.6%
Percentage change in total cost	25.3%	21.9%	58.4%	11.2%	1.8%	-3.8%	6.5%

3.7 Alternative Funding Scenarios

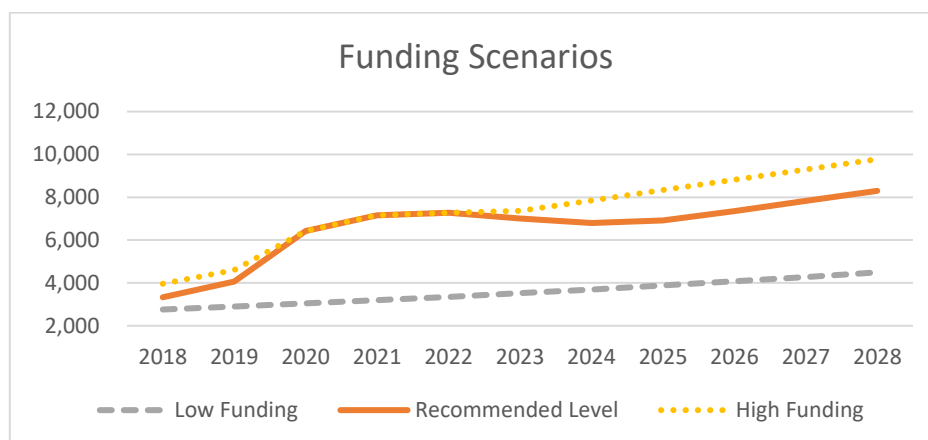
Three funding scenarios are outlined in this exercise.

“High funding scenario” takes into account the growth of nominal GDP, and commits a constant amount of the nominal GDP as an aggregate funding level of the MoE. As such, at least 6% of the GDP is assumed to be a high funding scenario, as the baseline spending depicts a share of 4.0% in 2018 and the funding declines over the projection period, if above estimation logics are used. Under the “high funding scenario” initially 4.5% is committed, and then gradually increased to 6% over the 5-year period. Under this scenario, the sector needs funding of MVR 4,600 million in 2019, and the requirement will grow to MVR 7,368 million by 2023. The funding required remains over 6% of GDP between 2020 to 2022.

The “low funding” scenario depicts a situation limited by budgetary constraints. In 2018, the spending by the MoE was MVR 2,757 million. If the Ministry carries out activities in the same scope and quality as in 2018 and adjusted for inflation, a scenario with low funding can be shown. However, this is a heavily constrained scenario and would not allow the Ministry to run new programmes and may hamper innovation in the sector. Under this scenario, the required funding will be MVR 3,591 million in 2019.

Figure 3.9 shows the recommended funding scenario (as generated from the model discussed in sections above) and other alternative scenarios. The recommended scenario is closer to the high funding scenario, as the Ministry requires additional funding to achieve the goals of ESP.

Figure 3.10: Funding Scenarios



Alternatively, the MoE can strive to reduce the unit costs and increase efficiency to utilize the allocated budget.

3.8 Funding Gap

The budget allocated for the education ministry (including schools and department under the ministry) for 2019 is MVR 3,117 million, which depicts a shortfall of MVR 942 million when compared against the recommended funding requirements from the demand side or a demographic approach. This gap will be even higher when university spending is included.

To reduce the funding gap, several strategies can be utilized. These include:

- 1- Tap into international donor agencies to fund some of the programmes, especially the costing for the ESP Action Plan and infrastructure spending.
- 2- Efficiency gains. The unit costs are based on existing efficiency levels and unit costs. Unit costs can be reduced by employing recommendations in various assessments made by International Monetary Fund (for example refer to Article IV report 2017 and the PEFA assessment of 2014) and World Bank (refer to Systematic Country Diagnostic study). Efficiency gains or unit cost reductions can be obtained by improving procurement methods, reducing leakage or wastage and/or proper planning.
- 3- Some of the special programme costs can be absorbed into the existing cost structure. For example, the costing model provides infrastructure spending adequately, and various costs are driven using the student enrollment and key ratios. Special programme costs can be accommodated within the costing structure by prioritizing and sequencing the activities.
- 4- Funding for one-off special programmes such as the school digitization, air-conditioning the classrooms etc. can be supported by the government on top of the

funding allocated for the education sector. The MoE can negotiate with the Ministry of Finance (MoF) on this matter.

3.9 Alternative sources of funding

As discussed in the ESA, the funding for the education sector comes from two sources: domestic and foreign. Domestic sources consist of funding from the consolidated revenue fund of the government and various trust funds established in the sector. Foreign sources refer to the cash grants and project grants coming from bilateral and multilateral sources.

An overwhelming majority of the funding for the education sector comes from domestic sources. In 2017, 97.9% of the total spending by the MoE was funded by domestic sources. 2.1% of the funding came from foreign sources.

Almost all of the recurrent spending is funded via domestic sources. Foreign funding contributes to 15.5% of the capital spending in 2017.

Table 3.9: Funding source of education spending

	2013	2014	2015	2016	2017
Total education expenditure					
Domestic funding (MVR millions)	1,869.9	2,053.0	2,730.8	2,937.6	2,525.7
External Funding (MVR millions)	20.1	7.6	30.9	37.7	52.9
Recurrent expenditure					
Domestic funding (MVR millions)	1,803.4	1,976.8	2,493.3	2,554.9	2,252.6
External Funding (MVR millions)	20.1	2.6	13.2	7.9	2.9
Capital expenditure					
Domestic funding (MVR millions)	66.5	76.2	237.5	382.8	273.1
External Funding (MVR millions)	-	5.0	17.7	29.8	50.0
Total domestic funding (MVR millions)	1,869.9	2,053.0	2,730.8	2,937.6	2,525.7
Total external funding (MVR millions)	20.1	7.6	30.9	37.7	52.9
Total domestic funding (as a % of GDP)	3.7%	3.6%	4.4%	4.5%	3.5%
Total external funding (as a % of GDP)	0.0%	0.0%	0.1%	0.1%	0.1%

The presence of a large project usually drives external funding. During the last 5 years, the EEDP funded by the International Development Association (IDA) of the World Bank drove the pattern of the foreign financing received to the education sector. In 2017, 95% of the total foreign financing can be attributed to this project. Table 3.10 shows the major foreign financing received over the past 5 years. In addition to IDA, UNICEF and UNESCO are among major multilateral donors. Among bilateral donors, India, Japan, and Turkey come on top in the past 5 years.

Table 3.10: Foreign funding received 2013 - 2017

	2013	2014	2015	2016	2017	Total
IDA	-	5.00	17.67	29.78	50.04	102.49
India	17.06	-	4.09	-	-	21.15
UNICEF	1.65	1.59	5.22	1.84	1.56	11.86
Japan	-	-	3.08	1.39	0.01	4.49
Malaysia	0.06	0.02	0.02	3.10	0.90	4.10
Turkey	0.45	0.16	0.39	0.09	0.01	1.10
UNESCO	0.54	0.20	0.04	0.24	0.03	1.06
Others	0.31	0.88	0.37	1.27	0.35	3.18
Total	20.07	7.86	30.87	37.72	52.90	149.43

IDA - International Development Association, UNICEF - United Nations Children's Fund, UNESCO - United Nations Educational, Scientific and Cultural Organization.

Since the external funding for the sector is limited, the Ministry can pitch to fund certain activities of the ESP via external financing from multilateral and bilateral sources. An effective fund-raising strategy is needed, along with the formulation of project proposals incorporating key programmes and activities of the ESP, and will need to be proposed to external agencies for funding.

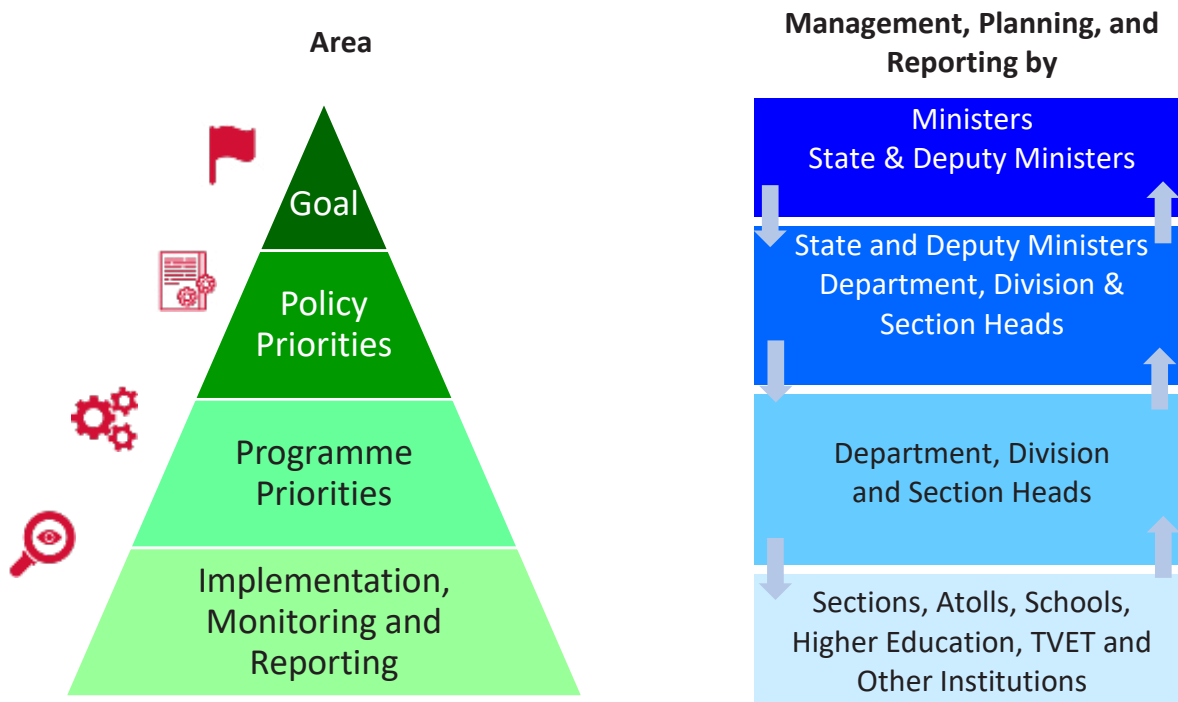
Furthermore, it is possible to reduce the funding gap by increasing the efficiency of the sector and the Ministry. The projections are made assuming a consistent level of efficiency throughout the estimation period. However, by incorporating new technology, through decentralisation, and finding better ways to carryout tasks and via cost-cutting measures, the efficiency of the spending can be obtained.

CHAPTER 4: MONITORING, EVALUATION, AND ACCOUNTABILITY FRAMEWORK

This chapter provides a monitoring, evaluation, and accountability framework for the entire duration of the ESP 2019-2023 across all stages of education, from Pre-primary to Higher Education. The MoE and MoHE are committed to the vision and the mission of the ESP, and improving equitable learning outcomes for all students in the Maldives across all stages of education. As an overarching principle, where possible, disaggregated data by sex, age, grade and other salient socio-economic characteristics, including income/wealth, location, disability status etc. will be collected. Science plays a major role in M&E activities. The MoE and MoHE will follow a scientific approach to design workplans, develop M&E tools, collect field data, and undertake a statistical analysis for policy analysis, and interpretation. To improve transparency and participation of all stakeholders, the Ministries will develop several M&E products which will be shared, presented, debated and disseminated. The proposed M&E accountability framework has integrated most targets and indicators defined in SDG 4, to enable the ministries to report progress of SDG 4.

4.1 Management, Reporting, and Accountability Framework

The MoE and MoHE will pay particular attention to enhancing transparency, and improving stakeholder engagement in the M&E process. Detailed procedures, timelines, and data collection and analysis templates will be prepared and shared, to elicit useful feedback. Stakeholders will be engaged in data analysis and preparation of analytical reports, where appropriate. The following table highlights the high-level division of management, planning, and reporting responsibilities over different aspects of the ESP 2019-2023:



Role of LEG

The MoE and MoHE will organize LEG meetings every six months to review and guide the implementation of the ESP 2019-2023. LEG members will also participate in the comprehensive annual review of the ESP 2019-2023.

Roles of Key MoE and MoHE Departments and Divisions, in Monitoring and Evaluations

A Joint Steering Committee (JSC) with equal composition of members from the MoE and the MoHE will take the lead role in setting up a sustainable monitoring, and evaluation system for the MoE and MoHE. The JSC will prepare a calendar of major M&E activities, and publications and shall share with all stakeholders. The JSC will conduct equity-focused analysis: in particular, disparities in access, participation and learning outcomes at all levels, between different atolls, gender, and wealth disaggregations, factoring in poverty and gender dimensions. The analysis will help to target more focused support for the most disadvantaged atolls, or the ones that are doing worse in terms of all education dimensions, and across the different levels of education.

The JSC will support other divisions, sections and departments to develop annual implementation workplan and monitoring plan; to track policy and program indicators that are expected to contribute to achieving goals year over year. The joint steering committee will conduct analysis of results showing clear linkages between inputs, program and policy results, and goals. A summary of overall KPIs (refer to results framework) and other important and relevant information will be collected and analyzed by the JSC with support from QAD, ESQID, TVETA, NIE, DIE, MQA, the Maldives Polytechnic and other relevant departments of the MoE and MoHE.

The JSC will also produce M&E products which will be shared for further dissemination and appropriate follow-up. The JSC with support from the relevant departments, will also prepare periodic analytical reports detailing both routine ESP indicators and situation of education in the Maldives. The JSC shall analyze EMIS/MEMIS data every quarter to identify unusual trends and discuss with relevant departments, divisions, sections, and educational institutes to enable them to examine the problem areas for under achievements of planned results; to facilitate them to develop and implement remedial interventions. The JSC will establish a well-organized reporting, feedback and response mechanism from central ministries to atolls, schools and other institutions and vice versa. EMIS platforms developed by the MoE and the MoHE will provide monthly feedback to educational institutes, including schools and HEIs on the quality of data, and identifying any discrepancies in the reported data to improve quality of data.

Other key departments such as QAD have developed the SIQAAF, the NALO and External School Reviews. These tools provide most of the quantitative indicators that are needed to monitor learning outcomes and systems strengthening.

External School Review refers to a planned, systematic monitoring procedure to determine the overall 'health' of the schools in the Maldives. School review is undertaken using a special tool kit,

based on 'Baraabaru School' Indicators, prepared for this particular purpose. Findings of the QAD school reviews will be shared with stakeholders to help bring about improvement in school quality. The SIQAAF is linked to providing a coherent and streamlined means for schools to: (i) Understand their performance (self-evaluation and review), (ii) identify their vision and purpose, and set goals and targets for improvement (school improvement plan), (iii) Put into operation their improvement plans and manage resources (annual implementation plan), and (iv) Report on their performance (annual report to the school community).

The NIE will identify, coordinate and conduct all evaluations and research activities, and shall organize the dissemination of evaluation and research results. Similarly, the ESQID will continue to conduct risk analysis of primary school students and monitor the impact of the implementation of risk mitigation measures. TVET Authority will assess the quality of TVET education, both institution-based and employer-based. The MoHE will set and enforce regulations of the higher education sector in the country. The MQA will monitor the quality of curricula and quality of curricula implementation in HEIs. The above qualitative monitoring reports will be used to implement corrective measures by relevant departments, divisions, and education institutions.

Education Management Information System (EMIS)

A well-functioning EMIS is an important element of monitoring and evaluation system. The Open EMIS was formally launched in Maldives in July 2017. ESA 2018 has made several recommendations to strengthen MEMIS. At present, the MEMIS is being implemented and monitored by the MoE. The MoHE has planned to develop an EMIS specifically for the usage of higher education and training. The MoE and MoHE is committed to implementing the ESA recommendations to strengthen EMIS platforms. To ensure that data is used for better planning, reporting and decision-making, the JSC will elaborate and mainstream EMIS in existing monitoring and evaluation mechanisms.

The JSC will conduct M&E readiness assessments of each departments, divisions and sections in the MoE and MoHE. During the process, the JSC will document M&E sub-systems in the departments and divisions, along with available datasets to identify gaps in data collection, organization, storing, management and analysis. This initiative will facilitate, integration of EMIS with other current sub-systems/data systems being used by the various MoE and MoHE departments and divisions. The MoE and MoHE will take full advantage of ICT to collect real time data where required. The annual school census report¹⁹ will be used to track most of the school level quantitative indicators.

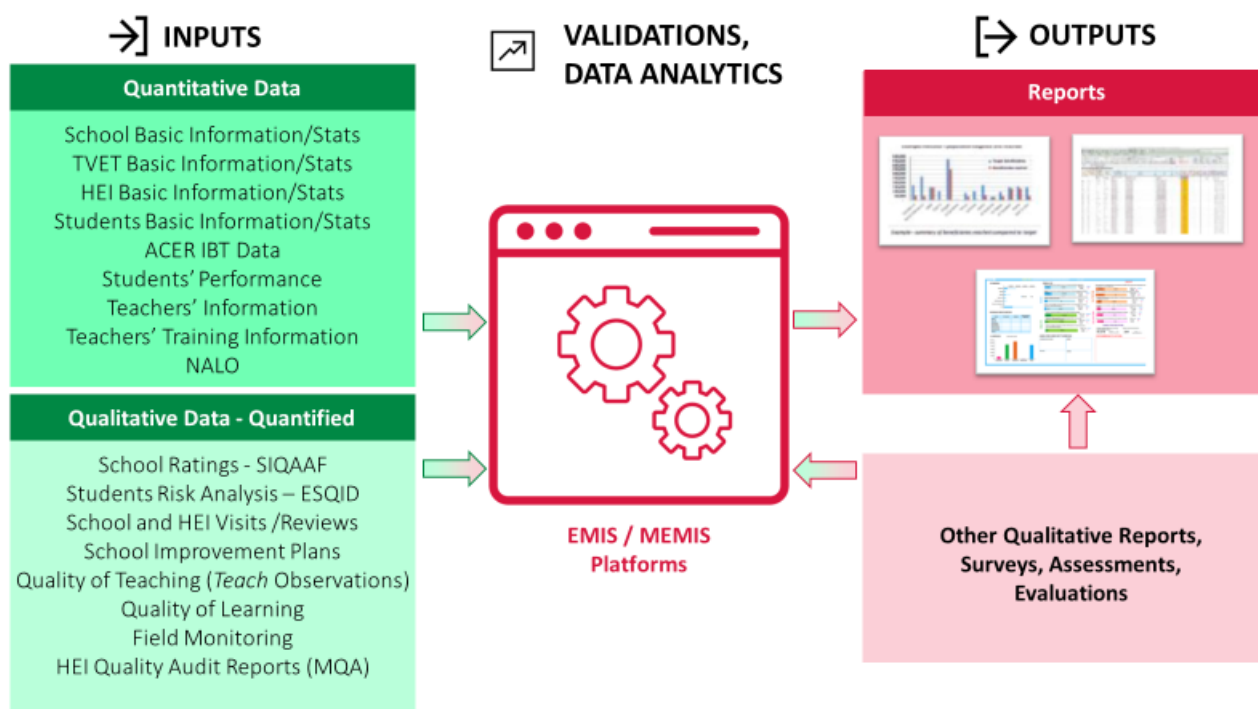
¹⁹ School census data should be entered in to EMIS to prepare section of Annual Education Statistics Year Book

ESP 2019-2023 Review Mechanisms

An important component of the ESP M&E system is the set of reviews that will facilitate to achieve results, to improve input efficiency and outcome efficiency. Following reviews will be systematized in the MoE and MoHE:

- **Routine Monitoring:** Monthly review meetings within sections, departments and divisions will be organized to review progress towards the activity targets, examine the problem areas for under achievements, identify good practices, and implement corrective actions to expedite the progress. A monthly review will also be organized within schools and institutions, to provide feedback to relevant staff on quantitative and qualitative findings from MEMIS, and other quality assurance frameworks, to improve work efficiencies.
- **Periodic Reviews:** The MoE and MoHE will organize quarterly/mid-year reviews under each department/division, under the auspice of the state/deputy ministers. Quarterly reviews shall provide an opportunity for work-plan adjustments, and to ensure that program and policy results remain consistent with the ESP. At decentralized level, the MoE and MoHE will institute a periodic review mechanism, at atolls level, school and associated institution level, to feed into quarterly/mid-year review meetings at the national level and annual national reviews.
- **Annual Review:** The MoE and MoHE will organize comprehensive annual reviews at the national level. The annual review will pay attention to learning outcomes and quality of ESP implementation. Using a combination of broad, synoptic overviews, and more detailed on-going operational approaches, the MoE and MoHE will produce an annual status of education report for the Maldives. The MoE and MoHE will prepare various other background papers such as public finance and expenditure management for the education sector; strategic analysis to identify the most effective strategies, to accelerate progress towards ESP and SDG goals. Based on several reviews, data and information from various sources, background papers, the MoE and MoHE will continue to produce products, such as Education Statistics Yearbook, Student Assessment Results Yearbook, M&E report on the ESP implementation progress, National Education Indicators (NEI) Report, school report card, M&E reports, policy briefs and sector analysis.
- **Mid-Term Evaluation:** Shall be conducted in 2021 to review the progress of ESP implementation, policy and program relevance to the prevailing situation of the education sector, to bring in evidence-based policy, and program adjustments for the remaining half of ESP.
- **End-of-ESP Evaluation:** Will be conducted in 2023, to consider constraints encountered, and ways and means of addressing them, to inform the design of new projects, programs and initiatives.

ESP Monitoring and Evaluation System



Required institutional capacity and resources

Effective monitoring of the ESP implementation is a major undertaking of the MoE and MoHE. The MoE and MoHE are committed to invest in institutionalizing M&E system, and build a sustainable M&E capacity to effectively manage and conduct M&E activities during the implementation of the ESP. The system strengthening the goal of the ESP takes into account, the development of individual capacity in the Ministries. The MoE and MoHE will boost human resource capacity in the Ministries, especially in policy and planning departments of the ministries in terms of numbers, expertise and competencies. The MoE and MoHE will train key staff involved in M&E, in courses such as education statistics for planning and monitoring, data analytics and big data; and data processing for learning assessments, to name the few.

Baseline and targets

The results framework below has introduced several new KPIs to monitor and evaluate ESP. The baseline for new indicators will be collected in 2019. Similarly, for the same new indicators, the MoE and MoHE will calculate mid-term and end-term targets within the first year of implementation.

4.2 Results framework

The results framework is structured in line with ESP structure, Goals, Policy priorities, Program priorities with KPIs identified under each policy and program priorities. The contributory

relationship between, core KPIs under each goal and other policy and program KPIs will be monitored and evaluated periodically; and the analysis of results will be reflected in the annual planning, monitoring, evaluation, and feedback mechanism. The targets in the results framework are cumulative targets.

GOAL 1
**IMPROVED LEARNING FOR ALL THROUGH EQUITABLE ACCESS TO
QUALITY EDUCATION**



KPIs	Segment	Base 2017	Target		Verify	Report	Comments	Owner
			2021	2023				
GROSS ENROLMENT RATE IN PRE-PRIMARY	♂	93.5 (2018)	97	98	MEMIS	Annual	E.g. Gross enrolment rate in KG1 and KG2 (Pre- Primary) M/F	MoE
	♀	93.2 (2018)	93	95				
NET COMPLETION RATE IN LOWER SECONDARY	♂♀	TBC	5% increase from baseline	7% increase from baseline	MEMIS	Annual		MoE
	♂♂	TBC	5% increase from baseline	7% increase from baseline				
	♀♀	TBC	5% increase from baseline	7% increase from baseline				
	♂♀	TBC	5% increase from baseline	7% increase from baseline				
GENDER PARITY IN ALL FORMS OF EDUCATION	PP	0.93 (2018)	0.95	0.96	QAD-NALO / MEMIS	Annual		MoE
	P	0.95 (2018)	0.95	0.96				
	LS	0.89 (2018)	0.95	0.96				
	US	1.19 (2018)	1	1				

% OF STUDENTS WITH SPECIAL EDUCATION NEEDS RECEIVING EDUCATION SERVICES	SEN	3.66 (2018)	50	80	MEMIS	Annual	(Total number of students enrolled in schools are 481)	MoE
IMPROVE LEARNING OUTCOMES AND REDUCE THE LEARNING GAP BY INCREASING THE LEARNING OF THE LOWER QUARTILE	Dhivehi Grade 4	TBC	20	40	NALO / MEMIS	Annual	Learning gap reduced by % between upper and lower quartile students	MoE
	Dhivehi Grade 7	TBC	20	40				
	English Grade 4	TBC	20	40				
	English Grade 7	TBC	20	40				
	Maths Grade 4	TBC	20	40				
	Maths Grade 7	TBC	20	40				
% STUDENTS PASSED FIVE OR MORE SUBJECTS OF "O" LEVEL CERTIFICATION	♂	77	80	95	DPE / MEMIS	Annual		MoE
	♀	77	80	95				
% OF STUDENTS COMPLETING LOWER SECONDARY AND HIGHER SECONDARY CERTIFICATION	♂LS	TBC	TBC	TBC				MoE
	♀LS	TBC	TBC	TBC				
	♂HS	TBC	TBC	TBC				
	♀HS	TBC	TBC	TBC				

♂ = Male, ♀ = Female, ● = Malé, ♂ = Outer Islands, PP = Pre-Primary, P = Primary, LS = Lower Secondary, US = Upper Secondary, SEN = Special Education Needs Students, TBC = To be confirmed

POLICY Equitable access and completion from K to 12, especially for girls and boys and children with PRIORITY 1 Special Education Need and at risk									
KPIs	Segment	Base 2018	Target		Verify	Report	Comments	Owner	
			2021	2023					
NET ENROLMENT RATE IN PRE-PRIMARY	♂	92.7	95	98	MoE (Statistics) - School Report/MEMIS	Annual		MoE	
	♂♀	92.7	95	9					
	♀	92.6	93	96					
	♀♀	92.6	93	96					
NET ENROLMENT RATE IN PRIMARY	♂	95.5	97.3	98	MoE (Statistics) - School Report/MEMIS	Annual		MoE	
	♂♀	95.5	97.3	98					
	♀	96.3	96.6	97					
	♀♀	96.3	96.6	97					
NET ENROLMENT RATE IN LOWER SECONDARY	♂	92.9	93	94	MoE (Statistics) - School Report/MEMIS	Annual		MoE	
	♂♀	92.9	93	94					
	♀	87.8	85	90					
	♀♀	87.8	85	90					
NET ENROLMENT RATE IN	♂	38.9	30	40	MoE (Statistics)	Annual		MoE	

UPPER SECONDARY	♂	38.9	30	40	- School Report/MEMIS	Annual	MoE
	♀	50.4	40	45			
	♀	50.4	40	45			
GROSS ENROLMENT RATE IN PRIMARY	♂	95.8	99	99	MoE (Statistics) - School Report/MEMIS	Annual	MoE
	♂	95.8	99	99			
	♀	96.7	99	99			
	♀	96.7	99	99			
GROSS ENROLMENT RATE IN LOWER SECONDARY	♂	102.8	103	100	MoE (Statistics) - School Report/MEMIS	Annual	MoE
	♂	102.8	103	100			
	♀	99.6	100	100			
	♀	99.6	100	100			
GROSS ENROLMENT RATE IN UPPER SECONDARY	♂	43.0	33	35	MoE (Statistics) - School Report/MEMIS	Annual	MoE
	♂	43.0	33	35			
	♀	56.7	43	45			

	♀♂	56.7	43	45				
TRANSITION RATE FROM LOWER SECONDARY TO UPPER SECONDARY	♂	32	60	70	Department of Examinations / MEMIS	Annual		MoE
	♀	40	60	70				
% CHILDREN WITH SPECIAL NEEDS ENROLLED IN NORMAL AND SPECIAL CLASSES	SEN	TBC	50	75	MoE (Statistics) - School Report/MEMIS	Annual		MoE
% OF STUDENTS DEMONSTRATE AT LEAST THREE COMPETENCIES "Consistent evident"; "Mostly evident" and "Occasional evident" on social and soft skills	♂LS	TBC	40	60	Schools/MEMIS	Annual		MoE
	♀LS	TBC	40	60				
	♂S	TBC	40	60				
	♀HS	TBC	40	60				

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POLICY PRIORITY 2 Improve learning equitably and reduce the learning gap through strengthening curricula implementation									
KPIs	Segment	Base		Target		Verify	Report	Comments	Owner
		2018	2021	2023	2023				
STUDENTS PERFORMANCE IN THE NALO IN DHIVEHI	♂ Grade 4	50	70	80	NALO / MEMIS	Annual			MoE
	♂ Grade 4	50	70	80					
	♂ Grade 7	50	70	80					
	♂ Grade 7	50	70	80					
	♀ Grade 4	50	70	80					
	♀ Grade 4	50	70	80					
	♀ Grade 7	50	70	80					
	♀ Grade 7	50	70	80					

		NALO / MEMIS		Annual		MoE	
STUDENTS PERFORMANCE IN THE NALO IN MATHS	𑍇𑍆𑍇 Grade 7	50	70	80			
	𑍇𑍆 Grade 4	50	70	80			
	𑍇𑍆𑍇 Grade 4	50	70	80			
	𑍇𑍆 Grade 7	50	70	80			
	𑍇𑍆𑍇 Grade 7	50	70	80			
	𑍇𑍆 Grade 4	50	70	80			
	𑍇𑍆𑍇 Grade 4	50	70	80			
	𑍇 Grade 7	50	70	80			
	𑍇𑍆𑍇 Grade 7	50	70	80			

		STUDENTS PERFORMANCE IN THE NALO IN ENGLISH								NALO / MEMIS			Annual		MoE		
		♂ Grade 4	♂ Grade 4	♂ Grade 7	♂ Grade 7	♀ Grade 4	♀ Grade 4	♀ Grade 7	♀ Grade 7	70	80	Schools / MEMIS	Annual	MoE			
		50	50	50	50	50	50	70	80	70	80						
		TBC	TBC	TBC	TBC	TBC	TBC	50	70	50	70						
		TBC	TBC	TBC	TBC	TBC	TBC	50	70	50	70						
		% OF STUDENTS SHOWS "FULLY ACHIEVING", "MOSTLY ACHIEVING" AND								70	70						

"ACHIEVING" LEARNING OUTCOMES IN PRE-PRIMARY	♀	TBC	50	70	Schools / MEMIS	Annual	MoE
	♀♂	TBC	50	70			
	SEN	TBC	50	70			
% OF STUDENTS SHOWS "FULLY ACHIEVING", "MOSTLY ACHIEVING" AND "ACHIEVING" LEARNING OUTCOMES IN PRIMARY	♂	TBC	50	70	Schools / MEMIS	Annual	MoE
	♂♂	TBC	50	70			
	♀	TBC	50	70			
	♀♂	TBC	50	70			
	SEN	TBC	50	70			
	♂	TBC	50	70			
% OF STUDENTS SHOWS "FULLY ACHIEVING", "MOSTLY ACHIEVING" AND "ACHIEVING" LEARNING OUTCOMES IN LOWER SECONDARY	♂	TBC	50	70	Schools / MEMIS	Annual	MoE
	♂♂	TBC	50	70			
	♀	TBC	50	70			
	♀♂	TBC	50	70			
	SEN	TBC	50	70			
	♂	TBC	50	70			
% OF STUDENTS SHOWS "FULLY ACHIEVING", "MOSTLY ACHIEVING" AND "ACHIEVING" LEARNING OUTCOMES IN UPPER	♂	TBC	50	70	Schools / MEMIS	Annual	MoE
	♂♂	TBC	50	70			
	♀	TBC	50	70			

SECONDARY	♀♂	TBC	50	70	NALO / QAD	Annual	MoE
	♂	TBC	50	70			
PERFORMANCE OF STUDENTS ATTENDING MULTI GRADE CLASSROOMS IN NALO IN DHIVEHI	♂ Grade 4	TBC	70	80	NALO / QAD	Annual	MoE
	♂ Grade 7	TBC	70	80			
	♀ Grade 4	TBC	70	80			
	♀ Grade 7	TBC	70	80			
	♂ Grade 4	TBC	70	80			
	♂ Grade 7	TBC	70	80			
PERFORMANCE OF STUDENTS ATTENDING MULTIGRADE CLASSROOMS IN THE NALO IN MATHS	♂ Grade 4	TBC	70	80	NALO / QAD	Annual	MoE
	♂ Grade 7	TBC	70	80			
	♀ Grade 4	TBC	70	80			
	♀ Grade 7	TBC	70	80			
	♂ Grade 4	TBC	70	80			
	♀ Grade 7	TBC	70	80			

PERFORMANCE OF STUDENTS ATTENDING MULTIGRADE CLASSROOMS IN NALO IN ENGLISH		Grade 4	TBC	70	80	NALO / QAD	Annual	MoE
		♂	TBC	70	80		Annual	MoE
		♂	TBC	70	80			
		♀	TBC	70	80		Annual	MoE
		♀	TBC	70	80			
% OF STUDENTS PASSED AT LEAST 5 SUBJECTS IN "A" LEVEL EXAMS		♂	62	75	80	Schools / MEMIS	Annual	MoE
		♂	62	75	80			
		♀	68	75	80			
		♀	68	75	80			
		SEN	TBC	TBC	TBC			

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POLICY Learning assessment for improved, equitable learning and skills development and PRIORITY 3 reduction of the learning gap							
KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
EARLY LEARNING STANDARD (KG2) IS DEVELOPED AND PILOTED	Yes	Yes	Yes	NIE - EDI tool	Once / Within First year of ESP		MoE
NATIONAL ASSESSMENT FOR LEARNING OUTCOMES FRAMEWORK DEVELOPED	Yes	Yes	Yes	NALO - QAD	Once / Within first year of ESP		MoE

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF TEACHERS OBSERVED APPLYING COMPETENCY-BASED TEACHING AS PER THE NATIONAL CURRICULUM		TBC	60	80	QAD- SIQAAF / ESQID-Risk assessments tool	Sample Survey / Quarterly		MoE
% OF TEACHERS OBSERVED APPLYING STUDENT-CENTERED TEACHING AND LEARNING APPROACH		TBC	60	80	NIE-QAD (SIQAAF)			MoE
% OF PRINCIPALS THAT DEVELOP AND IMPLEMENT SCHOOL IMPROVEMENT PLAN TO BOOST LEARNING OUTCOMES		80	85	95	QAD-SIQAAF / ESQID -Risk assessments tool	Sample Survey / Quarterly		MoE

POLICY
PRIORITY 4 **Enhancing teaching and leadership quality for improved teaching and learning**

POLICY PRIORITY 5 Enhancing the learning environment for effective curriculum implementation							
KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
THE STANDARDS FOR THE 21 ST CENTURY SCHOOLS ARE DEVELOPED	No	Yes	Yes	NIE (21 st Century Standard document)	Sample Survey / Quarterly		MoE
% OF SCHOOLS THAT MEET 21 ST CENTURY STANDARDS	TBC	50	75	NIE (21 st Century Standard document)	Sample Survey / Quarterly		MoE



Program 1 Holistic Pre-Primary Education (equitable access)

KPIs	Segment	Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF TEACHERS TRAINED / ACCREDITED / LICENSED AS PER NEW TEACHING AND LEARNING METHODS SUGGESTED IN THE NATIONAL CURRICULUM FRAMEWORK IN PRE-PRIMARY EDUCATION	Trained	TBC	50	80	NIE - Accreditation database / MEMIS	Annual		MoE
		TBC	50	80				
	Licensed	TBC	50	80				
% OF SCHOOLS USE APPROPRIATE PEDAGOGICAL MATERIALS FOR LANGUAGE		TBC	25	50	NIE	Annual		MoE
A MONITORING PROGRAMME TO ENSURE ACCESS TO PRE-PRIMARY BY CREATING ADDITIONAL LEARNING PATHWAYS IS DEVELOPED AND IMPLEMENTED		No	Yes	Yes	NIE	Annual		MoE
POLICY GUIDELINES AND RELATED MATERIALS TO PROMOTE A HOLISTIC EDUCATION FOR ALL AT THE FOUNDATION STAGE ARE DEVELOPED		No	Yes	Yes	NIE	Annual		MoE
WORLD BANK TEACH METHODOLOGY IS IMPLEMENTED AND IN USE AT THE PRE-PRIMARY STAGE		No	Yes	Yes	NIE	Annual		MoE
A PROGRAMME TO DEVELOP TEACHING		No	Yes	Yes	NIE	Annual		MoE

AND LEARNING RESOURCES (FLASH-CARDS, AUDIO, VIDEO, HANDS-ON MATERIALS) FOR VARIOUS LEVELS AND SUBJECTS IS DEVELOPED										
% OF TEACHERS TRAINED ON CLASSROOM PRACTICES ON ASSESSMENT	0	50	99	NIE	Annual				MoE	
% OF TEACHERS TRAINED IN-SERVICE FOR CURRICULAR CONTENT UPGRADING, ASSESSMENT AND EARLY INTERVENTION	0	50	99	NIE	Annual				MoE	

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Program 2 Holistic Education for Primary and Lower Secondary Levels

KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2021	2023				
AN EVALUATION OF TEACHING LEARNING MATERIALS CONDUCTED TO MEASURE IMPACT ON IMPROVEMENT IN SKILLS, VALUES, KEY COMPETENCIES ETC.	No	One evaluation	One evaluation	One evaluation	NIE - Evaluation document	2021, 2023		MoE
% OF TEACHERS TRAINED IN INTEGRATING IMPROVED CURRICULA IN DAILY LESSONS PLANNED IN PRIMARY AND LOWER SECONDARY SCHOOL	TBC	50	75		NIE - Training report	Annual		MoE
A MONITORING PROGRAMME TO ENSURE ACCESS TO PRIMARY AND SECONDARY EDUCATION BY CREATING ADDITIONAL LEARNING PATHWAYS IS DEVELOPED AND IMPLEMENTED	No	Yes	Yes	Yes	NIE	Annual		MoE
WORD BANK TEACH METHODOLOGY IS IMPLEMENTED AND IN USE AT THE PRIMARY AND LOWER-SECONDARY STAGE	No	Yes	Yes	Yes	NIE	Annual		MoE
POLICY GUIDELINES AND RELATED MATERIALS TO PROMOTE A HOLISTIC EDUCATION AT THE	No	Yes	Yes	Yes	NIE	Annual		MoE

PRIMARY AND LOWER SECONDARY LEVELS ARE DEVELOPED												
A LITERACY AND NUMERACY PROGRAMME IN RELEVANT KEY STAGES STARTING FROM FOUNDATION STAGE THAT EMPHASISES SCREENING CHILDREN WITH LEARNING DIFFICULTIES AND INTRODUCING INTERVENTION MEASURES TO RECTIFY THEM (ADDRESSING THE RESULTS OF THE NALO AND SCHOOL REVIEWS) IS DEVELOPED AND IMPLEMENTED	No	Yes	Yes							Annual	NIE	MoE
% OF STUDENTS SCREENED TO IDENTIFY PATTERNS OF INSTRUCTIONAL NEEDS (LOWEST RESULTS) FOR REMEDIAL EDUCATION	0	50	99							Annual	NIE	MoE
MODULES FOR TEACHER TRAINING (PRE-SERVICE AND IN-SERVICE) ARE DEVELOPED	No	Yes	Yes							Annual	NIE	MoE
TEACHING AND LEARNING MATERIALS ARE ASSESSED AND REVISED	No	Yes	Yes							Annual	NIE	MoE
ALTERNATIVE PATHWAYS (ESPECIALLY THE DHASVAARU PROGRAMME) FOR A SELECTION OF STUDENTS, SUBJECTS ON-	No	Yes	Yes							Annual	NIE	MoE

OFFER AND HOW PROGRAMMES ARE MANAGED ARE DEVELOPED									
% OF SCHOOLS WHERE STUDY SUPPORT SERVICES SUCH AS CAREER GUIDANCE, MENTORSHIP AND COUNSELLING ARE AVAILABLE	TBC	50	99	NIE	Annual				MoE

