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ILO Country Office for Sri Lanka and the Maldives
submission to the Government of the Maldives

The Maldives minimum wage report

Assessment of the needs of workers and their families, and economic factors

December 2019

ILO Country Office for Sri Lanka and the Maldives

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The Maldives minimum wage report: Assessment of the needs of workers and their families, and economic factors

ILO Decent Work Technical Support Team and ILO Country Office for Sri Lanka and the Maldives, 2019

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Preface

The year 2019 marks 100 years of the International Labour Organization's existence as the premier world of work agency. Born out of the ashes of the First World War, ILO was created in 1919 as part of the Treaty of Versailles that ended the War. It was founded on the belief that social justice is essential to universal and lasting peace.

The driving forces behind ILO's creation arose from security, humanitarian, political and economic considerations. ILO is the first specialized agency of the United Nations, and the only agency to have tripartite (government, workers and employers) representation in its Governing Body.

At 100 years, ILO has renewed its commitment through the ILO Centenary Declaration for the Future of Work, 2019. The Declaration reaffirms ILO's century-old social justice mandate, and the critical role of international labour standards and social dialogue. The precepts of social dialogue, collective bargaining and tripartite cooperation are more relevant than ever in the new changing dynamics of the world of work. These powerful tools can ensure that enterprises grow productively, dividends are widely shared, workers are protected and their work fairly remunerated.

The Declaration is in close alignment with the targets set forth under the global Sustainable Development Goals. The Declaration highlights the need to shape macroeconomic, investment, trade, industrial and sectoral policies so that they promote sustainable, inclusive growth and decent work for all. Significantly, it calls for a "human-centred approach" to the future of work. That means investing in jobs, skills and social protection. It means supporting gender equality. It means adopting policies that promote an enabling environment for sustainable enterprises, economic growth and decent work for all.

The Republic of Maldives took an historic decision this centenary year to establish its first ever minimum wage threshold and system. This decision is in alignment with the ideals enshrined in ILO's Declaration and pursuant to the Employment Act, 2008 (Act No. 2/2008) on 26 May 2008 where the need for the introduction and implementation of a minimum wage system and the right for collective bargaining for all workers in the Maldives is outlined.

The Ministry of Economic Development subsequently sought technical expertise of the ILO towards this end. A technical team of ILO experts together with the active participation of a tripartite Salary and Wage Advisory Board (SAWAB) of the Maldives finalized this technical report in November 2019 for submission to the ministry.

The report draws on ILO's extensive technical expertise in evidence-based analysis to inform the deliberations of SAWAB and to buttress its recommendations on solid ground. The report is as much a reflection of evidentiary analysis as it is a reflection of the centrality of evidence-based social dialogue, as demonstrated in the work of SAWAB.

As the cost of living and other economic conditions are to no doubt change over time, the report's recommendations include ways in which this newly born minimum wage system could be further strengthened to adapt to changes, while maintaining the essential pillars of sound evidentiary analysis coupled with improved conditions for tripartite consultation.

Simrin C. Singh

Director, ILO Country Office for Sri Lanka and the Maldives

Table of contents

Acknowledgements	x
Executive summary	xiii
Abbreviations.....	xxiv
1. Background	1
1.1 The Salary and Wage Advisory Board and the consultative process	2
2. Maldives: Landscape and socio-economic context	8
2.1 Landscape: Tourism and the economy	9
2.2 Poverty and inequality	15
2.3 Employment and wages	17
2.4 Social protection schemes	29
3. ILO minimum wage policy guidelines and international labour standards	31
3.1 ILOs Conventions on minimum wages	31
3.2 Effective minimum wage policies	36
3.3 Evidence-based setting and adjustment of the minimum wage	37
4. International experiences with minimum wage systems	43
4.1 Minimum wages in Asia	43
4.2 Vietnam's minimum wage system	46
4.3 Malaysia's minimum wage system	49
5. Determining the methodology for fixing the national minimum wage in	54
the Maldives	
5.1 Methodologies	54
5.2 Results	70
5.3 Regional or sectoral minimum wages	107
5.4 Mechanism for adjustment	110
6. Recommendations	112
Appendix	148
Bibliography	174

Tables

Table 1	Labour force participation rate (LFPR) from South Aisan and .....18 and the Maldives, 2016
Table 2	Average per day per person calorie requirement (K/cal) and adult .....58 equivalence coefficients in different age groups and sex
Table 3	A normative food basket for adequate nutrition requirement per day per .....63 per adult person consumption
Table 4	Population share and weighted calories (K/cal) requirement per person per day ...71
Table 5	Per person and per consumption unit per day consumption of calorie .....73
Table 6	Per consumption unit per day calorie intake (K/cal) and monthly food .....76 expenditure (MVR) by fractile group
Table 7	Alternative estimates on food consumption expenditure required to .....77 meet the minimum calorie norm
Table 8	Monthly per consumption unit of non-food expenditure (MVR), classified by .....78 essential, other and excluded total by fractile groups
Table 9	Percentage of households reporting rent payment and average value of .....79 rent (MVR) per paying household
Table 10	Summary of different estimates of monthly cost of living and estimation .....81 of need-based monthly minimum wage per worker
Table 11	Characteristics of the labour market, 2016 .....82
Table 12	Prevailing mean and median monthly wage (MVR) payments by heads .....83 of payment for primary occupation, 2016
Table 13	Estimated values of the parameters for estimating equation 6 .....94
Table 14	Estimates of total wage bill needed to meet the wage gap if minimum wages .....97 are implemented at different thresholds
Table 15	Percentage of workers below different thresholds and the related .....99 wage gap (MVR) per worker at the sectoral level
Table 16	Monthly wage gap bill ('000 MVR) below different thresholds at the .....100 sectoral level
Table 17	Number and percentage of workers along with mean and median monthly .....102 wages (MVR) of foreign workers in the Maldives
Table 18	Percentage and number of workers below different thresholds of monthly.....103 wages and per worker monthly wage gap (MVR)
Table 19	Estimation of outward remittances with different minimum wage scenarios .....105
Table 20	Wage-to-profit ratio across three main sectors .....109