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KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
 Program 3 Higher Secondary Education								
AN EVALUATION OF TEACHING LEARNING MATERIALS CONDUCTED TO MEASURE IMPACT ON IMPROVEMENT IN SKILLS, VALUES, KEY COMPETENCIES ETC.		No	One evaluation	One evaluation	NIE - Evaluation document	Annual		MoE
% OF TEACHERS TRAINED IN INTEGRATING IMPROVED CURRICULA IN LESSONS PLANNED IN HIGHER SECONDARY SCHOOLS		TBC	50	75	NIE - Training report	Annual		MoE
A MONITORING PROGRAMME TO ENSURE ACCESS TO HIGHER SECONDARY EDUCATION BY CREATING ADDITIONAL LEARNING PATHWAYS IS DEVELOPED AND IMPLEMENTED		No	Yes	Yes	NIE	Annual		MoE
A MECHANISM TO SYSTEMATICALLY COLLECT ENROLMENT DATA OF STUDENTS IN ADDITIONAL LEARNING PATHWAYS AT HIGHER SECONDARY IS DEVELOPED (This must include students who do foundation / other programmes instead of regular grade 11 and 12)		No	Yes	Yes	NIE	Annual		MoE


studies)										
POLICIES AND PROCEDURES FOR THE ESTABLISHMENT OF FLEXIBLE AND LEARNING PATHWAYS FOR STUDENTS WITH EXCEPTIONALITIES IS DEVELOPED	No	Yes	Yes	NIE	Annual			MoE		
THE ACHIEVEMENT GAPS BETWEEN YEAR 10 AND YEAR 12 RESULTS WITH THE IDENTIFICATION OF FACTORS INHIBITING LEARNING AND PROGRESSION IS COMPLETED	No	Yes	Yes	NIE	Annual			MoE		
A PROGRAMME TO OFFER INSTRUCTIONAL SUPPORT OFFERED TO TEACHERS ON SELECTED SUBJECTS ON PLANNING, DELIVERY AND ASSESSMENT WITH RESPECT TO THE INTENDED NATIONAL CURRICULUM IS DEVELOPED AND IMPLEMENTED	No	Yes	Yes	NIE	Annual			MoE		

Program 4 Teacher training and professional development for improved teaching and learning

KPIs	Segment	Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF TEACHERS TRAINED / ACCREDITED / LICENSED AS PER NEW TEACHING AND LEARNING METHODS SUGGESTED IN THE NATIONAL CURRICULUM FRAMEWORK IN PRIMARY AND SECONDARY EDUCATION	Trained	TBC	50	80	NIE - Accreditation database / MEMIS	Annual		MoE
		TBC	50	80				
	Licensed	TBC	50	80				
PROPORTION OF TEACHERS QUALIFIED ACCORDING TO NATIONAL STANDARDS BY EDUCATION LEVEL AND TYPE OF INSTITUTION	Institution TBC	TBC	50	90	NIE - Accreditation database / MEMIS	Annual		MoE
	Institution TBC	TBC	50	90				
	Institution TBC	TBC	50	90				
	Institution TBC	TBC	50	90				
	Institution TBC	TBC	50	90				
	Institution TBC	TBC	50	90				
% OF TEACHERS TRAINED IN CURRICULA IMPLEMENTATION (CONTENTS AND PEDAGOGY)		TBC	75	95	NIE - Training report / MEMIS	Annual		MoE
% OF QUALIFIED TEACHERS AVAILABLE AGAINST THE TOTAL REQUIRED FOR		30	50	75	NIE - Training report / MEMIS	Annual		MoE

CHILDREN IN SPECIAL EDUCATION NEEDS									
THE CURRICULUM INCORPORATING EFFECTIVE PEDAGOGIES OF THE NCF IS REVIEWED WITH THE HELP OF PRE-SERVICE TEACHER TRAINERS	No	Yes	Yes	NIE	Annual			MoE	
% OF TEACHERS RECEIVING REGULAR TRAINING FOR ON BETTER CURRICULA IMPLEMENTATION (pedagogical shift, pedagogical practices, subject-based and Multi-grade Teaching where appropriate)	TBC	25	50	NIE	Annual			MoE	
% OF SCHOOLS WITH IMPLEMENTED MODULES FOR TEACHER TRAINING, INCLUDING SCHOOL BASED PROFESSIONAL DEVELOPMENT (SBPD), WITH ADDITIONAL FORMS OF DELIVERY	0	50	99	NIE	Annual			MoE	


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KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
 Program 5 Equitable access to quality education for students with Exceptionality and Special Education Needs								
% OF IDENTIFIED TEACHERS COMPLETE ADEQUATE TRAINING TO SUPPORT FOR CHILDREN WITH SEN		5	15	30	NIE - Training report / MEMIS	Annual		MoE
# OF TEACHERS WORKING AS COACHES IN SCHOOLS AS SPECIAL EDUCATION NEEDS (15 in each category)		15	20	20	NIE - Teachers database / MEMIS	Annual		MoE
# OF TEACHERS TRAINED TO DO FUNCTIONAL ASSESSMENT OF CHILDREN WITH SPECIAL NEEDS		0	30	60	NIE - Training report / MEMIS	Annual		MoE
% OF REGULAR SCHOOLS AND SPECIAL SCHOOLS HAVE ASSISTIVE TECHNOLOGIES TO SUPPORT LEARNING PROCESS FOR CHILDREN WITH SPECIAL NEEDS		0	50	80	NIE - School reports / MEMIS	Annual		MoE
% OF CHILDREN WITH SPECIAL EDUCATION NEEDS HAVE ACCESS TO ASSISTIVE TECHNOLOGY		0	50	80	NIE- School reports / MEMIS	Annual		MoE
LEARNING FRAMEWORK FOR SEN STUDENTS (CURRICULUM AND LEARNING PATHWAYS) ARE DEVELOPED AND IMPLEMENTED		No	Yes	Yes	NIE- School reports / MEMIS			

<p>% OF SPECIALISED TEACHER (INCLUSIVE COACHES) WHO RECEIVED TRAINING ON:</p> <ul style="list-style-type: none"> ● AUTISM SPECTRUM DISORDERS ● BEHAVIOUR MODIFICATIONS ● SPECIFIC LEARNING DISABILITY (SPLD) ● FUNCTIONAL ASSESSMENT OF CHILDREN WITH SEN 	0	50	99	NIE- School reports / MEMIS	Annual	MoE
<p>AN EARLY IDENTIFICATION AND INTERVENTION SYSTEM AT SCHOOL LEVEL INCLUDING AGE CATEGORY (0-3 YEARS) IS DEVELOPED</p>	No	Yes	Yes	NIE- School reports / MEMIS	Annual	MoE
<p>% OF SCHOOLS WHERE SCHOOL-BASED THERAPY SERVICES FOR CHILDREN WITH SEN (SPEECH THERAPY, OCCUPATIONAL THERAPY AND BEHAVIOUR MODIFICATIONS)</p>	0	33	66	NIE- School reports / MEMIS	Annual	MoE
<p>MEMIS SYSTEM IS ABLE TO TRACK SEN STUDENTS' PROGRESS BASED ON (A) CURRICULUM OUTCOMES AND (B) IEP GOALS</p>	No	Yes	Yes	NIE- School reports / MEMIS	Annual	MoE
<p>A MECHANISM TO PROVIDE ASSISTIVE TECHNOLOGIES FOR CHILDREN WITH SEN IS ESTABLISHED</p>	No	Yes	Yes	NIE- School reports / MEMIS	Annual	MoE

# OF DEDICATED STAFF HIRED AT THE DEPARTMENT OF INCLUSIVE EDUCATION (DIE) TO IMPLEMENT INCLUSIVE EDUCATION POLICY	0	1	2	NIE- School reports / MEMIS	Annual		MoE

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KPIs		Segment	Base		Target		Verify	Report	Comments	Owner
			2019	2021	2021	2023				
 Program 6 Strengthening the existing school learning environment to reflect safety, health, conducive and technology-based, teaching and learning to reduce risk factors for students	% OF STUDENTS FEELING SAFE IN SCHOOLS (free from Violence, Bullying and Corporal Punishment)	♂	TBC	80	90	ESQID - Risk assessment tool	Sample Survey / Quarterly		MoE	
		♂	TBC	80	90					
		♀	TBC	80	90					
		♀	TBC	80	90					
		SEN	TBC	80	90					
% OF STUDENTS SCREENED FOR HEALTH INDICATORS ARE "HEALTHY"		TBC	60	80	ESDID – Risk assessment tool	Annual		MoE		
	Internet for Pedagogical Purposes Computers for Pedagogical Purposes Dedicated Technical Support Adapted Infrastructure and Materials and Space for SEN Students	60	80	90	ESQID / NIE / QAD / Department of Statistics	Sample Survey / Quarterly		MoE		
% OF SCHOOL HAVING WELL MAINTAINED INFRASTRUCTURE	60	80	90							
	60	80	90							
	60	80	90							

	Single-Sex Basic Sanitation Facilities	60	80	90		ESQID – Risk assessment tool	Sample Survey / Quarterly	MoE
	Multi-Grade Classrooms	60	80	90				
	Science Lab	60	80	90				
	Students Meeting Area	60	80	90				
	First-Aid Room	60	80	90				
% OF SCHOOLS RATED "GOOD" ON DISASTER RISK REDUCTION SCALE		TBC	80	90				MoE
STANDARDS FOR CLASSROOMS TO PROVIDE A HOLISTIC AND INCLUSIVE EDUCATION READY FOR EFFECTIVE IMPLEMENTATION OF THE NCF ARE DEVELOPED (E.g. Design and develop a concept of a model school to offer holistic, inclusive, and equitable quality education in a single session environment)		No	Yes	Yes		QAD	Annual	MoE
% OF SCHOOLS WITH INTERNET CONNECTIVITY AND TECHNICAL SUPPORT		0	50	100		QAD	Annual	MoE
% OF SCHOOLS WHERE RISK ASSESSMENT AS PART OF THE SCHOOL HEALTH SCREENING AND DEVELOPMENTAL SCREENING PROGRAMME IS COMPLETED		TBC	50	100		QAD	Annual	MoE
% OF SCHOOL-AGED CHILDREN WHO RECEIVED MEDICAL CHECKUPS IN SCHOOLS, COMMENCING AT THE		TBC	50	100		QAD / NIE	Annual	MoE

APPROPRIATE / PRACTICAL GRADE LEVEL, IN ADDITION TO SCHOOL HEALTH SCREENING										
AN ANTI-BULLYING POLICY IS DEVELOPED, REVISED AND IMPLEMENTED	No	Yes	Yes	QAD / NIE	Annual				MoE	
AWARENESS AND ORIENTATION SESSIONS ON ANTIBULLYING TO SCHOOL COMMUNITY INCLUDING STUDENTS, TEACHERS AND PARENTS IS CONDUCTED	No	Yes	Yes	QAD / NIE	Annual				MoE	
# OF CASES OF BULLYING REPORTED FROM SCHOOLS	TBC	<100	<50	QAD / NIE	Annual				MoE	

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Program 7 Free breakfast in all schools (all government schools)

KPIs	Segment	Base		Target		Verify	Report	Comments	Owner
		2019		2021	2023				
PILOT PROGRAMME OF FREE BREAKFASTS FOR ALL IS CONDUCTED (E.g. administering and managing, eating habits, appropriateness of food menu, health and well-being, soft skills, etc.)		No		Yes	Yes	QAD	Annual		MoE
		213		213	213	QAD	Annual		MoE
	# OF SCHOOLS WITH THE PROGRAMME (FROM TERM 2 OF 2019 (JUNE 2019))								



Program 8 Single-session schooling

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
% OF SCHOOLS THAT ARE ENTIRELY SINGLE-SESSION	TBC	60%	90%	ESQID / NIE / QAD / Department of Statistics	Annual		MoE
PHYSICAL FACILITIES DEVELOPMENT PLAN FOR THE NEXT FIVE YEARS IS DEVELOPED	No	Yes	Yes	ESQID / NIE / QAD / Department of Statistics	Annual		MoE
HUMAN RESOURCE NEEDS ASSESSMENT AND AN HR PLAN FOR SCHOOLS IS COMPLETED	No	Yes	Yes	ESQID / NIE / QAD / Department of Statistics	Annual		MoE
% OF SCHOOLS REQUIRING ADDITIONAL INFRASTRUCTURE MODIFICATIONS AND REFURBISHMENT TO BE SINGLE SESSION SUCCESSFULLY MODIFIED	TBC	75	100	ESQID / NIE / QAD / Department of Statistics	Annual		MoE



Program 9 Extra support systems in school

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
POLICY FOR EXTRA SUPPORT SYSTEMS IN SCHOOLS IS DEVELOPED	No	Yes	Yes	QAD	Annual		MoE
ACTIVITIES TO PROVIDE ADDITIONAL SUPPORT TO STUDENTS ARE DEVELOPED three main categories; (a) for students who need further assistance to achieve the expected competencies in the curriculum (b) to achieve the expected competencies in the curriculum (c) to assist students who have exceeded beyond the expected competencies in the curriculum to achieve a higher target.	No	Yes	Yes	ESQID / NIE / QAD	Annual		MoE
% OF SCHOOLS THAT CONDUCT REMEDIAL CLASSES, EXTRA CLASSES AND ENRICHMENT PROGRAMMES	TBC	50	100	ESQID / NIE / QAD	Annual		MoE

**SKILLS FOR YOUTH AND ADULTS THROUGH EQUITABLE
EXPANSION OF THE TVET PROGRAMMES RESPONDING TO THE
SOCIO-ECONOMIC AND DEVELOPMENT NEEDS OF THE MALDIVES**

GOAL 2




KPIs	Segment	Base 2017	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF STUDENTS ENROLLED AND COMPLETED SCHOOL-BASED SKILLS DEVELOPMENT PROGRAMS	♂	30	40	50	SA Division	Annual	Numerator: Total no. of Vocational graduated in grade 10 = 1,720 Denominators: Total no. of grade 10 students graduated in Maldives= 5,660	MoE
	♀	30	40	50				
% OF TRAINEES ENROLLED AND CERTIFIED IN SKILLS DEVELOPMENT PROGRAMMES IN THE MALDIVES POLYTECHNIC AND OTHER TVET INSTITUTIONS	♂	100	100	100	Maldives Polytechnic	Annual	All trainees enrolled have been successful in the trainings Numerator: Total no. of trainees graduated from Maldives polytechnic = 363 Denominators: Total no. of trainees= 363	MoHE
	♀	100	100	100				
% GRADUATES OF TVET INSTITUTIONS, INCLUDING POLYTECHNIC, HIRED AND REMUNERATED AS PER	♂	TBC	10% from baseline	30% from baseline	Maldives Polytechnic	Annual	To collect baseline, a survey will be conducted	MoHE

LABOR MARKET WITHIN 6 MONTHS OF COMPLETION	♀	TBC	10% from baseline	30% from baseline	Maldives Polytechnic	Annual	To collect baseline, a survey will be conducted	MoHE
	♂	TBC	10% from baseline	30% from baseline				
	♀	TBC	10% from baseline	30% from baseline				
% GRADUATES OF TVET INSTITUTIONS, INCLUDING POLYTECHNIC, ARE SELF-EMPLOYED WITHIN 6 MONTHS OF COMPLETION		TBC	10	15	TVET Authority	Annual	Quality assurance standards are being developed	MoHE
# OF TVET PROGRAMS THAT MEET QUALITY ASSURANCE STANDARDS SET BY THE TVET AUTHORITY AND THE MINQF		TBC						

KPIs		Segment	Base 2019	Target		Verify	Report	Comments	Owner
				2021	2023				
NET ENROLMENT RATE IN SCHOOL BASED TVET PROGRAM		♂●	10	30	50	SA Division/MEMIS	Annual	Numerator: Total no. of Female BTEC students enrolled in grade 10 = 580 Denominators: Total no. of grade 10 students graduated in Maldives = 5,660	MoE
		♂⚧	10	30	50				
		♀●	10	30	50				
		♀⚧	10	30	50				
NET ENROLMENT RATE IN POLYTECHNIC TVET PROGRAM (BY TRADE, CERTIFICATES)		♂●	60	70	75	Maldives Polytechnic / EMIS	Annual	Numerator: Total no. of Female students in Polytechnic = 61 Denominators: Total no. of students in Polytechnic = 958	MoHE
		♂⚧	60	70	75				
		♀●	60	70	75				
		♀⚧	60	70	75				


♂ = Male, ♀ = Female, ● = Malé, ⚧ = Outer Islands, PP = Pre-Primary, P = Primary, LS = Lower Secondary, US = Upper Secondary, SEN = Special Education Needs Students, TBC = To be confirmed

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
 POLICY PRIORITY 2 Ensure high quality of TVET programs and curricula focusing on both, work-related skills and soft skills including entrepreneurial and ICT skills, through innovative and more flexible delivery modes and qualified trainers, through research and innovation								
TVET NATIONAL QUALIFICATION FRAMEWORK REVISED BASED ON THE FUTURE SKILLS FOR MALDIVES		No	Yes	Yes	TVET Authority – Qualification framework	2019, 2021 (revise)	Update on the framework	MoHE
% OF TRAINEES "SATISFIED" WITH THE COURSE CONTENTS AND TEACHERS TRAINING METHODOLOGY		TBC	20% from baseline	40% from baseline	TVET Authority - Sample survey / EMIS	Annual	Survey to be conducted	MoHE
% TRAINERS RATED "GOOD" USING TAILORED METHODS OF TEACHING - POLYTECHNIC		TBC	40% from baseline	70% from baseline	Maldives Polytechnic - Sample Survey / EMIS	Quarterly	Survey to be conducted	MoHE

POLICY							Ensure employability, retention, and relevance of TVET courses for the economic and						
PRIORITY 3							labour sectors						
KPIs	Base		Target		Verify	Report	Comments	Owner					
	2019	2021	2021	2023									
# OF TVET PROGRAMS OFFERED ARE BASED ON THE CURRENT AND FUTURE DEMANDS OF LABOUR MARKET	TBC	10	15		TVET Authority - Sample Survey	2019, 2021 (Revision)	Survey to be conducted	MoHE					
LABOUR MARKET SURVEY CONDUCTED	No	Yes	Yes		TVET Authority/ Ministry of Economic Development (MED) – Sample Survey	2019, 2021 (repeat survey)	Survey to be conducted	MoHE					

POLICY Quality Assurance mechanism established through monitoring and evaluation and PRIORITY 4 flexible credentials for non-formal courses							
KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
TVET PROGRAMS ASSESSMENT FRAMEWORK REVISED FOR MALDIVES	No	Yes	Yes	TVET Authority - Revised assessment framework	2019, 2021 (Revision)	Update on the framework	MoHE
% OF ALL TVET INSTITUTES/PROGRAMS RATED "GOOD" MINIMUM QUALITY STANDARDS USING THE QUALITY ASSURANCE FRAMEWORK	TBC	50% from baseline	70% from baseline	TVET Authority - Sample survey	Annual	Survey to be conducted	MoHE

POLICY PRIORITY 5 Strengthening the capacity of the TVET system							
KPIs	Base	Target		Verify	Report	Comments	Owner
	2019	2021	2023				
% OF MALDIVES POLYTECHNIC AND TVET AUTHORITY HAVE ADEQUATE LEVEL OF TECHNICAL AND MANAGEMENT EXPERTS MEETING MINIMUM SKILLS	TBC	30% from baseline	50% from baseline	TVET Authority- Human resources / EMIS	Annual	Survey to be conducted	MoHE

KPIs		Base		Target		Verify	Report	Comments	Owner
		2017	2021	2023					
 Program 1 TVET in schools upstream and downstream expansion with equity, quality and gender equality and pathways between streams									
# OF ADDITIONAL SCHOOLS OFFERING TVET COURSES - SCHOOL		365	10	30	TVET Authority Report / EMIS	Annual	BTECH Schools: 203 DHASVAARU: 162	MoHE	
STUDY OF THE IMPACT OF BTEC AND DHASVAARU / INTERNSHIP PROGRAMME IS COMPLETED AND PUBLISHED		No	Yes	Yes	TVET Authority Report / EMIS	Annual		MoHE	
REVIEW OF THE BTEC AND DHASVAARU PATHWAYS EXTENSION TO ALL STUDENTS COMPLETED		No	Yes	Yes	TVET Authority Report / EMIS	Annual		MoHE	
SKILLS-BASED TEACHING / LEARNING FACILITIES FOR STUDENTS IN SCHOOLS BASED ON REVIEW AND IMPACT ASSESSMENT ARE DESIGNED AND IMPLEMENTED		No	Yes	Yes	TVET Authority Report / EMIS	Annual		MoHE	
POLICIES RELEVANT TO POST-SECONDARY EDUCATION TO BUILD PATHWAYS FOR TVET AND HIGHER EDUCATION ARE DEVELOPED		No	Yes	Yes	TVET Authority Report / EMIS	Annual		MoHE	

Skills Maldives: Expansion of equitable, quality TVET programmes by the Maldives
Program 2 Polytechnic and Institutes for youth and adults, with gender, economic and geographic lenses.



KPIs	Base	Target		Verify	Report	Comments	Owner
	2017	2021	2023				
# OF ADDITIONAL TVET FACILITIES ESTABLISHED - POLYTECHNIC	4	6	8	TVET Authority Report / Maldives Polytechnic / EMIS	Annual		MoHE
REBRANDING TVET TO SKILLS DEVELOPMENT. (E.G: SKILLS MALDIVES) IS COMPLETED	No	Yes	Yes	TVET Authority Report / EMIS	Annual		MoHE
INTENSIVE PROMOTIONAL AND AWARENESS ACTIVITIES TO REACH OUT TO THE OUTER ISLANDS ON ACCESS AND BENEFITS TO THE INDIVIDUALS AND THE COMMUNITY IS CONDUCTED	No	Yes	Yes	TVET Authority Report / EMIS	Annual		MoHE
# OF CAREER GUIDANCE SESSIONS TO ALL STAKEHOLDERS AT DECENTRALIZED LEVELS	TBC	TBC	TBC	TVET Authority Report / EMIS	Annual		MoHE
# OF SCHOLARSHIPS OR FINANCING OPPORTUNITIES AVAILABLE TO TRAINEES PARTICULARLY FROM VULNERABLE GROUP OF YOUNG ADULTS	TBC	TBC	TBC	TVET Authority Report / EMIS	Annual		MoHE
# OF SUPPORT GROUPS AND	TBC	TBC	TBC	TVET Authority	Annual		MoHE

SUPPORT ACTIVITIES AVAILABLE TO STUDENTS FROM DIFFERENT COMMUNITIES, GROUPS (WOMEN AND VULNERABLE GROUPS)			Report / EMIS			
# OF FREE OF CHARGE COURSES PROVIDED TO YOUTH AND ADULTS TO FILL THE DEMAND	TBC	10	TVET Authority Report / EMIS	Annual		MoHE
% OF OBSERVED TVET PROGRAMMES RATED GOOD OR BETTER FOR INNOVATION	TBC	TBC	TVET Authority Report / EMIS	Annual		MoHE

Program 3 Strengthen quality assurance mechanism and monitoring for TVET programs

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
QUALITY ASSURANCE FRAMEWORK ESTABLISHED TO ENSURE QUALITY OF TVET FACILITY, CURRICULUM, TEACHERS AND TRAININGS	No	Yes	Yes	TVET Authority - Quality Assurance Framework, MQA	2019, 2021 (Revise)	Quality assurance framework established to ensure quality of TVET facility, curriculum, teachers and trainings	MoHE
QUALITY ASSURANCE FRAMEWORK DEVELOPED	No	Yes	Yes	TVET Authority - Quality assurance framework	2019, 2021 (Revise)		MoHE
INSTITUTES FOR INTERNAL REVIEWS AND EXTERNAL AUDITS ARE ESTABLISHED AND OPERATE	No	Yes	Yes	TVET Authority - Quality assurance framework	2019, 2021 (Revise)		MoHE
STANDARDS ARE DEVELOPED, REVIEWED AND UPDATEED	No	Yes	Yes	TVET Authority - Quality assurance framework	2019, 2021 (Revise)		MoHE
QUALITY OF THE FACILITIES AND RESOURCES IS REVIEWED AND IMPROVED	No	Yes	Yes	TVET Authority - Quality assurance framework	2019, 2021 (Revise)		MoHE
% OF TRAINERS AND ASSESSORS WHO HAVE BEEN REVIEWED FOR QUALITY	TBC	50	100	TVET Authority - Quality assurance framework	2019, 2021 (Revise)		MoHE
GOOD GOVERNANCE POLICIES AND PROCEDURES FOR TVET INSTITUTES DEVELOPED	No	Yes	Yes	TVET Authority - Quality assurance framework	2019, 2021 (Revise)		MoHE

<p>TRAINING PROGRAMMES ON 'GOOD GOVERNANCE, DEVELOPING AND IMPLEMENTATION OF STRATEGIC PLANS TO TVET-BASED INSTITUTES AND PERIODIC MONITORING' IS CONDUCTED</p>	<p>No</p>	<p>Yes</p>	<p>Yes</p>	<p>TVET Authority - Quality assurance framework</p>	<p>2019, 2021 (Revise)</p>		<p>MoHE</p>
<p>ANNUAL STATISTICS OF TVET TRAINING AND GRADUATE INTEGRATION INTO THE LABOUR MARKET ARE PUBLISHED</p>	<p>No</p>	<p>Yes</p>	<p>Yes</p>	<p>TVET Authority - Quality assurance framework</p>	<p>2019, 2021 (Revise)</p>		<p>MoHE</p>



Program 4 Ensuring Employability of skilled youth and adults, girls and economically vulnerable and geographically isolated.

KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2021	2023				
# OF SKILLED YOUTHS CONNECTED WITH THE INDUSTRY THROUGH TVET WEB PLATFORM	0	1,000	3,000	3,000	TVET Authority – Report / MED	Annual		MoHE
# OF SKILLED YOUTHS REGISTERED IN EMPLOYMENT EXCHANGE	0	50,000	70,000	70,000	MED - Report	Annual		MoHE
% OF TVET INSTITUTES OFFERING INTERNATIONALLY ACCREDITED PROGRAMMES	TBC	50	100	100	TVET Authority – Report / MED	Annual		MoHE
A MONITORING TEAM WITHIN THE TVETA, TO ANALYZE THE OUTCOMES OF THE TRAINING FOR JOB INSERTION, IS CREATED	No	Yes	Yes	Yes	TVET Authority – Report / MED	Annual		MoHE
STUDY ON SELF-EMPLOYABILITY IS COMPLETE	No	Yes	Yes	Yes	TVET Authority – Report / MED	Annual		MoHE
A DYNAMIC JOB AND ANALYSIS OF MATCHING SKILLS AND JOBS IS COMPLETED	No	Yes	Yes	Yes	TVET Authority – Report / MED	Annual		MoHE
POLICIES AND STANDARDS ON SETTING UP STARTUP INCUBATORS ARE DEVELOPED	No	Yes	Yes	Yes	TVET Authority – Report / MED	Annual		MoHE

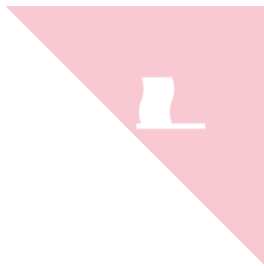


Program 5 TVET system to be strengthened through management and resource allocation at centre and outreach centres in atolls.

KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2021	2023				
# TVET FACILITIES ARE ADEQUATELY PROVIDED WITH FINANCIAL AND HUMAN RESOURCES	TBC	10	12		TVET Authority - Report	Annual		MoHE
% OF TVET TEAMS UNDERTAKING RESEARCH, INNOVATIONS AND IMPACT EVALUATIONS AND MONITOR PROGRAMMES	TBC	TBC	TBC		TVET Authority - Report	Annual		MoHE
THE CAPACITY OF THE TVET INSTITUTES AND REGULATORY AUTHORITIES THROUGH EXPOSURE, TRAINING, AND RESOURCE ALLOCATION IS INCREASED	TBC	TBC	TBC		TVET Authority - Report	Annual		MoHE
INFORMATION AND COMMUNICATION MANAGEMENT PLATFORM TO STRENGTHEN AND SUPPORT ALL INSTITUTES AND DECENTRALIZED STRUCTURES IS DEVELOPED AND IMPLEMENTED	No	Yes	Yes		TVET Authority - Report	Annual		MoHE
REGULAR MEETINGS ON THE PROPOSED PLATFORM ARE SCHEDULED AND TAKING PLACE	No	Yes	Yes		TVET Authority - Report	Annual		MoHE

**ENSURE EQUITABLE ACCESS TO LIFELONG, AFFORDABLE, AND
QUALITY HE FOR ALL**

GOAL 3



KPIs	Segment	Base 2017	Target		Verify	Report	Comments	Owner
			2021	2023				
GROSS ENROLMENT RATE IN HE (LEVEL 5)	♂	32	47	60	MoHE report / EMIS	Annual		MoHE
	♂	32	47	60				
	♀	32	47	60				
	♀	32	47	60				
GROSS ENROLMENT RATE IN HE (LEVEL 7)	♂	32	47	60	MoHE report / EMIS	Annual		MoHE
	♂	32	47	60				
	♀	32	47	60				
	♀	32	47	60				
% OF STUDENTS COMPLETED HE	♂	TBC	5% from baseline	10% from baseline	MoHE report / EMIS	Annual		MoHE
	♂	TBC	5% from baseline	10% from baseline				
	♀	TBC	5% from baseline	10% from baseline				
	♀	TBC	5% from baseline	10% from baseline				

# OF RESEARCHES PUBLISHED IN INTERNATIONAL JOURNALS		TBC	Research fund to be established	5% increase fund from 2021	TVET Authority	Annual	Quality assurance a Standards are being developed	MoHE
% OF HE GRADUATES HIRED AND REMUNERATED BY THE LABOUR MARKET WITHIN SIX MONTHS OF PROGRAMME COMPLETION IN A RELATED FIELD AND IN A NON-RELATED FIELD	♂ Related	TBC	50%	60%	MED / Maldives Chamber of Commerce - Survey	2021 & 2023		MoHE
	♂ Non-related	TBC	50%	60%				
	♀ Related	TBC	50%	60%				
	♀ Non-related	TBC	50%	60%				
% OF HE GRADUATES WHO ARE SELF-EMPLOYED	♂	TBC	5% from baseline	10% from baseline	MED / Maldives Chamber of Commerce - Survey	2021 & 2023	Increase by 5% and 10%	MoHE
	♀	TBC	5% from baseline	10% from baseline				
ADDITIONAL NUMBER OF SCHOLARSHIPS, LOANS AND FINANCIAL ASSISTANCE PROGRAMS EQUITABLY AVAILABLE TO THE STUDENTS		566 (2018)	1,000	2,000	MoHE Report / EMIS	Annual	1,000 loan opportunities opened annually, and others also opened	MoHE

♂ = Male, ♀ = Female, ● = Malé, ♂ = Outer Islands, PP = Pre-Primary, P = Primary, LS = Lower Secondary, US = Upper Secondary, SEN = Special Education Needs Students, TBC = To be confirmed

POLICY PRIORITY 1							
Size and Structure of Higher Education							
KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
# OF ADDITIONAL HE INSTITUTIONS ARE ACCREDITED AS PER THE QUALITY STANDARDS	0	Prepare the relevant docs	Start the implementation process	MoHE – Standards / EMIS	Annual		MoHE

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
HIGHER EDUCATION LEGISLATION, THE REGULATIONS FOR UNIVERSITIES, COLLEGES AND OTHER HEIS, APPROVED		No	Yes	Yes	MoHE - Legislation	2019 and 2020		MoHE
POLICY, PLANNING AND GOVERNANCE OF HE DEVELOPED		No	Yes	Yes	MoHE – Policy document	2019 - 2020		MoHE
MOHE HUMAN RESOURCE CAPACITY PLAN DEVELOPED AND IMPLEMENTED		No	Yes	Yes	MoHE - Human resource report	Annual		MoHE



POLICY
PRIORITY 2
Governance of Higher Education

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
QUALITY ASSURANCE FRAMEWORK (MNQF) TO ACCREDITED HE PROGRAM AND OTHER QUALITY ASPECTS DEVELOPED		No	Yes	Yes	MQA - MNQF	2019, 2021 (Review)		MoHE
# OF EXPERTS TRAINED IN MNQF		TBC	At least 15	At least 30	MQA - MNQF	Annual	# of experts trained in specialized areas	MoHE
% OF HE INSTITUTIONS AND PROGRAM OFFERED ACHIEVE MINIMUM QUALITY STANDARDS AS PER MNQF		TBC	10	15	MQA - MNQF	Annual	# of professional standards developed	MoHE




POLICY
PRIORITY 3
Quality in Higher Education

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
# OF ADDITIONAL COURSES INTRODUCED IN MOHE TO ENHANCE THE INTERNATIONAL STANDING OF THE MALDIVIAN HE SYSTEM BASED ON FUTURE NEEDS		0	to develop the standards	5	HE - Course details / EMIS	Annual	# of new curricula developed based on industry demands	MoHE
# OF RESEARCH PRODUCTS DEVELOPED USING NATIONAL FUND FOR RESEARCH		No (National fund for research established)	Developed the standards	Start the implementation process	NRC - Research reports	Annual		MoHE
E-LEARNING PLATFORM LAUNCHED		No	Yes	Yes	MoHE - Web platform			MoHE



POLICY PRIORITY 4
Economic and Social Relevance of Higher Education

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF SPENDING FOR HIGHER EDUCATION		TBC	5% Increase in spending	10% Increase in spending	MoHE - Financial reports	Annual		MoHE
% OF PRIVATE SECTOR PARTICIPATION IN THE PROVISION OF HE IN MALDIVES		TBC	10% Increase in spending	20% Increase in spending	MoHE - Private sector engagement report	Annual		MoHE
GEOGRAPHIC SPREAD OF HE INVESTMENTS IN ORDER TO IMPROVE INCLUSIVE HE PROVISION IN THE ATOLLS		TBC	15 atolls	20 atolls	MoHE - Financial report	Annual		MoHE

 Program 1 Size and Structure of Higher Education							
KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
SITUATIONAL REVIEW TO DETERMINE THE CURRENT CAPACITY OF HE IS CONDUCTED	No	Yes	Yes		2021, 2023 (revised)		MoHE
A STREAMLINED INSTITUTIONAL STRUCTURE IS DEVELOPED	No	Yes	Yes		2021, 2023 (revised)		MoHE
KEY AREAS IN WHICH THE MALDIVES COMMANDS COMPARATIVE ADVANTAGE IN HIGHER EDUCATION ARE IDENTIFIED AND DEVELOPED (E.G. TOURISM, FISHERIES, ISLAMIC FINANCE, WELLNESS, MARINE SCIENCE, ETC.)	No	Yes	Yes		2021, 2023 (revised)		MoHE
GUIDELINES / POLICIES FOR INNOVATIVE PEDAGOGICAL PRACTICES ARE DEVELOPED	No	Yes	Yes		2021, 2023 (revised)		MoHE
% OF FIRST DEGREE PROGRAMMES THAT ARE PROVIDED FOR FREE (completely free in 2 State universities, up to 60% subsidized in private colleges/universities)	TBC	50	70		2021, 2023 (revised)		MoHE
HIGHER EDUCATION LOAN SCHEME IS REVISED TO LOWER ADMINISTRATIVE CHARGE AND THE	TBC	TBC	TBC		2021, 2023 (revised)		MoHE

KPIs		Base 2019	Target		Verify	Report	Comments	Owner
			2021	2023				
APPROPRIATE LEGISLATION IS DEVELOPED		No	Yes	Yes	Legislation	2021, 2023 (review)		MoHE
HIGHER EDUCATION MASTER PLAN THROUGH A CONSULTATIVE PROCESS IS REVISED		No	Yes	Yes	Revised Master Plan	2021, 2023 (review)		MoHE
HIGHER EDUCATION COUNCIL IS RECONSTITUTED TO REFLECT REPRESENTATIVES FROM VARIOUS FIELDS		No	Yes	Yes	HEC reconstituted	2021, 2023 (review)		MoHE
GUIDANCE DOCUMENT ON THE CORE VALUES AND PRINCIPLES OF INSTITUTIONAL GOVERNANCE IS DEVELOPED		No	Yes	Yes	MoHE – Policy document	2021, 2023 (review)		MoHE
ORIENTATION PROGRAMMES TO HEIS ON HOW TO DEVELOP AND PUBLISH STRATEGIC PLANS AND ACTION PLANS ARE DEVELOPED AND DELIVERED		No	Yes	Yes	MoHE – Policy document	2021, 2023 (review)		MoHE
WORKSHOP/SEMINAR ON GOOD GOVERNANCE TO ALL HEIS IS DEVELOPED AND CONDUCTED		No	Yes	Yes	Workshop Reports	2021, 2023 (review)		MoHE

Program 2 Governance of Higher Education



KPIs		Base	Target		Verify	Report	Comments	Owner
		2019	2021	2023				
PROGRAMME TO REVISE AND STRENGTHEN THE INSTITUTIONAL AUDIT AND THE PROGRAMME ACCREDITATION POLICIES AND PROCEDURES IS CONDUCTED		No	Yes	Yes	MQA Document	2021, 2023 (review)		MQA/MoHE
COMPREHENSIVE REVIEW OF THE MNQF IS UNDERTAKEN		No	Yes	Yes	Revised NQF Document	2021, 2023 (review)		MQA/MoHE
% OF TRAINED STAFF OF THE MQA ON INSTITUTIONAL AUDITING AND PROGRAMME ACCREDITATION		0	50	100	Workshop Report	2021, 2023 (review)		MQA/MoHE
% OF IDENTIFIED RELEVANT STAFF THAT UNDERGO A TRAINING PROGRAMME ON INSTITUTIONAL REGISTRATION AND MANAGEMENT OF SCHEMES/FUNDS		0	50	100	Training Report	2021, 2023 (review)		MQA/MoHE
# OF EXPERTS TRAINED IN SPECIALIZED AREAS FOR CURRICULUM REVIEW		0	50	100	Training Report	2021, 2023 (review)		MQA/MoHE
ROFESSIONAL / OCCUPATIONAL STANDARDS IN THE CORE AREAS WHICH ARE RELEVANT TO THE CURRENT LABOUR MARKET ARE DEVELOPED		No	Yes	Yes	Standards Document	2021, 2023 (review)		MQA/MoHE
HIGH ACHIEVERS SCHOLARSHIP		No	Yes	Yes	MoHE Annual	2021, 2023		MoHE

Program 3 Quality in Higher Education



SCHEME IS DEVELOPED (Extended countries allowed SAARC countries, China, Philippines, Malaysia, and Indonesia to cover OECD countries as well)			Report	(review)		
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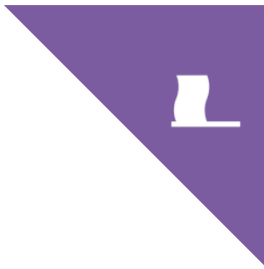
Program 4 Economic and Social Relevance of Higher Education