Figures

Figure 1	Number of establishments by type of accommodation facility, 2013–17	10
Figure 2	Maldives' GDP growth, 1990–2019 (%)	12
Figure 3	GDP per capita, PPP\$ South Asian countries	13
	(constant 2011 international dollar prices)	
Figure 4	Sectoral distribution of GDP, 2000 and 2016 (%)	14
Figure 5	GINI coefficient, 2016	17
Figure 6	Maldives' working-age population, 2016	18
Figure 7	Working-age population (age groups), 2016	19
Figure 8	Status of the working-age population, 2016	19
Figure 9	Female and male working-age population, 2016	20
Figure 10	Census 2014 and HIES 2016 sectoral comparison (%)	21
Figure 11	Mean and median wages by type of employment agreement, 2016	22
Figure 12	Mean and median wages by gender	23
Figure 13	Mean and median wages by sector, 2016	24
Figure 14	Question for those outside the labour market: What job would you want?	25
Figure 15	Minimum income for which workers would be willing to work as	26
	full-time workers	
Figure 16	Used criteria related to workers' needs	34
Figure 17	Used criteria related to economic factors	34
Figure 18	Evolution of the minimum wage policy in Vietnam	47
Figure 19	Mean household size and consumption unit per household in the atolls	71
	and the Maldives	
Figure 20	Per consumption unit per day calorie intakes in the Maldives	74
Figure 21	Percentage population consuming adequate calories and falling short of	74
	the 2,400 K/cal norm, by different fractile groups	
Figure 22	Productivity and ratio of the minimum wage to mean wages of	84
	upper-middle income countries, 2016	
Figure 23	Distribution of basic wages and salaries (including payments in kind), mean	85
	and median wages and salaries, minimum wages at a Kaitz ratio of 0.44	
Figure 24	Total Population 2016, selected SIDS (including the Maldives)	86
Figure 25	GDP in current USD 2016, selected SIDS (including the Maldives).....	87

Figure 26	Coastline (km) to land area (km ²) ratio, selected SIDS (including the Maldives).....	88
Figure 27	GDP per capita in PPP \$ International 2016, selected SIDS (including the Maldives)	89
Figure 28	Trade as a percentage (%) of GDP 2016, selected SIDS (including the Maldives).....	90
Figure 29	Tourism receipts as a percentage (%) of exports 2016, selected SIDS (including the Maldives)	91
Figure 30	International migrant stock as a percentage (%)of total population 2015,..... selected SIDS (including the Maldives)	92
Figure 31	Minimum wages 2016 from selected SIDS (PPP \$ International)	93
Figure 32a	Percentage of workers receiving wages and salaries below different thresholds	96
Figure 32b	Mean wage gap ('000 MVR) for those workers who are receiving wages and salaries below different thresholds	96
Figure 33a	Percentage of workers receiving wages and salaries below different thresholds across public and private sectors	101
Figure 33b	Mean wage gap ('000 MVR) for those workers receiving basic wages and salaries ... below different thresholds across private and public sectors	101
Figure 34	Percentage distribution of responses of enterprise owners/managers	106

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Ms. Mariyam Khalida

Chairperson of the Salary and Wage Advisory Board

Executive summary

Section 1. Background

Section 1 describes the context in which the Government of Maldives undertook the initiative to roll-out a minimum wage system for the country. After a decade of the enactment of the Employment Act, 2008 (Act No. 2/2008), there is a need to effectively operationalize and enforce some of the rights enshrined in the legal framework, including the implementation of minimum wages. The Minister of Economic Development of the Maldives requested the International Labour Organization (ILO) for technical support to establish a minimum wage system and also recommend a methodology to set a national minimum wage for the country.

Similarly, the president of the Maldives constituted the Salary and Wage Advisory Board (SAWAB) comprising five members with representatives from employers' and workers' sides. The SAWAB and its Secretariat have worked arduously with ILO and other government organizations to assess and collect the available data and information to conduct the study that will serve the purpose of developing the proposed methodologies. A process of full consultation was underpinned by over 60 meetings and the participation of 400 or more individuals from diverse backgrounds to better understand the realities of employers and employees in the Maldives. The sessions provided the Board with great insights with regard to the challenges and concerns faced by both employers and employees. Additionally, a Technical Committee representing the relevant ministries was constituted to provide a forum for the review and discussion of the methodologies for setting minimum wages, thus providing inputs on the findings and potential options leading to the drafting of this report.

Section 2. Maldives' landscape and socio-economic context

Section 2 gives a detailed account of the landscape and socio-economic background of the Republic of Maldives. It highlights the significant challenges that the Maldives faces as a Small Island Developing State in terms of a limited domestic market, remote location, environmental vulnerability, and external economic dependence. Tourism plays a vital role in the Maldivian economy and has contributed to changing the status of the country to an upper-middle income

country. The sector continues to be a dominant activity and has different backward and forward linkages to other economic areas which are crucial to the development of the country. However, the economy is vulnerable to exogenous shocks, and real growth fell sharply twice in the last two decades, once due to the Indian Ocean tsunami of 2004 and once because of the 2008–09 global financial crisis.