KPIs	Base	Target		Verify	Report	Comments	Owner
	2019	2021	2023				
ICT ENABLED WORKING ENVIRONMENT IN THE MOHE, THE MQA AND IN THE TVETA IS CREATED WITH THE HELP OF INFORMATION MANAGEMENT SYSTEM	No	Yes	Yes		2021, 2023 (review)		MoHE/MQA/TVETA
HIGHER EDUCATION NEEDS ANALYSIS IS CONDUCTED	No	Yes	Yes	Needs Analysis Report	2021, 2023 (review)		MoHE
SECTOR COUNCILS UNDER THE TVET AUTHORITY ARE REACTIVATED AND INDUSTRY-BASED CURRICULA DEVELOPED	No	Yes	Yes		2021, 2023 (review)		TVETA/MoHE
RESEARCH COUNCIL IS ESTABLISHED	No	Yes	Yes	Council Mandate	2021, 2023 (review)		MoHE
NATIONAL FUND FOR RESEARCH IS ESTABLISHED	No	Yes	Yes	Fund Statement	2021, 2023 (review)		MoHE
POLICIES AND GUIDELINES FOR INNOVATIVE PEDAGOGICAL PRACTICES ARE DEVELOPED	No	Yes	Yes		2021, 2023 (review)		MoHE
POLICIES FOR RPL ARE DEVELOPED	No	Yes	Yes	RPL Document	2021, 2023 (review)		MQA/MoHE
POLICIES FOR LIFELONG LEARNING ARE DEVELOPED	No	Yes	Yes		2021, 2023 (review)		MoHE

Program 5 Budget and Finance of Higher Education

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
AMOUNT OF LOCAL AND INTERNATIONAL FUNDING FOR HIGHER EDUCATION AND RESEARCH	TBC	TBC	TBC		2021, 2023 (review)		MoHE
KEY STAKEHOLDERS FROM MAIN INDUSTRIES ARE IDENTIFIED TO SHARE GOOD PRACTICES TO ENCOURAGE PUBLIC -PRIVATE SECTOR PARTNERSHIPS	No	Yes	Ye		2021, 2023 (review)		MoHE



GOAL 4

SYSTEM STRENGTHENING FOR EFFICIENCY AND QUALITY SCHOOLS AND TRAINING SERVICES

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
% OF SCHOOLS RATED MORE THAN 3 ON RATING SCALES IN ALL QUALITY ASSURANCE MODULES OF SIQAAF WHICH ALSO INCLUDES IMPLEMENTATION OF SIP	TBC	60	80	QAD - SIQAAF	Sample / Quarterly		MoE
MEMIS PLATFORM IS FULLY IMPLEMENTED FOR POLICY DEVELOPMENT AND ACCOUNTABILITY	No	Yes	Yes	PPRD – MEMIS report	Annual		MoE & MoHE
SIQAAF AND NATIONAL ASSESSMENT FOR LEARNING OUTCOMES ARE INTEGRATED AND MAINSTREAMED IN THE QUALITY ASSURANCE DEPARTMENT (QAD)	Yes	Yes	Yes	QAD Revised framework	Annual		MoE
MOE FORMULATES HUMAN RESOURCE DEVELOPMENT PLANS FOR STRENGTHENING TECHNICAL COMPETENCE OF STAFF IN SELECTED AREAS	No	Yes	Yes	PPRD	Annual		MoE
PUBLIC EXPENDITURE REVIEW AND INPUT AND OUTPUT EFFICIENCY EVALUATED	No	Yes	Yes	PPRD – PER / PFM report	2021, 2023		MoE & MoHE



**POLICY
PRIORITY 1**

Strengthen the capacity of the system at the MoE and the decentralized entities (TRC), to support schools for the development of 3-year strategic plans, learning oriented SIPs, defining subject improvement plans, and for evidence-based innovation to reduce learning gap, to succeed in inclusion and development of skills and soft skills and wellbeing of students

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
# OF TEACHER RESOURCE CENTERS WITH ICT UPGRADED AND AT LEAST 1 TECHNICAL COORDINATOR PROVIDING SUPPORT TO SCHOOLS WITH FOCUS ON TEACHING AND LEARNING	21	21	21	NIE/TRC report	Quarterly		MoE

POLICY PRIORITY 2 Strengthen the Maldives Monitoring and Evaluation Information System (MEMIS) for policy development and implementation to improve Learning for all								
KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2023					
CREATE CORE KPIS FOR EVIDENCE BASED DECISION MAKING	No	Yes	Yes		PPRD - MEMIS	Annual		MoE & MoHE
% OF ESA 2018 RECOMMENDATIONS ARE IMPLEMENTED	0	50	80		PPRD - MEMIS	Annual		MoE & MoHE
# OF POLICY MAKERS AND OTHER STAKEHOLDERS UTILIZING EMIS PLATFORMS FOR POLICY MAKING, IMPLEMENTATION AND ADVOCACY	0	20	40		PPRD – MEMIS & MoHE EMIS	Sample Survey / Annual		MoE & MoHE

Implement School Improvement Plans focused on the adequate response to at risk students, equitable access and improve learning outcomes, skills/soft skills and wellbeing, through the SSE and external school reviews and the NALO results in accountability



**POLICY
PRIORITY 3**

KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2021	2023				
# OF SCHOOLS PREPARE SIPS USING RESULTS OF QUALITY ASSURANCE ACCOUNTABILITY FRAMEWORK (SIQAAF) AND THE NALO RESULTS	80	120	213	213	QAD / PPRD - SIQAAF	Annual		MoE
# OF SCHOOLS SHOWING PROGRESS IN LEARNING OUTCOMES	TBC	80	213	213	QAD-NALO	2019,2021		MoE

KPIs		Base 2017	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF TEACHERS OBSERVED EFFECTIVELY USING ICT IN CLASSROOM TEACHING IN SCHOOLS		20	50	80	QAD - SIQAAF	Quarterly / Sample survey		MoE



**POLICY
PRIORITY 4**

Effective use of technology in the education system for improved services delivery

Program 1
Strengthening the MoE and TRCs teams to support School Improvement Plans focused on holistic learning outcomes and inclusion



KPIs	Base	Target		Verify	Report	Comments	Owner
	2017	2021	2023				
# OF MOE STAFF AND TRC COORDINATORS TRAINED IN DEVELOPMENT OF SIP	10	20	20	QAD - Report	Beginning of every year	# of MoE staff and TRC coordinators trained in development of SIP	MoE
CAPACITY ASSESSMENT TO SUPPORT THE EFFECTIVE IMPLEMENTATION OF THE NATIONAL CURRICULUM FRAMEWORK AT NIE IS CONDUCTED	No	Yes	Yes				
% OF STAFF OF NIE, QAD, ESQID AND DIE WHO ATTENDED TRAINING ON EVIDENCE-BASED PRACTICES ON LEARNING, SKILLS ACQUISITION, INCLUSION, SCHOOL-BASED PROFESSIONAL DEVELOPMENT (SBPD), THROUGH APPROPRIATE IN-COUNTRY WORKSHOPS, AND OVERSEAS WORKSHOPS, SHORT TRAINING AND EXPOSURE TRIPS	No	Yes	Yes				
EDUCATIONAL TECHNOLOGY (INCLUDING ICTS) CAPACITY OF THE TRCS AND HUMAN RESOURCES CAPABILITY OF THE TRCS ARE BOTH STRENGTHENED	No	Yes	Yes				
% OF SCHOOLS THAT SUBMIT AND IMPLEMENT CORRECT SIPS	TBC	75	100				



Program 2 MoE Financial management to improve cost effectiveness towards holistic learning for all

KPIs	Base	Target		Verify	Report	Comments	Owner
	2019	2021	2023				
MOE FINANCE DEPARTMENT HAS THE CAPACITY TO REPORT ON SUB-SECTORS AND CONDUCT PUBLIC EXPENDITURE REVIEW FOR COST-EFFECTIVENESS	No	Yes	Yes	PPRD / Finance/MoHE	Mid-Term		MoE & MoHE
COST-BENEFIT ANALYSIS FOR LEARNING OUTCOMES CONDUCTE	No	Yes	Yes				
FINANCIAL REPORTING SYSTEMS AND PRACTICES BY LEVELS OF THE EDUCATION SYSTEM (E.G.: PREPRIMARY, PRIMARY, LOWER SECONDARY, HIGHER SECONDARY, TVET, HIGHER EDUCATION) IS COMPLETED	No	Yes	Yes				

Program 3 MEMIS strengthening for improved holistic learning for all



KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2023					
MEMIS HAVE SKILLED STAFF TO SUSTAIN THE SYSTEM IN REAL TIME	No	Yes	Yes		PPRD / MEMIS	Annual		MoE
MEMIS TEAM AND THE FACILITY ARE CONSOLIDATED	No	Yes	Yes		PPRD / MEMIS			MoE
INDICATORS FROM THE MEMIS DATABASE ARE CONSOLIDATED	No	Yes	Yes		PPRD / MEMIS			MoE
# STAFF FROM EACH SCHOOL AND MOE DEPARTMENTS ON MEMIS FEED AND USE TRAINED	2	5	7		PPRD / MEMIS			MoE
MEMIS IS MADE OPERATIONAL BY PROVIDING ACCESS TO ALL KEY DEPARTMENTS OF THE MOE	No	Yes	Yes		PPRD / MEMIS			MoE
% MINISTRY STAFF THAT ATTENDED THE ORIENTATION AND TRAINING PROGRAMMES OF THE MEMIS	TBC	60	100		PPRD / MEMIS			MoE
FINANCIAL SUSTAINABILITY OF THE MEMIS SYSTEM WITH THE SCOPE FOR EXPANSION IS ANALYZED AND A REPORT IS PUBLISHED	TBC (ongoing in April 2019)	Yes	Yes		PPRD / MEMIS			MoE



Program 4 SIQAAF and NALO strengthening Implementation

KPIs	Base		Target		Verify	Report	Comments	Owner
	2019	2021	2021	2023				
BASIC FRAMEWORK PREPARED FOR MALDIVES INTEGRATION WITH OECD CONDUCTED TEST THE PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT (PISA)	No	Yes	Yes	Yes	QAD – PISA implementation plan	Annual		MoE
ESTABLISH A MECHANISM FOR SYSTEMATIC EXTERNAL REVIEW OF SCHOOLS	Yes	Yes	Yes	Yes	QAD – External review reports	2019, 2021 (Revise)		MoE
ESTABLISH A ROBUST SYSTEM TO CONDUCT NALO	No	Yes	Yes	Yes	QAD - NALO	2019, 2021 (Revise)		MoE
# OF ATOLLS HAVING AT LEAST 2 STAFF TRAINED IN CONDUCTING NALO	No	20	20	20	QAD - NALO	Annual		MoE
SIQAAF IMPLEMENTATION POLICY AND SUPPORTING DOCUMENTS IS PUBLISHED	Yes	Yes	Yes	Yes	QAD - NALO	Annual		MoE
# OF QUALITY PEOPLE WORKING FOR THE QAD TEAM TO IMPLEMENT SIQAAF BY THE END OF 2019 THROUGH A SERIES OF TRAINING PROGRAMMES /WORKSHOPS	TBC	TBC	TBC	TBC	QAD - NALO	Annual		MoE

% OF TEACHERS WHO RECEIVED TRAINING AND GUIDANCE TO REGARDING SIQAAF AND NALO IMPLEMENTATION	TBC	90	100	QAD - NALO	Annual	MoE
NALO IMPLEMENTATION POLICY AND NATIONAL ASSESSMENT FRAMEWORK, INCLUDING BENCHMARKS AND STANDARDS, ARE PUBLISHED	Yes	Yes	Yes	QAD - NALO	Annual	MoE
NALO IS INCLUDED IN MEMIS BY THE END OF 2020	No	No	Yes	QAD - NALO	Annual	MoE
(ONLINE) GUIDELINES FOR THE USE OF NALO DATA FOR INSTRUCTIONAL PURPOSES AT THE SYSTEM AND NATIONAL LEVEL ARE PREPARED AND MADE AVAILABLE	No	Yes	Yes	QAD - NALO	Annual	MoE



Program 5 Educational technology integration for quality holistic learning for all

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
% OF STUDENTS OBSERVED EFFECTIVELY USING ICT IN CLASSROOM LEARNING	TBC	50	75	NIE - Classroom assessment	Quarterly / Sample survey		MoE
% OF TEACHERS TRAINED ON THE INTEGRATION OF EDUCATIONAL TECHNOLOGY (INCLUDING ICTS) IN TEACHING AND LEARNING BY THE END OF 2020	TBC	50	100	NIE - Classroom assessment	Quarterly / Sample survey		MoE
% OF SCHOOLS WITH EDUCATIONAL TECHNOLOGY (INCLUDING ICT)	TBC	50	100	NIE - Classroom assessment	Quarterly / Sample survey		MoE
SELECTED GROUP OF SCHOOL STAFF FOR ICT MAINTENANCE ARE CHOSEN	No	Yes	Yes	NIE - Classroom assessment	Quarterly / Sample survey		MoE

Program 6 Empowering schools for effective school leadership and management							
KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
A TRAINING PROGRAMME FOR SCHOOL PRINCIPALS FOR THE ENHANCEMENT OF LEADERSHIP SKILLS AND COMPETENCE IS DEVELOPED AND CONDUCTED (ESPECIALLY NEW PRINCIPALS AND DEPUTIES)	No	Yes	Yes	School Admin Division/TRC	2021, 2023 (review)		MoE
SCHOOL-BASED MANAGEMENT WORKSHOPS ARE CONDUCTED (e.g. delegating of authority, the involvement of school community /parents, initiative taking, etc.)	No	Yes	Yes	School Admin Division/TRC	2021, 2023 (review)		MoE
TRAINING PROGRAMME TO UPSKILL LEADING TEACHERS IS CONDUCTED	No	Yes	Yes	School Admin Division/TRC	2021, 2023 (review)		MoE

References:

Abdul-Hamid, Husein. (2014). "What Matters Most for Education Management Information Systems: A Framework Paper." SABER Working Paper Series No. 7, World Bank, Washington DC.

Abdul-Hamid, Husein. (2017). "Data for Learning: Building a Smart Education Data Systems." Directions Development, World Bank, Washington, DC.

Act (08/2010). Act on protecting the rights of persons with disability, Maldives.

Adam, L. (2011). How Can Holistic Education Management Information Systems Improve Education?" Retrieved from <http://edutechdebate.org/education-managementinformationsystems/how-can-holistic-education-management-information-systems-improve-education/>

Asian Development Bank [ADB]. (2015). Maldives: overcoming the challenges of a small island state. Retrieved from <https://www.adb.org/sites/default/files/publication/172704/maldives-overcoming-challenges-small-island-state.pdf>

ADB. (2012). Maldives: Employment Skills Training Project. Retrieved from <https://www.adb.org/sites/default/files/project-document/73163/33217-013-mld-pcr.pdf>

Al Koofi, Ahmed & A. Karim. (2007). "A Study of How an Education Management Information System (EMIS) Can Be Effectively Implemented in the Ministry of Education in the Kingdom of Bahrain." Ministry of Education, Kingdom of Bahrain, Al Manamah.

APEID/UNESCO (1989). Multi-grade teaching in single teacher primary schools.

Asian Development Bank. (2002, January). Poverty Reduction in the Maldives: Issues, Findings, and Approaches. Retrieved from <http://www.finance.gov.mv/v2/uploadedcontent/posts/intpub/Post1368-2002.pdf>.

Birch, I. & Lally, M. (1995). Multigrade teaching in primary school. Thailand: UNESCO.

Bredeson, P.V. (2000). The School Principal's Role in Teacher Professional Development. Journal of In-Service Education, 385-401. 229

Centre for Education Innovations. (2014). Educational Technology. Retrieved from <http://www.educationinnovations.org/topics/educational-technology>

CERID/TU (1988). Multi-grade Teaching in Primary Schools of Nepal. Kathmandu.

- Chopin, I., Farkas, L. and Germaine, C. (2014). Ethnic Origin and Disability Data Collection in Europe: Measuring Inequality – Combating Discrimination. Brussels, Open Society European. Policy Institute. (Equality Data Initiative Policy Report.)
- Choudhuri, M., Khandake, Jahurul Alam, Rabiul Hasan, & Rashida, S. (2005, June). Situational Analysis and Assessment of Education for Children with Disabilities in Bangladesh, South Asia, East Asia and South Africa. Retrieved from http://www.hpod.org/pdf/Kar-thematic_edu.pdf.
- Circular (02/2013). Inclusive education policy of Maldives, Ministry of Education.
- De Melo, G. Machado, A., & Miranda, A. (2014). The impact of a one laptop per child program on learning: Evidence from Uruguay. IZA Discussion paper No. 8489. Retrieved from <http://ftp.iza.org/dp8489.pdf>
- Department of Higher Education. (2017). Master Plan for Higher Education 2017-2022. Ministry of Education and The World Bank.
- Department of Higher Education. (2017). Registered Higher Education Institutions. Ministry of Education. Retrieved from <http://dhe.gov.mv/wp-content/uploads/2017/09/19th-September-2017-Registered-Higher-Education-Institutions.pdf>.
- Department of Higher Education. (2018). Skills shortage list. Ministry of Education. Maldives. Retrieved from: <http://dhe.gov.mv/wp-content/uploads/2013/04/Skill-Shortage-List-04-Jan-2017.pdf>.
- Department of National Planning. (2012). Statistical Yearbook 2012. Retrieved from <http://planning.gov.mv/yearbook2012/yearbook.html>.
- Dinçer, M. A., Kaushal, N., & Grossman, M. (2014). Women’s education: Harbinger of another spring? Evidence from a natural experiment in Turkey. *World Development*, 64, 243-258.
- Dundar, H., Beteille, T., Reboud, T., & Deolalikar, A. (2014). Student learning in South Asia: Challenges, opportunities, and policy priorities. Washington DC: The World Bank.
- Education for all multigrade teaching: Challenges and opportunities, (pp.1-26), Netherlands: Springer.
- El-Horr, J & Pande, R, P. (2016). Understanding Gender in Maldives: Toward Inclusive Development. *Directions in Development--Countries and Regions*. Washington, DC: World Bank. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/24118/9781464808685.pdf?sequence=2&isAllowed=y>

- Galama, T. J., & van Kippersluis, H. (2013). Health Inequalities through the Lens of Health Capital Theory: Issues, Solutions, and Future Directions. *Research on Economic Inequality*, 21, 263–284. Retrieved from [http://doi.org/10.1108/S1049-2585\(2013\)0000021013](http://doi.org/10.1108/S1049-2585(2013)0000021013)
- Global Education Monitoring Report (2017/18)
- GPE. (2017). Global Partnership for Education (GPE) Results Report 2015/2016 Washington, DC.
- Greaney, V and Kellaghan, T. (2008a). “Assessing National Achievement Level in Education”. Volume1. The World Bank Publishing, Washington, DC.
- Greaney, V and Kellaghan, T. (2008b). “National Assessment”, Volume 2. The World Bank Publishing, Washington, DC.
- Groff, J. (2013). Technology-rich innovating learning environments (OECD Innovative Learning Environments (ILE) project). Retrieved from <http://www.oecd.org/education/cei/TechnologyRich%20Innovative%20Learning%20Environments%20by%20Jennifer%20Groff.pdf>
- Gunatilaka., R. (2013). Employment Challenges in the Maldives. International Labour Organization.
- Hammond DL. (2005). Educating the new educator: Teacher education and the future of democracy. *The New Educator* (1), pp.1-18.
- Harris, Claire; Green, Sally and Elshaugs, Adam.G. Claire Harris. (2017). Sustainability in Health care by Allocating Resources Effectively (SHARE) 10: operationalising disinvestment in a conceptual framework for resource allocation. *BMC Health Serv Res.* 17:632 (2506-7)
- Hassan, A. (2015). Education for All: National Review Report. Maldives 2015.
- Hayes, N. (2007a). The role of early childhood care and education from anti-poverty perspective. Background Policy Paper commissioned by Combat Poverty.
- Health Protection Agency. (2013). Study of KAP of Women of Reproductive age related to the risk Factors, Prevention and Early Detection of Cervical Cancer in Maldives. Ministry of Health. Maldives.
- Heckman, J.J., Humphries, E.J & Veramendi, G. (2017). The Non-Market Benefits of Education and Ability. National Bureau of Economic Research. DOI: 10.3386/w23896. Retrieved from <http://www.nber.org/papers/w23896.pdf>
- <https://www.adb.org/sites/default/files/publication/172704/maldives-overcomingchallenges-small-island-state.pdf>

Hussain, Y., Atkin, K. and Ahmad, W. I. U. 2002. South Asian disabled young people and their families. Bristol, The Policy Press and the Joseph Rowntree Foundation.

ILO. (2018). The ILO at a glance. Retrieved from <http://www.ilo.org/public/english/download/glance.pdf>

Incheon Declaration and Framework for Action for the implementation of Sustainable Developmental Goal 4 – Education 2030 Framework for Action

Juvenile Justice Unit. (2015). Report on Children who breaks the law. Retrieved from <http://jju.gov.mv/archives/324>

Kayani, M. M., Akbar, R. A., Faisal, S., Kayani, A., & Ghuman, M. A. (2017). Analysis of Socio- Economic Benefits of Education in Developing Countries: A Example of Pakistan. Bulletin of Education and Research, 39(3), 75-92.

Lam, D., Sedlacek, G., & Duryea, S. (2016). Increase in women´ s education and fertility decline in Brazil. Anais, 89-118. Retrieved from <http://www.abep.org.br/publicacoes/index.php/anais/article/viewFile/568/548>

Li, Kun. (2007). Teacher Resource Centres give every Maldivian child a chance for quality education. Retrieved from https://www.unicef.org/infobycountry/maldives_42216.html

Little, A. (2003). Multi-grade teaching. In: the development of the Asia Pacific Curriculum Resource Pack – UNESCO-IBE. Kathmandu: CERID, pp.1-3. Retrieved from http://www.ibe.unesco.org/sites/default/files/6_3_3_CS_NPMultigradeMulticlass.pdf

Little, A. (2008). Education for all and Multi-grade Teaching: Challenges and opportunities. A Journal of Comparative and International Education, 38(4), pp.505-507.

Little, A. W. (2006). Education for all: Multigrade realities and histories. In A. W. Little (Ed.),

Little, A.W. (1995). Multigrade teaching: A review of practice and research. Serial No. 12. London: Overseas Development Administration (ODA).

Little, A.W. (2001). Multigrade teaching: towards an international research and policy agenda, International Journal of Educational Development, 21(6), pp. 481- 497.

Luena, Assela M., "Strengthening the Education Management Information System (EMIS) in

- Ma, J; Matea, P and Welch, M. (2016). Education Pays 2016: The Benefits of Higher Education for Individuals and Society. Trends in Higher Education Series. The College Board. Retrieved from <https://files.eric.ed.gov/fulltext/ED572548.pdf>
- Machin, S., Marie, O & Vujic', S. (2011). The Crime Reducing Effect of Education. The Economic Journal, 121 (May), 463–484. Doi: 10.1111/j.1468-0297.2011. 02430.x
- Maldives Institute for Psychological Services, Training and Research. (2012). Rapid situation assessment of gangs in Male'. The Asia Foundation. Sri Lanka.
- Maldives National University. (2016). Annual Report. Maldives National University. Maldives.
- Maldives Polytechnic. (2018). Retrieved from <http://v2.polytechnic.edu.mv/>.
- Maldives Strategy for Inclusive Education 2015-2019.
- Management Information System.” MoEHA, Suva, Fiji. Retrieved from http://www.education.gov.fj/images/2016/FEMIS_Policy_-Reviewed_2016.pdf.
- Marchetta, F., & Sahn, D. E. (2016). The Role of Education and Family Background in Marriage, Childbearing, and Labor Market Participation in Senegal. Economic Development and Cultural Change, 64(2), 369-403.
- May., J.F. (2016). Maldives' Population Dynamics: Policy Prospects for Human Growth and Opportunity. UNFPA. Maldives.
- MCST. (2001). Science and Technology Master Plan. Malé, Maldives: Ministry of Communication, Science and Technology. Retrieved from <http://www.unapcict.org/ecohub/resources/maldives-science-and-technology-master-planinformation-technology>
- MDHS. (2009, nd. nd.). www.cdc.gov/nchs/ppt/citygroup. Retrieved from https://www.cdc.gov/nchs/ppt/citygroup/meeting12/wg12_session6_2_abdulhakeem.pdf
- Mezo-Cordeno, J. A. (2016). Learn to play and play to learn: Evaluation of the one laptop per child program in Cost Rica. Journal of International Development, 29(1), 3-31. Retrieved from DOI: 10.1002/jid.3267
- Ministry of Education & UNICEF Maldives. (2015). Abridged Report: Children who migrate to Male' for Education.
- Ministry of Education & UNICEF Maldives. (2016). Alternative Learning Programs (ALPs) for Out of School Children (OOSC) Policy.

Ministry of Education Statistics (2016). School statistics. Retrieved 2 June, 2017 from <https://moe.gov.mv/en/category/view/14>

Ministry of Education, 1992. Structure of the Education System. Retrieved from http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdfversions/Maldives.pdf

Ministry of Education, Maldives (2017). Multigrade policy revised, Policies and Circulars pp.1-7 Retrieved from <https://www.moe.gov.mv/en/category/view/10>

Ministry of Education, Maldives (2018). Multigrade profiles list of schools, Retrieved from <https://docs.google.com/spreadsheets/d/1PQIk3KiqYJAuz16GmrQn7TibaMrhjV4rcyc71V27g/edit#gid=1384042764>

Ministry of Education, Male' Maldives. Retrieved from https://www.unicef.org/about/employ/files/ADVERT_for_the_Consultancy_on_developing_ALPs_for_OOSC.pdf

Ministry of Education, NCF Maldives (2014). National curriculum Framework. Retrieved from https://moe.gov.mv/assets/upload/National_Curriculum_Framework_English.pdf

Ministry of Education. (2009). Guide for “school emergency operations plan” Maldives. Retrieved from http://www.mv.undp.org/content/maldives/en/home/library/environment_energy/Report.html.

Ministry of Education. (2011). Circular No 11/2011. Retrieved from https://www.moe.gov.mv/assets/upload/Implementing_of_the_Guide_for_School_Emergency_Operations_Plan3.pdf.

Ministry of Education. (2014). National Curriculum Framework. Ministry of Education. Maldives.

Ministry of Education. (2015). Multigrade policy, Policies and Circulars. Maldives. pp.1-5. Ministry of Education. Maldives.

Ministry of Education. (2015). Statistics 2015. Ministry of Education. Maldives.

Ministry of Education. (2016). Brief Study into the implementation of the National Curriculum. Ministry of Education

Ministry of Education. (2016). Minister speech, media press. Retrieved 2 June 2017 from <https://moe.gov.mv/en/category/view/19>

Ministry of Education. (2009). Guide for “school emergency operations plan” Maldives.

Retrieved from
http://www.mv.undp.org/content/maldives/en/home/library/environment_energy/Report.html.

Ministry of Education. (2011). Circular No 11/2011. Retrieved from
https://www.moe.gov.mv/assets/upload/Implementing_of_the_Guide_for_School_Emergency_Operations_Plan3.pdf.

Ministry of Education. (2017). School Statistics 2017

Ministry of Education. (2010). Republic of the Marshall Islands, Ministry of Education: One laptop per child pilot project. Retrieved from
<https://app.box.com/s/k6fsitchrvtquv7jvrut>

Ministry of Education. (2015). ICT in Education Master Plan of Maldives 2015-2018: Strengthening foundation, starting innovation. Ministry of Education. Male', Maldives.

Ministry of Education. HA (Ministry of Education, Heritage and Arts). (2016). "Policy on Fiji Education".

Ministry of Finance and Treasury. 2015. "Budget in Statistics. Financial Year 2015". Retrieved from, <http://www.finance.gov.mv/v2/uploadedcontent/posts/Post1464-2015.pdf>

Ministry of Health and Family & ICF Macro. (2010). Maldives Demographic and Health Survey 2009. Ministry of Health and Family. Maldives. Retrieved from
[http://www.health.gov.mv/Uploads/Downloads//Informations/Informations\(60\).pdf](http://www.health.gov.mv/Uploads/Downloads//Informations/Informations(60).pdf)

Mohamed, A. & Ahmed, M. (2008). Maldives. Education policies, curriculum design and implementation at the level of upper primary and general secondary education. Retrieved from <http://www.nzdl.org/gsdImod>

Mortimore., G & Stimson., G. (2010). Process & systems evaluation of the drug treatment & rehabilitation services in the Maldives.

MPND [Ministry of Planning and National Development]. (2007). Seventh National Development Plan 2006-2010: creating new opportunities. Male', Maldives: MPND.

MQA. (2009). Maldives National Qualifications Framework. Retrieved from http://www.mqa.gov.mv/mnqf#accordion1_1 [Accessed: 25 February 2018].

Naaz., A., A. (2011). Prison Assessment and Proposed Rehabilitation and Reintegration of Offenders Report. United Nations Development Programme in the Maldives and the Government of Maldives.

- National Bureau of Statistics. (2014). Maldives Population and Housing Census 2014: Statistical Release: III Education. Retrieved from <http://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2016/02/StatisticalReleaseIIIEducation.pdf>
- National Bureau of Statistics. (2014). Population and Housing Census-Statistical Release IV: Employment. Retrieved from <http://statisticsmaldives.gov.mv/nbs/wpcontent/uploads/2016/02/StatisticalReleaseIV-Employment.pdf>
- National Bureau of Statistics. (2014). Statistical Release IV: Employment. Retrieved from <http://statisticsmaldives.gov.mv/statistical-release-iv-employment/>
- National Bureau of Statistics. (2016). Statistical Yearbook of Maldives 2016. Ministry of Finance and Treasury. Retrieved from <http://statisticsmaldives.gov.mv/yearbook/>.
- National Bureau of statistics. (2017). Statistical Year book of Maldives-2017. Ministry of Finance and Treasury. Maldives. Retrieved from <http://statisticsmaldives.gov.mv/toshare/yearbook/Statistical%20Yearbook%20of%20Maldives%202017.pdf>.
- National Bureau of Statistics. (2017). Statistical Year Book. Ministry of Finance and Treasury.
- National Institute of Education. (2013). Longitudinal Study on the impact of Curriculum Reform (2012- 2013).
- Nawab, A. & Baig, S.R. (2011). The possibilities and challenges of multigrade teaching in rural Pakistan, International Journal of Business and Social Science, 2(15), pp.166–172.
- Nazeer, A. (2017). Education Policy in the Maldives: No Child Left Behind: Changing Lives & Working for Results. Retrieved from <https://www.thecommonwealth-educationhub.net/wpcontent/uploads/2016/02/No-Child-Left-Behind-Abdulla-Nazeer-20160927.pdf>
- NBS [National Bureau of Statistics]. (2016). Statistical Pocketbook of Maldives 2016. Retrieved from <http://statisticsmaldives.gov.mv/yearbook/2016>
- NCED (2003). Primary Teacher Training Curriculum: A Basic Training Curriculum for Primary School Teachers, Bhaktapur
- NIE [National Institute of Education] (2014). The National Curriculum Framework. Retrieved from http://www.nie.edu.mv/sites/default/files/NCF_31%203%202014_0.pdf

- Niumath Shafeeq. (2017). EARLY CHILDHOOD EDUCATION IN THE MALDIVES: Learning Stories of ECD; Documentation of Preschool Education in the Maldives. National Institute of Maldives.
- Noordheen, M. (2009). Innovative practices in TVET towards education for sustainable development. Retrieved from http://r.search.yahoo.com/Maldives_Country_Presentation.pdf/
- OECD [The Organization for Economic Corporation and Development] (2010). Inspired by technology, driven by pedagogy: A systemic approach to technology-based school innovations. Paris, France: OECD
- OECD [The Organization for Economic Corporation and Development] (2010a). Are the new millennium learner making the grade? Technology use and educational performance in PISA. 2006. Paris, France: OECD.
- OECD [The Organization for Economic Corporation and Development] (2010). Inspired by technology, driven by pedagogy: A systemic approach to technology-based school innovations. Paris, France: OECD
- OECD. (2012). "Equity and Quality in Education: Supporting Disadvantaged Students and Schools". Retrieved from OECD Publishing. <http://dx.doi.org/10.1787/9789264130852-en>.
- OECD. (2012a). Encouraging quality in Early childhood education and care (ECEC), Research brief: Qualification, Education and professional development matter. Retrieved from <http://www.oecd.org/dataoecd/50/24/49322232.pdf>
- Organisation for Economic Co-operation and Development. (2018). Teachers' salaries (indicators). doi:10.1787/f689fb91-en. Retrieved from <https://data.oecd.org/eduresource/teachers-salaries.htm>
- Pont, Beatriz; Nusche, Deborah; Moorman, Hunter. (2009). Improving School Leadership. Volume 1: Policy and Practice. OECD Publishing.
- PPM. [The Progressive Party of Maldives]. The manifesto of the Progressive Party of the Maldives. Male', Maldives
- Preeraer, J. & Van Petegem, P. (2011). ICT in teacher education in an emerging developing country: Vietnam's baseline situation at the start of the 'The Year of ICT.' Computers & Education, 56, 974-982.
- President's Office, The. (2009). Aneh Dhivehi Raajje Strategic Action Plan: National framework for development 2009-2013. Retrieved from http://planning.gov.mv/en/images/stories/publications/strategic_action_plan/SAP-EN.pdf

- Quality Assurance Department. (2017a). "National Assessment of Learning Outcome for English and Mathematics". Ministry of Education.
- Quality Assurance Department. (2017b). "National Assessment of Learning Outcome for Dhivehi". Ministry of Education.
- Quality Assurance Department. (2018). "A Snapshot of the Maldivian School System: Analytical Report of Issues and Challenges from External School Reviews of 2016 & 2017". Ministry of Education.
- Quality Assurance Department. (2018). A Snapshot of the Maldivian School System: Analytical Report of Issues and Challenges form the External School Review of 2016 and 2017. Ministry of Education. Male, Maldives.
- Quality Assurance Department. 2018. "A Snapshot of the Maldivian School System: Analytical Report of Issues and Challenges from External School Reviews of 2016 & 2017". Ministry of Education.
- Raj, A; McDougal, L; Silverman, G, J; Rusch. L. M, A. (2014). Cross-Sectional Time Series Analysis of Associations between Education and Girl Child Marriage in Bangladesh, India, Nepal and Pakistan, 1991-2011. Retrieved from <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0106210&type=printable>
- Read, Lindsay, and Tamar Manelyan Atinc. (2017). "Information for Accountability: Transparency and Citizen Engagement for Improved Service Delivery in Education Systems." Center for Universal Education at Brookings, Washington, DC.
- Rizwan, S., & Shifaza, F. (2015). Principals' Perceptions of School Based Professional Development. 3rd International Teachers' Conference. Male': National Institute of Education.
- Russell, G. M., & Kelly, N. H. (2002). Research as interacting dialogic processes: Implications for reflexivity. *Qualitative Social Research*, 3(3). Retrieved 10 March, 2017, from <http://www.qualitative-research.net/fqstexte/3-02/3-02russellkelly-e.htm>.
- Sabates, R., Hossain, A., & M Lewin, K. (2010, October). School Drop Out in Bangladesh: New Insights from Longitudinal Evidence. Retrieved from CREATE: Consortium for Research on Educational Access, Transitions and Equity: <http://www.createrpc.org/pdfdocuments/PTA49.pdf>
- Samarakoon, S., & Parinduri, R. A. (2015). Does education empower women? Evidence from Indonesia. *World Development*, 66, 428-442. Retrieved from <https://ac.elscdn.com/S0305750X14002678/1-s2.0-S0305750X14002678->

main.pdf?_tid=669c83a6-3982-427f-8e5b-
f9641933be95&acdnat=1520807736_60b657d355fdc297c291f2a67b2f40e2.

Screening, s. h. (2014). School Health Screening. Male': MOE.

Shafina, A. (2019). Gendered differentials in enrollment, retention and completion of higher education in the Maldives. Unpublished thesis submitted for the degree of Doctor of Philosophy in sociology to the Postgraduate Institute of Humanities and Social Sciences, University of Peradeniya, Sri Lanka.

Shapiro, D., & Tenikue, M. (2017). Women's education, infant and child mortality, and fertility decline in urban and rural sub-Saharan Africa. *Demographic Research*, 37, 669-708. Retrieved from <https://www.demographic-research.org/volumes/vol37/21/default.htm>.

Shibana, A. (2013). The predictors for the successful adaptation of open educational resources in Maldives (Master of Education Dissertation). Open University of Malaysia.

Shiham, A. (2015). Workshop on higher education quality assurance 2015. Organised by World University Service of Canada, Ministry of Education Afghanistan, in collaboration with Maldives Qualifications Authority Tuesday 10th November 2015.

Singal, N., Bhatti, F. and Malik, R. (2011). Counting the invisible: understanding the lives of young people with disabilities in Pakistan. *Disability and Rehabilitation*, Vol. 33, No. 11, pp. 908–21.

Statistical Yearbook of Maldives, (2016). National Bureau of Statistics. Retrieved from <http://statisticsmaldives.gov.mv/yearbook/2016/>

Statistics provided by Department of Higher Education. (2017).

Survey, M. n. (2007, n.d n.d). odi.org. Retrieved from [www.odi.org:https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6387.pdf](https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6387.pdf)

Sustainable Development Goals: 17 Goals to transform our world from www.un.org

Tanzania: Government Actors' Perceptions about Enhancing Local Capacity for Information based Policy Reforms" (2012). Master's Capstone Projects. 21. Retrieved from https://scholarworks.umass.edu/cie_capstones/21

The Asia Foundation. (2012, August). Rapid Situation Assessment of Gangs in Male'. Retrieved from <https://asiafoundation.org/resources/pdfs/GangViolenceReportFINAL.pdf>

- The World Bank. (2018). Human Development Report. International Bank for Reconstruction and Development, Washington DC
- TVET Authority. (2016). Statistics-Total number of Graduates. TVET Authority. Retrieved from <http://tvet.gov.mv/statistics/>
- TVET Authority. (2016). About Technical and Vocational Education and Training Authority. TVET Authority. Retrieved from <http://tvet.gov.mv/about/>
- Ufaa Program. (2017). No Child Left Behind. Ministry of Education. Maldives. UIS. (2005). Children Out of School - Measuring Exclusion from Primary Education. Retrieved from UNESCO UIS: http://uis.unesco.org/sites/default/files/documents/children-out-of-school-measuring-exclusion-from-primary-education-en_0.pdf
- UIS. (2015). Out-of-School Children and Adolescents in Asia and the Pacific. Retrieved from UNESCO: <http://unesdoc.unesco.org/images/0023/002351/235152E.pdf>
- UNDAF Maldives. (2015). 2016-2020. United Nations Development Assistance Framework 2016 -2020 Republic of Maldives. Retrieved from <http://www.mv.undp.org/content/dam/maldives/docs/publicationsgeneral/UNDAF%20%20Maldives%202016-2020.pdf>.
- UNDP. (2016). Human Development Report: Maldives. Retrieved from http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MDV.pdf.
- UNDP. (2018). About Maldives: Introduction. Retrieved on March 3, 2018 from <http://www.mv.undp.org/content/maldives/en/home/countryinfo/>.
- UNESCO. (2016). A framework of action.
- UNESCO. (2014). Innovations in Education. Retrieved from https://www.unicef.org/education/bege_73537.html
- UNESCO. (2014b). UNESCO Education Strategy 2014-2021. Retrieved from <http://unesdoc.unesco.org/images/0023/002312/231288e.pdf>
- UNESCO. (2015). Pacific education for all 2015 review. Paris, France: United National Educational, Scientific and Cultural Organization. Retrieved from http://uis.unesco.org/sites/default/files/documents/pacific-education-for-all-2015-reviewen_1.pdf
- UNESCO. (2017). Primary and Secondary Education. Retrieved from <https://ourworldindata.org/primary-and-secondary-education>
- UNESCO. (2017). Reducing global poverty through universal primary and secondary education. Retrieved from <http://unesdoc.unesco.org/images/0025/002503/250392E.pdf>

- UNESCO. (2017). Situation Analysis of Out-of-School Children in Nine Southeast Asian Countries. Retrieved from UNESDOC Database: <http://unesdoc.unesco.org/images/0025/002527/252749e.pdf>
- UNFPA (2016). Maldives Population Dynamics: Policy Prospects for Human Growth and Opportunity. UNFPA and National Bureau of Statistics, Male', Maldives.
- UNICEF Maldives & Ministry of Education. (2017, April 18). The Condensed Learning Programme for Out of School Children (OOSC) in Maldives.
- UNICEF Maldives. (2016, August 26). Inception Report: Consultancy to develop a framework for provision of quality alternative and flexible learning outcomes for vulnerable and Out of School Children in the Maldives.
- UNICEF. (2007). 20 Teacher Resource Centres to be launched in the Maldives. Retrieved from https://www.unicef.org/maldives/media_3672.htm
- UNICEF. (2007, 11, 26). 20 Teacher Resource Centres to be launched in the Maldives. Retrieved from UNICEF Maldives: https://www.unicef.org/maldives/media_3672.htm
- UNICEF. (2013). Study on the Decentralisation process in the Maldives with reference to the impact on services to children. Male', Maldives.
- UNICEF. (2015). Family and children situation analysis
- UNICEF. (2016, July). Terms of Reference for International consultant to develop a framework for provision of quality alternative and flexible learning programmes for the Maldives.
- United Nations Children's Fund. (2015). Country Program Document: Maldives. Retrieved from: https://www.unicef.org/maldives/2015-PL31-Maldives_CPD-EN-15Jun2015.pdf
- United Nations Children's Fund. (2016). UNICEF Annual Report 2016: Maldives. Retrieved from https://www.unicef.org/about/annualreport/files/Maldives_2016_COAR.pdf.
- United Nations Development Program. (2006). Developing a Disaster Risk Profile for Maldives. Retrieved from <file:///C:/Users/ismail/Downloads/disaster%20risk%20profile.pdf>.
- United Nations Development Program. (2014). Maldives Human Development Report 2014 Bridging the Divide: Addressing Vulnerability, Reducing Inequality. The Ministry of Finance and Treasury and the United Nations Development Programme in the Maldives. Retrieved from: http://hdr.undp.org/sites/default/files/maldives_hdr2014_full_report_0.pdf.