On the other hand, fishery still represents a substantial foreign exchange contributor to the economy, supports food security to the islands, and is an important source of national employment. The country as a whole has reduced poverty in the last few years. However, many persons remain clustered just above the poverty line and face the risk of falling back into poverty. The Gini coefficient reveals that inequality lies mainly between two regions in the country: Malé and the atolls.

Based on the 2016 Household Income and Expenditure Survey (HIES), this section has identified that the Maldives has a relatively young working population – 38 per cent constitutes the youth cohort from 15 to 29 years. Most male workers are employed, and few stay outside the labour force. On the contrary, most female workers remain outside the labour force. Wage earners constitute 71 per cent of total employment and earn an average monthly rate of 9,014 Maldivian rufiyaas (MVR). Yet half of all wage earners are paid at least MVR7,144 a month. The highest average wage-paying sectors include public administration, transport, construction, professionals and technical activities, information and communication, finance, and entertainment. These sectors concentrate more than 43 per cent of wage earners, and amongst these sectors, only public administration has a median wage below MVR8,000 a month. In contrast, accommodation and food, administrative activities, and health and social work are sectors where half the workers earn MVR6,500 a month or less.

Approximately 48,000 persons would be willing to join the labour market to work as a full-time worker for a wage equal to MVR5,000. Additionally, 30,405 women and 6,885 men (not in employment) are willing to work in manual jobs that require no specific skills. Currently, there is a significant share of foreign workers engaged mainly in the construction and tourism sectors, with lower wages than average employees. Firms employ foreign workers as these workers have a lower reservation wage than the Maldivian nationals and will work for lower wages and other benefits.

An adequate minimum wage system opens the possibility of increasing job opportunities that match the aspirations of nationals, especially the youth. However, a minimum wage policy by itself will not be able to increase the participation of national workers in the labour market. Specific strategies are needed to increase employability and to close the gaps between the supply and demand of labour.

Finally, the Maldivian social protection system has in place schemes that guarantee essential benefits that may reduce the risk of financial burden throughout the life cycle of a person. This policy ensures that workers' incentives to work are not driven only to sustain their livelihoods but to also increase their standards of living.

Section 3. ILO minimum wage policy guidelines and international labour standards

Section 3 looks into international labour standards and ILO's policy guidelines regarding minimum wages to establish a framework for the Maldivian minimum wage system. The Minimum Wage-Fixing Machinery Convention, 1928 (No. 26) and the Minimum Wage Fixing Convention, 1970 (No. 131) are the most important international labour standards that address minimum wages. The latter pays special attention to developing countries, protecting wage earners against unduly low wages. Convention No. 131 puts forward a balanced approach to determining the level of minimum wages. The elements to be taken into account when fixing the minimum wage are the needs of the workers and their families and economic factors.

At the heart of Convention No. 131 is the process of full consultation that has to be underpinned by evidence-based arguments. ILO's Minimum Wage Fixing Recommendation, 1970 (No. 135) encourages the use of surveys of national economic conditions to look into the trends of socio-economic indicators such as income per capita, cost of living, productivity, and employment, in order to be able to make appropriate decisions when setting the minimum wage level.

Convention No. 131 and Recommendation No. 135 provide essential elements to construct a minimum wage system according to national circumstances. With regard to setting an adequate minimum wage, ILO's minimum wage guidelines highlight some of the methods that are used to estimate the needs of the

workers and their families, as well as to identify socio-economic indicators for policy-makers to balance their decisions.

The report also addresses the importance of an evidence-based approach to backstop the arguments raised by social partners. Drawing upon Convention No. 131, this report relies on an evidence-based approach to propose methodologies and establish a range of base values to support SAWAB in their mantle to recommend an adequate minimum wage at the national level.

Section 4. International experiences with minimum wage systems

Section 4 of the report examines the salient features in Convention No. 131 regarding the establishment of a minimum wage system. The machinery for setting minimum wages should enable a process of full consultation through evidence-based social dialogue. But it also requires proper enforcement of minimum wages to ensure that workers receive adequate protection.

This section looks at the evolution of minimum wage policy in Asia. The scope of the coverage in the region has progressively shifted from a specific group or sector coverage, and, only recently, to an extension of minimum wages to all wage earners. Countries in the South Asian context (e.g. India, Sri Lanka and Nepal) have taken important policy decisions to extend the coverage of minimum wages in their countries.

However, significant challenges appear in designing minimum wage systems that produce and use statistical information to make appropriate evidence-based decisions. Similarly, the question raised is how countries integrate technical analysis with the process of social dialogue in the context of minimum wage determination. Vietnam and Malaysia are two countries in the region that have strengthened their minimum wage systems over time. These systems have evolved and have introduced different elements to improve their minimum wage policy. In Malaysia and Vietnam, technical boards play a crucial role in the collection and analysis of information. These technical bodies develop sound evidence-based studies, thus providing technical support to the social partners in their deliberations.

These international practices and country experiences may contribute to the design of the minimum wage machinery and system of the Maldives.

Section 5. Determining the methodology for fixing the national minimum wage

This section presents in detail the methods adopted for, and the evidence-based results on, the fixation of minimum wages. The approach and methods utilized to fix minimum wages in the Maldives follow a well-established framework of estimating the consumption needs of the workers and their families, as also the prevailing economic factors in the country. The section, in addition to determining national-level minimum wages, also presents a mechanism of adjustment of minimum wages over time, and the methods to estimate regional/sectoral minimum wages. It also offers estimates on the number and percentage of workers likely to be affected by minimum wages and the related financial implications in terms of the increased wage bill needed to implement the minimum wages.