- United Nations Office on Drugs and Crime. (2013). National Drug Use Survey Maldives-2011/2012. United Nations Office on Drugs and Crime.
- Van Kippersluis, H., O'Donnell, O., & van Doorslaer, E. (2009). Long Run Returns to Education: Does Schooling Lead to an Extended Old Age? *The Journal of Human Resources*, 4, 1–33.
- Vayachuta, P., Ratana-Ubol, A., & Soopanyo, W. (2016, April 26). The study of 'out-of-school' children and youth situations for developing a lifelong education model for 'out-of-school' children and youth. Retrieved from: https://www.shsconferences.org/articles/shsconf/abs/2016/04/shsconf_ erpa2016_01015/shsconf_ erpa2016_01015.html
- Vithanapathirana, M. (2005). Improving Multigrade Teaching: Action Research with Teachers in Rural Sri Lanka. PHD. University of London, Institute of Education.
- World Bank & Asian development Bank. (2005). Maldives Tsunami: Impact and Recovery. Joint Needs Assessment by World Bank-ADB-UN System. Retrieved from http://www.presidencymaldives.gov.mv/Documents/27_8fb240f7-5_.pdf.
- World Bank. (2012). Report No. 54- Expanding Access and Enhancing the Economic Benefits of Education in the Maldives: Challenges and Prospects. World Bank.
- World Bank. (2014). Youth in the Maldives: Shaping a New Future for Young Women and Men Through Engagement and Empowerment. World Bank.
- World Bank. (2018). Climate investment opportunities in South Asia: Maldives (English). Washington, D.C.: World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/988401515581078644/Climate-investment-opportunities-in-South-Asia-Maldives>.
- World Bank. (2018). The World Development Report 2018 (WDR 2018) The World Development Report 2018 (WDR 2018)-Learning to realize the education's promise. World Bank Group. Retrieved from <http://www.worldbank.org/en/publication/wdr2018>
- UNESCO. (2015). "EFA Global Monitoring Report 2015 Education for All 2000-2015: Achievements and Challenges", UNESCO publishing, Paris.
- UNESCO. (2015). Pacific education for all 2015 review. Paris, France: United National Educational, Scientific and Cultural Organization. Retrieved from http://uis.unesco.org/sites/default/files/documents/pacific-education-for-all-2015-reviewen_1.pdf

United Nations Children’s Fund. (2015). Country Program Document: Maldives. Retrieved from: https://www.unicef.org/maldives/2015-PL31-Maldives_CPD-EN-15Jun2015.pdf

United Nations Development Program. (2014). Maldives Human Development Report 2014 Bridging The Divide: Addressing Vulnerability, Reducing Inequality. The Ministry of Finance and Treasury and the United Nations Development Program in the Maldives. Retrieved from: http://hdr.undp.org/sites/default/files/maldives_hdr2014_full_report_0.pdf.

United Nations Development Program. (2006). Developing a Disaster Risk Profile for Maldives. Retrieved from <file:///C:/Users/ismail/Downloads/disaster%20risk%20profile.pdf>.

World Bank & Asian development Bank. (2005). Maldives Tsunami: Impact and Recovery. Joint Needs Assessment by World Bank-ADB-UN System. Retrieved from http://www.presidencymaldives.gov.mv/Documents/27_8fb240f7-5_.pdf.

Annex 1:

List of Members of the Local Education Group (LEG) - 2019

#	Names	Official Designation
1.	Dr. Aishath Ali (Co-Chair)	Minister of Education
2.	Dr. Ibrahim Hassan (Co-Chair)	Minister of Higher Education
3.	Ms. Fathimath Naseer	Minister of State for Education
4.	Dr. Abdulla Rasheed Ahmed	Minister of State for Education
5.	Ms. Khadheeja Adam	Minister of State for Higher Education
6.	Mr. Mohamed Hashim	Minister of State for Higher Education
7.	Ms. Ifhaam Hussain	Minister of State for Gender and Family
8.	Mr. Adam Badhurulla	Assistant Director, Ministry of Finance
9.	Mr. Ahmed Hassan	Assistant Director, Local Government Authority, Ministry of Home Affairs
10.	Ms. Aishath Khaleela Abdul Sattar	Vice Chancellor, Islamic University of Maldives
11.	Ms. Fathimath Azza	Director General, Educational Supervision and Quality Improvement Division, MoE
12.	Mr. Mohamed Waheed Ali	Director General/Finance Executive, MoE
13.	Mr. Yoosuf Ahmed	Director, Policy Planning and Research Division, MoE
14.	Mr. Ahmed Shakeeb	Director General, National Institute of Education, MoE
15.	Ms. Aishath Shaheen	Education Officer (Acting Head), Quality Assurance Department, MoE
16.	Ms. Aishath Mohamed Solih	Principal, Majeediyya School, Male'
17.	Mr. Ismail Saud	Member, Teachers' Association of Maldives
18.	Ms. Naushan Abdul Muhaimin	CEO, Care Society of Maldives
19.	Dr. Harsha Aturupane	Lead Economist, Education Global Practice, The World Bank
20.	Ms. Mazeena Jameel (UNICEF)	Programme Specialist for Education and WASH, UNICEF, Male'
21.	Ms. Shadiya Ibrahim	Program Officer, UNFPA, Male'

Annex 2: Risk Assessment and Institutional Capacity

The risk assessment for the implementation of the Education Sector Plan (ESP) 2019-2023 is based on the key risks identified in the Education Sector Analysis (ESA) (ESA MoE, 2018, update 2019), with regard to the human resources capacities at central and decentral, and at schools' levels, the vulnerabilities, and the governance and management of the sector. It is also based on the risks identified during the development and implementation of the Enhancing Education Development Project (EEDP) 2013-18, supported by the World Bank, and designed to be implemented by the education institutions of the MoE, in line with their institutional mandates and responsibilities.

Stakeholder risks: The goals of the ESP 2019-23 are focused on improving learning and skills, through strengthening the system capacity and quality assurance at all levels of the education sector, including the TVET and Higher Education. As per 2018, the MoE reinforced its technical capacity on improving learning and skills, through the successful implementation of (i) the School Improvement and Quality Assurance Accountability Framework (SIQAAF) and the School Improvement Plans (SIPs) in all schools, (ii) the National Assessment for Learning Outcomes (NALO), (iii) the Quality Assurance mechanisms for TVET (by TVET Authority), (iv) the Maldives Qualifications Authority (MQA) processes for Higher Education, and (v) the Maldives Education Management Information System (MEMIS) platform. The above mechanisms, measurements and platforms are relatively new, and there are some risks on relying on them to achieve the ESP goals. It is also noteworthy to highlight that due to the change in government in late 2018, two ministries have been formulated under the education umbrella; the Ministry of Education (MoE) and the Ministry of Higher Education (MoHE). Therefore, the mandate of the two ministries will differ in scope when addressing ESP at present. The risks are related to (i) low technical capacity in selected areas, (ii) a certain bureaucracy linked to “heavy” quality assurance mechanisms which are hard to implement, especially by small schools and TVET institutes, and (iii) some mainstreaming and sustainability issues. The risks will be mitigated by the experiences gained by the MoE and former DHE in implementing the EEDP. Additionally, there is a focus within the ESP, to simplify the SIQAAF, and orient SIPs on how to improve learning and skills including soft skills within a given school. The target of key activities is to improve specific technical capacities of the MoE and MoHE staff to deliver the expected results. It is expected that the stakeholder risk will not be significant, given that the ESP is aligned with the Ministry's ongoing policy initiatives to improve quality of education for all, as part of the “Inclusive and Holistic Education” policy.

Capacity risks: The ESA confirmed that the key entities of the MoE and the MoHE: the decentralized entities, including the Teacher Resource Centers (TRCs), the schools and the TVET institutions and other Higher Education Institutions (HEIs) should reinforce their capacities to deliver towards improving learning skills and soft skills, by 2023. In some cases, school communities might have limited capacity and resources to design and implement SIPs with a focus on learning. The schools and TVET institutes will also be supported in specific technical areas through training and capacity building; to better implement the National Curricula for improved learning and skills, and the quality assurance mechanisms, and to achieve 100% inclusion of the specific groups related to gender, economic situation, and also children with special education needs (SEN), and students at risk.

Genuine ownership and accountability due to dearth of planning capacity at the central level at MoE: High turnover at the MoE top management level could also lead the ESP to be implemented in a fragmented manner, leading departments to focus on what they want to do rather than using a coherent approach. It is important to have a visionary and pragmatic planner as the head of planning in order to steer the sector in the right direction.

Limited middle-management technical capacity in sector planning, monitoring and evaluation. Institutional memory of the process of the development of the ESP undertaken with considerable non-staff technical support from outside MoE may fade away, leaving the top management unsupported with the in-house technical support needed. Lack of technical expertise in the MoHE may also result in overburdening of expenses to hire outside expertise. In order to mitigate this, the MoHE is in the process of recruiting technically competent key staff to its various divisions.

Limited capacity for evidence-based decision making: Even though the MEMIS exists, there is a need to enhance the capacity of the MOE's Policy, Planning and Research Division (PPRD) and school leaders, on indicator calculation, data analysis, presentations, and use findings from analysis at policy level and at school level. Furthermore, there is need to improve coordination between data producers, program divisions, and the users. Without addressing this weakness, monitoring the ESP along the lines of the M&E framework prepared will be a challenge. At present, there is no data management system in the MoHE which weakens evidence-based decision making. The MoHE is committed to developing such a system.

Lack of collaboration between the MoE and MoHE could also result in weakening the overlapping components, such as the age group between 16 to 18 years. Systematic collection and reporting of data pertaining to this age group is a key recommendation from the ESA and the ESP. The proposed ESP review and reporting arrangements, with the participation of key staff in the ESP Steering Committee (see Implementation Manual) will mitigate this risk.

The current MoE's Quality Assurance Department (QAD) and the National Institute of Education (NIE)'s structures do not appear to be commensurate with the new responsibilities the ESP requires of them. The organizational structures will need to be revised to enable the right fits for the different levels in the structure. Undertaking an audit of capacity gaps for each goal area which informs a capacity development plan is of utmost importance. Sector officials may need to be trained on priority basis. For instance, NIE urgently needs curriculum specialists and larger subject teams along with an efficient administrator to oversee the daily running of the Institute. The MoE needs to have a designated unit (either stand alone or within an existing department) dedicated to school-improvement. Schools need to be supported by well-resourced TRCs, or by a division of the MoE that they can look up to for guidance.

Similarly, procurement and financial management will be at risk, especially with the pressure of the decentralization programme (a presidential initiative).

Governance risks: Potential lack of continuity in staffing, and capacity limitations in the MoE and

MoHE, to monitor compliance of MoE and MoHE civil works, with engineering and environmental standards are key governance risks in the process of the implementation of the ESP. These risks will be addressed by training a pool of relevant staff for procurement and financial management. In addition, provisions for procurement and financial management specialist support will also be made. Furthermore, lack of relevant and applicable performance evaluation and internal auditing mechanisms also hinders good governance. The activities of the ESP will also support training and capacity building of school communities in the new initiatives, and these initiatives will be introduced in a phased manner.

Education Sector Plan design risks: A key feature of the ESP is to deliver on learning and skills through supporting the schools and their SIPs. Therefore, the success of the ESP will depend on the extent to which schools and teachers will be supported to better deliver at the classroom level. The decentralized level will be key in this process. Decentralized delivery could be hampered by capacity limitations, and inadequate coordination and cooperation among education sector officials across atolls and islands. The MoE will identify atolls and islands which lag behind in implementation performance and strengthen initiatives to support them. In addition, the ESP activities are built around strengthening decentralized service delivery, such as the TRCs. Furthermore, the success of the ESP will also depend on the extent to which HEIs, TVET institutes and other relevant stakeholders will be held accountable for quality higher education and training.

A potential risk is a possible divergence between the National Development Plan (NDP) (currently being developed by the new Government) and the ESP. Alignment with the NDP is important especially with key national goals of NDP. While the broad policy goals of the Government have been outlined, detailed policy development in some key policy areas remain. Further development of such policies, including decisions on the pace of reform may call for adjustments in the ESP.

Social and environmental risks: The ESP 2019-2023 includes major civil works in the kindergarten to grade 12 (K to 12) with the new emphasis on making all schools single- session. Furthermore, the new policy priority to establish Junior Colleges will also witness the construction of these new institutions in the atolls. The civil works and other activities associated with these new policies, and expansion of secondary schools and TVET programs could have unforeseen social and environmental impacts. As a risk mitigation measure, the EEPD (2013-18) Environmental and Social Management Framework (ESMF) will be used to guide the implementation of such activities. Under the same project, EEDP training was provided to strengthen the MoE and MoHE's capacity to monitor and report on impacts, with the support of an environmental specialist.

Political instability risks: Given the political instability in the Maldives, the MoE plans to continue to consult with all key stakeholders on the goals and results of the ESP, and will pursue a national dissemination campaign once the ESP is approved by the GPE. With the recent election victory for the new government, more stability is expected for the next five years. Risks of potential instability that were looming just before the parliamentary elections in early April 2019 appear to have been mitigated, and no major setbacks are expected in short to medium term. However, it would be important to continue the dialogue with all stakeholders. Dissemination of the ESP should reach the Members of the Parliament as well.

Decentralisation is one of the cornerstone priorities of the new government. The education sector

is also expected to follow this policy once the national strategy for decentralisation is worked out. The MoE and the MoHE will develop its decentralisation/ devolution strategies and guidelines, along with the organisational changes and the human resource needs.

Decentralization of education and how the ESP implementation will be “localized” to sub-national levels under local authorities is uncertain, and subject to more detailed development of the new Government’s decentralization policy. No clear strategy has yet emerged on how education will be decentralized. Limited and varying capacity at local levels is also a concern, and the pace with which reform in decentralization may need to be carried out could also be a challenge/risk.

Natural disaster risks: This multi-island, archipelago nation has several vulnerabilities identified in the ESA (chapter 1, ESA, 2018). Structural vulnerabilities: geographical isolation, small in size, limited land, natural and human resources, and vulnerability to climate change and natural disasters. The tsunami of 2004 was a major shock to all systems of Maldives, including education, as families, children and their livelihood are most affected by each of those environmental disasters. In the aftermath of the tsunami and the human and infrastructure loss, many aspects of the environmental vulnerabilities were assessed. To prepare for natural disaster risks in the sector, the MoE developed a School Emergency Operational Plan (SEOP) Guide 2009. The MoE also developed national and school level emergency response teams. Furthermore, by 2016, the former National Disaster Management Center (NDMC) had developed Standard Operating Procedures (SOP) for the establishment of the Community Emergency Response Team, which was piloted in Laamu Atoll, with children and community engagement.

The importance of education in promoting and enabling Disaster Risk Reduction (DRR) has already been identified by researchers and policymakers. In doing so, there is a renewed focus on disaster risk education in primary and secondary schools. The NDMC School Disaster Awareness Programs, through the component “disaster risk reduction”, increases the coping capacity of people and make them more resilient to disasters. School programs include disaster awareness sessions and mock drills, aimed at helping school administrators, staff, teachers, and students; to be prepared in case of emergencies and disasters due to natural hazards or man-made causes, to protect themselves from personal injury and loss of life, as well as to protect the school property from damage.

Annex 3:

Policy pledges related to the education sector

(translated from the Joint Party Manifesto)

1. Pledge One: Decentralization, delivery modality, and Arabic language as a study subject

Based on the population, the capacity, and the available resources in the islands, a suitable educational delivery system 'Jazeera Madharusa' (Island School) will be established. All the schools will be operated by the facilitation of the school board, under the responsibility of the local councils. Delivery mechanisms such as multi-grade schooling and other modern educational delivery mediums will be introduced in those schools which have few numbers of students. All schools will run as single-session schools. It is vital to understand the process of new curriculum implementation, at the same time, to research and review the gaps in the implementation of the new curriculum. All schools will have adequate resources to teach the Arabic language. In addition, all teacher training programmes will have components adequate for them to be thorough with the new curriculum.

2. Pledge Two: Islamic values in education

The programmes offered by the educational institutes are based on the principles and values of Islam. Every student who passed from the educational systems demonstrates moral conduct and understands the Islamic faith.

3. Pledge Four: Islamic values in education

The educational system of the Maldives will uphold the values of Islam. Education and upbringing of the students will be based on inculcating the values of Islam, preventing terrorism and countering extremism. This will be done through the MoE in their mandate to regulate private schools. Scholarship opportunities will be more accessible, and councils will be empowered to up bring an educated citizen.

4. Pledge Five: School transport system

All schools will be made accessible via easy transport options. In the capital city of Male', and in the bigger islands, school bus system will be introduced, by which students will be picked and dropped closer to their homes. This will assist to create a worry-free environment for the parents, where they are assured that their children will be carefully taken to-and-from school, without them having to take time off from work to do so.

5. Pledge Seven: Extra-support systems to schools, all-inclusive education, Technical and Vocational Education and Training (TVET) exposure in schools

Extra-support systems of the schools will be upgraded. Every student will be aided by these

support systems. In addition, the resources will be upgraded, and teacher training suited to cater to the SEN students. Students will be equipped with the learning outcomes prescribed in the curriculum, regardless of the stream that they choose. Furthermore, students will also be equipped with TVET skills.

6. Pledge Eight: School improvement, holistic education, single-session schooling

To review school indicators and utilize these indicators to evaluate school performance, and develop an education system based on these findings. A holistic education will be provided in single-session schools to a 'Jazeera student'.

7. Pledge Eleven: Teacher training in Arabic language and Quranic studies

All teachers teaching the subject of Arabic Language and Quranic studies will be trained efficiently to increase students' interests in these subjects. Furthermore, school completers who excel in studies will also be attracted to teacher training, via increasing incentives to teaching professions.

8. Pledge Twelve: Free breakfast

Free breakfast will be provided in all schools.

9. Pledge Thirteen: Civic education in schools

Civic education will be introduced in the curriculum. Civic education will be incorporated at all levels of schooling where students will be inculcated with values to uphold the principles of democracy and rule of law in the Maldives. Ending gendered violence and respect to gender equity values will be part of the education system.

10. Pledge Sixteen: Structured arts and culture centres, picnic zones

Structured arts and culture centers and picnic zones will be established closer to residential islands. These centers will have movie studios which will generate income.

Cross-cutting policy pledges related to education sector

11. Inclusive education will be further developed, and those with different abilities will be more closely attended.

Policy pledges related to the Higher Education sector

12. Pledge Three: Boarding schools, accommodation blocks, lifelong learning

The boarding schools and regional accommodation blocks will be introduced and expanded, to provide educational opportunities from outer islands. Furthermore, distance education modality will be expanded, and study opportunities up to bachelor's degree will be made available to study from home, regardless of age and residency. In-and-out of school lifelong learning will be

introduced to provide learning throughout life.

13. Pledge Six: Free higher education, loan scheme revision, opportunities to study in developed countries, revisions to MQA, pre-school system

Providing higher educational opportunities for all Maldivians is a key pledge. Those who have disadvantages due to their socioeconomic background will be provided higher education free of charge. Furthermore, the utilization of decentralized training centers will make higher education accessible throughout the country, irrespective of the level of studies. The loan scheme for higher education will be revised to make it more affordable and more accessible to as many as possible. Further revisions and easier mechanisms of loan scheme will be established for those who are currently undertaking their studies and finding it difficult to manage payback. Those who are eligible for government scholarship can undertake their studies in the most developed countries. In addition, to provide quality higher education in the Maldives, the Maldives Qualifications Authority (MQA) will be reviewed. All preschools will be operated by the Councils while the Government bearing the fees from them.

14. Pledge Nine: Junior College, TVET in further education

To cater to those islands where there are no facilities available to study beyond grade 11, a junior college will be established in each atoll to provide technical and vocational education. This will facilitate studies for students who are interested to pursue studies in such fields.

15. Pledge Ten: Teacher training, teaching environment, revision to the teaching profession structure and increments, in-service upgrading

School completers who excel in studies will also be attracted to teacher training via increasing incentives to teaching professions. A stress-free environment with a manageable workload will be provided to those who work in the teaching profession. Furthermore, in-service upgrading programmes will also be provided to the teachers.

16. Pledge Fourteen: Regional training centres

The students who complete schooling are expected to have the skills and competencies required for work. However, in the past, traveling from islands to Male' city, and living on a rental basis, or staying in ad-hoc places, have been the norm; which hinders acquiring of training and skills. Therefore, it is pledged that there will be training centers in seven regions, which will produce professionals in the field of Tourism. Fields such as landscape, heritage, handicraft, fine-arts, and other such programmes will be offered from these centers. Furthermore, vocational education and training prospects will be expanded, and those in secondary education who would like to study in such fields will be given the opportunity to do so.

17. Pledge Fifteen: regional training centres

A loan scheme will be introduced to those who would like to pursue further studies in the field of performing arts and other areas which are vital for the economy. Furthermore, rather than sourcing

foreign workers in the field of photography and diving, Maldivians will be given financial support to be trained in these fields. To address this matter, training centers will be established in seven regions.

18. Pledge Seventeen: Women empowerment

Women will be empowered to work in formal employment sectors.

Cross-cutting policy pledges related to education sector:

19. Graduates from Imaamship courses to be employed in mosques.
20. To increase opportunities available in Quranic studies, and to establish partnerships with international bodies, to deliver and certify such programmes.
21. To establish an Islamic research centre. To establish partnership with international partners, to research and produce academic references and Islamic journals, and publish them. All islands will have a branch of this research centre.
22. A national research centre will be established.
23. A national think-tank will be setup to research on health, social, economic, environmental issues and to utilize technology to address these issues. This will facilitate research activities in the outer islands.
24. To provide exposure programmes for Maldivian farmers to participate in international training programmes via TVET expansion plans.
25. Since an information and communication technology (ICT) revolution is overtaking worldwide, learning modalities like artificial intelligence, and computer-based learning will be given priority. To keep par with the economic development, the education system will embrace and develop on artificial thinking, machine learning, deep learning and computer engineering. This will facilitate an increase in investment in this area.
26. To conduct awareness programmes throughout the country on the active and healthy lifestyle. Community health workers' and social workers' role will be more prominent, to provide the public with regular health checkups and facilitate reporting to the doctors.
27. Those who are trained from outer-islands will be provided an opportunity to serve to their islands. IT consultation and telemedicine will be introduced in most of the islands.

Annex 4: Output of the Costing Model at Various Levels of Education

Baseline	Targets No of Annual	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
e	Option Years												
Nominal GDP (MVR mn)		75052	82504	90188	98656	107095	114770	122794	130818	138842	146865	154889	162913
GDP per capita		175283	189561	203862	219371	234271	246986	259934	272455	284473	296028	307134	317800
Salary stabilization index	< Applies to staff salaries	100%	107%	114%	120%	126%	133%	140%	146%	153%	160%	169%	178%
Non salary stabilization index	< Applies to non salary items	100%	103%	105%	108%	110%	113%	115%	118%	120%	123%	125%	128%
Pre-Primary Recurrent Costs													
Salary Expenditure		122,726,564	152,938,824	216,493,789	257,135,976	272,739,403	285,856,650	312,592,794	346,428,954	385,188,103	430,149,283	482,590,195	515,338,016
Teaching Staffs' Salary	based on staff breakdown	63,088,168	80,338,961	116,210,273	140,718,896	151,053,567	162,800,527	179,917,671	204,327,264	232,879,999	266,804,950	307,307,188	328,085,119
Non-Teaching Staff Salary	based on staff breakdown	59,668,396	72,819,863	100,283,517	116,657,080	121,685,842	126,785,122	132,681,123	142,107,688	152,308,104	163,344,333	175,283,008	187,252,897
Goods and Services	% of salary expenditure	26,967,894	34,451,399	49,950,886	60,740,696	65,942,831	71,587,635	78,932,291	89,445,914	101,569,325	115,788,052	132,555,260	144,381,259
Teacher and Staff Training	based on unit costs and	2,124,880	9,899,822	23,364,508	38,565,193	51,745,379	65,578,750	69,034,500	74,342,250	80,280,000	87,024,000	94,725,000	98,264,250
Repairs and Maintenance	2% of PPE stock	3,632,255	44,702,516	6,057,959	11,186,768	16,088,187	19,735,299	21,801,559	22,721,294	22,831,267	22,925,950	23,001,427	23,211,528
Subsidies	based on unit costs and	24,339,450	25,619,921	30,309,148	29,946,019	25,856,688	21,609,411	17,878,695	14,360,326	10,938,631	6,602,963	1,938,319	2,009,706
Capital Equipment	% of salary expenditure	5,336,134	6,816,895	9,883,777	12,018,755	13,944,540	14,165,938	15,630,216	17,698,654	20,097,512	22,910,970	26,228,696	28,568,705
Total Pre-Primary Recurrent Costs		185,128,178	234,216,537	336,060,067	409,593,407	445,538,209	482,461,783	515,948,735	564,997,390	620,904,738	685,200,318	761,038,897	811,734,464
Primary Recurrent Costs													
Salary Expenditure		774,700,309	872,045,639	973,442,175	1,058,588,913	1,147,148,380	1,240,002,450	1,326,487,482	1,413,504,465	1,505,204,540	1,605,042,120	1,713,547,176	1,828,273,061
Teaching Staffs' Salary	based on staff breakdown	494,619,830	568,840,706	627,615,987	683,000,960	738,407,884	795,892,732	850,927,393	904,802,379	962,270,946	1,024,377,293	1,091,436,174	1,164,119,281
Non-Teaching Staff Salary	based on staff breakdown	280,080,480	313,204,934	345,826,187	375,497,953	404,740,497	444,995,718	476,561,092	508,702,085	543,933,594	580,684,827	622,111,002	664,153,791
Goods and Services	% of salary expenditure	170,232,386	196,413,592	224,599,050	250,060,021	277,281,400	306,567,214	335,204,202	364,958,521	396,463,769	432,046,986	470,657,852	512,233,739
Teacher and Staff Training	based on unit costs and	51,746,129	55,785,953	59,594,066	63,186,793	67,393,529	70,285,097	73,200,627	75,909,037	78,628,764	81,523,922	84,593,000	87,679,810
Repairs and Maintenance	2% of PPE stock	17,049,074	192,417,894	20,890,637	36,011,926	54,085,131	69,133,655	78,311,890	81,306,707	81,919,894	81,544,736	81,572,319	82,348,323
Subsidies	based on unit costs and	114,213,046	110,266,325	104,519,920	96,400,841	86,632,665	75,689,755	64,166,095	51,387,513	37,982,103	22,771,338	6,882,485	7,129,902
Capital Equipment	% of salary expenditure	33,683,865	38,643,337	44,441,391	49,479,351	54,955,642	60,688,445	66,326,821	72,214,365	78,335,308	85,689,093	93,131,000	101,353,659
Total Primary Recurrent Costs		1,161,624,810	1,292,616,741	1,427,487,239	1,558,727,844	1,686,762,948	1,822,415,616	1,945,697,118	2,059,280,549	2,178,274,467	2,308,418,195	2,450,493,832	2,619,008,495
Lower Secondary Recurrent Costs													
Salary Expenditure		413,949,1964	454,245,897	504,125,078	559,054,651	619,584,833	687,042,151	741,276,300	796,342,826	851,083,778	910,187,402	973,810,721	1,040,893,466
Teaching Staffs' Salary	based on staff breakdown	319,393,136	351,909,116	392,799,986	436,654,061	484,229,486	537,179,603	579,044,815	621,955,664	663,759,955	709,214,008	757,760,047	809,387,654
Non-Teaching Staff Salary	based on staff breakdown	94,588,828	102,316,781	111,345,092	122,400,590	135,355,397	149,862,548	162,231,485	174,866,962	187,300,823	200,973,394	216,050,674	231,001,812
Goods and Services	% of salary expenditure	90,970,455	102,315,742	116,315,089	132,059,968	149,762,112	169,841,713	187,320,976	205,933,566	224,620,237	245,005,236	267,481,051	291,483,911
Teacher and Staff Training	based on unit costs and	27,284,048	28,689,944	30,446,889	32,915,533	35,948,489	38,393,659	40,331,498	42,148,045	43,822,548	45,577,603	47,394,339	49,188,816
Repairs and Maintenance	2% of PPE stock	5,758,086	6,285,389	6,724,486	7,173,403	7,668,509	8,126,326	8,606,812	9,116,983	9,662,137	10,249,425	10,873,352	11,536,002
Subsidies	based on unit costs and	38,577,877	36,019,883	35,843,912	31,409,915	28,866,231	25,541,488	21,849,877	17,944,108	12,862,246	7,883,057	2,899,254	2,831,002
Capital Equipment	% of salary expenditure	18,000,315	20,245,205	22,015,255	25,130,692	29,633,414	33,606,502	37,065,182	40,068,906	42,966,009	48,479,161	52,926,448	57,675,892
Total Lower Secondary Recurrent Costs		594,583,345	647,801,561	714,270,510	793,303,562	881,124,021	977,751,933	1,054,510,645	1,129,954,434	1,204,786,954	1,285,361,884	1,372,354,343	1,469,848,023
Higher Secondary Recurrent Costs													
Salary Expenditure		76,540,394	90,840,905	106,938,946	120,620,247	137,021,360	153,342,121	174,274,526	196,480,885	220,172,834	246,273,679	274,812,032	299,916,437
Teaching Staffs' Salary	based on staff breakdown	59,659,122	70,232,880	82,238,082	93,699,564	105,620,823	119,493,647	134,500,570	150,714,763	168,860,478	188,632,799	210,158,646	229,201,597
Non-Teaching Staff Salary	based on staff breakdown	16,881,272	20,607,025	23,699,864	26,920,683	31,400,537	35,862,992	40,483,985	45,766,122	51,312,355	57,640,880	64,653,568	70,714,840
Goods and Services	% of salary expenditure	16,818,960	20,460,361	24,454,356	28,495,294	33,119,331	38,401,681	44,152,995	50,730,207	58,056,846	66,392,217	75,483,880	84,027,010
Teacher and Staff Training	based on unit costs and	5,040,305	5,200,995	5,401,490	5,705,472	6,068,509	6,492,263	6,988,858	7,558,858	8,214,323	8,964,267	9,803,627	10,739,627
Repairs and Maintenance	2% of PPE stock	1,028,970	1,236,630	1,415,621	1,582,526	1,747,364	1,915,621	2,093,263	2,284,640	2,490,443	2,714,640	2,958,027	3,213,318
Subsidies	based on unit costs and	6,893,146	7,096,695	7,082,627	6,931,200	6,695,940	6,414,640	5,660,553	4,815,767	3,956,043	3,062,432	2,196,783	1,538,352
Capital Equipment	% of salary expenditure	3,327,966	4,048,490	4,838,777	5,638,361	6,553,437	7,598,537	8,876,549	10,387,981	12,117,702	14,131,234	16,435,988	19,266,416
Total Higher Secondary Recurrent Costs		109,649,742	129,403,875	150,181,196	171,365,099	195,275,540	221,733,688	249,258,371	279,585,354	312,331,707	348,396,911	387,837,730	424,286,164

SEN	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Salary Expenditure	481,724,956	643,355,598	94,901,065	126,863,884	160,172,251	196,856,930	238,873,774	285,158,828	336,886,200	394,764,221	459,183,583	490,700,051
Teaching Staff Salary	41,860,175	55,360,919	82,623,932	110,909,689	140,374,420	172,653,776	209,714,920	251,020,161	296,976,590	348,241,018	405,306,609	433,000,741
Non-Teaching Staff Salary	6,264,120	8,747,679	12,277,134	16,954,196	22,859,354	29,859,354	38,959,354	49,702,668	63,909,610	81,663,063	103,703,974	131,000,000
Goods and Services	1,057,481,616	1,449,051,016	2,189,205	29,867,804	38,715,816	48,664,435	60,313,039	73,626,329	88,832,713	106,263,063	126,126,058	137,481,009
% of salary expenditure	2,331,519	3,000,793	4,214,842	5,483,218	6,730,522	8,064,111	9,510,181	11,046,795	12,685,272	14,446,926	16,320,289	16,951,045
Teacher and Staff Training	384,214	549,702	743,486	1,525,060	2,618,245	3,767,648	4,892,132	5,438,528	6,532,903	7,075,514	7,146,472	7,146,472
Repairs and Maintenance	2,573,879	3,150,153	3,719,806	4,082,454	4,193,871	4,125,433	3,892,132	3,494,902	2,766,017	1,824,311	995,250	618,758
Subsides	2,092,438	2,867,236	4,332,600	5,929,726	7,660,695	9,629,227	11,934,129	14,568,434	17,977,320	21,025,261	24,956,550	27,203,353
% of salary expenditure	66,081,161	88,393,291	129,808,004	173,852,148	220,100,339	271,107,784	329,073,400	393,308,816	464,739,976	544,857,684	634,264,244	680,109,687
Capital Equipment												
Total SEN	15,873,876	51,008,665	53,701,442	66,083,878	73,083,229	83,911,857	110,175,616	128,071,361	148,112,727	169,934,945	194,912,295	207,842,091
Polychemic												
Salary Expenditure	12,288,213	18,463,184	25,612,142	33,383,528	42,135,390	52,122,820	63,003,655	74,937,406	88,546,822	103,263,687	120,156,523	128,217,038
Teaching Staff Salary	9,209,239	13,795,439	19,170,286	24,959,712	31,280,155	38,614,084	46,605,204	55,294,702	65,252,642	76,068,139	88,368,579	94,273,915
Non-Teaching Staff Salary	3,078,974	4,667,745	6,442,856	8,423,815	10,855,235	13,508,737	16,400,451	19,702,704	23,294,181	27,195,549	31,780,004	33,943,123
Goods and Services	2,700,208	4,156,269	5,999,542	7,885,862	10,184,698	12,885,132	15,921,062	19,363,888	23,448,699	27,796,632	33,003,943	35,922,320
% of salary expenditure	162,264	233,640	310,329	386,552	486,598	586,757	690,876	801,225	920,266	1,043,558	1,180,757	1,224,076
Teacher and Staff Training	188,902	285,286	388,446	808,744	1,430,367	2,112,473	2,704,084	3,140,923	3,482,287	3,824,761	4,166,691	4,204,240
Repairs and Maintenance		27,056,885	20,311,062	22,000,819	22,830,996	23,655,095	24,056,639	25,936,389	27,194,648	28,506,191	29,873,894	31,166,471
Subsides		822,401	1,169,320	1,560,375	2,015,245	2,549,580	3,331,531	4,320,005	5,500,117	6,920,000	8,530,487	10,107,946
% of salary expenditure	534,290	1,008,665	1,169,320	1,560,375	2,015,245	2,549,580	3,331,531	4,320,005	5,500,117	6,920,000	8,530,487	10,107,946
Total Polychemic	15,873,876	51,008,665	53,701,442	66,083,878	73,083,229	83,911,857	110,175,616	128,071,361	148,112,727	169,934,945	194,912,295	207,842,091
Higher Education												
National Student Loan Scheme	200,000,000	230,186,739	253,684,340	270,146,389	279,193,997	280,469,922	273,548,530	235,280,108	195,081,634	154,707,836	112,828,700	114,181,326
Free First Degree Programme												
High Achievers Scholarship Scheme	27,000,000	28,498,833	30,066,200	30,066,200	30,066,200	30,066,200	30,066,200	30,066,200	30,066,200	30,066,200	30,066,200	30,066,200
National Fund for Research												
Consultancies and development of Higher Education												
Total Higher Education	227,000,000	258,685,572	283,750,540	300,212,589	309,260,197	310,536,122	303,614,730	265,346,308	225,147,834	184,774,036	142,894,900	144,247,526
Infrastructure Costs												
Public Sector Investment Program - Education Sector	296,986,912	309,795,669	318,157,089	1,906,855,576	2,208,216,665	1,917,848,587	1,207,559,133	627,828,824	337,138,182	335,487,205	332,395,375	327,862,689
Total Infrastructure Costs	296,986,912	309,795,669	318,157,089	1,906,855,576	2,208,216,665	1,917,848,587	1,207,559,133	627,828,824	337,138,182	335,487,205	332,395,375	327,862,689
Special Programs Costs												
Program 1: School digitization project												
Program 2: Enhancing teacher resource centres												
Program 3: New technology adoption												
Program 4: ESP Action Plan Implementation												
Program 5: Student breakfast												
Program 6: Junior college recurrent costs												
Program 7: Air Conditioning the classrooms												
Total Special Programs Costs	317,302,203	397,090,771	785,644,422	809,410,845	812,551,557	768,436,276	859,219,807	859,219,807	900,117,825	944,722,054	991,820,670	1,035,168,265
Special programs Economic Classification												
Salary Expenditure												
Teaching Staff Salary												
Non-Teaching Staff Salary												
Goods and Services												
Teacher and Staff Training												
Repairs and Maintenance												
Subsides												
Capital Equipment												
Total Special Programs Economic Classification	317,302,203	397,090,771	785,644,422	809,410,845	812,551,557	768,436,276	859,219,807	859,219,807	900,117,825	944,722,054	991,820,670	1,035,168,265