The estimation of minimum wages is grounded in the Maldives and international-level data. The most important database considered for the purpose is the Household Income and Expenditure Survey (HIES) conducted by the National Bureau of Statistics (NBS), Maldives. Also used was data on the calorie content of different food items, recommendation on calorie intakes, and adult equivalence scale of family members from the Food and Agriculture Organization (FAO) of the United Nations. The analysis also used other data and evidence from a range of sources: the Health Protection Agency (HPA), Ministry of Health, the Maldives Pension Administration Office, the Human Resources and Employment Department of the Ministry of Economic Development Office, all from the Government of Maldives; World Bank Development Indicators of the World Bank; and, Small Island Development States (SIDS) of the United Nations System.

To estimate the consumption needs of workers, the method used an international framework to assess the food and non-food consumption expenditure of the needs of workers and their families. The food expenditure need was estimated using the calorie need of workers, 2,400 K/cal per adult person per day. Various alternative analyses reflected that the calorie norm of 2,400 K/cal per adult person per day matched the consumption expenditure of the population in the Maldives in the 2nd to 3rd fractile groups (20 groups at 5 per cent interval). This section presents a range of options for representative food expenditure. It recommends an average per adult person per month food expenditure of the 2nd and 3rd fractiles where the calories norm was met. The average estimate of food expenditure in the 3rd fractile is MVR840 per adult person per month.

The classification of non-food expenditure items in the Maldivian context is a result of a thorough consultative process. All the non-food items, as reported in the HIES survey, were grouped into three different categories – “essential”, “other” and “excluded”. The rationale behind the three divisions reflects the basic needs of the workers (e.g. housing rent, clothing, footwear, fuel, utilities, transport, etc.) and other common needs. However, there is a long list of non-food items that are either not of common use or are fully subsidized by the Government of Maldives. The analysis excluded such items. For the first two groups – essential and other – the expenditure of the median and the 5th fractile population, respectively, were considered as representative of the needs of the workers. The value of non-food items is estimated to be MVR1,448 per consumption unit per month. However, this analysis highly underestimated the expenditure on account of housing rent. Based on the average value of rent paid by only rent-paying households, this study reflects an appropriate rent value as falling between MVR1,254 and MVR1,614 per consumption unit per month. Adding the values of different food and non-food items produced four different options of the total consumption needs of the workers’ families. The analysis also considers the number of wage workers per family and dividing the entire consumption needs of the workers’ families by the number of wage workers to arrive at the estimate of need-based minimum wage rate per month. Accordingly, the 2016 estimated need-based minimum wages ranged between MVR5,777 and MVR8,635 per month.

This section also presents a range of robustness checks of these estimates using the Kaitz index, Malaysian formula and other international experiences. For instance, based on the similarly placed SIDS, the 2016 average minimum wage ranged between MVR4,761 and MVR5,522 per month. Most of the evidence reflects a minimum wage in the range of MVR3,966 on the lower side to MVR6,292 on the higher side. The section also presents implications of minimum wages in terms of the number of workers being affected and the related financial consequences at different levels of minimum wages. At the lowest level of minimum wages of MVR5,500, 23 per cent of workers will benefit, with a financial implication of MVR28 million per month. On the higher side, at MVR8,000 as minimum wage, more than 55 per cent workers will benefit, with a financial impact of MVR161 million per month. Among the economic sectors, the most affected sectors are agriculture, fishing, trade, and accommodation and food.

This section also presents the implications of minimum wages only for foreign workers, estimated at more than 70 per cent of foreign workers benefiting even at the level of MVR5,000 as minimum wage. Finally, an analysis of the implications

of remittances is also brought forward, considering that a large percentage of foreign workers will increase their income by benefiting from the minimum wage determination. The results of the analysis suggest that an increase in outward remittance from foreign workers might range from 34 per cent to 63 per cent of total remittances, depending on the level of the minimum wage.

On the issue of adjustment and revision of minimum wages over the years, the section proposes that adjustments to minimum wages should take into account inflation and changes in labour productivity.

Section 6. Recommendations

Section 6 contains detailed recommendations relating to establishing the minimum wage system in the Maldives and fixing minimum wages through the use of evidence-based information. It proposes methodologies that address the needs of the workers and their families and economic factors. Some of the recommendations are as follows:

- Most effective minimum wages should afford adequate protection to all workers. The report recommends the minimum wage covers all groups of wage earners, including women, youth, domestic workers and migrant workers, regardless of their contractual arrangements.
- If in-kind benefits are to be included in the minimum wage, it is essential to ensure that the value attributed to such allowances is fair and reasonable, and restricted to a limited proportion of the remuneration.
- It recommends that SAWAB comprises an equal number of employers' and workers' representatives, nominated by their organizations, while ensuring representation of both women and men.
- It is suggested that a Technical Board or Technical Secretariat be appointed permanently. The technical body may jointly work or coordinate with official institutions such as the NBS and other institutions to strengthen the minimum wage system.
- There must be a regular production of good and reliable national data on expenditure, employment, wages, productivity and hours worked. Income and expenditure, labour force and establishment surveys should be conducted regularly to capture the realities of the labour market in the Maldives so that policy-makers can make informed decisions.

- The effective implementation of minimum wage provisions requires strengthening the unit responsible for labour and employment. Other measures to enforce compliance of minimum wages include: (i) the establishment of grievance channels (e.g. toll-free hotlines, web-based and desk complaint mechanisms); (ii) handling statistics of statutory inspections, the number of complaints regarding non-compliance of minimum wages, claims presented to the labour inspectors, prosecutions relating to minimum wages, notifications, sanctions imposed and recovery of wages; (iii) monitoring the implementation of minimum wages and detecting levels of non-compliance; (iv) carrying out periodic surveys to monitor compliance under labour legislation.
- As practices and the law align to Convention No. 131 and Recommendation No. 135, we recommend the ratification of Convention No. 131. The international labour standards provide guidelines as well as useful frameworks for both employers' and workers' organizations.
- To set the level of an adequate minimum wage, we recommend a balanced approach based on Convention No. 131, and that the minimum wage discussion is constructed over reliable, evidence-based information of the country and methodologies to support the aforementioned balanced approach.

Needs of the workers and their families (NWF)

- This report recommends that the needs of the workers and their families should be able to meet a working family's minimum required expenditure on food and non-food items, which should be adequate to preserve the efficiency of workers at their job and the health of their families.
- The report used three different methods to estimate the value of the minimum recommended intake (per adult equivalent consumption unit per day) of 2,400 calories. The report recommends monthly food values ranging from MVR773 to MVR907.
- To estimate the required expenditure on non-food items, we recommend identifying two groups of items: (i) essential non-food items and (ii) other non-food items.
- This report recommends that the required expenditure of essential non-food items – not including rent – be equal to the median class of the expenditure distribution. Other non-food items should be equal to the

expenditure at the lowest fractile group where the calories norm or at the poverty line.

- This report recommends, for rent, the expenditure values between the 6th and 8th fractile percentage of households paying rent. The weighted average of rent value for households across the 6th and 8th fractiles is estimated to be MVR1,468 monthly per adult equivalent consumption unit.
- This report recommends that the minimum wage need-based approach (NWF) for 2016 be estimated between MVR5,777 and MVR8,635.

Economic Factors (EF)

- This report recommends comparing the minimum to mean wage ratios of other countries with characteristics similar to the Maldives. Additionally, it supports identifying countries with similar features to the Maldives that already have minimum wage systems in place, and to use their minimum wage levels as a benchmark to set Maldives' minimum wage level.
- This report, taking into account economic factors of upper-middle income countries from 2016, recommends using a 0.44 minimum to mean wage ratio (Kaitz index) as a reference point to set the level of the minimum wages in the Maldives. Using this indicator on the 2016 wage distribution of the HIES, the minimum wage comes at a monthly rate of MVR3,966.
- This report analysed the levels of minimum wages measured in PPP \$ International of the following SIDS: Group 1 (15 countries) – Belize, Seychelles, Antigua & Barbuda, Barbados, Cabo Verde, Bahamas, Guyana, the Marshall Islands, Aruba, Dominica, Fiji, Palau, Saint Kitts & Nevis, Samoa, and Timor-Leste; Group 2 (four countries) – Dominican Republic, Grenada, Mauritius, and Saint Vincent and the Grenadines. It recommends using the benchmarks of countries with similar economic development based on GDP PPP per capita and the status of upper-middle income country groups.
- This report revised the 2016 minimum wages in PPP \$ International of SIDS with characteristics similar to the Maldives. It recommends using the range of minimum wages of these countries as a benchmark to set the minimum wage for the Maldives. The minimum wage values are estimated from PPP \$ International from 469.1 to 544.1, which correspond to MVR4,761 to MVR 5,522 a month.

- This report estimated the weighted average of the ratio of the minimum wage to GDP per capita in PPP \$ International (4.41 per cent) of the SIDS with characteristics similar to the Maldives. The ratio, calculated with the GDP per capita PPP \$ International and converted in local currency, recommends MVR6,292 a month as an additional international minimum wage benchmark to take into account.
- This report uses 2016 estimated benchmarks adopted from an international context and recommends that minimum wages for 2016 in the Maldives should be set in the range of MVR3,966 to MVR6,292 a month.

The level of minimum wages in the Maldives

- This report suggests adopting a balanced approach when setting the national minimum wage of the Maldives, contrasting the 2016 values of the NWF approach, ranging from MVR5,777 to MVR8,635, and those values from the EF approach, ranging from MVR3,966 to MVR6,292 a month. This report has analysed the impact of the minimum wages that range from MVR5,000 to MVR8,000 on the share of workers affected and the wage bill, at both national and sectoral levels. There is also an analysis of the remittances due to the increase in wages of foreign workers. It recommends that SAWAB should take into consideration these implications to define the level of the national minimum wage.
- This report also suggests using productivity ratios or compensation of workers' ratios of different sectors, if there would be an interest to define a sectoral minimum wage level for specific industries. If sectoral minimum wages are set, keep the number of sectors at the minimum.
- This report recommends that the values of the minimum wage need-based approach and economic factors approach for 2016 be adjusted by the consumer price index (CPI) to arrive at the 2019 values.
- The report recommends that the updated monthly minimum wage of the Maldives falls within the range of MVR6,008 and MVR6,544; balancing both NWF and EF approaches.
- This report recommends that minimum wages be fixed at round numbers, which are much easier to disseminate, thereby facilitating the minimum wage enforcement process.

- This report recommends continuing using evidence-based information and similar methodologies to revise and set the minimum wages for the next revisions (every two years). If the information or data of the surveys is not produced every two years, it is recommended that the minimum wage be adjusted by the CPI to reflect changes in the cost and also be adjusted by the change in labour productivity measured by the change of the GDP per worker.
- This report recommends launching a minimum wage campaign with awareness-raising activities and information dissemination strategies at the national level.