Summary, Indicators, and Scenarios

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
in millions of MVR												
SUMMARY												
Pre-Primary	185.1	234.2	336.1	409.6	445.3	482.5	515.9	565.0	620.5	685.2	761.0	811.8
Primary	1,161.6	1,292.6	1,487.5	1,563.7	1,686.8	1,822.4	1,943.7	2,098.3	2,178.3	2,308.4	2,450.4	2,619.0
Lower Secondary	594.6	647.8	714.3	793.3	881.1	977.8	1,054.5	1,130.4	1,204.8	1,285.4	1,372.4	1,465.8
Higher Secondary	109.6	129.4	150.2	171.4	195.3	221.7	249.3	279.6	312.3	348.4	387.8	424.3
SEN	66.1	88.4	129.8	173.9	220.1	271.1	329.1	393.3	464.7	544.9	634.3	680.1
Polychronic	15.9	51.0	53.7	66.0	79.1	93.9	110.2	128.1	148.1	169.9	194.9	207.8
Higher Education	227.0	258.7	318.2	390.9	467.6	532.4	609.0	737.3	758.4	738.8	716.6	737.9
Infrastructure Costs	297.0	309.8	318.2	1,906.9	2,208.2	1,917.8	1,207.6	627.8	337.1	335.5	332.4	327.9
Special Programs Costs	-	317.3	397.1	782.6	809.4	768.4	812.6	859.2	900.7	944.7	991.8	1,035.2
Total	2,656.9	3,329.2	4,059.1	6,466.4	7,199.9	7,233.0	7,018.6	6,820.6	6,326.0	7,361.2	7,841.7	8,313.8
in millions of MVR												
Total Costs	1,448.4	1,659.9	1,920.6	2,155.7	2,380.3	2,625.5	2,864.3	3,124.6	3,399.6	3,702.7	4,037.7	4,317.1
Salary Expenditure	892.8	1,020.8	1,209.9	1,409.8	1,622.2	1,829.7	2,064.7	2,395.5	2,388.4	2,629.1	2,898.6	3,057.8
Teaching Staff's Salary	466.6	522.1	596.6	665.9	728.1	796.8	856.6	929.1	1,001.2	1,080.6	1,168.7	1,249.3
Non-Teaching Staff Salary	318.3	398.7	483.3	543.9	604.1	652.9	698.1	746.4	757.2	797.5	839.9	868.4
Goods and Services	86.7	165.3	185.5	207.2	223.6	199.5	210.0	222.9	235.6	230.0	265.7	215.7
Teacher and Staff Training	28.0	40.2	46.0	72.6	105.0	132.4	149.1	156.6	158.5	160.2	161.9	163.5
Repairs and Maintenance	186.6	227.2	217.6	208.8	192.7	174.7	156.1	138.8	113.1	88.4	61.3	63.3
Subsidies	63.0	78.2	108.1	212.1	231.9	257.1	285.8	314.9	345.5	379.4	417.0	452.2
Capital Equipment	297.0	309.8	318.2	1,906.9	2,208.2	1,917.8	1,207.6	627.8	337.1	335.5	332.4	327.9
PSIP	227.0	268.7	532.4	609.0	674.5	757.3	795.8	778.3	759.4	738.8	716.6	737.9
Loans and Scholarships												
Total Total Costs	2,656.9	3,329.2	4,059.1	6,429.2	7,151.1	7,277.4	7,002.6	6,804.2	6,909.6	7,344.9	7,825.6	8,297.9
Universities	192.49	203.24	213.99	224.74	235.50	246.25	257.00	267.75	278.50	289.25	300.00	300.00
Total Education Sector Costs	2,893.42	3,532.47	4,273.11	6,553.92	7,386.55	7,523.61	7,259.55	7,071.91	7,188.13	7,634.20	8,125.61	8,597.87
	54.5%	49.6%	21.0%	33.3%	33.3%	36.1%	40.9%					
Indicators												
Education spending as % of GDP	3.5%	4.0%	4.5%	5.3%	6.7%	6.3%	5.7%	5.2%	5.0%	5.0%	5.1%	5.1%
Total education spending as a % of GDP	3.8%	4.3%	4.7%	5.7%	6.9%	6.6%	5.9%	5.4%	5.2%	5.2%	5.2%	5.3%
Share of recurrent costs	86.5%	88.3%	89.5%	89.5%	89.5%	89.5%	89.5%	89.5%	89.5%	89.5%	89.5%	89.5%
Share of capital costs	13.5%	11.7%	10.5%	33.0%	34.1%	29.9%	21.3%	13.9%	9.9%	9.7%	9.6%	9.4%
Percentage change in total cost		25.3%	21.9%	58.4%	11.2%	1.8%	-3.8%	-2.8%	1.6%	6.3%	6.5%	6.0%
Scenarios												
High Funding Scenario												
Education spending as % of GDP	4.5%	4.8%	5.1%	5.4%	5.7%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Total Costs - High Funding Scenario	3,377.32	3,960.21	4,599.60	5,327.40	6,104.41	6,886.22	7,367.65	7,849.07	8,330.50	8,811.93	9,293.36	9,774.78
Total Costs - High Funding Scenario	3,377.32	3,960.21	4,599.60	6,429.18	7,151.05	7,277.37	7,367.65	7,849.07	8,330.50	8,811.93	9,293.36	9,774.78
Low Funding Scenario												
Education spending as % of GDP	3.5%	3.6%	3.7%	3.8%	3.9%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Total Costs - Low Funding Scenario	2,656.91	2,970.16	3,326.96	3,748.91	4,176.70	4,590.81	4,911.76	5,232.72	5,553.67	5,874.62	6,195.57	6,516.52
Total Costs - Low Funding Scenario Using GDP assumption	2,656.91	2,970.16	3,326.96	3,748.91	4,176.70	4,590.81	4,911.76	5,232.72	5,553.67	5,874.62	6,195.57	6,516.52
Total Costs - Low Funding Scenario Using Inflation only	2,626.43	2,797.75	2,995.04	3,040.42	3,192.44	3,352.06	3,513.66	3,695.65	3,880.43	4,074.45	4,278.17	4,492.08
Scenario Summary												
Low Funding	2,626.43	2,797.75	2,995.04	3,040.42	3,192.44	3,352.06	3,513.66	3,695.65	3,880.43	4,074.45	4,278.17	4,492.08
Recommended Level	2,656.93	3,329.22	4,059.12	6,429.18	7,151.05	7,277.37	7,002.56	6,804.16	6,909.63	7,344.95	7,825.61	8,297.87
High Funding	3,377.32	3,960.21	4,599.60	6,429.18	7,151.05	7,277.37	7,367.65	7,849.07	8,330.50	8,811.93	9,293.36	9,774.78

Annex 5: Implementation Plan and Estimated Programme Cost

Maldives ESP 2018-2022 Implementation Plan and Estimated Program Cost

	Goal 1	Goal 2	Goal 3	Goal 4	Total (MVR)	Total (USD)
2019	112,603,325	35,265,000	91,175,000	12,163,540	251,206,865	16,747,124
2020	207,865,425	37,482,500	163,872,000	13,885,820	423,105,745	28,207,050
2021	207,391,825	36,476,000	182,747,000	12,918,120	439,532,945	29,302,196
2022	200,762,925	36,977,500	181,522,000	11,648,840	430,911,265	28,727,418
2023	201,600,825	36,582,000	184,367,000	10,207,620	432,757,445	28,850,496
Total	930,224,325	182,783,000	803,683,000	60,823,940	1,977,514,265	131,834,284
Total (USD)	62,014,955	12,185,533	53,578,867	4,054,929	131,834,284	

Program Priorities	Activities	Responsible Departments/Divisions	Activity Indicators	2019		2020		2021		2022		2023		Source of Funding	Comments			
				Unit	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit	Total Cost			Unit	Total Cost	
1.1 Holistic Pre-Primary Education (equitable access)	1.1.1 Access: Develop and implement a monitoring programme to ensure access to learning pathways for those that may opt not to enrol.	QAD	# of monitoring visits conducted and identification of out of KS1, KS2 young students with National statistics and EIMS support	0	0	0	0	0	0	0	0	0	0	M&E	This activity is covered in 2.1.1.1			
	1.1.2 Quality: Conduct training for the teachers to orient them to the reviewed curriculum focusing on the pedagogical shift in teaching and learning.		300	3,500	1,050,000	500	3,500	1,050,000	100	3,500	350,000	100	3,500			350,000	M&E, WB, UNICEF	
	1.1.3 Provide classroom focused support and in-school mentoring.	DIE	# of schools with individualized learning support	25	9,000	225,000	75	9,000	675,000	50	9,000	450,000	50	9,000	450,000	M&E	School visit and training	
	1.1.4 Develop policy guidelines and related materials (e.g. teacher practice guides) to promote a shift in teaching and learning at the Foundation Stage.		15	35,000	525,000	5	35,000	175,000	5	35,000	175,000	5	35,000	175,000	M&E, WB, UNICEF			
	1.1.5 Develop and implement a mechanism for monitoring teaching and learning by focusing on instructional practice for students who may require additional support during learning, delivery and assessment.	NIE / DIE	# of teachers trained in harmonized assessments methodology	100	3,500	350,000	250	3,500	875,000	100	3,500	350,000	100	3,500	350,000	M&E	Training of teachers	
	1.1.6 Conduct a programme to develop teaching and learning resources (flash-cards, audio, video, hands-on materials) for various levels and subjects to learn how to use locally available materials		4	65,000	260,000	0	0	0	8	520,000	4,160,000	0	0	0	0	4,420,000	M&E, WB, UNICEF	Modules revised
	1.1.7 Conduct a programme to support teachers on classroom practices on assessment.	NIE	# of teachers trained in in-service	50	3,500	175,000	100	3,500	350,000	100	3,500	350,000	100	3,500	350,000	M&E, WB, UNICEF		
	1.1.8 Develop modules and conduct in-service training for assessment upgrading, assessment and early intervention.		20	3,500	70,000	25	3,500	87,500	25	3,500	87,500	25	3,500	87,500	420,000	M&E, WB, UNICEF		
	1.2 Holistic Education for Primary and Lower Secondary levels	1.2.1 Access: Develop and implement a monitoring programme to ensure access to Primary and Secondary Education by creating additional learning pathways.	QAD	# of teachers trained on classroom assessment practices	0	3500	0	20	3500	70000	20	3500	70000	0	3500	0	210,000	
		1.2.2 Quality: Conduct a comprehensive review of the teaching-learning process (along with a focus on school-based assessments) at these levels for identifying gaps in the learning process and how these gaps could be done for selective subjects)		6	60,000	360,000	35	60,000	210,000	35	60,000	210,000	35	60,000	210,000	8,760,000	M&E, UNICEF	One visit will cover two schools in each school. Consultants will be hired to develop reports based on monitoring visits which will help to conduct this activity
1.2.3 Develop policy guidelines and related materials to promote a holistic education at the Primary and Lower Secondary Levels.		NIE	# of monitoring visits conducted and secondary teaching and learning process available	1	200,000	200,000	1	200,000	200,000	1	200,000	200,000	1	200,000	200,000	1,000,000	M&E, UNICEF	
1.2.4 Develop and conduct a Literacy and Mathematics programme in relevant key stages for students who have learning difficulties and introducing intervention measures to rectify them (addressing the results of the NALO and School Review).			25	20,000	500,000	25	20,000	500,000	25	20,000	500,000	25	20,000	500,000	2,500,000	M&E, WB	Consultancy for analytical work	

Program Priorities	Activities	Activity Indicators	Responsible Department/Divisions	2019		2020		2021		2022		2023		Total Estimated Cost	Source of Funding	Comments				
				Unit	Unit Cost	Unit	Unit Cost	Unit	Unit Cost	Unit	Unit Cost	Unit	Unit Cost				Unit	Unit Cost		
2.1 TVET in Schools upstream and downstream expansion with equity, quality and gender and geographic equality and pathways between streams.	2.1.1 Evaluate the impact of BTFC and Dhaavaa/Internship programme.	Assessment and Certification / report	TVET Authority	45	1,500	67,500	40	1,500	60,000	45	1,500	67,500	40	1,500	60,000	318,000	Government and funding agencies.	focus on school regions / 211 schools / no. distributed for 5 yrs		
	2.1.2 Review the BTFC and Dhaavaa pathways with a view to extending these options to all students.	# of outreach activities increased with potential TVET students to increase enrolments	TVET Authority / Maldives Polytechnic	2	500,000	1,000,000	4	500,000	2,000,000	4	500,000	2,000,000	5	500,000	2,500,000	9,500,000	Government and Public Private Partnership and other funding agencies	focus on atolls as regions / 19 atolls / no. distributed for 5 yrs		
	2.1.3 Design and set up skills-based teaching/learning facilities for students in schools based on the review and the impact assessment.	A model skilled based training centers for schools is designed	TVET Authority	45	1,500	67,500	40	1,500	60,000	45	1,500	67,500	40	1,500	60,000	318,000	Government and funding agencies.	focus on school regions and fields of study / 211 schools / no. distributed for 5 yrs		
	2.1.4 Develop policies relevant to Post-Secondary Education to build pathways for TVET and Higher Education.	Impact evaluation report is available Relevant policies developed for post-secondary education to build pathways for TVET and HE	TVET Authority	45	1,500	67,500	40	1,500	60,000	45	1,500	67,500	40	1,500	60,000	318,000	Government and funding agencies.	focus on school regions and fields of study / 211 schools / no. distributed for 5 yrs		
2.2 Skills Maldives: Expansion of equitable, quality TVET programmes by the Maldives Polytechnic and Institutes for youth and adults, with gender, Economic and Resilience Focus.	2.2.1 Rebranding TVET to skills development (Eg. Skills Maldives)	# of promotional and awareness activities conducted to increase perceptual value of TVET education in Maldives	TVET Authority	45	1,500	67,500	40	1,500	60,000	45	1,500	67,500	40	1,500	60,000	318,000	Government and Public Partnership and other funding agencies.	Government and Public Partnership and other funding agencies.		
	2.2.2 Carry out intensive promotional and awareness activities to reach out to the outer islands on access and benefits to the individuals and the community.	# of outreach and financing programmes designed and implemented for TVET students for islands in which awareness programs are conducted	TVET Authority	500	36,000	18,000,000	500	36,000	18,000,000	500	36,000	18,000,000	500	36,000	18,000,000	90,000,000	Government and Public Partnership and other funding agencies.	Government and Public Partnership and other funding agencies.		
	2.2.3 Conduct career guidance sessions to all stakeholders at decentralized levels.	# of women and other vulnerable groups receive guidance to continue/attend TVET education	Maldives Polytechnic	3500	0	0	3500	0	0	3500	0	0	3500	0	0	0	0	Government and funding agencies.	Government and funding agencies.	
	2.2.4 Offer scholarships or financing opportunities for students from vulnerable group of young adults.	# of TVET courses offered free of charge Awareness on financing opportunities/options for TVET programs	TVET Authority	450	20000	9,000,000	450	20000	9,000,000	450	20000	9,000,000	450	20000	9,000,000	45,000,000	Government and Public Partnership and other funding agencies.	Government and Public Partnership and other funding agencies.		
	2.2.5 Establish support groups and support activities for students from different communities, groups, (especially women and vulnerable groups).	# of support groups and support activities established for students from different communities and groups	TVET Authority / Maldives Polytechnic	50	500	25,000	100	500	50,000	67	500	33,500	0	0	0	108,500	Government and funding agencies.	Government and funding agencies.		
	2.2.6 Provide free of charge courses to attract youth and adults to fill the demand	# of courses provided free of charge # of students enrolled in these courses	TVET Authority / Maldives Polytechnic	0	0	0	100	10,000	1,000,000	100	10,000	1,000,000	100	10,000	1,000,000	4,000,000	Government and funding agencies.	Government and funding agencies.		
	2.2.7 Introduce innovative pedagogical practices in the TVET programmes to attract students	Information of innovative pedagogical strategies compiled and put into practice # of students enrolled in these programs	TVET Authority / Maldives Polytechnic	0	0	0	5	10,000	50,000	0	0	0	5	12,000	60,000	0	0	110,000	Government and funding agencies.	Government and funding agencies.
	2.2.8 Develop and conduct vocational therapy classes for SEN students (Could be considered a MP activity in collaboration with MoE).	Required vocational therapies identified Awareness programs on vocational therapies # of SEN students enrolled in vocational therapy programs	DIE / TVET Authority / Maldives Polytechnic	50	2,500	125,000	75	2,500	187,500	25	2,500	62,500	25	2,500	62,500	125,000	562,500	Government and funding agencies.	Government and funding agencies.	

Program Priorities	Activities	Activity Indicators	Responsible Departments/Divisions	2019		2020		2021		2022		2023		Total Estimated Cost	Source of Funding	Comments		
				Unit	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit	Total Cost				Unit	Total Cost
3.1 Size and Structure of Higher Education	3.1.1 Undertake situational reviews to determine the current capacity of HEIs	Capacity assessment report available	Higher Education Department	1	70,000	1	70,000	0	0	0	0	0	0	770,000	Government and funding agencies	Develop a report by Government and funding agencies based on research based		
	3.1.2 Develop a streamlined institutional structure	A structure suitable to current and future needs is approved	Higher Education Department	0	0	4	3,000	4	3,000	0	0	0	0	24,000	Government and funding agencies	Train the staff for implementation.		
	3.1.3 Identify the key areas in which Maldives commands comparative advantage in higher education and identify areas for tourism, fisheries, health, ICT, Wellness, Marine Sciences, etc.)	Key comparative advantage areas for Maldives HE identified	Higher Education Department	0	0	1	2,000,000	2	5,000	100,000	2	50,000	0	0	400,000	Government and funding agencies	1. Identification process 2. dissemination of info	
	3.1.4 Develop the guidelines/policies for innovative pedagogical practices	Plans develop to focus on comparative advantage for Maldives identified innovative pedagogical practices	Higher Education Department	0	0	1	35,000	0	0	0	0	0	0	0	35,000	Government and funding agencies	for policy level decision making	
	3.1.5 Access provide free higher education to first-degree programmes (completely free in 2 State universities, up to 70% subsidised in private colleges/universities).	Public announcements made	Higher Education Department	0	0	0	0	0	0	0	1	20,000	2,000,000	400,000	Government and funding agencies	1. Situational review 2. formulate the plan 3. Train staff 4. implement		
	3.1.6 Revise higher education loan scheme to lower administrative charge and interest rate. Charge reduced from 8% to 3% and payback period made flexible with an extension of 25% of the initial time period)	Discussions with relevant authorities as the bank to revise the scheme	Higher Education Department	0	0	0	0	0	0	0	0	0	0	0	0			
	3.1.7 Develop mechanisms and guidelines to assist youth and adults in higher education with Special Educational Needs	Mechanisms and guidelines developed to assist SEN students enrolled in HE	DIE / DHE	1	35,000	1	40,000	0	0	0	0	0	1	35,000	110,000	Government and funding agencies		
	3.2 Governance of Higher Education	3.2.1 Develop appropriate legislation for HE	Appropriate legislation for HE developed	Higher Education Department	0	0	0	0	1	50,000	4	3,000	12,000	4	3,000	74,000	Government and funding agencies	for policy level decision making
	3.2.2 Review the Higher Education Master Plan through a consultative process.	Consultant hired	Higher Education Department	0	0	1	5,000,000	0	0	0	0	0	0	0	5,000,000	Government and funding agencies		
	3.2.3 Reconstitute Higher Education Council to reflect representatives from various fields.	Accountability systems for HE within MoE is developed	Higher Education Department	0	0	0	0	0	0	0	0	0	0	0	0	Government and funding agencies	for policy level decision making	
3.2.4 Develop a guidance document on the core principles of governance of HE	Accountability and Governance systems for HE within MoE is developed	Higher Education Department	10	30,000	1	50,000	0	0	0	1	50,000	0	0	500,000	Government and funding agencies	staff training and surveys		
3.2.5 Conduct orientation programmes to HEIs on how to develop and publish Strategic Plans and Action Plans.	Orientation program developed	Higher Education Department	1	100,000	2	50,000	0	0	0	0	0	2	50,000	300,000	Government and funding agencies	develop higher education award system/implement staff training		
3.2.6 Conduct a workshop/seminar on good governance to all HEIs.	Workshop conducted	Higher Education Department	0	0	15	150,000	0	0	0	15	150,000	0	0	450,000	Government and funding agencies	develop higher education award system/implement staff training		

Program Priorities	Activities	Activity Indicators	Responsible Departments/Divisions	2019		2020		2021		2022		2023		Total Estimated Cost	Source of Funding	Comments
				Unit	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit	Total Cost	Unit	Total Cost			
					Cost		Cost		Cost		Cost		Cost			
4.1. Strengthening MoE and TRCS teams to support School Improvement Plans focused on holistic learning outcomes and inclusion	4.1.1 Institutional capacity at NIE comprehensively assessed and strengthened to support the effective implementation of the National Curriculum Framework.	Capacity assessment of NIE conducted	NIE	3	17,500	20	350	8	4,000	0	0	0	0	915,000	MoE, WB	2018 capacity assessment, 2019 onwards training of NIE staff
				20	3,600,000	20	3,600,000	20	3,600,000	20	3,600,000	20	3,600,000	20	3,600,000	MoE, WB
	4.1.2 Undertake an audit of the existing infrastructure in schools.	Recommendations of capacity assessment findings implemented	PPRD	20	180,000	20	180,000	20	180,000	20	180,000	20	180,000	2,100,000	MoE, UNICEF	
				20	35,000	20	700,000	20	35,000	20	700,000	20	35,000	20	700,000	MoE, UNICEF
	4.1.3 Strengthening the capacity of staff of NIE, QAD, ESQID and DIE on evidence-based practices on learning, skills acquisition, inclusion, School-based Professional Development (SBPD), In-service approach in country, Workshops, short training and exposure trips.	SIP monitoring analytical report shared with stakeholders	NIE/SA	0	0	3	200,000	20	50,000	20	1,000,000	20	50,000	1,000,000	MoE	2019: 3 trainings in Male' and after 2019 One training in each Abdi per year
				0	0	0	0	0	0	0	0	0	0	0	0	0
4.2. MoE Financial management to improve cost-effectiveness towards holistic learning for all	4.2.1 Prepare cost-benefit analysis for learning outcomes	Cost-benefit analysis conducted for learning outcome	PPRD	0	0	1	372,000	0	0	0	372,000	0	0	744,000	MoE, GPE	
				13	30,000	13	30,000	13	30,000	13	30,000	13	30,000	13	30,000	1,950,000
4.3. MEMIS strengthening for improved holistic learning for all	4.3.1 Complete the revision and endorsement of the MEMIS Action Plan and commence its implementation.	MEMIS team is adequately resourced (human resources with technical skills) and financial resources	PPRD	15	50,000	1	1,000,000	15	750,000	15	50,000	15	50,000	4,000,000	MoE, UNICEF	System Enhancements
				1	185,040	3	185,040	3	185,040	3	185,040	3	185,040	3	185,040	2,405,520
	4.3.2 Consolidate the MEMIS team and the facility.	# of staff trained in MEMIS	PPRD	450	3,000	3	1,350,000	450	3,000	450	3,000	450	3,000	6,180,120	MoE, UNICEF	System Enhancements
				60	2,000	2	185,040	60	2,500	3	185,040	60	2,000	2,000	1,355,200	MoE, UNICEF
	4.3.3 Consolidate the indicators from the MEMIS database.	KPIs developed and followed up	PPRD	50	800	100	800	100	800	100	800	100	800	253,600		
				0	0	0	0	0	0	0	0	0	0	0	0	0
	4.3.4 Train at least 2 staff from each school and MoE Departments on MEMIS feed and use.	Required training provided to schools	PPRD	0	0	0	0	0	0	0	0	0	0	0		
				0	0	0	0	0	0	0	0	0	0	0	0	
	4.3.5 Operationalize MEMIS by providing access to all key departments of the MoE	MEMIS operationalize in MoE departments	PPRD	50	800	100	800	100	800	100	800	100	800	253,600		
				0	0	0	0	0	0	0	0	0	0	0	0	
	4.3.6 Continuous orientation and training programmes of the MEMIS.	List of trained staff	PPRD	0	0	1	75,000	0	0	0	0	0	0	75,000		
				0	0	0	0	0	0	0	0	0	0	0	0	
	4.3.7 Assess and analyze the financial sustainability of the MEMIS system with the scope for expansion.	Financial analysis done and report available	PPRD	0	0	0	0	0	0	0	0	0	0	75,000		
				0	0	0	0	0	0	0	0	0	0	0	0	

Annex 6:

Additional indicators following M&E review



Indicative practical cost-effective measurements to monitor the teaching and learning practices in the class including learning in early grades and practical and cost-effective measurements to assess skills for work.

Annex 6.1



Annex 6.1.1. Student Attainment on International Benchmark Tests

KPIs	Segment	Base	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF STUDENTS ACHIEVING ABOVE 50 TH INTERNATIONAL PERCENTILE ON ACER IBT MATHS	♂● P	TBC	TBC	TBC				MoE
	♂⊘ P	TBC	TBC	TBC				
	♀● P	TBC	TBC	TBC				
	♀⊘ P	TBC	TBC	TBC				
	♂● LS	TBC	TBC	TBC				
	♂⊘ LS	TBC	TBC	TBC				
	♀● LS	TBC	TBC	TBC				
	♀⊘ LS	TBC	TBC	TBC				
	♂● P	TBC	TBC	TBC				
	♀● P	TBC	TBC	TBC				

ABOVE 50 TH INTERNATIONAL PERCENTILE ON ACER IBT ENGLISH	♂ P	TBC	TBC	TBC	TBC	MoE
	♀ P	TBC	TBC	TBC	TBC	
	♀ P	TBC	TBC	TBC	TBC	
	♂ LS	TBC	TBC	TBC	TBC	
	♂ LS	TBC	TBC	TBC	TBC	
	♀ LS	TBC	TBC	TBC	TBC	
	♀ LS	TBC	TBC	TBC	TBC	
	♂ P	TBC	TBC	TBC	TBC	
	♂ P	TBC	TBC	TBC	TBC	
	♀ P	TBC	TBC	TBC	TBC	
% OF STUDENTS ACHIEVING ABOVE 50 TH INTERNATIONAL PERCENTILE ON ACER IBT SCIENCE	♂ LS	TBC	TBC	TBC	TBC	
	♂ LS	TBC	TBC	TBC	TBC	
	♀ LS	TBC	TBC	TBC	TBC	
	♀ LS	TBC	TBC	TBC	TBC	

Annex 6.1.1.2. Student Progress on International Benchmark Tests



KPIs	Segment	Base	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF STUDENTS ACHIEVING THE SAME OR HIGHER INDIVIDUAL SCORE OVER TWO CONSECUTIVE GRADES ON INTERNATIONAL ACER IBT IN MATHS (Comparison of current and previous year score)	♂● P	TBC	TBC	TBC			Comparisons to be made only on the same students across 2 consecutive years.	MoE
	♂⚙ P	TBC	TBC	TBC				
	♀● P	TBC	TBC	TBC				
	♀⚙ P	TBC	TBC	TBC				
	♂● LS	TBC	TBC	TBC				
	♂⚙ LS	TBC	TBC	TBC				
	♀● LS	TBC	TBC	TBC				
	♀⚙ LS	TBC	TBC	TBC				
	♂● P	TBC	TBC	TBC				
	♂⚙ P	TBC	TBC	TBC				
% OF STUDENTS ACHIEVING THE SAME OR HIGHER INDIVIDUAL SCORE OVER TWO CONSECUTIVE GRADES ON INTERNATIONAL ACER IBT IN ENGLISH (Comparison of current and previous year score)	♀● P	TBC	TBC	TBC			Comparisons to be made only on the same students across 2 consecutive years.	MoE
	♀⚙ P	TBC	TBC	TBC				
	♂● LS	TBC	TBC	TBC				
	♂⚙ LS	TBC	TBC	TBC				
	♀● LS	TBC	TBC	TBC				
	♀⚙ LS	TBC	TBC	TBC				

<p>% OF STUDENTS ACHIEVING THE SAME OR HIGHER INDIVIDUAL SCORE OVER TWO CONSECUTIVE GRADES ON INTERNATIONAL ACER IBT IN SCIENCE (Comparison of current and previous year score)</p>	♂ LS	TBC	TBC	TBC	TBC	<p>Comparisons to be made only on the same students across 2 consecutive years.</p> <p>MoE</p>			
	♀ LS	TBC	TBC	TBC	TBC				
	♀ LS	TBC	TBC	TBC	TBC				
	♂ P	TBC	TBC	TBC	TBC				
	♂ P	TBC	TBC	TBC	TBC				
	♀ P	TBC	TBC	TBC	TBC				
	♀ P	TBC	TBC	TBC	TBC				
	♂ LS	TBC	TBC	TBC	TBC				
	♂ LS	TBC	TBC	TBC	TBC				
	♀ LS	TBC	TBC	TBC	TBC				
	♀ LS	TBC	TBC	TBC	TBC				

Annex Implementation of International Benchmark Testing into the Maldivian Education System



KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
% OF SCHOOL PRINCIPALS AND SENIOR LEADERS WHO RECEIVED TRAINING ON IMPLEMENTING ACER IBT AND USE OF DATA	TBC	TBC	TBC				MoE
% OF SCHOOLS WHO USE ACER IBT DATA IN THEIR OWN SCHOOL IMPROVEMENT PLANNING	TBC	TBC	TBC				MoE
MEMIS SYSTEM IS ADAPTED TO INCLUDE ACER IBT DATA AND PROVIDE AUTOMATED AND REGULAR REPORTS	TBC	TBC	TBC				MoE



**Annex Improving Quality of Teaching Practice in Maldivian Schools Using World Bank Teach
6.1.4. Observation Methodology**

KPIs	Segment	Base	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF ALL TEACHERS WHO ACHIEVE 'HIGH' AND 'MEDIUM' AVERAGE SCORES ON TIME ON LEARNING CATEGORY	TBC	TBC	TBC	TBC				MoE
	Supportive Learning Environment	TBC	TBC	TBC				MoE
	Positive Behavioural Expectations	TBC	TBC	TBC				
	Lesson Facilitation	TBC	TBC	TBC				
	Checks for Understanding	TBC	TBC	TBC				
AVERAGE SCORES OF ALL TEACHERS ACROSS TEACH ELEMENTS	Feedback	TBC	TBC	TBC				MoE
	Critical Thinking	TBC	TBC	TBC				
	Autonomy	TBC	TBC	TBC				
	Perseverance	TBC	TBC	TBC				
	Social and Collaborative Skills	TBC	TBC	TBC				
% OF TEACHERS RECEIVING REMEDIAL TRAINING IN THE AREA OF WEAKNESS IDENTIFIED IN THE PAST YEAR		TBC	TBC	TBC				MoE



**Annex
6.1.5**

Implementing Teach Methodology into the Maldivian Education System

KPIs	Base	Target		Verify	Report	Comments	Owner
		2021	2023				
% OF ALL PRINCIPALS AND SENIOR LEADERS TRAINED ON <i>TEACH</i> METHODOLOGY AND OBSERVATION APPROACH	TBC	TBC	TBC				MoE
% OF SCHOOLS WHERE EACH FULL-TIME TEACHER IS OBSERVED WITH <i>TEACH</i> AT LEAST TWICE A YEAR	TBC	TBC	TBC				MoE
MEMIS SYSTEM ADAPTED TO INCLUDE <i>TEACH</i> OBSERVATION DATA	TBC	TBC	TBC				MoE
ANALYSIS OF <i>TEACH</i> OBSERVATION DATA COMPLETED AND PROFESSIONAL DEVELOPMENT PLAN FOR TEACHERS PREPARED	TBC	TBC	TBC				MoE
ADAPTED GUIDANCE ON THE DEVELOPMENT OF SCHOOL IMPROVEMENT PLANS TO INCLUDE DATA AND FINDINGS FROM <i>TEACH</i>	TBC	TBC	TBC				MoE



Annex 6.2 Monitoring for Vulnerability

KPIs	Base	Target		Verify	Report	Comments	Owner
		2021	2023				
REGULAR REVIEWS OF VULNERABILITIES COMPLETED	TBC	TBC	TBC				MoE
# OF VULNERABILITY ONSET-TYPE INDICATORS IDENTIFIED	TBC	TBC	TBC				MoE
# OF IMPACT-TYPE INDICATORS IDENTIFIED	TBC	TBC	TBC				MoE
# OF MITIGATION STRATEGIES IMPLEMENTED	TBC	TBC	TBC				MoE
# OF VULNERABILITIES WITH LOW/NO DISRUPTION ON EDUCATION SYSTEM	TBC	TBC	TBC				MoE
# OF UNFORESEEN VULNERABILITIES THAT DISRUPTED THE EDUCATION SYSTEM	TBC	TBC	TBC				MoE

Annex 6.3 Improved Validation and Consolidation of Existing Resources



KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
# OF DEPARTMENTS UPLOADED THEIR DATA TO EMIS THIS YEAR	TBC	TBC	TBC	EMIS	Annual		MoE
CONDUCTED STATISTICAL CORRELATION STUDIES (E.G. MULTIPLE REGRESSION) OF ALL MAJOR DATA SOURCES ON QUALITY OF EDUCATION, PARTICULARLY (I) NALO VS. ACER, O-LEVELS, TEACH OBSERVATION DATA, AND SCHOOL SELF EVALUATION AND (II) SCHOOL ASSESSMENT DATA VS. ACER, O-LEVELS, TEACH OBSERVATION DATA, AND SCHOOL SELF EVALUATION	TBC	TBC	TBC	EMIS	Annual		MoE
# OF DEPARTMENTS THAT SUBMITTED COMPREHENSIVE DATA COLLECTION REQUESTS TO EMIS	TBC	TBC	TBC	EMIS	Annual		MoE



Annex 6.4 Increasing Capacity of Human Resources

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
COMPLETED AN INITIAL, IN-DEPTH, CAPACITY ASSESSMENT, TO EXPLORE HUMAN, AND OTHER, RESOURCE CAPACITY FOR THE IMPLEMENTATION, AND MONITORING AND EVALUATION OF THE ESP	TBC	YES	YES	QAD	Annual		
# OF DEDICATED STAFF CHARGED WITH ESP IMPLEMENTATION	TBC	TBC	TBC	QAD	Annual		MoE
# OF DEDICATED STAFF CHARGED WITH ESP MONITORING	TBC	TBC	TBC	QAD	Annual		MoE



Annex 6.5 Addressing 16-18 Data Gaps

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
LEAVERS' TRACKER IS EXPANDED TO TRACK DATA POINTS ON LEAVERS' DESTINATION, COURSE TERMINOLOGY, HOURS OF DIRECT INSTRUCTION, COURSE PROVIDERS (4 YEARS OF DATA FOR 16-Y-O LEAVERS, 2 YEARS OF DATA FOR 18-Y-O LEAVERS)	TBC	Yes	Yes	QAD	Annual		MoE
LEAVERS' TRACKER IS REINSTATED AS AN INSTRUMENT AND USED TO COLLECT DATA ON REGULAR BASIS	TBC	Yes	Yes	QAD	Annual		MoE



Annex 6.6 Improving Consistency in Higher Education

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
DEFINE DATA TO BE COLLECTED ON ALL HE INSTITUTIONS (INCL. COURSE TERMINOLOGY, MODES OF STUDY, CONTACT HOURS, LENGTH OF PROGRAM, # AND FORMS OF ASSESSMENT, INTERNATIONAL VALIDATION AND ACCREDITATION, ENROLMENT, COMPLETION, PASS RATES, GRADE LEVELS, LEAVERS' DESTINATIONS, FINANCIAL FEE MODELS, EMPLOYER PERCEPTION)	TBC	Yes	Yes		Annual		MoHE



Annex 6.7 Inclusive Education

KPIs	Base	Target		Verify	Report	Comments	Owner
		2021	2023				
INCLUSION POLICY FOR THE EDUCATION SYSTEM IS DEVELOPED	TBC	Yes	Yes		Annual		MoE
IDENTIFY SUITABLE DIAGNOSTIC TEST FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS AS WELL AS GIFTS AN TALENTS	TBC	Yes	Yes		Annual		MoE
DIAGNOSTIC TESTING IS IMPLEMENTED AT KEY TRANSITION POINTS IN EDUCATION	TBC	Yes	Yes		Annual		MoE



Annex 6.8 Employability Tracking

KPIs	Base 2019	Target		Verify	Report	Comments	Owner
		2021	2023				
EMPLOYMENT TRACKER FOR ALL TVET GRADUATES IS CREATED AND IMPLEMENTED (to include statistics on employment status, time to find employment, salary, sector of employment, job title, core duties, location, employer name, employer training, size of employer, how graduates secured employment – to be tracked for 4 years for 16-Y-O Leavers and 2 years for 18-Y-O leavers)	TBC	Yes	Yes		Annual		MoHE

Annex 6.9 Safety, Disaster Readiness, and Infrastructure in Schools



KPIs	Segment	Base	Target		Verify	Report	Comments	Owner
			2021	2023				
% OF STUDENTS FEELING SAFE IN SCHOOLS (free from Violence, Bullying and Corporal Punishment)	♂●	TBC	80	90	ESQID - Risk assessment tool	Sample Survey / Quarterly		MoE
	♂☸	TBC	80	90				
	♀●	TBC	80	90				
	♀☸	TBC	80	90				
	SEN	TBC	80	90				
		TBC	60	80				
% OF STUDENTS SCREENED FOR HEALTH INDICATORS ARE "HEALTHY"	Internet for Pedagogical Purposes	60	80	90	ESDID – Risk assessment tool	Annual		MoE
	Computers for Pedagogical Purposes	60	80	90				
% OF SCHOOL HAVING WELL MAINTAINED INFRASTRUCTURE	Dedicated Technical Support	60	80	90	ESQID / NIE / QAD / Department of Statistics	Sample Survey / Quarterly		MoE
	Adapted Infrastructure and Materials and Space for	60	80	90				

<p>SEN Students</p> <p>Single-Sex Basic Sanitation Facilities</p> <p>Multi-Grade Classrooms</p> <p>Science Lab</p> <p>Students Meeting Area</p> <p>First Aid Room</p>	60	80	90	<p>ESQID – Risk assessment tool</p>	<p>Sample Survey / Quarterly</p>	<p>MoE</p>
	60	80	90			
	60	80	90			
	60	80	90			
	60	80	90			
	60	80	90			
	TBC	80	90			
<p>% OF SCHOOLS RATED "GOOD" ON DISASTER RISK REDUCTION SCALE</p>						

Annex 7: Implementation Manual



Ministry of Education & Ministry of Higher Education
Republic of Maldives

IMPLEMENTATION MANUAL
Planning, Monitoring and Reporting
ESP 2019-2023

April 2019

CHAPTER 1: INTRODUCTION

1.1 The Monitoring, evaluation and accountability framework

This document provides a monitoring, evaluation and accountability framework for the entire duration of the ESP 2019-2023 across all stages of education from pre-primary to higher education. MoE and MoHE are committed to ‘holistic and inclusive education’ and improving equitable learning outcomes for all students in the Maldives, across all stages. As an overarching principle, where possible, disaggregated data including but not limited to by sex, age, grade and other salient socio-economic characteristics, including income/wealth, location, and disability status will be collected. Science plays a major role in M&E activities. MoE will follow a scientific approach to design work-plans, M&E tools development, field data collection, statistical analysis methods for policy analysis and interpretation. The ministry will develop several M&E products to improve transparency and participation of all stakeholders, which will be shared, presented, debated and disseminated. The proposed M&E accountability framework has integrated most of the targets and indicators defined in SDG Goal 4, to enable the ministry to report progress of SDG Goal 4.

1.1.1 SDG key principles

The ESP Planning, Monitoring and Reporting arrangements are developed under following SDG key principals.

1. Inclusion and equity: All people, irrespective of sex, age, race, colour, ethnicity, language, religion, political or other opinion, national or social origin, property or birth, as well as persons with disabilities, migrants, indigenous peoples, and children and youth, especially those in vulnerable situations or other status, should have access to inclusive, equitable quality education and lifelong learning opportunities. Vulnerable groups that require particular attention and targeted strategies include persons with disabilities, indigenous peoples, ethnic minorities and the poor.

2. Gender equality: All girls and boys, women and men, should have equal opportunity to enjoy education of high quality, achieve at equal levels and enjoy equal benefits from education. Adolescent girls and young women, who may be subject to gender-based violence, child marriage, early pregnancy and a heavy load of household chores, as well as those living in poor and remote rural areas, require special attention. In contexts in which boys are disadvantaged, targeted action should be taken for them. Policies aimed at overcoming gender inequality are more effective when they are part of an overall package that also promotes health, justice, good governance and freedom from child labour.