Abbreviations

AEEI	adult equivalent energy intake
AIMS	Africa, Indian Ocean, Mediterranean and South China Sea
AOSIS	Alliance of Small Island States
APESO	Asia-Pacific Employment and Social Outlook
ASEAN	Association of Southeast Asia Nations
BoP	balance of payments
CLR	coast to land ratio
CPI	consumer price index
CU	consumption unit
DWT	Decent Work Team
EF	Economic factors
FAO	Food and Agricultural Organization
FE	food expenditure
GDP	gross domestic product
HIES	Household Income and Expenditure Survey
HPA	Health Protection Agency
ICMR	Indian Council of Medical Research
ILO	International Labour Organization
LFPR	labour force participation rate
MATI	Maldives Association of Tourism Industry
MED	Ministry of Economic Development
MIRA	Maldives Inland Revenue Authority
MMA	Maldives Monetary Authority
MNACI	Maldives National Association of Construction Industry
MoHR	Ministry of Human Resources (Malaysia)

MOLISA	Ministry of Labour, Invalids and Social Affairs (Vietnam)
MPAO	Maldives Pension Administration Office
MPCU	Monthly per capita consumption unit
MVR	Maldivian rufiyaa
MW	minimum wage
NBE	need-based household expenditure
NBS	National Bureau of Statistics
NFE	non-food expenditure
NGO	non-governmental organization
NMF	Needs of the workers and their Families
NMWC	National Minimum Wage Committee (Myanmar)
NPR	Nepalese rupee
NMW	National Minimum Wage
NWC	National Wages Council
NWCC	National Wages Consultative Council (Malaysia)
NWF	needs of the workers and their families
NWTC	National Wages Technical Committee (Malaysia)
PCU	per consumption unit
PLI	Poverty Line Income
PPP	purchasing power parity
RCA	recommended calories allowance
RM	Malaysian ringgit
SAWAB	Salary and Wage Advisory Board
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SME	small and medium-sized enterprise
SOE	state-owned enterprise

TCE	total consumption expenditure
TCE _{pcu}	per consumption unit consumption total consumption expenditure
UNWTO	United Nations World Tourism Organization
VGCL	Vietnam General Confederation of Labour
WTO	World Trade Organization

1. Background

In recent years, both economic and wage growth in Asia and the Pacific has been higher than other parts of the world. However, outcome distribution becomes a concern when rising inequality and prevailing low wages remain salient features of some economies, especially in most South Asian countries. To address some of these social and economic imbalances, many countries have turned to wage and social protection policies to ensure an inclusive growth process and to promote decent work for all.

Within South Asia, many countries have strengthened their minimum wage systems. Countries like India have prioritized the extension of the minimum wage coverage through a national universal minimum wage (floor wage) stipulated in the recent Code on Wages, 2019 (henceforth Wage Code Act). Sri Lanka established a national minimum wage in 2016 (National Minimum Wage of Workers Act, No. 3 of 2016) and continues to look at ways to improve its minimum wage setting machinery. Similarly, in the past few years, Nepal and Pakistan have actively revised and fixed minimum wages through a process of consultation within their tripartite wage boards.

The majority of the member States of the International Labour Organization (ILO) have adopted statutory or collectively bargained minimum wages.¹ In Europe, all countries have a minimum wage system, with either statutory or collectively bargained minimum wages. Similarly, most countries in the Americas make use of minimum wages, with only few exceptions. There are more exceptions in Asia, Africa and among the Arab states in particular. The Maldives is one of the few countries in Asia which is yet to implement a minimum wage system despite the fact that in the first Employment Act of 2008 it introduced work contracts that set minimum wages, working hours, work conditions and employee benefits. Some of the provisions in the aforementioned Act have not yet benefited workers in the country.

A decade after the enactment of the Employment Act, 2008 (Act No. 2/2008) on 26 May 2008, there is a need to effectively operationalize, implement and enforce some of the rights enshrined in the Act, including the introduction and

¹ The ILO has 187 member States: 186 of the 193 UN member States plus the Cook Islands are members of the ILO. The UN member States that are not members of the ILO are Andorra, Bhutan, Liechtenstein, Micronesia, the Principality of Monaco, Nauru, and the Democratic People's Republic of Korea. The Kingdom of Tonga, a South Pacific island nation, became the 187th member State of the ILO on 24 February 2016.

implementation of a minimum wage system and the right to collective bargaining.

The Human Rights Commission of Maldives report (HRCM, 2009) mentioned nonpayment of wages to migrant workers being a persistent problem. It also pointed out that tripartite consultations (government, workers and employers) should be established to set minimum wages in the country, which in turn would also provide workers' and employers' associations with a legal basis to function.

Currently, there is also a demand for higher wages to counterbalance some socio-economic disparities that have emerged with economic growth. The Maldivian government is committed to improving and strengthening labour-related conditions in the country, and the Ministry of Economic Development is tasked with the mandate of implementing policies related to labour and employment.

In this context, on 29 February 2019, the Minister of Economic Development of the Maldives, the Hon. Uz Fayyaz Ismail, kindly requested technical support from ILO to conduct in-depth research for setting up a minimum wage system for the Republic of Maldives, and to recommend a methodology to set a national minimum wage for the country. This is a historical step towards establishing a minimum wage system that will work on evidence-based methodology to set the national minimum wage underpinned in the provisions of international labour standards and drawing from international country experiences. With increasing underemployment and unemployment among the youth population, and exploitative labour practices, especially among international migrant workers, there appears to be an urgent need for a minimum wage system in the country.