Other Key principles of M&E system

Results-Based Framework will be used as an overarching framework to strengthen and recalibrate the current monitoring and evaluation system in MoE and MoHE to monitor and evaluate

programme and performance management of the ESP 2019-2023. Some of the key principles will be used in the development of the Monitoring and Evaluation system are:

- **Results-Based Monitoring:** is a demand-driven monitoring system where key results will set an outline of data and monitoring systems. The system will consider, which results is to be monitored, how results will be monitored, by whom and how/when results will be used and how much it would cost to monitor results
- **Accountability:** in accountability hierarchy, ownership of the results will rest with the head of each department and divisions, as per the ESP structure - Policy and Program Priorities. The head of departments and divisions will be held accountable for the implementation monitoring (Annual Work Plan/Implementation Plan) and performance monitoring (KPIs) and factors affecting progress
- **Transparency:** M&E plan including procedures and timeline, will be developed and shared with all education sector stakeholders. Which data to be collected, how data could be potentially analysed, who carry out the data analysis and draft the analysis of results will all be open and known to all key partners. M&E plan will take in to account KPIs defined in ESP 2019-2023, SDG monitoring framework and may conform to the OECD standards
- **Data science and systematic methodological approaches:** M&E will follow a scientific approach to design work, tools development, field data collection, methods of statistical analysis and interpretation for policy and programme relevance

1.2 Why are monitoring and evaluation essential?

The reasons for developing and implementing robust and comprehensive Monitoring and Evaluation programmes are many. In the context of managing education at a national strategic level, a few primary reasons can be summarized as:

- **Achieving targets:** in the absence of key performance indicators and valid and reliable data, governments are unable to make properly informed decisions about interventions and support they need to provide within the education sector. This significantly undermines their potential to achieve set targets and help the socio-economic development of their populations.
- **Efficacy and efficiency of interventions:** M&E, founded in robust and meaningful indicators helps governments to evaluate the efficacy as well as the efficiency of alternative courses of actions, programmes, and interventions. Such data allows for opportunity cost analysis, and can support 'business cases' or other financial evaluations of government action (or inaction), support advocacy for interventions

and programmes with both local populations and international donors, as well as help clearly demonstrate the positive impact of government programming (or its failing where that may be an issue).

- **Understanding complex causes:** Rigorous statistical analysis, performed as part of an evaluation exercise, particularly in cases of large and longitudinal datasets can help decision-makers understand complex causal relationships between different aspects of the education system, which cannot be revealed based on ‘manual’ or non-data-driven approaches. This allows decision-makers to identify systemic pressure points as well as obstacles to impact, which can all be utilized to improve the efficacy of government programming.

CHAPTER 2: MONITORING AND EVALUATION PROCESS

The UN defines each of the constituent concepts as follows:

Monitoring

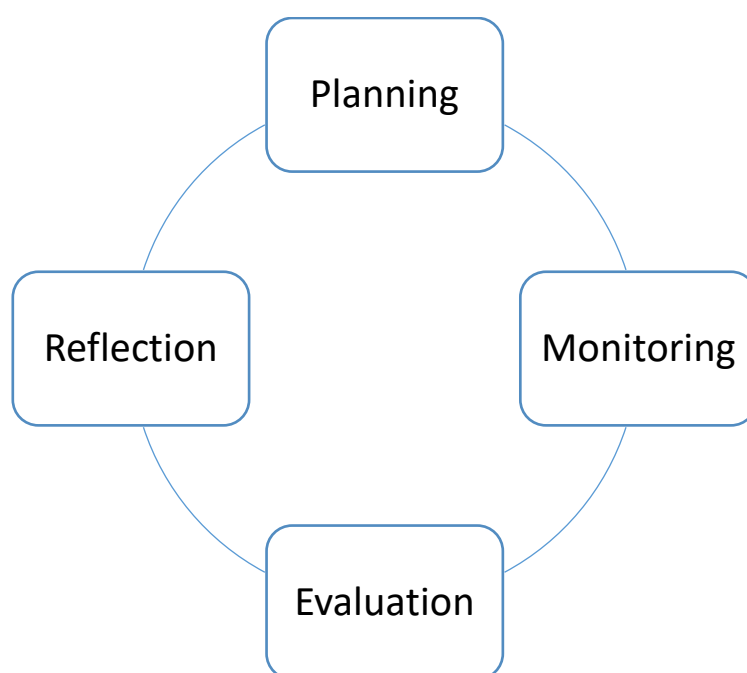
Monitoring can be defined as the ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives. Contrary to many definitions that treat monitoring as merely reviewing progress made in implementing actions or activities, the definition used in this Handbook focuses on reviewing progress against achieving goals. In other words, monitoring in this Handbook is not only concerned with asking ‘Are we taking the actions we said we would take?’ but also ‘Are we making progress on achieving the results that we said we wanted to achieve?’ The difference between these two approaches is extremely important. In the more limited approach, monitoring may focus on tracking projects and the use of the agency’s resources. In the broader approach, monitoring also involves tracking strategies and actions being taken by partners and non-partners, and figuring out what new strategies and actions need to be taken to ensure progress towards the most important results.

EVALUATION

Evaluation is a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making. Evaluations, like monitoring, can apply to many things, including an activity, project, programme, strategy, policy, topic, theme, sector or organization. The key distinction between the two is that evaluations are one independently to provide managers and staff with an objective assessment of whether or not they are on track. They are also more rigorous in their procedures, design and methodology, and generally involve more extensive analysis. However, the aims of both monitoring and evaluation are very similar: to provide information that can help inform decisions, improve performance and achieve planned results.

The high-level M&E process is relatively common across domains and it is cyclical:

Source: (UNDP, 2018)



Each stage comprises a set of distinct activities. Broadly, these are:

Planning

Undertaking needs assessment

Developing a Theory of Change

Setting Goals and Objectives

Defining Key Performance Indicators

Logistical and operational planning of data collection

Monitoring

Building monitoring database and tools

Data collection

Performance measurement

Data quality assurance

Evaluation

Data analysis

Data synthesis

Reporting

Reflection

Feedback

Decision-making

M&E process change

Project / Programme change

At the heart of the M&E process are four key questions targeted at the project/initiative being monitored and evaluated. These are:

Is the project/initiative:

- achieving its intended objectives;
- reaching the intended target groups;
- being efficiently implemented; and
- providing opportunities for knowledge transfer.

It is these activities, and core questions that have helped inform the M&E process applied to monitor and evaluate the implementation of the ESP 2019-2023, and this manual more broadly.

2.1 Principles guiding monitoring and evaluation process

This section outlines some of the principles that should guide all M&E stakeholders' thinking throughout the process. These are:

- **Ownership:** ownership (and related to it – accountability) is a principle that is fundamental to achieving results within any education programming. As such all monitoring and evaluation activities need to consider it explicitly. M&E Practitioners can evaluate the (i) depth of ownership, i.e. to what extent stakeholders own the result that a programme is trying to achieve (as opposed to the bureaucratic process or superficial ownership of reporting on project to satisfy funding bodies), and the (ii) breadth of ownership, i.e. whether the ownership is shared among a sufficient number of stakeholders whose input or support is necessary to achieve the desired objective.
- **Focus on Results:** M&E need to consider to what extent is the proposed programming conducive to achieving actual results and impact for the target beneficiaries. Additionally, they may wish to consider the extent to which this impact or result is appropriate within the context, and to what extent it is sustainable.
- **Engagement of Stakeholders:** no impact can be achieved or maintained without the buy-in of the relevant stakeholders and beneficiaries. Effective M&E helps practitioners not only to monitor impact but also monitor and evaluate the engagement of relevant stakeholders, or even promote it.
- **Focus on Efficiency:** the impact of programming and initiatives is always relative. Relative in the sense of the value it provides for the money it expenses. Some programmes may be achieving tangible positive impact, yet miss opportunities for achieving the same impact quicker or with fewer resources. Good M&E provides opportunities for practitioners to undertake benchmarking of existing programming and initiatives against alternatives to assess opportunity cost and drive long-term efficiency.

2.1.1 Overview of key roles and responsibilities

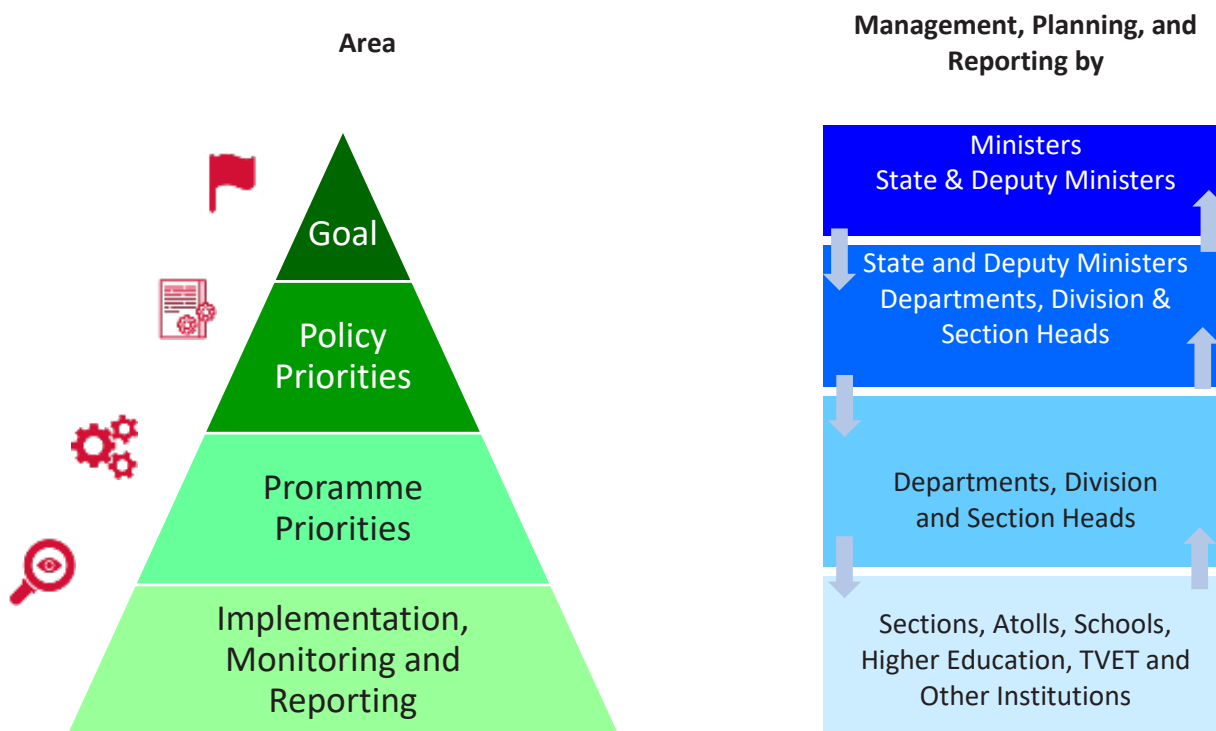
2.1.1.1 Roles of Key MoE and MoHE Departments and Divisions in Monitoring and Evaluations

The Joint Steering Committee (JSC) with equal composition of members from MoE and the MoHE will take a lead role in setting up a sustainable monitoring, evaluation system for the MoE and the MoHE. The JSC will prepare a calendar of major M&E activities, publications and shall share with all stakeholders. The JSC will support other divisions, sections and departments to develop annual implementation plan/work plan and monitoring plan to track policy and program indicators that are expected to contribute to achieving goals year over year. The joint steering committee will analyse results showing clear linkages between inputs, program and policy results and goals. A summary of overall KPIs (refer to results framework) and other important, relevant information, will be collected and analysed by PPD with support from QAD, ESQID, TVETA, NIE, MQA, Polytechnic and other relevant departments of the MoE and MoHE..The JSC will also produce M&E products which will be shared for further dissemination and appropriate follow-up. The joint steering committee with support from the relevant departments will also prepare periodic analytical reports detailing both routine ESP indicators and situation of education in the Maldives. The JSC shall analyse MEMIS data every quarter to identify unusual trends and discuss with relevant departments and divisions and sections, educational institutes to enable them to examine the problem areas for under achievements of planned results to facilitate them to develop and implement remedial interventions. A well-organized reporting, feedback and response mechanism from central ministry to atolls, schools and other institutions and vice versa will be established in the joint steering committee. The respective EMIS platforms will provide monthly feedback to educational institutes including schools and higher education institutions on the quality of data and identifying any discrepancies in the reported data to improve the quality of data.

Other key departments such as **QAD** has developed 'School Improvement Quality Assurance & Accountability Framework' (SIQAAF), National Assessment of Learning Outcomes and School reviews. These tools provide most of the quantitative indicators that are needed to monitor learning outcomes and systems strengthening. School Review refers to a planned, systematic monitoring procedure to determine the overall 'health' of the school in the Maldives. School review is undertaken using a special tool kit, based on Baraabaru School Indicators, prepared for this particular purpose. Findings of QAD school reviews will be shared with stakeholders to help bring about improvement in school quality. SIQAAF is linked to providing a coherent and streamlined means for schools to achieve i) Understand their performance (self-evaluation and review) ii) Identify their vision and purpose and set goals and targets for improvement (school improvement plan) iii) Put into operation their improvement plans and manage resources (annual implementation plan) iv) Report on their performance (annual report to the school community).

NIE will identify, coordinate and conduct all evaluations and research activities and shall organize dissemination of evaluation and research results. Similarly, ESQID will continue to conduct a risk analysis of primary school students and monitor the impact of implementation of risk mitigation

measures. School Admin Division will continue to monitor the quality of non-formal lifelong education, TVET Authority will assess the quality of TVET education both institution-based and employer-based. Ministry of Higher Education will set and enforce regulations of higher education sector in the country. MQA will monitor the quality of curricula and quality of curricula implementation in higher education institutions. The above qualitative monitoring reports will be used to implement corrective measures by relevant departments, divisions, and education institutions.



Role of LEG:

MoE and MoHE will coordinate to organize LEG meetings every six months to review and guide implementation of the ESP 2019-2023. LEG members will also participate in a comprehensive annual review of ESP 2019-2023.



2.1.1.2 Joint-Sector Reviews

Where appropriate, monitoring and evaluation activities need to be undertaken in close collaboration with relevant sector partners as joint-sector reviews. Detailed guidance on undertaking joint-sector reviews in the context of education is provided by the GPE within a dedicated manual, available here.

Chapter 3: Planning for Monitoring and Evaluation

3.1 Management, Reporting and Accountability Framework

MoE and MoHE will particularly pay attention to enhance transparency and stakeholder engagement in M&E process including procedures and timeline, which data to be collected, how data could be potentially analysed, who will carry out the data analysis and prepare analytical reports. Following structure highlights, management and reporting accountability of ESP 2019-2023 within the Ministry of Education and Higher Education.

3.2 Maldives Education Management Information System (EMIS)

3.2.1 The purpose of EMIS

A well-functioning Education Management Information System (EMIS) is an important element of monitoring and evaluation system. MOE and MoHE will use their respective MEIS platform for the monitoring and evaluation of ESP. The MoE's EMIS was formally launched in the Maldives in July 2017 in the name of MEMIS. ESA 2018 has made several recommendations to strengthen MEMIS. The MoE and MoHE is committed to implementing ESA recommendations to strengthen their respective EMIS platforms. To ensure that data is used for better planning, reporting and decision-making, the joint steering committee will elaborate and mainstream the two EMIS platforms in existing monitoring and evaluation mechanisms. The JSC will conduct M&E readiness assessments of each department, divisions and sections in MoE and MoHE. During the process, the JSC will document ME sub-systems in departments and divisions along with available datasets to identify gaps in data collection, organization, storing, management and analysis. This initiative will facilitate, integration of EMIS platforms with other current sub-systems/data systems being used by various MoE and MoHE departments and divisions. The MoE and MoHE will take full advantage of ICT technologies to collect real-time data where required. TThe annual school census²⁰ report will be used to track most of the school level indicators to track quantitative indicators.

In summary, the objectives of the two EMIS platforms are to:

- Serve as a central repository of all key education data for the country, according to relevant indicators; and
- Provide an up-to-date and reliable foundation for planning and management of education programming and policy.

To achieve these objectives, the EMIS must be able to produce data and analyses for the following functions:

- Management and administration of the education system;

²⁰ School census data should be entered in to EMIS to prepare section of Annual Education Statistics Year Book sda

- The research focused on the Maldivian education system;
- Education system planning and programming;
- Monitoring and evaluation of the education system.

3.2.2 Effective and ineffective EMIS systems

The existence of an EMIS in the Maldives is the necessary pre-requisite for a more effective and efficient use of national resources to achieve desired goals within the education system. In its guidance, the World Bank identifies four core principles marking effective education management information systems. These are:

1. **Enabling environment:** intended policies about sustainable infrastructure and human resources that can handle data collection, management, and access.
2. **System soundness:** the degree to which the processes and structure support the components of a comprehensive information management system.
3. **Quality data:** the degree to which an EMIS system accurately collects, securely saves and produces high-quality, timely information.
4. **Utilization for decision making** the reality of system implementation and utilization of EMIS information in decision-making.

Source: (World Bank, 2014. SABER: What Matters for EMIS)

The existence alone, however, will not guarantee the success of MoE and MoHE's programming and initiatives. For the EMIS to be effective, it is important to consider how it is used. An EMIS, which is not sound, whose data is poor, and most crucially, whose data is not regularly used for decision-making will contribute minimally to improving the national education system in a country.

Finally, any centralization of data collection and decision-making inevitably carries with it increased risks and augments the impact of any systemic failures (e.g. loss of all data at a central level). As such it is important that the Ministries sufficiently plans for and verifies the continued operability of the system, creating regular, automatic, and multiple back-ups of all core data to minimize the impact of a catastrophic system failure and human error.

3.2.3 Integration of EMIS platforms with major departments/divisions data system in MoE and MoHE

Following matrix shows, integration of EMIS platforms to MoE and MoHE departments information system, which will evolve continuously along with the open-MEMIS system.

Department	Major Role	Available features in MEMIS	Enhancement activities
SCHOOL ADMINISTRATION	Student Enrolment and transfer	Transfer and approve students from one school to other	Generate palm cards
	Manage Co-curricular activities	-	Generate lists and stats
SCHOOL ADMIN DIVISION	Monitor Attendance	Use attendance tracking system to monitor, manage cases and provide support to schools	Alerts and automation and statistics
	Monitor vocational programs	Use the system to identify the list of students enrolled in different vocational programs	Generate lists and stats
	Behaviour Management	Use the behaviour module to monitor, and provide support to schools	Design a feature on case management and automation on behaviour
	VINAVI	--	Design a feature to track for VINAVI
	RISK	Generate risk index value for students and alerts	Design a feature on case management and automation on risk
ESQID	Monitor Attendance	Use attendance tracking system to monitor, manage cases and provide support to schools	Alerts and automation and statistics
	RISK	Generate risk index value for students and alerts	Design a feature on case management and automation on risk
	WASH	Use the system to check the status of WASH in schools	Use the respective tools to generate reports on WASH indicators
	OOSC and at risk	Generate students who are out of schools, track students' movements, identify at risk students and get alerts	Design a feature on case management and automation on risk
	Health screening	Use the system to add student's health records	Generate lists and stats and reports

NIE	Monitor students' performance	Use performance module to view students' performance	Use the respective tools to generate reports, stats and performance indicators
	Curriculum monitoring	Use survey module to conduct surveys for monitoring	Use the respective tools to generate lists, stats and reports on performance indicators
	Teacher qualifications	Use the system to generate reports on teacher qualification	Use the respective tools to generate lists, stats and reports on Teacher qualifications indicators
	Track in service training	Use the training module to track trainings taken by staff	Use the respective tools to generate reports on respective indicators
	Monitor SEN	Use the system to identify the SEN programs enrolled by the SEN students	Add report card items for SEN, add a feature to monitor IEPs
HR	Staff positions and transfer	add staff, termination, promotion, transfer and staff from one school to other	Integrate with CS visa
	Staff appraisal	Use appraisal feature to add records	Appraisal reports and export to CV visa
	Employment approval and visa process for expatriate teachers	Maintain identity and nationality records, passport expiry dates, etc.	Develop a feature to Visa details and alert before Visa expires
	Approval of allowance	Add allowance to the staff	List and reports to in MoE /MoHE format
FINANCE	Process invoice, Payments and approvals	Institution Bank Account details, Staff Salaries	Change the template of the salary sheet to MOE /MoHE salary sheet format
QAD	Teaching quality	Teacher qualification records	Use the respective tools to generate lists, stats and reports, on

			Teacher qualifications indicators
	Quality check and SIQAF	Survey and monitoring tool	Use the respective tools to generate lists, stats and reports on SIQAF indicators
	Teacher licensing	Teacher licensing module	Identify the QAD need and bring the required changes to the module
	Conducting national assessments	-	Develop a feature to add national assessment records
DPE	Conducting national and international examinations	Examinations, exams, centres, students, results,	Identify the DPE requirement and bring changes to the module
MOHE	Oversees higher education institutions	scholarships, details, applications, recipients and MoHE, Enrolment, retention and completion statistics, tracking of students-postsecondary level (from age 16 years and above), Gather data of socioeconomic background, regional distribution, training needs Institutional statistics	Pilot the module and Identify the requirement and bring changes to the module
	Creating opportunities for higher studies	-	Pilot the module and Identify the requirement and bring changes to the module
	Creating loan /scholarships opportunities	-	Pilot the module and Identify the requirement and bring changes to the module
	Monitoring students who are abroad	-	Pilot the module and Identify the requirement and bring changes to the module
ADMINISTRATION	Keeping track of Assets	Use the assets feature to keep track of assets	Identify and bring required changes to the module

	Maintaining the infrastructure of MOE	Use the infrastructure module to monitor the physical facilities	Identify and bring required changes to the module
	Managing and dispatching	Use the logistics module	Identify and bring required changes to the module
PHYSICAL FACILITIES	Maintaining the infrastructure of Schools	Infrastructure, needs, projects, utilities, assets	
POLICY PLANNING AND RESEARCH	MEMIS configuration, implementation and Support	System configuration and customization	
	Result analysis		Develop a feature for result analysis

3.2.4 Regular Review of EMIS system and data

The MEMIS system has been developed in response to the requirements of the Maldivian Ministry of Education and relevant international partner organizations to facilitate education data collection, evaluation, and to inform policy-planning and education programming initiatives in the country. Furthermore, the system has been developed within the limitations (both technological and in terms of resources) affecting the Maldivian education system today.

As the agendas of the MoE, MoHE, and international partners, as well as technological possibilities change, the utility and efficiency of the MEMIS system are bound to be affected. As a result, it is important that the MoE, who manages and operates the MEMIS system regularly and comprehensively reviews the MEMIS system and the applicable limitations. At present, the MoHE is planning to develop its own EMIS platform.

The data to be monitored and tracked by the EMIS system must be specified prior to its deployment. Nevertheless, as national education in the Maldives improves (or changes) as do the government's and international organizations agendas, the number and type of indicators monitored by the system may change. As such the MEMIS should be developed with sufficient flexibility in mind to allow for amendments in light of new requirements or to address any gaps that may result from omissions during the initial planning phase.

Generally, the system should allow for any addition and expansion of the data being tracked within it, though a central indicator repository should be made available to all relevant stakeholders to prevent requests for new indicator tracking of duplicate (or very similar indicators), which are already being monitored and collected within the system.

Similarly, data should always be tracked at the lowest level of granularity possible (e.g. at individual student, school, teacher level), as aggregation is a simple system function to integrate, whereas disaggregation of data already collected without granularity is generally not possible.

The Ministries should also avoid deleting or ceasing to track any indicators which may be perceived as achieved or no longer useful. Particularly in situations where the 'completion' status is not irreversible (e.g. net enrolment rates, even after they achieve 100% can still decrease). No historic data should ever be removed from the system, even in cases where a strong argument about discontinuing collection efforts for a particular indicator are made. The ministries should always consider decreasing the frequency of collection (e.g. from quarterly to annually), where appropriate before complete discontinuation is agreed on.

Finally, at least once towards the end of the ESP implementation period, the Ministry should review the technical suitability of the system and consider acquiring or commissioning an improved version. With technological and analytical progress, newer systems can usually offer faster, more reliable data processing, increased analytical functions, and improved user-friendliness.

Chapter 4: Monitoring for results

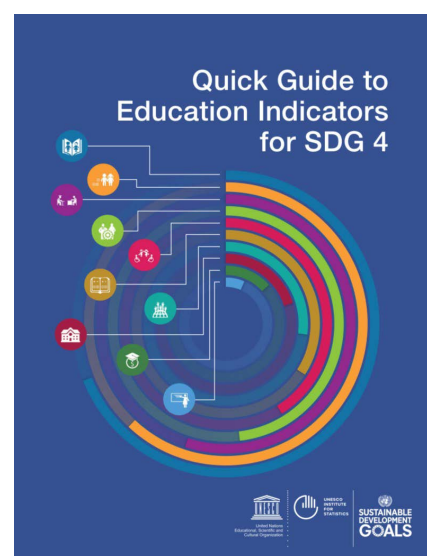
4.1 Monitoring in the Context of Education, ESP, and SDGs

Data collection and monitoring in the context of education has its specificities. Unlike scientific or mathematical concepts such as weight, speed, or length, data collection within the education sector is often subject to a much weaker consensus regarding the appropriate ‘units of measurement’ (indicators), and aspects of quality. In other words, even in the case of clearly defined policy objectives, practitioners will often disagree on the best way to measure them and experience more obstacles in ensuring the data collected is reliable and valid.

As such the monitoring requirements for the education sector can be more complex, stricter, and costly than those for many lines of scientific enquiry. They also require regular and frequent review of collection instruments, collection methodologies, and data inputs.

To ensure consistency in this regard, the Ministries should defer to consensually agreed indicators and data collection approaches as much as possible. This will allow it to generate partially or wholly benchmark-able datasets and create additional comparative analyses of the Maldivian education system vis-à-vis other systems internationally. To reflect this point, the updated M&E framework has included a few externally validated tools, including but not limited to:

- ACER International Benchmark Test to measure students’ attainment and progress;
- World Bank Teach teacher observation tool to measure teaching, learning and students’ personal and social development in the classroom;
- SDG 4 targets and indicators, as centrally agreed by the relevant UN agencies.



Further guidance on the specifics of tracking SDG Goal 4 (and other relevant) indicators can be found within the many materials provided by the UN. To mention but one, the Quick Guide to Education Indicators for SDG 4, provides a useful high-level overview and guidance on implementing relevant monitoring mechanisms and data collection approaches in the context of national education systems.

4.2 Collecting Data

Collecting data in the context of the national education system is subject to the same principles and guidance as for data collection within any domain. Generally, all instruments should be developed to generate reliable and valid data, and rigorously piloted prior to full deployment.

The comparison table below summarizes the key aspects of validity and reliability and their relevance for effective data collection:





Comparison Aspect	Validity	Reliability
DEFINITION	Validity refers to the extent to which an instrument used in collection measures what it is intended to measure	Reliability refers to the extent to which a scale will produce the same results across repeat measurements.
EXAMPLE	An end-of-year maths test for grade 5 that correlates highly with ACER IBT test undertaken by the same students in the same grade can be said to have high validity	A completed test that produces the same marker score across different teachers can be said to be reliable.
MUTUAL RELATION	The valid instrument is always reliable	A reliable instrument is not necessarily valid
CORE ASPECT	Accuracy	Precision
VERIFICATION	Difficult	Easy

To improve both validity and reliability, designed instruments and pilot data should be reviewed for Type I (false positives) and Type II errors (false negatives), and adjusted accordingly to minimize opportunities for such errors to emerge in the data.

4.2.1 Target data segments

Results-based decision-making requires granular data to fully inform action. Data that is presented in aggregate un-segmented form better hides underlying differences. This makes the diagnosis of any issues much more difficult and any resulting intervention much more broad-brush (less targeted), less effective, and more costly.

For this reason, it is important that, as a point of principle, data is always collected in the most granular form practically and financially possible, i.e. at the lowest relevant variable. This can be data collected per student rather than per school, or per school rather than per Atoll. More granular data can always be aggregated further for analysis and evaluation, but the opposite is not true. Though the granularity of data collection brings with it important implications for the cost of data collection and is not therefore always feasible, there are a few segments of data that must always be respected, where applicable. These are

Segment	Rationale
 <p>GENDER (Male vs Female)</p>	<p>Pertinent differences between genders and their socialization within the Maldivian society exist. These may manifest in the extent to which different genders participate or benefit in education and as such may have important implications for policies and educational interventions.</p>
 <p>SPECIAL EDUCATIONAL NEEDS (SEND vs G&T)</p>	<p>Children with special educational needs and disability, including those with special gifts and talents, require specialized and targeted approaches to education to allow them to reach their potential fully. Disaggregating data for this group of students will allow the MoE and MoHE to ensure their fuller participation in the education sector and labour market later.</p>
 <p>SOCIO-ECONOMIC BACKGROUND (Low, Medium, High-income groups)</p>	<p>Socio-economic background has profound direct and indirect implications for equity in access and quality of education. Differential approaches may be required for different socio-economic groups to achieve equitable outcomes, justifying disaggregation of data along this segment.</p>
 <p>GEOGRAPHY (Malé vs Outer Islands)</p>	<p>Maldivian geography, particularly with regards to its isolation and uneven distribution of its population has important implications for the access and quality of education students receive in different parts of the country. Ensuring that education provision is consistent and comparable across all parts of the country must be an important principle underpinning the country's</p>



EDUCATION STAGE

(Pre-Primary, Primary, Lower Secondary, Higher Secondary, Post-secondary, Higher Education)

education policy and as such must be tracked in a disaggregated manner.

Different stages of the education sector have diametrically different requirements, face different issues, and are subject to vastly different objectives. As such data must be disaggregated by stage of education to ensure these inherent differences can be accurately understood and reflected in policy.

4.2.2 Collecting data on teaching and learning

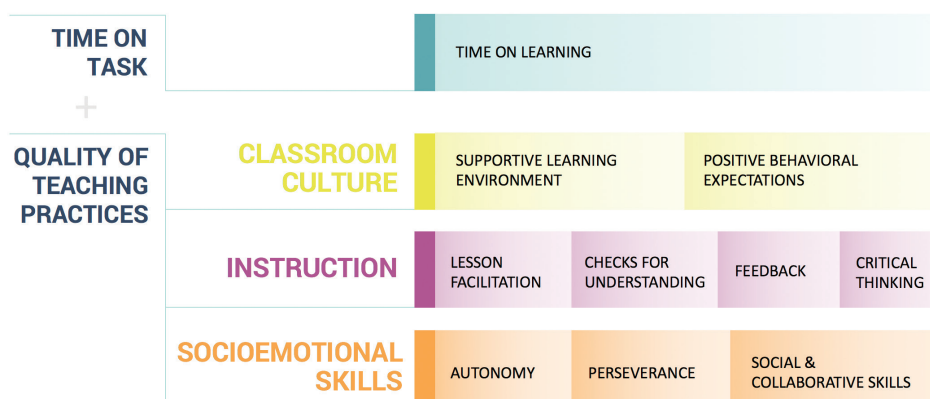
4.2.2.1 The Implementation of Teach methodology for the monitoring of teaching and learning in the classroom

The World Bank has historically recognized the importance of monitoring in-classroom teacher practices, and the fact that many low- and middle-income countries do not monitor these systematically. Where systematic methods have been employed, these have often fallen short because they '(i) measure either the occurrence or quality of a given practice; (ii) do not explicitly focus on teachers' efforts to develop students' socioemotional skills; (iii) use tools designed for other contexts, which can be culturally irrelevant, costly, and difficult to implement; and (iv) use tools that are neither evidence-based nor meet basic reliability criteria' (World Bank Group, 2019). To address these challenges, the World Bank has developed the Teach methodology for in-class teacher observations.

The Teach observation method relies on the following elements, which have been developed and piloted in observations in thousands of schools:

TEACH FRAMEWORK

Source: (World Bank Group, 2019, p. 3)



The World Bank offers a wide range of resources available to the Ministry (and all education staff in the country) in the public domain, including but not limited to:

- Teach Methodology Brief;
- Observer Manual;
- Teach Implementation Brief;
- Teach Methodology Training Manual;
- Teach Complementary Resources; and
- World Bank Teach Portal under SABER.

Given the comprehensive set of tools, guidelines, and references provided directly by the World Bank, this document will not provide further details regarding the specifics of the methodology.

Nevertheless, it is evident that Maldivian primary and secondary education system can benefit from aligning its monitoring of teaching quality practice across the country as well as with other low- and middle- income countries where the Teach framework is being implemented.

Going forward, the Ministry of Education, therefore, undertakes to:

- Train all Primary and Secondary school Principals and Senior Leaders on the application of the Teach observation methodology;
- Have Senior Leaders in all Maldivian schools undertake at least two rounds of Teach observations of all full-time teachers in the school;
- Collect and analyse observation data on teachers in Maldivian schools;
- Integrate Teach observation data into schools' own School Improvement Planning process;
- Use observation data to develop and deliver targeted professional development to teachers on a regular basis;
- Use observation data to improve (i) time on task, and (ii) quality of teaching practices in all Maldivian schools.

These six goals are reflected in the updated ESP indicators framework to enable tracking of progress.

4.2.2.2 External Benchmarking

It is important that steps are in place for the identification of data collection processes with regards, access for specific groups, including girls, boys, children with special education needs at various levels of education and by geography through the EMIS system.

Given the capacity constraints identified by the Ministry of Education, the Ministry of Higher Education, and external stakeholders, pertaining to the implementation of the Education Sector Plan, and the associated Monitoring and Evaluation Framework (incorporating the updated Results Framework), stakeholders have voiced broad support for International, External Benchmarking Data, allowing for the validation of National Assessment Data, as well as schools' internal assessment. It is anticipated that this will serve as an interim stop-gap while capacity issues are addressed, as well as offering a 'modelling' guide to effective data-analysis to inform learning, teaching, and associated interventions (including the analysis of performance by demographic, etc.).

Two potential international benchmarks have been considered (the following draws on the National Curriculum Framework Review – Tools and Resources, UNICEF / National Institute of Education / MNU, 2016):

4.2.2.2.1 ACER IBT

The IBT is one of many high-quality educational assessments developed by the Australian Council for Educational Research (ACER, 2019). It is an internationally administered program of assessments with tests appropriate for grades 3 to 10 in English, Mathematics, and Science; schools around the world use this test to rigorously benchmark pupil performance against international standards.

ACER has been developed to be curriculum-neutral and low-cost, with tablet-deployed examinations delivered in a range of countries, with some of the more challenging and remote contexts including Lesotho, Afghanistan, and remote indigenous communities in Oceania (Cresswell, Schwantner, & Waters, 2015). A wide body of evidence has demonstrated this approach's effectiveness within remote international contexts, as well as the potential benefits on the accuracy of data and pupil achievement (ibid.).

4.2.2.2.2 Summary of Focus

Strands assessed in English	Strands assessed in Mathematics	Strands assessed in Science
Reading Comprehension	Number	Earth Science
Spelling	Measurement	Physical Science
Punctuation	Space	Life Science
Grammar	Chance and Data	
Vocabulary		

4.2.2.2.3 Strengths and Weaknesses

The IBT allows schools to compare student performance internationally, between grades and over time. Reports provide schools with detailed information about a student's strengths and areas for improvement in all subjects. The IBT is a high-quality skill-based assessment not linked to any national curriculum. This allows students from all countries to be compared fairly. Tests are offered not only as computer-based but also as paper based, which means ease of deployment in an archipelago with limited IT infrastructure

4.2.2.2.4 Indicative Cost

£1.5 per test (3 subjects)²¹



4.2.2.2.5 Cambridge Primary Checkpoint

Cambridge Primary Checkpoint tests have been designed to assess learners at the end of Cambridge Primary. They are available in English, English as a second language, mathematics and science, and give valuable feedback on learners' strengths and weaknesses before they progress to the next stage of education. Schools around the world use this test to rigorously benchmark pupil performance against international standards (Cambridge Assessment, 2019).

4.2.2.2.6 Summary of Focus

Cambridge Primary Checkpoint tests cover all major areas of learning in the Cambridge Primary curriculum frameworks for English, English as a second language, mathematics and science.

4.2.2.2.7 Strengths and Weaknesses

The tests provide schools with an external international benchmark for learner performance. Each learner receives a statement of achievement and a diagnostic feedback report, giving schools detailed information and parents extra trust in the feedback they receive.

4.2.2.2.8 Cost

Likely to be costlier than ACER – for pricing, discussions would need to be entered into with CIE.

4.2.2.2.9 Conclusion

For the purposes of the revised Results Framework, and associated Monitoring and Evaluation Framework, ACER is recommended as the primary tool for benchmarking assessment, for the following reasons:

- i) Curriculum Neutrality – unlike the Cambridge Primary (which is intended to assess

²¹ Indicative only, based on costings elsewhere in South Asia, will require negotiation.

progress in the Cambridge Curriculum), ACER IBT is curriculum neutral by design;

- ii) Ease of implementation – ACER IBT is easy to administer at low cost, including delivery in low-resource, remote, environments;
- iii) Proven use in resource-limited South Asian contexts – ACER IBT is widely used in similar contexts to those of The Maldives; and
- iv) Cost, ACER IBT is likely to be significantly less costly to administer.

This would allow for data collection processes with regards, access for specific groups, including girls, boys, children with special education needs at various levels of education and by geography through the EMIS system, with which the ACER data could be integrated quickly, at minimal cost.

4.2.3 Collecting data on skills for work

The specificities of the Maldivian economy have significant implications for the education and skills requirements of its school and university leavers. The largest sectors of its economy (i) tourism, (ii) agriculture, and (iii) fishing each need different types of graduates with a variety of skills. To create an educational system that effectively caters to such different needs, as well as any needs that may be emerging, the Maldivian government must undertake a Labour-Market Survey (LMS) to understand those needs, create appropriate indicators for the tracking of relevant skills for work development, and to implement any relevant interventions to adjust the education system to such needs.