To this effect, the Government of the Maldives has established a Salary and Wage Advisory Board² (SAWAB) to initiate work on determining a minimum wage system for the country. The SAWAB comprises five members³ (two workers' representatives and two employers' representatives, presidentially appointed, chaired by a government nominee). This report supports SAWAB's efforts to underpin the minimum wage recommendations, and to build technical capacity through the use of the proposed methodologies.

This report was developed over a four-month period. A technical committee was constituted to validate the initial methodologies and baseline information for the

² In the translated version of the Employment Act, 2008 (Act No. 2/2008), article 57 refers to a Salary Advisory Board. However, in the President's communications, the term used is Salary and Wage Advisory Board (SAWAB) which will be used throughout this report.

³ Ms Mariyam Khalida (Chairperson), Mr Ibrahim Noordeen, Mr Ali Adam, Mr Mauroof Zakir and Mr Adnan Haleem.

determination of the national minimum wage in the Maldives. Throughout the process, there has been permanent involvement and interaction with the different stakeholders. The lead consultant and members of the SAWAB Secretariat have extensively reviewed all available reports and official information and data on the subject. Additionally, this report has benefitted from the existing literature on the international minimum wage practices, analysis of relevant thematically arranged data sets, and support from international experts of the ILO and other institutions.

1.1 The Salary and Wage Advisory Board and the consultative process

Some concerns with regard to a minimum wage system relate to maintaining a balanced approach to secure the protection of workers and to create an enabling environment which promotes sustainable enterprise development, growth and competitiveness of the country.

Furthermore, the Minimum Wage Fixing Convention, 1970 (No. 131) from ILO calls to “establish a system of Minimum Wages which covers all groups of wage earners whose terms of employment are such that coverage would be appropriate”. It is for the competent authority in each country to determine, through full consultation with the representative organizations of employers and workers, the determination of the groups of wage earners to be covered by the minimum wage system.

Article 59 of the Employment Act, 2008 has triggered the work on determining a minimum wage system for the country. SAWAB has the mandate to review the establishment of the minimum wage every two years. Thus, the Board Secretariat, with assistance from the Technical Committee, is responsible for taking up the mantle of collecting available statistical data on key socio-economic indicators.

Moreover, it was established that SAWAB will determine a minimum wage through a process of consultation with the representative organizations of the employers and workers concerned. In addition, it will establish the groups of wage earners to be covered, including possible exemptions that should be kept to a minimum.

1.1.1 The consultative process

Since this is the first time a minimum wage system is being set up in the Maldives, SAWAB decided to proceed with evidence-based analysis with technical assistance from ILO. The evidence-based analysis shall enable SAWAB to set the foundation for effective social dialogue and to fix an appropriate level of minimum wage for the country.

To this end, the Board and its Secretariat commenced work on the minimum wage from June 2019. A three-day workshop followed in September 2019, conducted in collaboration with ILO experts and with assistance from the Ministry of Economic Development. This workshop shared the principles of effective wages policies with the SAWAB members and, subsequently, engaged with government officials as well as several stakeholders (representatives of both employers and employees).

The workshop sessions focused mainly on introducing the concept of a minimum wage to the Maldives through its definition and also its historical origins (the establishment of ILO's international labour standards on minimum wages). The sessions focused on capacity building to design and implement coherent and effective minimum wage policies by examining major wage policy issues, new trends and developments, and a diverse set of country experiences, as well as by providing some examples of different minimum wage systems around the world. These sessions helped the Board to assess the informational capacity of the various ministries and other government organizations. By the end of the sessions, the Board was able to identify all the available data that could be used to develop a methodology to establish an adequate minimum wage in the Maldives.

During these sessions, it was also agreed by the Board to establish a Technical Committee upon ILO's recommendation. Hence, a Technical Committee, representing the relevant ministries, was constituted to provide a forum for the review and discussion of methodologies of setting minimum wages, providing inputs on findings and potential options that will lead to a robust study on a minimum wage system in the Maldives.

It was also decided that the Board would continue to hold regular stakeholder meetings to stay up to date with public opinion on minimum wages and to ensure an inclusive process of consultation. Hence, the Board and its Secretariat engaged in a consultative strategy that was divided into two parts: meetings with data collectors and other government organizations, and meetings with stakeholders (appendix table A1).

For the first part, the Board took the initiative, arranging meetings with various government ministries and other government organizations. The purpose behind this move was to establish a point of contact with the respective public institutions to enable the smooth flow of data. Through these meetings, the Board met 18 organizations and all available data relating to minimum wage work was collected. These meetings enabled the Board and its Secretariat to establish a permanent channel of communication with key organizations, allowing to clarify and update data as and when required.

For the second part, meetings with stakeholders included organizations representing both employees and employers, associations representing marginalized groups in the workforce, advocates of employees' rights, and private businesses, especially from small and medium-sized enterprises (SMEs). These meetings helped the Board understand public perception towards minimum wage. It also helped build a comprehensive picture of the existing working conditions and the challenges facing employers with regard to operational costs. The Board met 50 associations/businesses/advocates as part of the stakeholder meetings.

The consultation meetings provided the Board with insight into the challenges and concerns facing both employees and employers. The meetings allowed these two stakeholder groups to air their views on minimum wage and how it could potentially affect both business as well as the economy. Additionally, in these interactions the Board was able to gauge the existing salary and wage structures of commercial ventures, which assisted in the identification of workers at the lower wage spectrum. This consultative process continued until the final recommendation to the Minister of Economic Development in December 2019.