4.2.3.1 Designing dedicated assessments

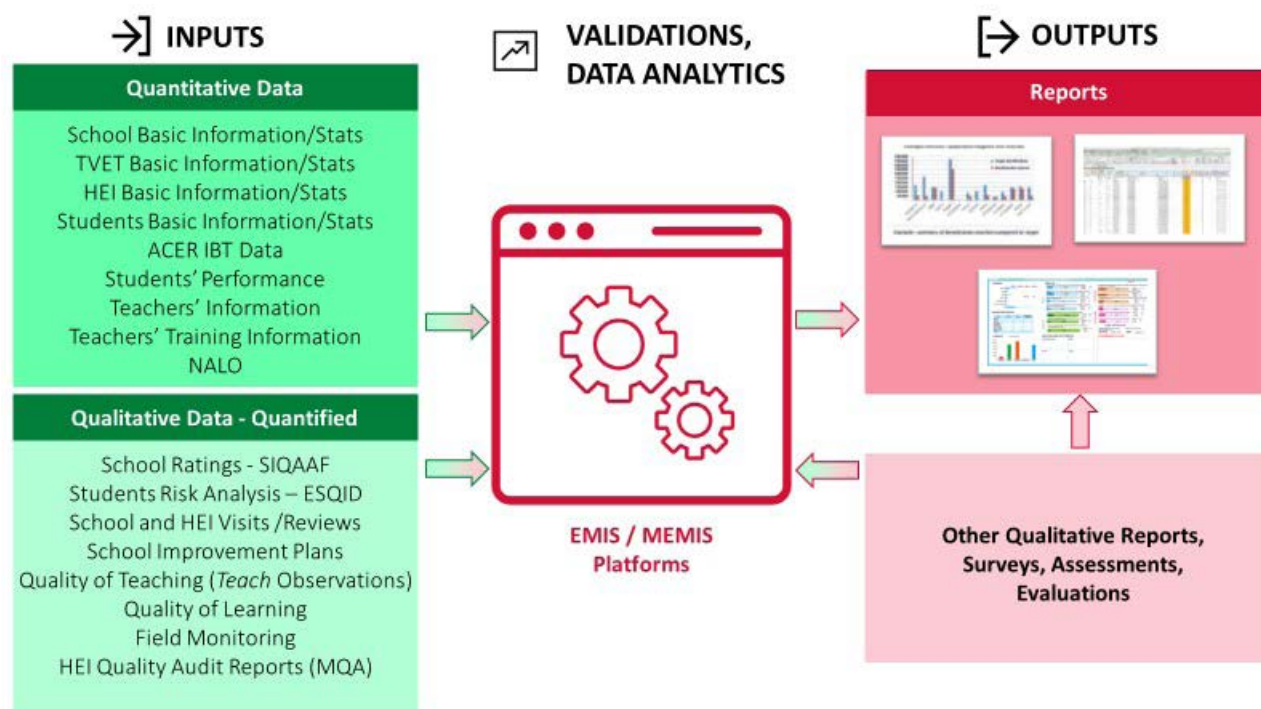
Other than general principles of effective instrument design, labour-market surveys are also characterized by:

- **Stakeholder engagement:** effective LMSs engage most or all relevant stakeholders in data collection, including but not limited to (i) policy-makers, (ii) industry groups and associations, (iii) domestic employers, (iv) international employers, (v) HE institutions, (vi) schools, (vii) students, (viii) parents, etc. This helps ensure that the government can obtain a comprehensive picture of the labour market.
- **Demand and supply:** following from stakeholder engagement, effective LMS will consider factors affecting both (i) supply and (ii) demand for skills for employment, i.e. it will look at (i) which skills, and how, are being developed by the existing education system; as well as (ii) which skills are required by existing employers, at home and internationally, and (iii) if any gaps exist between (i) and (ii).
- **Hard and soft skills:** while technical skills, such as IT, customer service, sales, or operating a fishing vessel may be key to a student's post-graduation employability, many employers, particularly within the service sector, will also look for a variety of

soft skills when making hiring decisions. These are often neglected or insufficiently developed within education policy. It is therefore of vital importance that an LMS collects data about the labour market's needs with regards to soft skills as well as hard skills to ensure that the education sector can produce well-rounded, employable leavers.

- **Forward-looking:** many industries that dominate global economies today did not exist a couple of decades ago. This fact, combined with the reality of the isolated geography and economic vulnerability of the Maldives means that the LMS which should be undertaken by the local decision-makers needs to explicitly consider the possible developments which may occur within the Maldivian economy, or which can be pushed by current and future government strategy (e.g. many of the internet-driven sectors can represent interesting potential sectors for the Maldivian economy to expand into, as they are not affected by the country's remoteness and isolation). Skills that may be required to fuel specific strategic economic growth, especially in sectors that are not currently common in the Maldives, are unlikely to strongly emerge through standard stakeholder interviews and surveys. The LMS may, therefore, need to be designed with specific possible future economic developments in mind to survey participants and stakeholders explicitly about such eventualities and to reveal any underlying appetite for economic strategy pivots that may influence the demand for specific hard and soft skills.
- **Contextual:** finally, the LMS data should be considered in the context of existing economic trends and data. For example, if a particular sector is in long-term decline in terms of its contribution to the GDP – indicating its diminishing importance and declining demand for labour, this needs to be reflected in the analysis of any survey results to avoid subsequently developing inappropriate policies which are out-of-date for the market by the time they are implemented.

4.3 ESP Monitoring and Evaluation System



4.4 ESP 2019-2023 Review Mechanisms

4.4.1 Programming cycle



While, the first three phases, (i) Situation Analysis (which is Education Sector Analysis), (ii) Objectives and Strategies (which is Education Sector Plan) and (iii) Implementation plan has already been developed, this document will focus on strengthening and streamlining planning, Monitoring and Reporting of the Ministry of Education for ESP 2019-2023.

This section is divided into the following sections:

1. Program Planning (Annual Work Plan) and Program Reviews (M&E Plan)
2. Program Performance: (Reports and other Products)

4.4.2 Program Planning (Annual Work Plan) and Program Reviews (M&E Plan)

4.4.2.1 Annual Work Plan (AWP):

The overall process of work planning will help MoE and MoHE Departments and Divisions to translate information or ideas from ESP into implementation and operational trajectory on a quarterly and annual basis. AWP consist of a summary of tasks, timeframes, responsibilities and expected results.

Tips to develop AWP: ESP has defined Goals, Policy and Program priorities and Activities. An implementation plan has also been developed. Take the activities from each goal and policy and program priorities and define sub-activities, precisely as possible in the suggested template. Ensure consistency with the implementation plan. AWP should answer the following:

- Who is responsible for carrying out this activity?
- What exactly will be done?
- Where is the activity going to take place?
- When will the activity start and end?
- With what? What human or financial resources are being committed?

4.4.2.1.1 Roles and Responsibilities for Developing AWP:

The Joint Steering Committee will spearhead sustainable planning, monitoring, reporting and review process.

- Facilitate and guide all departments and divisions to develop their AWP.
- Develop quality assurance criteria to review the annual work plan and create a multi-disciplinary team to review AWP.
- Consolidate plans and submit to Minister for approval

Departments and Divisions:

- Each department and division will prepare AWP in a suggested template enclosed herewith and submit to JSC.

Annual Work Plan 20XX: Department - Division: QAD - Sample

Goal 1: Improved Learning for all, through equitable access to quality education

PROGRAM PRIORITIES 1.1 Pre-primary Education (equitable access)

ACTIVITIES	Sub-Activities	Sub Activity Indicators	Baseline	Target	Responsible Departments/Divisions/Sections	2019				Source of Funding	Comments		
						Q1	Q2	Q3	Q4			Total Cost	
1.1.1	# of monitoring visits conducted and identification of out of KG1				QAD - Monitoring team							MoE	
Access: Monitoring program to ensure equitable access to pre-primary, especially for girls, children with SEN, children in remote areas and children of	KG2 young students with National statistics and MEMIS support					-	-	-	-	-			
	1.1.1.1 To plan a quality assurance visit to schools	# of schools planned to visit	0	80	QAD - Monitoring division	20	20	20	20	50,000			
	1.1.1.2 To interview number of principals	# of principals planned to be interviewed	0	80	QAD - Monitoring division	20	20	20	20	20,000			

emigrant workers	1.1.1.3 Number of students observed	# of students interviewed	QAD - Monitoring division	
			0 200	50 50 50 200,000
	1.1.1.4			
	1.1.1.5			
	1.1.1.6			
	1.1.1.7			
	1.1.1.8			
	1.1.1.9			

Annual Work Plan 20XX: Department - Division: NIE - Sample

Goal 1: Improved Learning for all, through equitable access to quality education

PROGRAM PRIORITIES
1.1 Pre-primary Education (equitable access)

Activities	Sub-Activities	Sub Activity Indicators	Baseline	Target	Responsible Departments/Divisions	2019				Source of Funding	Comments		
						Q1	Q2	Q3	Q4			Total Cost	
1.1.2 Quality-learning readiness: Develop a plan for quality teaching and learning in KG by providing professional development to teachers to implement the national	# of training modules developed											MoE	
	# of teachers and other staff trained in curricula based pedagogical practices promoting cognitive, linguistic, social, emotional, physical development and well-being, a holistic ECD				NIE - Curriculum Development- Teachers Training	-	-	-	-	-			
	# teachers trained on early intervention to cater to children with Special Needs			100									
	1.1.2.1 Pre-primary schools have adequate books to	# of pre-primary schools have books	0	100	NIE-Curriculum Development	100	00	00	00	00	25,000		
	1.1.2.2												

curricula	1.1.2.3
enhancing	
cognitive,	1.1.2.4
linguistic,	
social,	1.1.2.5
emotional,	
physical	1.1.2.6
development	1.1.2.7
and well-	
being of	1.1.2.8
young	
Maldivians	1.1.2.9

4.4.3 Program Monitoring and Reviews

4.4.3.1 Monitoring Plan

Based on AWP, the JSC may also facilitate the development of M&E plan. M&E plan is an extension of AWP. M&E plan will help to track activities in each of program strategies through performance indicators, that are expected to contribute to the key performance indicators year over year. This contributory relationship, Sub-activities (AWP) --> Activities (AWP/ESP) --> ESP Key Performance Indicators will be monitored and evaluated annually, and the analysis of results should be reflected in the quarterly and annual reviews and reporting. M&E plan template is as follows:

4.4.3.1.1 M&E Plan - Sample

Expected Results PERFORMANCE INDICATOR	Pedagogical Material Printed				Data Source	Responsibility	Use of Information
	Q1	Q2	Q3	Q4			
4000 study materials printed	1000	0	1000	2000	Sample of material	NIE - Training section	Reporting
4000 new props for stimulating brain procured	1000	1000	1000	1000	A sample of new props	NIE - Training section	Reporting
120 Videos produced	30	30	30	30	Samples of Videos	NIE - Training section	Reporting

4.4.3.2 Evaluation Plan

The JSC may identify critical evaluation and research issues and prepare an Evaluation and Research plan. A template for the same is as follows:

Evaluation and Research Plan: Maldives ESP 2019-2023

Type and title of the evaluation, research and studies	Year 1 and Cost	Year 2 and Cost	Year 3 and Cost	Year 4 and Cost	Year 5 and Cost	Internal/ External
RESEARCH ON SEN	200,000					External
MID-TERM EVALUATION			500,000			External

4.4.4 Review/Reporting arrangements

The MoE and MoHE may constitute an **M&E Joint Steering Committee** (JSC), with memberships drawn from key Departments and Divisions. The JSC may arrange to customise the two EMIS platform, to incorporate AWP and M&E plan format. Each Department and Division can complete the AWP and M&E plan in EMIS. Progress should be reported against planned results in the two EMIS platforms by each Departments and Divisions every quarter. M&E steering committee will meet quarterly to review progress against the targets. Departments and Divisions may organize monthly meetings at Departments and Division level chaired by the head of Departments and Divisions to ensure monthly, and quarterly targets are achieved. At decentralized school level, PPRD may institute a periodic review mechanism at Atoll, school and associated institutes level to feed into quarterly steering committee meetings and annual national reviews. Similarly, the JSC may organize a comprehensive annual review inviting all key relevant partners and ministries. The annual review meeting will evaluate ESP and education sector progress and performance against a set of key performance indicators listed in the results framework. The annual review will also pay attention to financial and equity analysis. MoE and MoHE will prepare various other background papers such as public financial and expenditure management for the education sector, strategic analysis to identify the most effective strategies to accelerate progress towards ESP goals linked to SDG4 goals.

An important component of the ESP M&E system is the set of reviews that will facilitate to achieve results to improve input efficiency and outcome efficiency. Following reviews will be systematized in the MoE and MoHE;

Routine Monitoring: Monthly review meetings within sections, departments and divisions will be organized to review progress towards the activity targets, examine the problem areas for under achievements, identify good practices and implement corrective actions to expedite the progress. Also, a monthly review will also be organized within schools and institutions to provide feedback to relevant staff on quantitative and qualitative findings from the two EMIS platforms, and other quality assurance frameworks to improve work efficiencies.

Periodic Reviews: MoE and MoHE will coordinate to organize quarterly/mid-year reviews under each department/division under the auspice of the state ministers. Quarterly reviews shall provide an opportunity for work-plan adjustments and to ensure that program and policy results remain consistent with the ESP. At decentralized level, MoE and MoHE will institute a periodic review mechanism at atolls level, school and associated institution level to feed into quarterly/mid-year review meetings at the national level and annual national reviews.

Annual Review: MoE and MoHE will organize comprehensive annual reviews at the national level. The annual review will pay attention to learning outcomes and quality of ESP implementation. Using a combination of broad synoptic overviews and more detailed on-going operational approaches, MoE and MoHE will produce the annual status of education report for the Maldives. MoE and MoHE will prepare various other background papers such as public financial and expenditure management for the education sector, strategic analysis to identify the most effective strategies to accelerate progress towards ESP and SDG goals. Based on the several reviews, data

and information from various sources, background papers, MoE and MoHE will continue to produce products such as Education Statistics Yearbook, Student Assessment Results Yearbook, M&E report on the ESP implementation progress, Higher Education and TVET statistics, National Education Indicators (NEI) Report, School Report Card, M&E Reports, Policy Briefs and Sector analysis.

Mid-Term Evaluation shall be conducted in 2020 to review the progress of ESP implementation, policy and program relevance to prevailing situation of the education sector to bring in evidence-based policy and program adjustments for the remaining half of ESP.

End-of-ESP Evaluation will be conducted in 2022, to consider constraints encountered and ways and means of addressing them to inform the design of new projects, programs and initiatives.

4.5 Monitoring strategies to mitigate the vulnerability of the education system to political, social and environmental impacts identified in the sector analysis and programme design

The Education Sector Analysis identified several vulnerabilities affecting the Maldivian education system. These were categorized into two distinct types:

- (1) Structural Vulnerabilities; and
- (2) Vulnerabilities at Risk.

The four types of Structural Vulnerabilities highlighted by the ESA included:

- (i) Geographical isolation;
- (ii) Small size,
- (iii) Limited land, natural and human resources, and
- (iv) Vulnerability to climate change and natural disasters.

Vulnerabilities at risk identified by the ESA included:

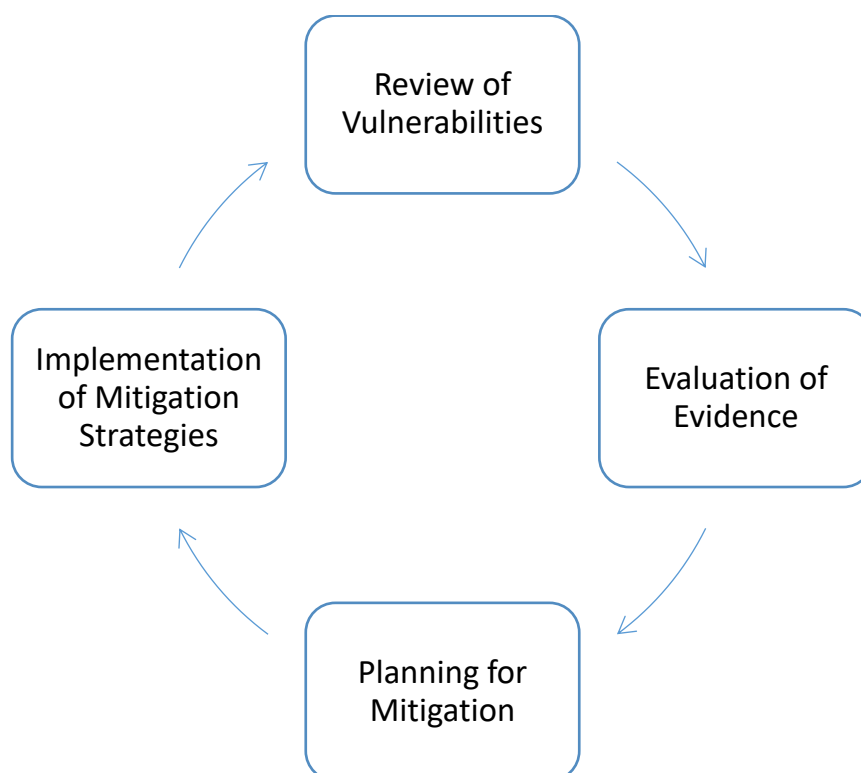
- (i) Socio-economic transitions and changes (e.g. Maldives graduation to become Middle Income Country);
- (ii) Natural external shocks (e.g. 2004 tsunami);
- (iii) Socio-economic external shocks (e.g. global financial crisis);

The following section of the manual discusses the different monitoring strategies to be employed

by the Maldives MoE, the MoHE and other relevant stakeholders to continuously evaluate the impact of the specified vulnerabilities on the Maldivian education sector over time.

The uniting factor of all vulnerabilities facing the Maldivian society (such as tsunami, external economic shocks, and geographical isolation) is the limited control the Maldivian government can exercise in actively preventing them from occurring.

It is therefore crucial for the effective monitoring and management of such vulnerabilities that the MoE, the MoHE and other relevant stakeholders are regularly engaged in systemic (1) review, (2) evaluation, (3) planning, and (4) implementation of mitigation mechanisms against such vulnerabilities. This is an ongoing process:



The discreet stages of the process are further described further in this chapter.

4.5.1 Review of Vulnerabilities

4.5.1.1 Appointment of Review Committee

The MoE the MoHE must appoint a dedicated committee comprising relevant members of the ministry's and international partner staff. It is recommended that the Committee comprises:

- State /Deputy Ministers of Education/Higher Education;

- Member of the Quality Assurance Department;
- Member of National Institute of Education;
- Member of TVETA;
- Teacher Representative;
- Representatives of UNICEF, World Bank, GPE (and other large-scale education partners in the Maldives).

The Committee must meet at the following occasions:

- Regular Review: at least twice a year;
- Emergency Review: immediately, at least once, following the occurrence of any 'vulnerability' (whether it has been previously identified or not).

The Committee must also select among them the Chairman of the Committee. The rights and responsibilities of the Chair shall be the following:

- Call Regular and Emergency Meetings;
- Preside and moderate Regular and Emergency Meetings;
- Complete and sign for all relevant documentation and submit for further evaluation to relevant government authorities;
- Have a decisive vote in cases of voting ties;
- Be comprehensively accountable for the vulnerability monitoring process.

It is possible that the operation of such a Committee may be subject to higher-level government and Ministry policies and procedures. Furthermore, many of the vulnerabilities identified are likely common across multiple (often all) government departments and ministries. As such the Ministries may wish to integrate the Review Committee and its vulnerability monitoring under the relevant sections (and processes) of the wider government. The vulnerability monitoring process described herein is designed to be sufficiently flexible to allow for integration within many higher-level policies and procedures as mandated by the government.

4.5.1.2 Identification of Relevant Vulnerabilities

The Regular Review begins with a brainstorming discussion regarding the vulnerabilities facing the Maldivian education system, where each member individually lists all pertinent vulnerabilities that may affect education in the country. At this point, the Committee must disregard the likelihood of such vulnerability occurring and note all possibilities, however unlikely they may appear. They

should use the Vulnerability Register (see Annex).

Within the Register, the Chairman first fills in the date and location of the meeting, followed by his name. (S)he then leads the discussion among the committee members to elicit relevant vulnerabilities, each of which is recorded on the Register. Multiple sheets may be required to write down all vulnerabilities mentioned.

It is to be noted that the purpose of this meeting is to evaluate the structural and systemic vulnerabilities, which are defined as:

Vulnerability (definition)

- ! **Systemic or structural risk which has a potential negative impact on the**
- **education system, which is outside the control of the government/Ministry/schools/pupils/parents to prevent.**

All risks and issues that are within the government's or other stakeholders' purview are not considered vulnerabilities. In other words, while tsunami, international financial crisis, global warming are all vulnerabilities; risks and issues such as lack of textbooks, high absenteeism, or lack of funding for school /institutions repairs are not.

Once there are no additional vulnerabilities being suggested by the Committee, the Chairman will lead the discussion to review all vulnerabilities elicited to ensure they fit the definition above and are not in fact issues or risks that can be prevented and thus should be dealt with by the relevant departments separately. This 'relevance review' is done in plenary discussion and marked Y/N in the appropriate column of the Vulnerability Register. Where the same vulnerability was raised by several members, the number of members who raised the same issue is noted in the final column.

4.5.1.3 Prioritization of Vulnerabilities

Since not all vulnerabilities are equal in terms of their likelihood and severity of impact, it is important to undertake a prioritization exercise to ensure that resources are appropriately allocated to those that are likely to negatively affect the education system.

Once the register has been completed the Review Committee undertakes a prioritization exercise by filling in the Vulnerability Prioritization (see Annex) document. Within it, the team should relist all of the vulnerabilities identified in the previous step (only those deemed relevant) in the order of a number of members' mentions from most to least.

Following that, the Committee must rate each vulnerability in terms of two criteria:

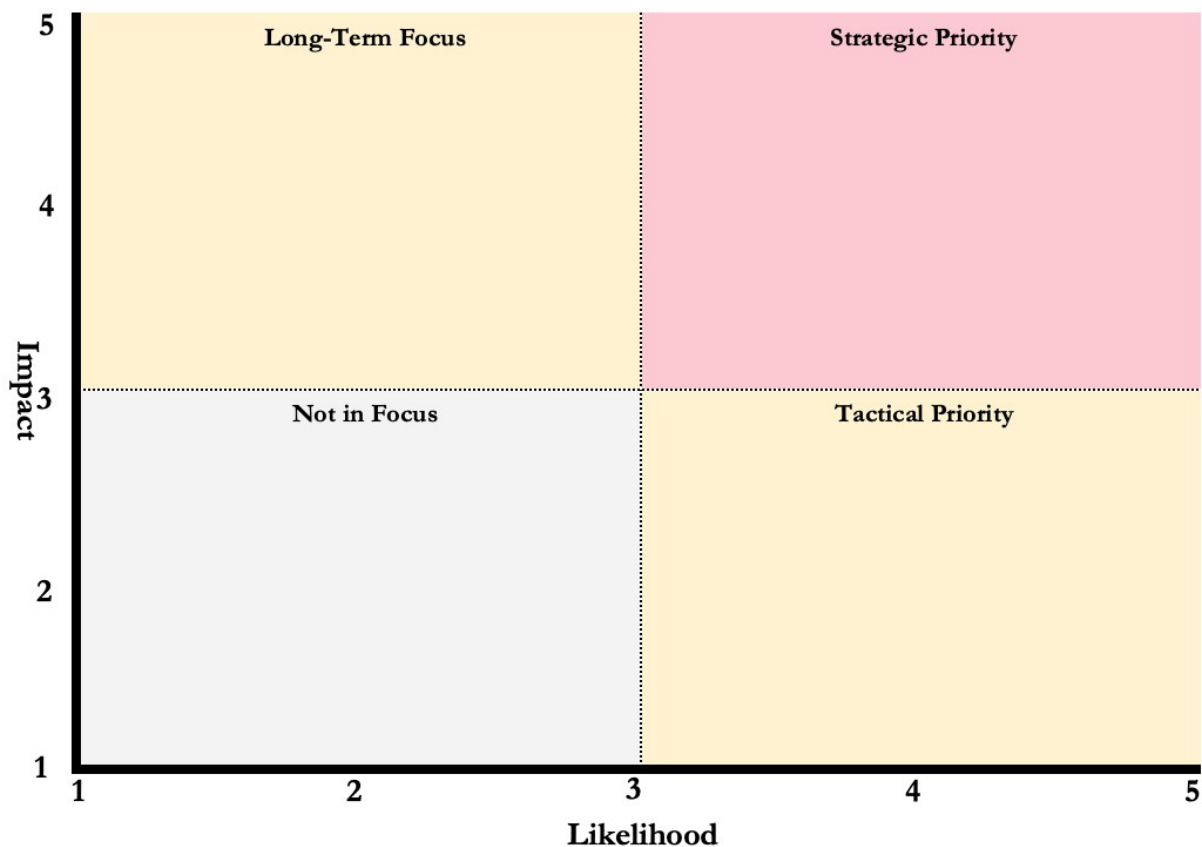
- **Impact:** represents the severity of impact on the Maldivian education system (impact on other aspects of Maldivian society should be disregarded). The rating can be from 1 = no impact on the education system to 5 = complete disruption of one or more stages of Maldivian education.

- **Likelihood:** represents the probability of that vulnerability affecting the education system. It ranges from 1 = not at all likely, 5 = very likely. For ease of decision-making, the numerical value can also be thought to represent the likelihood of occurrence over the next specific period, where:

Rating	Likely to occur in next...
1	10+ years
2	5-10 years
3	3-5 years
4	2-3 years
5	0-1 year

Individual ratings for each vulnerability and both impact and likelihood have to be agreed by the majority of Committee members. Once all ratings are assigned, all vulnerabilities should be plotted on the associated prioritization chart, with x-axis representing the likelihood score, and the y-axis representing the likelihood score.

The position of each vulnerability in one of the four quadrants on the chart will determine the next steps for that particular issue:



Strategic Priorities: These vulnerabilities represent issues that have the potential to severely or completely disrupt the education system in the country, and are likely to occur in short to medium-term horizon. As such these must be addressed immediately at the Regular Review in detail, and a comprehensive Mitigation Plan prepared

Tactical Priorities: These vulnerabilities represent issues that are likely to occur in short to medium-term but whose impact on the education system is limited. These should be considered regularly, with focus and resources being allocated to them following the implementation of mitigation strategies for the Strategic Priorities.

Long-Term Focus: These vulnerabilities represent issues that can have a severe impact on the education system in the country, although they are not likely to occur in the near future. As such, they need to be considered in the respective Ministry's long-term strategic planning and regularly reviewed in case the likelihood of their occurrence changes. These long-term vulnerabilities will also likely include catastrophic events with a low likelihood of occurrences such as tsunamis and other natural disasters. Generally, these need to be addressed and reviewed regularly, with long-term resources allocated to building resilience for such events.

Not-in-Focus: These are vulnerabilities with limited impact and low likelihood of occurrence. Given that their impact will be limited and that they are unlikely to occur soon, the general systemic approach should not allocate substantial time and/or resources to building mitigation and resilience strategies to address these vulnerabilities, as the expense and effort to do so is likely to be higher than what would be required to address their consequences should these vulnerabilities affect the education system.

4.5.2 Evaluation of Evidence

When the relevant vulnerabilities have been identified and prioritized it is important to establish a rigorous foundation for the monitoring and evaluation of their (1) onset and (2) impact.

4.5.2.1 Establishing Relevant Indicators

For each of the vulnerabilities placed within the Strategic Priority and Long-Term Focus quadrants, the Review Committee must identify indicator(s) to measure the onset and impact of each vulnerability. The following sub-section provides some guidance as to how such indicators should be selected and monitored.

Onset-type indicators may be impossible to define for some vulnerabilities, such as the global economic crisis or the risk of a large tsunami. Where that is the case, the Review Committee may instead choose to rely on the Likelihood score from the Prioritization of Vulnerability step. Though imperfect as an objective measure, the Likelihood score, when agreed in consensus is likely to reflect a common understanding of the complex interplay of factors that contribute to the onset of any such vulnerability. The Committee may opt to instead record the numerical value as a categorical risk score, i.e. 1 = Very low risk, 2 = Low risk, 3 = Medium risk, 4 = High risk, and 5 = Very high risk.

For other vulnerabilities such as rising sea-levels, the onset indicator maybe complex but measurable, i.e. the percentage of Maldives schools which would be flooded with each X cm rise in sea level. Where such indicators are available, the Review Committee should communicate and collaborate with other relevant departments within the government to obtain relevant historical data and evidence to help them further verify their evaluation of the pertinent impact and likelihood of occurrence of each such risk.

These indicators then must be added to the Education Management Information System (EMIS) to facilitate future tracking and to enable multi-variant statistical analysis of their influence of other educational indicators.

Impact-type indicators relate to the relevant goals and objectives of the Maldivian education system as already tracked within the EMIS platforms. These include but are not limited to student enrolment (at different stages of education), learning outcomes (as measured on formal examinations), student and teacher absenteeism, and student drop-out rates. The Review Committee must evaluate the comprehensive list of indicators tracked within the EMIS platforms alongside the vulnerabilities identified and allocate relevant indicators to each vulnerability (at least within the Strategic Priority, and Long-Term Focus quadrants).

On occasion, the Committee may wish to expand the data collected within the EMIS platforms through additional indicators or indicator sub-categories to reflect the relevant impact of the identified vulnerabilities. For example, the Committee may wish to collect data on the reason for student absences and potentially include response categories such as ‘adverse weather’, ‘school damaged in natural disaster’, etc. to reflect the identified vulnerability, in this case, global warming/ rising sea-levels. In all cases, where such additional indicators are identified these must be included in the EMIS system for long-term, systematic tracking.

During the Regular Review, the Committee will then review data from indicators linked to vulnerabilities identified during a previous Regular Review to evaluate the onset and impact of any ongoing vulnerability.

The impact-type indicators are also important as they indicate critical ‘pressure points’, along which the Committee should design mitigation strategies.

4.5.2.2 Recognizing Trends

Regular monitoring of established indicators should focus on the identification of trends in data. This applies to both onset and impact-type indicator data. The Committee may wish to employ qualitative and quantitative methodologies in collaboration with the EMIS team to select and apply the appropriate analyses and produce insightful data outputs for the Committee’s group evaluations.

Reviewing data trends for each set of indicators for every vulnerability previously identified and tracked will allow the Committee to see if the vulnerability is becoming more pronounced by either becoming more likely or more impactful or both. This finding should then be used to develop appropriate mitigation strategies and to re-allocate resources to address most pressing

vulnerabilities.

Where vulnerabilities are becoming less likely or less impactful, this may signify an effective mitigation strategy being implemented by the Committee. In such cases, the Committee must also carefully consider the impact that re-allocation of resources from any implemented mitigation strategy may undermine the results achieved thus far.

4.5.2.3 Research of Potential Mitigation Strategies

Following the Regular Review the committee members must divide continuous and newly identified vulnerabilities and undertake research (in collaboration with other government departments if necessary) into mitigation strategies employed other countries, international organizations, or new strategies identified in research to help them frame existing approaches and formulate new innovative ways in which individual vulnerabilities can be addressed.

4.5.2.4 Review and Benchmarking of Existing Strategies

Once such research is completed, the Committee must systematically review the existing mitigation strategies to benchmark their efficiency and efficacy vis-à-vis new strategies being implemented elsewhere or proposed in research. Where such new strategies appear more efficient or effective, the Committee must consider recommending a change in nation-wide education strategy to implement such new approaches. That said, the Committee must also consider the set-up costs of pivoting mitigation approaches, as it may still be more cost-effective to continue an ongoing long-term mitigation approach with higher recurring costs than it is to implement a brand-new strategy which may have high set-up costs, but low recurring ones.

4.5.3 Planning for Mitigation

With the list of vulnerabilities firmly established, supported by relevant data and indicators, the Committee moves onto the next stage of the vulnerability monitoring process – Planning for Mitigation. The planning process relied on a dedicated Action Plan and associated Resource Planning exercise which is further described below.

4.5.3.1 Development of Action Plan

Development of an Action Plan follows closely from the vulnerabilities identified as Strategic and Long-Term priorities. The Committee will review each one of these and identify the relevant indicators that will be affected by the vulnerability. A mitigating strategy must then be developed by the Committee for each indicator. The mitigating strategy can take a wide range of forms, including but not limited to amended policies and procedures, building preventative measures, and relevant training. Whichever the strategy selected as most appropriate by the Committee, it should be underpinned by two key principles of strategic planning in the face of risk and vulnerability:

- 1 Resilience:** refers to the capacity to recover quickly from difficulties. Strategies that support resilience in the education system introduce structural, often innovative measures, that not only minimize the damage of any potential adversity but also facilitate the development of long-term dynamic infrastructure, which ensures continuity of the system even in the face of disaster.
- 2 Redundancy:** refers to the inclusion of extra components which are not strictly necessary to functioning, in case of failure in other components. Strategies that support redundancy include but are not limited to succession planning, 'plans B', and parallel delivery mechanisms. Such approaches help minimize disruptions to the education system even in case of a disaster, risk, or vulnerability materializing.

When a mitigation strategy has been allocated to each relevant indicator, the Committee will select and formally appoint an 'owner' of strategy implementation, key milestone for its delivery, and crucial deadlines. The Committee then oversees the implementation of such mitigation strategies by selected owners during their Regular Reviews, including appropriate use of resources.

For this stage of the process, the Committee should use the Vulnerability Action Plan template (see Annex).

4.5.3.2 Allocation of Resources

The implementation of developed vulnerability mitigation strategies will, in many cases, require allocation of dedicated resources to build resilience and redundancy measures. To avoid competing for claims for resources from the different departments of the Ministry of Education, it is recommended that a dedicated Vulnerabilities Resilience budget is established. This would represent the total pool of financial and material resources available to the Committee to develop some or all of the proposed mitigation strategies.

The budget should be prioritized to develop mitigation strategies for Strategic Priorities first and long-term priorities second. If there are any resources remaining after that, these can be allocated to Tactical Priorities Strategies.

To allocate the budget appropriately, the Committee may first need to undertake a detailed costing exercise, which may include obtaining competing supplier quotes, if needed. This must be done in line with applicable government procurement policies and rules.

It is likely that even with all due care, the total resources available will not be sufficient to fund all mitigation strategies completely. The Committee is therefore encouraged, prior to formulating complex top-down mitigation strategies, to elicit from its members, bottom-up strategies that can be driven by community members and lower echelons of the education system in the Maldives at no or minimal financial cost. Engagement of communities will also help ensure the appropriateness to the local context of any solutions proposed.

4.5.4 Implementation of Mitigation Strategies

The implementation of mitigation strategies shall be done by appointed ‘owners’, in order of strategic priority, and with regards to resources and time-driven limits. The Committee shall review reports on the implementation of mitigation strategies during Regular Reviews.

Where successful strategies have already been developed for ongoing vulnerabilities, it may suffice that the Committee simply further verifies that such a strategy is still functional, relevant, applicable, and cost-effective and no additional resources or strategies may be required.

4.5.5 Emergency Reviews

The process mentioned above applies during Regular Reviews and regular MoE and MoHE operations. It may occur on occasion that a vulnerability or a particular risk – whether previously identified by the Committee or not – may affect and disrupt the education system in the Maldives.

Should such an event (e.g. a tsunami destroying a number of schools) occur, the Chairman of the Committee shall convene an Emergency Review Meeting. During this meeting, the Committee will review the damage to the Maldivian education system – as comprehensively as possible. It may wish to make use of the monitoring framework indicators to identify key priority areas of impact of such a vulnerability (e.g. destroyed schools may affect gross and net enrolment in primary and secondary schools, availability of textbooks, teaching quality, educational outcomes, etc.).

The Committee must prepare a report for the perusal of the wider Ministries detailing the following:

- All measurable impact on any relevant educational indicators affected by the vulnerability;
- The likely long-term impact of the vulnerability;
- Whether the vulnerability was previously identified, and its relevant risk classification and prioritization if so;
- Review of previously implemented mitigation strategies and their (in)efficacy;
- Proposed resolution strategy to address the impact of the vulnerability.

The Report must be completed without delay and led by new primary evidence collected – as far as possible – in the aftermath of the vulnerability’s occurrence. Where previously implemented mitigation strategies were ineffective in limiting the vulnerability’s impact, the Committee must undertake a detailed, evidence-led evaluation as to the reasons for this inefficacy and adapt or replace the strategy going forward. The Committee must also fill in the Emergency Review Report (See Annex).

Chapter 5: Evaluating for Results

5.1 Why evaluate? Uses of evaluation

Effective evaluation in the education sector allows leaders, policy makers, teachers, and citizens to understand how their education system is performing, where key strengths lie, and how quality, access, and achievement can be strengthened. It is a tool which can be applied at various levels (e.g. classroom, school, community, policy, systems) for evidence-based reflection and planning, leading to improved national socio-economic outcomes.

5.2 Evaluation policy: principles, norms, and standards for evaluation

5.2.1 Quality assurance of evaluation design and methodology

For evaluations to be effective, they must meet several key minimum requirements:

OUTCOME-ORIENTED

One of the primary mistakes made in educational evaluation is a focus on outputs (e.g. teachers trained, textbooks distributed, children enrolled, schools built), or opinions (e.g. do subjects feel they learned well or did they enjoy a programme); such metrics are easy to implement, and offer fewer opportunities for embarrassment relative to outcome-oriented metrics. However, such self-reported, and output-driven metrics do not offer insights into the real impacts of education: are all our children learning well, if so why, if no why not? Such lines of enquiry truly allow for driving improved educational performance on a national level.

CONSISTENCY AND VALIDITY

Evaluations must be consistent, particularly those applied across multiple stages or on a national level. Coordinated and comparable tools and metrics must be used to ensure effective tracking of educational achievements, attainment, and progress. Similarly, evaluation approaches must measure what they purport to, if assertions of educational success or failure are to be supported, and if impactful lessons are to be drawn from evaluation activity.

DISSEMINATION, REFLECTION, AND IMPLEMENTATION

And finally, for evaluations to be effective, they must be disseminated to key audiences, reflected upon, and acted on.

5.3 Roles and responsibilities in the evaluation

5.3.1 Involvement of partners and stakeholders in the regular

evaluation

It is important that roles and responsibilities are clearly delineated, to avoid diffusion of responsibility, and to ensure it is clear who is responsible for undertaking what. For this reason, it is essential that a clear 'Owner' is identified for all aspects of Evaluation.

Furthermore, it is essential that stakeholder engagement is undertaken on an ongoing basis, to ensure clear, consistent, and transparent communication and effective implementation of the Evaluation.

5.4 Using evaluation for decision-making

5.4.1 Using EMIS data for decision-making

Well-designed evaluations have the potential to inform strong, evidence-based decision-making that is focused on driving outcomes, rather than inputs. Ensuring decisions at every level are informed by such evidence will drive improved performance at every level of the education sector, as well as an improved socio-economic performance at the national level. Within this, data from the two EMIS platforms offers substantial opportunities for evidence-driven decision-making, with the limited marginal cost associated with its use in decision-making processes, relative to many forms of evaluation. Consequently, its use should be a given across education actors' decision-making and activity.

Chapter 6: Reporting on Monitoring and Evaluation










6.1 Program Performance (Reports and Other Products)

Based on the several reviews, data and information from various sources, the JSC may produce products such as Education Statistics Yearbook, Student Assessment Results Yearbook, National Education Indicators (NEI) Report, School Report Card and Other M&E Reports, Policy Briefs etc.

6.1.1 Thematic Maldives Education Report (ESY)

Inspired by the Global Education Monitoring Report, each year Maldives will identify gaps and additionally focus all its efforts to address such gaps. This will be a theme for that year. An annual thematic report will be produced by the MoE and the MoHE.

Suggested themes:

Theme	
	HOLISTIC & INCLUSIVE EDUCATION
	FUNDING OF SCHOOL EDUCATION
	LIFE-LONG LEARNING
	EDUCATION FOR SUSTAINABLE DEVELOPMENT
	EDUCATION, INNOVATION, AND ENTREPRENEURSHIP
	SKILLS AND COMPETENCY-BASED EDUCATION
	EDUCATION AND TECHNOLOGY IN THE DIGITAL AGE
	QUALITY EDUCATION AND EDUCATION GOVERNANCE
	LEARNING OPPORTUNITIES AND LEARNING OUTCOMES

Examples of similar reports and resources: [example 1](#), [example 2](#).

6.1.2 Education Statistics Yearbook (ESY)

Maldives has been producing and publishing ESY report regularly on an annual basis. It is critical that this Statistics is used to develop AWP and M&E for the next year. Data from the two EMIS platforms should be used to prepare Education Statistics Yearbook. To effectively use this data, consideration needs to be given to harmonisation of both cycles. The statistics should provide, data and information to the lowest denominator or disaggregated by sex, SEN, atolls, grades, age, type of schools and institutions etc.

Suggested Chapters for Education Statistics Yearbook are:

1. National Education Systems
2. Demographic and Enrolment Prospect
3. Pre-Primary – Foundation Stage
4. Lower Primary – Key Stage 1
5. Upper primary – Key Stage 2, 3
6. Lower Secondary – Key Stage 4
7. Higher Secondary – Key Stage 5
8. TVET
9. Higher and Tertiary Education
10. Public Expenditure on Education

6.1.3 National Student Learning Assessment Results (NALO)

This yearly report should be on student learning assessment outcomes. Every year, NALO assessment data should be presented along with the past two to three years of data to see trends in the quality of learning in students. This could be expanded to grades where annual or periodic important exams are conducted. This report shall provide an opportunity to MoE to understand reasons for differential learning outcomes amongst the grade 4 and grade 7 students. This is a responsibility of the NALO and Director of Examinations.

Suggested Chapters for National Students Learning Assessment Results are:

1. Basic Statistics
2. Providing learning support - learning materials and learning aids

3. Improving pedagogy and curriculum
4. Improving program outcomes (e.g. Retention, Graduation, Examination passing rate)
5. Improving the quality of teachers
6. Trend Analysis of Learning Outcome - NALO results for the past three years
7. Learning Gaps
8. Recommendations and Way forward

Maldives will be preparing to integrate OECD 's Global Educational Assessment Community, a global competency in 2018; <http://www.oecd.org/pisa/pisa-2018-global-competence.htm>, should serve as bench mark for preparing and evaluating for PISA.

6.1.4 School Report Card

Currently, MEMIS has this feature. Schools are entering data periodically in MEMIS. An annual school report card, which has Key performance indicators for the schools and neighbouring schools and Atolls can be generated for each school to create competition amongst the schools to improve school governance. Please refer to link for an example of the school report card.

6.1.5 M&E report on the ESP implementation progress

Overall ESP implementation progress under all 4 Goals. This report can be generated using Results Framework Indicators. AWP and ME plan will help to track and calculate each indicator annually against the set targets. Annual budgets and planned activities could then be adjusted accordingly. There should be an annual M&E event for this purpose to discuss the report and the ESP progress as well as the needed action planning and adjustment. This production should be under the leadership of the JSC.

Suggested Chapters for National Students Learning Assessment Results are:

1. Introduction
2. Implementation Arrangements
3. Goal 1
4. Goal 2
5. Goal 3
6. Goal 4

7. Budget and Expenditure
8. Suggestions and recommendations for next year's AWP

6.1.6 Country profile

Provides an overview of the Education sector, including key events and facts about the education scenarios of a country. An example of a country profile is available at this link.

6.1.7 Policy briefs

Policy briefs provide important insights into a particular issue. The policy brief is designed to help all stakeholders to address and prioritize issues identified. Examples of policy briefs are:

- OECD Policy Briefs by Country
- CEEP Education Policy Brief

6.1.8 Dashboard

An example of School Dashboard is <http://www.schoolview.org/dish/schooldashboard.asp>. JSC can also select indicators from the Results Framework or any other additional indicators and develop a dashboard for the senior management. Following are suggested indicator for Dashboard:

- % of schools rated more than three on rating scales in all quality assurance modules of SIQAAF which also includes implementation of SIP
- Gender parity in all forms of education
- % of students with Special Education Needs receiving education services
- # of students received 'occasional consistent' remarks in at least three competencies
- # of students received 'Achieving' remarks in at least three subjects in subjects
- % of students passed five or more subject of 'O' level certification
- % of students passed at least five subjects in 'A' level exams
- % of teachers observed apply student-cantered teaching and learning approach
- % of students feeling safe in schools (free from Violence, Bullying and Corporal punishment)
- % of students screened for health indicators are 'Healthy.'

- % of students observed effectively using ICT in classroom learning
- % of TVET graduates from institutions and polytechnic
- Net enrolment rate in polytechnic TVET program
- Net enrolment rate in school-based TVET program (especially girls) in Male' and Atolls
- # of SIPs not meeting quality criteria
- Gross enrolment rate in HE (Level 5 to 7) by sex and geographic areas (Transition rate from secondary to higher education)
- # of students completed HE by level and sex and geographic areas
- An additional number of scholarships, loans and financial assistance programs equitably available to the students.

Chapter 7: Conclusion

7.1 Effective and ineffective M&E

In order to ensure that Monitoring and Evaluation are effective, it is important that it is undertaken as part of a wider research cycle, to inform a process of ongoing refinement, improvement, and enhancement of education interventions – such a cycle follows a clear pattern:

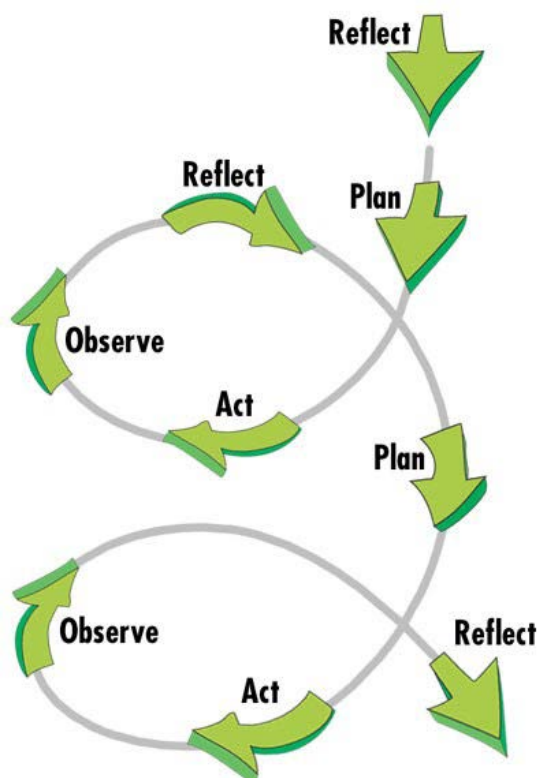
REFLECT: Pausing to consider what data is available, and what the implications of this are;

PLAN: Planning targeted interventions in light of data;

ACT: Acting on the interventions that have been planned; and

OBSERVE: Collating data on the context following the intervention (or interventions).

This process is cyclical and continues on an on-going basis – if it is undertaken effectively, this can affect positive change.



Monitoring and Evaluation relate to the Reflect and Observe portions of this cycle – gathering data (Observing), and providing meaningful, and informed evaluation (Reflecting) of findings. This should inform effective policy interventions (Planning), and their implementation (Action). This serves as an important reminder of the primary intended purpose of effective Monitoring and Evaluation in the Context of an Education Sector Plan – it is a tool to ensure that the Education Sector Plan is demonstrably impacting positively on Learning and Teaching, and related outcomes, and that failure to do so is identified quickly, allowing the Education Sector Plan to be revised as required.

As such, effective Monitoring and Evaluation is:

- Practical;
- Accurate;
- Up-to-date;
- Is precise, and unambiguous;
- Focuses on ‘outcomes’, not ‘inputs’;
- Meaningful;
- Useful; and
- Relevant

It allows for informed policy interventions moving forward and gauges the efficacy of the Education Sector Plan in achieving its intended outcomes (or, if these are not being achieved, seeks to address shortcomings in this regard).

Ineffective Monitoring and Evaluation:

- is undertaken ‘for its own sake’, rather than to inform effective implementation;
- is tokenistic, or not understood;
- is vague, or imprecise.’
- focuses on ‘inputs’, not ‘outcomes’;
- is undertaken to placate external parties, rather than for a tangible purpose; and
- is inaccurate, inconsistent, or poorly analysed.

Without effective Monitoring and Evaluation, it is impossible to identify the successes, and the failings, of Education Sector Plan implementation.

7.2 Reviewing the process (not just the data)

Part of ensuring that Monitoring and Evaluation are, and remains, effective, is to ensure that the underlying process is reviewed on an ongoing basis and refined in light of findings. Without such reviews, and constant refinement, Monitoring and Evaluation is unlikely to remain fit-for-purpose, it is, therefore, essential that the process of Monitoring and Evaluation be constantly reviewed, as well as the data the process generates.

7.3 Reviewing and building capacity

Even the strongest, and most comprehensive, Monitoring and Evaluation Framework is only as effective as those implementing it – human capacity, and wider resourcing is key.

It is therefore essential that, to ensure effective Monitoring and Evaluation can take place that:

- i) A clear audit is undertaken to understand what current capacity is, what gaps exist, and how these can be addressed;
- ii) There is a process of regular review, to ensure progress is made to address gaps in capacity; and
- iii) That progress is addressed, and fostered, through training, resourcing, incentives, and other mechanisms.

This will allow for ongoing refinement of human capacity, increasing the likelihood of effective Monitoring and Evaluation, thus facilitating effective implementation of the Education Sector Plan.

Annexes

1. National Education SDG Indicators (NE-SDGI) Report;

NATIONAL EDUCATION SDG INDICATORS (NE-SDGI) REPORT

NE-SDGI report, 11 education indicators of SDG4, may provide a true reflection of the status of education in the Maldives. etc. An analytical report by indicators can be produced every two years. Please refer to the matrix on following page. Though the Results Framework may not capture all of the SDG indicators, many of the quantitative indicators could be calculated from MEMIS data.

SDG Targets and Indicators

Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes **ESP/EMIS Indicator**

4.1.1	The proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	MEMIS
4.1.2	Administration of a nationally-representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education, and (c) at the end of lower secondary education	EDI and NALO
4.1.3	Gross intake ratio to the last grade (primary education, lower secondary education)	MEMIS
4.1.4	Completion rate (primary education, lower secondary education, upper secondary education)	MEMIS
4.1.5	Out-of-school rate (primary education, lower secondary education, upper secondary education)	MEMIS
4.1.6	Percentage of children over-age for the grade (primary education, lower secondary education)	MEMIS
4.1.7	Number of years of (a) free and (b) compulsory primary and secondary education guaranteed in legal frameworks	National Policy

Target 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

4.2.1	The proportion of children under five years of age who are developmentally on track in health, learning and psychosocial	DIE/MEMIS
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	well-being, by sex	
4.2.2	The participation rate in organized learning (one year before the official primary entry age), by sex	MEMIS
4.2.3	Percentage of children under five years experiencing positive and stimulating home learning environments	Not Applicable
4.2.4	Gross early childhood education enrolment ratio in (a) pre-primary education and (b) and early childhood educational development	MEMIS
4.2.5	Number of years of (a) free and (b) compulsory pre-primary education guaranteed in legal frameworks	National Policy
Target 4.3 By 2030, ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university		
4.3.1	The participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	EMIS/TVETA/Polytechnic/MoHE
4.3.2	Gross enrolment ratio for tertiary education by sex	EMIS/TVETA/Polytechnic/MoHE
4.3.3	Participation rate in technical-vocational programmes (15- to 24-year-olds) by sex	EMIS/TVETA/Polytechnic/MoHE
Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship		
4.4.1	The proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	SIQAAF/MEMIS
4.4.2	Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills	SIQAAF/MEMIS
4.4.3	Youth/adult educational attainment rates by age group, economic activity status, levels of education and programme orientation	EMIS
Target 4.5 By 2030, eliminate gender disparities in education		

and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

4.5.1	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated	EMIS
4.5.2	Percentage of students in primary education whose first or home language is the language of instruction	MEMIS
4.5.3	The extent to which explicit formula-based policies reallocate education resources to disadvantaged populations	National Policy
4.5.4	Education expenditure per student by the level of education and source of funding	Public Expenditure Report
4.5.5	Percentage of total aid to education allocated to least developed countries	Financing Mechanism

Target 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

4.6.1	The proportion of the population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	MEMIS/EMIS
4.6.2	Youth/adult literacy rate	Census
4.6.3	Participation rate of illiterate youth/adults in literacy programmes	MEMIS/EMIS

Target 4.7 By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable

development

4.7.1	The extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	Not Addressed
4.7.2	Percentage of schools that provide life skills-based HIV and sexuality education	MEMIS (Life skills based only)
4.7.3	The extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113)	Not Addressed
4.7.4	Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability	Not Addressed
4.7.5	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience	Not Addressed

Target 4.a Build and upgrade education facilities that are a child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

4.a.1	Proportion of schools with access to: (a) electricity; (b) Internet for pedagogical purposes; and (c) computers for pedagogical purposes (d) adapted infrastructure and materials for students with disabilities(e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)	MEMIS
4.a.2	Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse	ESQID/MEMIS
4.a.3	Number of attacks on students, personnel and institutions	ESQID/MEMIS

Target 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular, least developed countries, small island developing States and African countries, for enrolment in higher

education, including vocational training, information and communications technology, technical, engineering and scientific programmes in developed countries and other developing countries

4.b.1 The volume of official development assistance flows for HE Report
scholarships by sector and type of study

4.b.2 Number of higher education scholarships awarded, by the HE Report
beneficiary country

Target 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

4.c.1 Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) higher secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex MEMIS

4.c.2 Pupil-trained teacher ratio by education level MEMIS/EMIS

4.c.3 The proportion of teachers qualified according to national standards by education level and type of institution MEMIS/EMIS

4.c.4 Pupil-qualified teacher ratio by education level MEMIS

4.c.5 Average teacher salary relative to other professions requiring a comparable level of qualification National Policy

4.c.6 Teacher attrition rate by education level MEMIS

4.c.7 Percentage of teachers who received in-service training in the last 12 months by type of training MEMIS

Goal 1: Improved learning for all through equitable access to quality education

Key Performance Indicators	Means of Verification	Reporting Frequency	Indicator Description	Relevant SDGs
Gross enrolment rate in KG1 and KG2 (Pre-Primary) M/F	MEMIS	Annual	Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year	4.1.3
Net completion rate (in lower secondary, 12) by sex and Male' and Atolls	MEMIS	Annual	Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population	4.1.3
Gender parity in all forms of education	QAD-NALO /MEMIS	Annual	The ratio of boys and girls enrolled at an educational level. It is usually computed as the ratio of the Gross Enrolment Rate (GER) of females to males at an educational level	4.5.1
% of students with Special Education Needs receiving education services*	MEMIS (Total number of students enrolled in schools are 481)	Annual	Total number of children with disability in schools or receiving educational support to the total number of children with special needs	4.5.1
Improve learning outcomes and reduce the learning gap by increasing the learning of the lower quartile, grades 4 and 7 (Dhivehi, English, Math)	NALO /MEMIS	Annual	Number of students in grade 4 and 7 secured less than the national average to Number of students in grade 4 and 7 secured more than the national average score in NALO exam	4.1.2
% of students passed five or more subject of 'O' level	Department of	Annual	Number of students passes five or more 'O' level subjects	4.1.2

certification	Examination/ MEMIS		to a total number of students appeared in exam AND Number of students passes five or more 'O' level subjects to a total number of students enrolled in 'O' level in that year	
Net Enrolment Rate (in KG2, Grade 4,7,10,12) by sex and Male' and Atolls	MoE (Statistics) - School Report /MEMIS	Annual	Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population	4.1.3
Gross Enrolment Rate (Grade 4,7,10, 12) by sex and Male' and Atolls	MoE (Statistics) - School Report /MEMIS	Annual	Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year	4.1.3
The transition rate from lower secondary to upper secondary	MoE (Statistics) - School Report /MEMIS	Annual	Number of students in the last grade of lower secondary enrolled in the first grade of upper secondary	4.1.4
% Children with special needs enrolled in normal and special classes	MoE (Statistics) - School Report /MEMIS	Annual	Total number of children with special needs to the total number of children enrolled in schools (Normal and special needs classes)	4.5.1
% of students demonstrate 'Consistent evident', 'Mostly evident' and 'Occasional evident' on at least three competencies (Social and soft skills) by Gender and Grade	Schools /MEMIS	Monthly	This is the class teachers' assessment. total number of students demonstrates their ability in a different category by gender and grade to the total number of students by gender and grade	4.1.2
Students performance in NALO in grade 4 and 7 - English, Math and Dhivehi as per	NALO /MEMIS	Annual	Statistical analytical report of students in NALO exams	4.1.2

learning benchmarks					
% of students shows 'Fully achieving', 'Mostly achieving' and 'Achieving' learning outcomes by Gender and Grade	Schools /MEMIS	Annual	This is a subject teachers' assessment. total number of students demonstrates their ability in a different category by gender and grade to the total number of students by gender and grade	4.1.2	
Performance of students attending multi-grade classrooms in NALO in grade 4 and 7 - English, Math and Dhivehi as per learning benchmarks	NALO/QAD	Annual	Statistical analytical report of students in NALO exams	4.1.2	
% of students passed at least five subjects in 'A' level exams	Department of Examination/ MEMIS	Annual	Statistical analytical report of students in NALO exams	4.1.2	
<u>Early learning measurement[i] (KG2) is developed and piloted</u>	NIE - EDI tool	Once/With in the first year of ESP and the analytical report is produced every two years	The Early Development Instrument (EDI) is a population-based tool to assess children's psychometrically which assesses readiness to learn in the school	4.2.1	
National Assessment for Learning Outcomes framework developed	NALO – QAD /MEMIS	Once/With in the first year of ESP	Assessment framework document	4.1.2	
% of teachers observed applying competency-based teaching as per the national curriculum	QAD-SIQAAF /ESQID-Risk assessments tool/MEMIS	Sample Survey /Quarterly	Number of teachers observed applying competency-based teaching as per the national curriculum to the total number of teachers observed	4.4.1	
% of teachers observed apply student-cantered teaching and learning approach	NIE-QAD (SIQAAF) /MEMIS	Sample Survey /Quarterly	Number of teachers observed applying students centric teaching, and learning	4.c.1, 4.c.7	

				approach to the total number of teachers observed	
% of principals develop and implement a school improvement plan to boost learning outcomes	MEMIS/QAD-SIQAAF /ESQID -Risk assessments tool	Sample Survey /Quarterly	Total number of SIP submitted to a total number of expected SIP to be submitted	4.c.1, 4.c.7	
The standards for the 21st-century schools are developed	NIE - (21st Century Standard document)	Sample Survey /Quarterly	21st-century school standards	4.7.1	
<u>% of schools that meet 21st century standards[iii]</u>	NIE - (21st Century Standard document)	Sample Survey /Quarterly	Total number of schools meeting 21st century standards to the total number of schools planned to convert into 21st-century standard schools	4.7.1	
% of teachers trained/licensed as per new teaching and learning methods suggested in the national curriculum framework in pre-primary education	NIE - Accreditation database /MEMIS	Annual	a) Total number of teachers trained to the total number of teachers in pre-primary school b) Total number of teachers accredited/licenseses to the total number of teachers in pre-primary school	4.c.2	
% of schools use pedagogical materials for language	NIE	Quarterly/ Annual - Sample survey	Total number of schools observed using appropriate pedagogical materials for language to the total number of schools observed and have appropriate pedagogical materials for language	4.1.2	
An evaluation of teaching-learning materials conducted to measure the impact on improvement in skills, values, key competencies etc	NIE Evaluation document	- 2020, 2022	Evaluation report (Primary and Lower Secondary)	4.1.2	

% of teachers trained in integrating improved curricula in daily lessons planned in primary and lower secondary school	MEMIS/NIE - Training report	Annual	Total number of teachers trained in integrating improved curricula in daily lessons planned in primary and lower secondary school to the total number of to be trained	4.c.7
An evaluation of teaching-learning materials conducted to measure the impact on improvement in skills, values, key competencies etc	NIE Evaluation document	Annual	Evaluation report (Higher Secondary)	4.1.2
% of teachers trained in integrating improved curricula in lessons planned in higher secondary schools	NIE - Training report	Annual	Total number of teachers trained in integrating improved curricula in daily lessons planned in higher secondary school to the total number of to be trained	4.c.7
% of teachers trained/licensed as per new teaching and learning methods suggested in the national curriculum framework in primary and secondary education	NIE Accreditation database /MEMIS	Annual	a) Total number of teachers trained to the total number of teachers in primary and secondary school b) Total number of teachers accredited/licensees to the total number of teachers in primary and secondary school	4.c.2
The proportion of teachers qualified according to national standards by education level and type of institution	NIE- Accreditation database /MEMIS	Annual	Total number of teachers qualified in all forms of basic education (Pre-primary to Higher Secondary)	4.c.2
% of teachers trained in curricula implementation (contents and pedagogy)	NIE - Training report /MEMIS	Annual	Total number of teachers trained in curricula implementation (contents and pedagogy) to the total number of teachers required training	4.c.2
% of qualified teachers available against the total required for Children in Special	DIE - Training report /MEMIS	Annual	Number of qualified teachers available against the total required for Children in	4.c.1

Education Needs			Special Education Needs	
% of identified teachers complete adequate training to support children with SEN	DIE - Training report /MEMIS	Annual	Number of identified teachers qualified to support Children in Special Education Needs to the total required	4.c.7
# of teachers working as coaches in schools as Special Education Needs (15 in each category)	DIE - Teachers database /MEMIS	Annual	Number of teachers working as coaches	4.c.1
# of teachers trained to do a functional assessment of children with special needs	DIE - Training report /MEMIS	Annual	Number of teachers trained in functional assessments	4.c.7
% of regular schools and special schools have assistive technologies to support the learning process for children with special needs	DIE - School reports /MEMIS	Annual	Number of regular schools and special schools have assistive technologies to support the learning process for children with special needs to total number of the school identified to upgrade with assistive technologies	4.a.1
% of children with special education needs have access to assistive technology	DIE- School reports /MEMIS	Annual	Number of SEN children have access to assistive technologies to total SEN children required assistive technologies	4.a.1
% of students feeling safe in schools (free from Violence, Bullying and Corporal punishment)	ESQID/MEMIS - Risk assessment tool	Sample Survey /Quarterly	Total number of students feeling safe in schools (free from Violence, Bullying and Corporal punishment) to the total number of school students responded	4.a.2
% of students screened for health indicators are 'Healthy.'	ESQID - - Risk assessment tool/MEMIS	Annual	Total number of students screened for health indicators are 'Healthy' to the total number of school students gone through health check-up	4.a.2

<p>% of school having well-maintained infrastructure, Internet for pedagogical purposes; computers for pedagogical purposes including dedicated technical support, adapted infrastructure and materials and space for students with special needs, single-sex basic sanitation facilities; h) multi-grade classrooms, i) science lab; g) students meeting area, first aid room</p>	<p>ESQID/ NIE/QAD /Department of Statistics</p>	<p>Sample Survey /Quarterly</p>	<p>Total number of school having well-maintained infrastructure, Internet for pedagogical purposes; computers for pedagogical purposes including dedicated technical support, adapted infrastructure and materials and space for students with special needs, single-sex basic sanitation facilities; h) multi-grade classrooms, i) science lab; g) students meeting area, first aid room to total number of schools surveyed</p>	<p>4.a.1</p>
<p><u>% of schools rated ‘Good’ on disaster risk reduction scale^[iii]</u></p>	<p>ESQID - Risk assessment tool</p>	<p>Sample Survey /Quarterly</p>	<p>Total number of schools rated ‘Good’ on disaster risk reduction scale^[iii] to the total number of schools</p>	<p>4.a.1</p>

Goal 2: Skills for Youth and Adults through equitable expansion of the TVET programs responding to the economic and development needs of the Maldives

Key Performance Indicators	Means of Verification	Reporting Frequency	Indicator Description	Relevant SDGs
% of students completed school-based TVET (BTEC and Dhasvaaru)	SA Division /MEMIS	Annual	<p>a) Number of students, boys and girls are enrolled in school-based TVET - Dhasvaaru</p> <p>b) Number of students, boys and girls are enrolled in school-based TVET - BTEC</p> <p>c) Number of students, boys and girls complete school-based TVET - Dhasvaaru to the total number of students enrolled</p> <p>d) Number of students, boys and girls complete school-based TVET - BTEC to the total number of students enrolled</p>	4.3.1
% of trainees certified in TVET courses in Polytechnic and other TVET Institutions	TVETA/EMIS	Annual	<p>a) Number of trainees, male and females, are enrolled in TVET courses in Polytechnic and other TVET Institutions</p> <p>b) Number of trainees, male and females, are certified in TVET courses in Polytechnic and other TVET Institutions to the total number of trainees enrolled</p>	4.3.1
% of graduates of TVET institutions, including Polytechnic, hired and remunerated as per labour market within six months of completion	TVETA	Annual	<p>a) Number of TVET graduates hired and remunerated as per labour market within six months of completion to total number graduated in last six months</p> <p>a) Number of TVET graduates hired and not-remunerated as per labour market within six</p>	Target 4.4

				months of completion to total number graduated in last six months	
% of graduates of TVET institutions, including Polytechnic, are self-employed within six months of completion	TVETA/EMIS	Annual		Number of TVET graduates are self-employed within six months of completion to total number graduated in last six months	Target 4.4
# of TVET programs meet quality assurance standards set by the TVET Authority	TVETA/EMIS	Annual		Number of TVET programs meeting quality assurance standards set by the TVET Authority	Target 4.3
Net enrolment rate in school-based TVET program (especially girls) in Male' and Atolls	School TVET/MEMIS	Annual		Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population	4.4.1
Net enrolment rate in polytechnic TVET program (by trade, certificates) (especially girls)	Maldives Polytechnic/MEMIS	Annual		Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population	4.4.1
TVET national qualification framework revised based on the future skills for the Maldives	TVET Authority - Qualification framework	2018, 2020 (revise)		Qualification framework	Target 4.3
% of trainees 'Satisfied' with the course contents and teachers training methodology	TVET Authority - Sample survey /EMIS	Annual		a) Number of trainees expressed satisfaction on the course contents to the total number of trainees interviewed b) Number of trainees expressed satisfaction on the teachers training methodology to the total number of trainees interviewed	Target 4.3

% of trainers rated 'Good' using tailored methods of teaching - Polytechnic	MQA Maldives Polytechnic - Sample Survey /EMIS	- Quarterly	Number of trainers rated 'Good' using tailored methods of teaching - Polytechnic to total number of trainers observed	Target 4.3
# of TVET program offered is based on the current and future demands of the labour market	TVET Authority - Sample Survey	2018, 2020 (Revision)	Number of TVET program offered is based on the current and future demands of the labour market needs	Target 4.3
Labour market survey conducted	TVET Authority/ME D - Sample Survey	2018, 2020 (repeat survey)	Labour market survey	Target 4.3
TVET programs assessment framework revised for the Maldives	TVET Authority - Revised assessment framework	2018, 2020 (Revision)	Revised TVET program assessment framework	Target 4.3
% of all TVET Institutes/programs rated 'good' minimum quality standards using the quality assurance framework	TVET Authority - Sample survey	Annual	a) Number of TVET Institutes rated 'good' minimum quality standards using the quality assurance framework to total number of Institutes surveyed a) Number of TVET programs rated 'good' minimum quality standards using the quality assurance framework to the total number of programs developed	Target 4.3
% of Maldives Polytechnic and TVET Authority have an adequate level of technical and management experts meeting minimum skills	TVETA Directorate - Human resources /EMIS	Annual	a) Number of Maldives Polytechnic have an adequate level of technical and management experts meeting minimum skills to a total number of current staff b) Number of Maldives TVET Authority have an adequate level of technical and	Target 4.3

				management experts meeting minimum skills to a total number of staff	
# of additional schools offering TVET courses - School	TVET Authority Report /MEMIS	Annual		New schools offering TVET courses in a year	Target 4.3
# of additional TVET facilities established - Polytechnic	TVET Authority Report /Maldives Polytechnic /EMIS	Annual		New TVET - Polytechnic facilities established in a year	Target 4.3
Quality assurance framework established to ensure the quality of TVET facility, curriculum, teachers and training	TVET Authority Quality assurance framework	2018, 2020 - (Revise)		A quality assurance framework	Target 4.3
# of skilled youths connected with the industry through TVET web platform	TVET Authority - Report/MED	Annual		a) Number of skilled youths registered on the web platform b) Number of industries registered on the web platform	Target 4.3
# of skilled youths registered in employment exchange	MED - Report	Annual		Number of skilled youths registered in employment exchange, as relevant	Target 4.3
# TVET facilities are adequately provided with financial and human resources	TVET Authority Report	Annual		Number of TVET facilities financial status	Target 4.3

Goal 3: Ensure equitable access to lifelong, affordable, and quality of Higher Education for all

Key Performance Indicators	Means of Verification	Reporting Frequency	Indicator Description	Relevant SDGs
Gross enrolment rate in HE (Level 5 and 7) by sex and geographic areas (Transition rate from secondary to higher education)	MoHE report /EMIS	Annual	Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year	4.3.2
# of students completed HE by level and sex and geographic areas	MoHE report /EMIS	Annual	Number of students completed HE by level and sex and geographic areas	4.3.2
<u>%a 'passed'[iv] HE graduates hired and remunerated fairly by the labour market within six months of completion in related field and non-related field</u>	Ministry of Labour /Maldives Chamber of Commerce - Survey	2020,2022	<p>a) Number of passed HE graduates hired and remunerated as per labour market within six months of completion to total number graduated in last six months</p> <p>a) Number of passed HE graduates hired and not-remunerated as per labour market within six months of completion to total number graduated in last six months</p>	Target 4.3
% passed HE graduates are self-employed	MED /Maldives Chamber of Commerce - Survey	2020,2022	Number of passed HE graduates are self-employed	Target 4.3
An additional number of scholarships, loans and financial assistance programs equitably available to the students	MoHE report /EMIS	Annual	<p>a) Number of new scholarships awarded</p> <p>b) Number of new loans provided</p>	4.b.1 and 4.b.2
Number of researches published in international journals	MoHE Institutions/ Research	Annual	Number of researches published	Target 4.3

	reports				
# of additional HE institutions are accredited as per the quality standards	MoHE Standards /EMIS	-	Annual	Number of new HE institutions are accredited	Target 4.3
Higher education legislation, the regulations for Universities, Colleges and other HEIs, approved	MoHE Legislation	-	2018,2019	HE legislation and other regulations are in place	Target 4.3
Policy, planning and governance of HE developed	MoHE Policy document	-	a 2018,2019	HE governance frameworks are developed	Target 4.3
MOHE has an adequate number of technical expertise	MoHE Human resource report	-	Annual	MOHE staff Human Resource Capacity Assessment and Professional Development Policy and Implementation	Target 4.3
Quality assurance framework to accredited HE program, and other quality aspects developed	MQA/ MNQF	-	2018, 2020 (Review)	Quality Assurance Framework	Target 4.3
# of experts trained in MNQF	MQA MNQF	-	Annual	Number of experts trained to correctly implement MNQF	Target 4.3
% of HE institutions and program offered to achieve minimum quality standards as per MNQF	MQA/ MNQF	-	Annual	Number of programs observed meeting quality criteria to the total number of programs observed	Target 4.3
# of additional courses introduced in MOHE to enhance the international standing of the Maldivian HE system based on future needs	HE - Course details /EMIS	-	Annual	Number of additional programs for HE developed	Target 4.3
# of research products developed using the national fund for research	NRC Research reports	-	Annual	Number of research products in a year	Target 4.3

E-learning platform launched	MoHE Web platform	-		E-learning platform	Target 4.3
% of spending for Higher Education	MoHE Financial reports	-	Annual	a) Funds spent to the allocation b) Funds spent to total HE budget	Target 4.3
% of private sector participation in the provision of HE in the Maldives	MoHE Private sector engagement report	-	Annual	Number of HE institutions run by the private sector to total number of HE institutions	Target 4.3
The geographic spread of HE investments to improve inclusive HE provision in the atolls	MoHE Financial report	-	Annual	Financial analysis	Target 4.3

Goal 4: System Strengthening for Efficiency and Quality Schools and Training Services

Key Performance Indicators	Means of Verification	Reporting Frequency	Indicator Description	Relevant SDGs	
% of schools rated more than three on rating scales in all quality assurance modules of SIQAAF which also includes implementation of SIP	QAD SIQAAF	-	Sample /Quarterly	Number of schools' assessment secured more than 3 in all SIQAAF modules to a total number of schools monitored in a quarter/annual	Target 4.1
MEMIS platform is fully implemented for policy development and accountability	PPRD MEMIS report	-	Annual	MEMIS functional	Target 4.1
SIQAAF and National Assessment for Learning outcomes fully integrated into school monitoring	QAD Revised framework	-	Annual	SIQAAF and NALO integration	Target 4.1
MoE formulates human resource development	PPRD	-	Annual	The human resource development plan	Target 4.1

plans for the technical staff							
Public expenditure review and input and output efficiency evaluated	PPD PER/PFM report	-	2020, 2022	Public Reports	Expenditure Review	Target 4.1	
# of Teacher Resource Centres with ICT upgraded and at least one technical coordinator providing support to schools with a focus on teaching and learning	NIE/TRC report		Quarterly	Number of coordinator	TRCs with the	Target 4.1	
Create core KPIs for evidence-based decision making	PPRD MEMIS	-	Annual	KPIs developed		Target 4.1	
% of ESA 2018 recommendations are implemented for MEMIS	PPRD MEMIS	-	Annual	Number of recommendations for MEMIS implemented against recommended in ESA 2018		Target 4.1	
# of Policy makers and other stakeholders utilizing MEMIS for policy making, implementation and advocacy	PPRD MEMIS	-	Sample survey /Annual	Number of policy makers and other stakeholders using MEMIS		Target 4.1	
# of schools prepare SIPs using results of Quality Assurance Accountability Framework (SIQAAF) and the NALO results	QAD/PPRD – SIQAAF /MEMIS		Annual	Number of schools prepare SIPs using results of Quality Assurance Accountability Framework (SIQAAF) and the NALO results		Target 4.1	
# of schools showing progress in learning outcomes	QAD-NALO /MEMIS		2018,2020	Number of schools showing progress in learning outcomes		Target 4.1	
% of teachers observed effectively using ICT in classroom teaching in schools	QAD SIQAAF /MEMIS	-	Quarterly /Sample survey	Number of teachers observed effectively using ICT in classroom teaching in schools to the total number of teachers observed for the same		Target 4.1	
# of MoE staff and TRC coordinators trained in the	QAD	-	The beginning	Number of MoE staff and TRC coordinators trained in the		Target	

development of SIP	Report	of every year	development of SIP	4.1
MoE Finance department has the capacity to report on sub-sectors and conduct public expenditure review for cost-effectiveness	PPRD /Finance	Mid-Term	Mid-Term Report	Target 4.1
MEMIS have skilled staff to sustain the system in real time	PPRD /MEMIS	Annual	All MEMIS staff trained	Target 4.1
Basic framework prepared for Maldives integration with OECD conducted test The Programme for International Student Assessment (PISA)	QAD - PISA implement ation plan	Annual	Monitoring of PISA processes	Target 4.1
Establish a mechanism for systematic external review of schools	QAD External review reports	- 2018, 2020 (Revise)	A process document for systematic external review of schools	Target 4.1
Establish a robust system to conduct NALO	QAD NALO	- 2018, 2020 (Revise)	A process document for a robust system to conduct NALO	Target 4.1
# of atolls having at least two staff trained in conducting NALO	QAD NALO	- Annual	Number of people trained in conducting NALO by Atolls	Target 4.1
% of students observed effectively using ICT in classroom learning	NIE-Class room assessment	Quarterly /Sample survey	Number of students observed using ICT in learning to the total number of students observed who has access to ICT for learning	Target 4.1

- [i] The Early Development Instrument (EDI) is a population-based tool to assess children's psychometrically which assesses readiness to learn in the school
- [ii] 21st Century standards to be developed
- [iii] Criteria such as minimum two teachers trained and at least 3 drills conducted in a year, can be developed
- [iv] At least two-level certificates

VULNERABILITY REGISTER

Meeting Date:

Meeting Location:

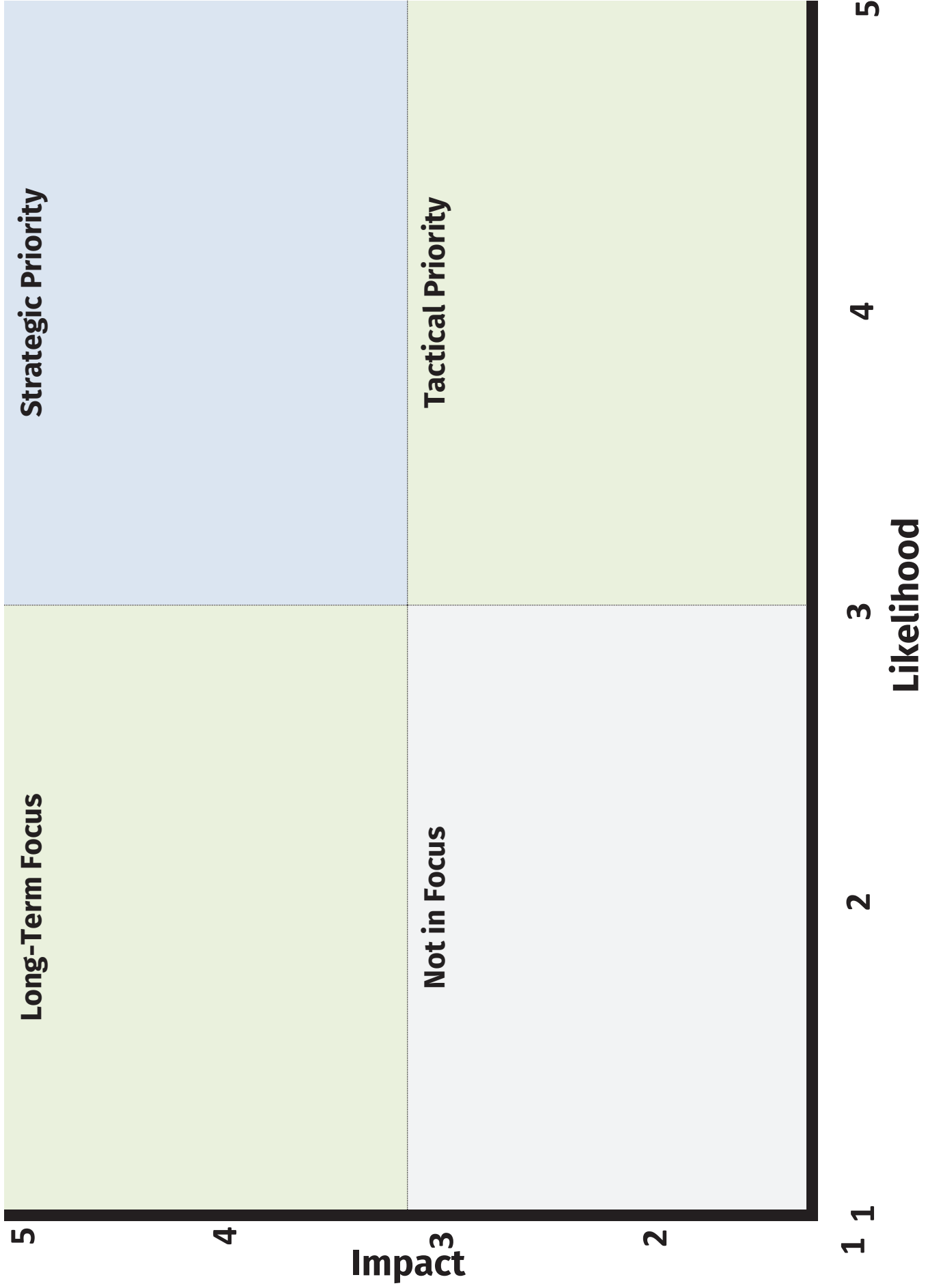
Chairman Name:

Participants present:

Name	Designation	Signature

Elicit vulnerabilities from the Committee members and fill out the register below:

#	Vulnerability	Relevant Y/N	# Members' Mentions



VULNERABILITY ACTION PLAN

Meeting Date:

Meeting Location:

Chairman Name:

Participants present:

Name	Designation	Signature

Vulnerability	Related Indicator Affected	Mitigation Strategy	Allocated Budget	Owner

EMERGENCY REVIEW REPORT

Meeting Date:

Meeting Location:

Chairman Name:

Participants present:

Name	Designation	Signature

Describe the incident / event / vulnerability occurrence that preceded this meeting, include date/time of the incident, affected areas, and as much other detail as possible:

Incident
Was this incident a vulnerability previously identified by the Committee? YES NO

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What mitigation strategies, if any, were in place to help minimize the impact of this particular incident?

Previous Strategies

Were these effective? If not, why not? / If so, what made them effective? (How do you know they were in/effective – what is your evidence?)

Previous Strategies Effectiveness

How will you change previous strategies / What new strategies will you implement to mitigate this vulnerability in the future?

Future Strategies