Several important points emerged from these meetings, including employees' concerns regarding the lower wages they receive compared to the persisting high living costs in the Maldives (especially in the capital city Malé). So, many employees advocated a living wage to match the high living standards in the Maldives. Moreover, employees from certain sectors such as tourism demanded a higher minimum wage as they believed that the tourism receipts are high compared to other sectors and the revenue generated high enough for businesses in this sector to pay higher wages.

Meanwhile, employers, especially the SMEs, too raised some major concerns including, importantly, the foreseen increase in their operational costs due to a minimum wage. This is largely due to the challenge of finding local employment for jobs involving heavy physical work, and the difficulty they faced in retaining

local workers which resulted in high employee turnover. Many employers demanded that the in-kind benefits provided to workers be included in the minimum wage calculation. This issue was mainly brought up in connection with the high number of low-level expatriate workforce prevalent in both construction and fish processing/exporting industries. Since the in-kind benefits provided to expatriate workers are an additional cost incurred as part of the remuneration package, they also reported difficulty in replacing expatriate workers with locals, especially in the low unskilled labour category.

To summarize, the number of organizations/associations/businesses met by the Board adds up to 60 meetings in total. Meetings were held both with data collectors and stakeholders. Moreover, these meetings assisted in establishing social dialogue with approximately 300 individuals with regard to the establishment of the minimum wage and with respect to the work carried out by the Board.

Throughout the consultation process, the Board and its Secretariat faced several challenges because of inadequate representation of the workers from both associations representing the workers and from the existing workers' associations met by the Board.

The Board acknowledged the necessity and importance of sharing the process of minimum wage determination with the public. A public consultative process will enable broader ownership of the methodology as well as contextualize the minimum wage system to the Maldivian setting.

Hence, further consultations were carried out with the ILO's technical team visit on 23 September 2019. The mission's main objective was to present the first draft of the methodology to SAWAB members. Apart from this, the Board arranged a meeting and consultation with the Technical Committee members to present the minimum wage setting methodology and to fine-tune it within the Maldivian context. As a result, key aspects of the methodology, especially the classification of non-food items, were thoroughly analysed by the Technical Committee.

Furthermore, discussions with academia and industry and sector professionals were held with regard to the minimum wage setting methodology to obtain technical inputs. ILO's mission also presented the methodology to groups and individuals advocating employees' rights. The meetings were fruitful and helped share the need-based methodology, including disseminating information on all the elements that were considered when taking into account the workers and their family's needs.

The ILO visit was followed by an additional Technical Committee meeting on 6 October 2019 to revise the components of the minimum wage setting methodology, including the analysis of non-food expenditure. Through this process, the Technical Committee re-categorized the non-food items that are captured in the Household Income Expenditure Survey (HIES, 2016). The discussion enabled the Board to better understand the expenditure patterns of Maldivians and to adjust the methodology to reflect these consumption and expenditure practices. For example, when taking a closer look at the household expenditure patterns, the Technical Committee advised the re-categorization of certain items such as school uniforms as part of the “essential” category among others (See appendix table A3).

Overall, the consultation process enabled the Board to assess the current social and economic environment in the Maldives. This process further complemented the analysis carried out to estimate base values for both the needs-based approach and the economic factors. Through these discussions, the Board was able to fine-tune its minimum wage setting methodology to reflect the distinct economic and cultural norms of the Maldives. Therefore, the Board Secretariat committed itself to continue with the public consultations until the finalization of the report.

2. Maldives: Landscape and socio-economic context

The Republic of Maldives is considered to be a Small Island Developing State⁴ (SIDS) and the smallest country both in population and size within the South Asian context. Most SIDS face similar economic, social and environmental challenges which influence their economic and social development.

All countries experience external and internal shocks that will impact the economy, but SIDS are particularly vulnerable to exogenous factors such as socio-economic and environmental occurrences. Another common feature among most SIDS is their external dependence. Due to limited domestic demand, development in these states is often export-driven and dependent on sectors like tourism which become the backbone of the economy. SIDS are at a particular disadvantage and usually face specific constraints while pursuing sustainable economic growth. Many researchers have summarized these hurdles under four categories, mainly due to their small size, remote location, climate and environmental vulnerability, and socio-economic factors (Pratt, 2015).

Although many SIDS are classified in their regional groups⁵, and possibly face similar challenges, many have developed differently. Some authors have suggested that SIDS, as a unique category, may be subcategorized according to specific issues (Alonso, Cortez and Klasen, 2014). However, other authors have chosen to selectively categorize SIDS in different group definitions using a particular set of indicators based on relevant concepts (Mounsey and Singh, 2018). This report revises these group classifications to achieve a comparative analysis with other SIDS to establish similar minimum wage benchmarks.

⁴ The United Nations classifies the Maldives as a small island developing state (SIDS). The SIDS classification regards the recognition that a distinct group of countries faces specific economic, social and environmental vulnerabilities due to their inherent characteristics.

⁵ UN Members (38): Atlantic, Indian Ocean and South China Sea (AIS). (9): Bahrain, Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, Sao Tomé and Príncipe, Seychelles, Singapore. Caribbean (16): Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago. Pacific (13): Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, Vanuatu. Non-UN Members/Associate Members of Regional Commissions (20): American Samoa, Anguilla, Aruba, Bermuda, British Virgin Islands, Cayman Islands, Commonwealth of Northern Marianas, Cook Islands, Curacao, French Polynesia, Guadeloupe, Guam, Martinique, Montserrat, New Caledonia, Niue, Puerto Rico, Sint Maarten, Turks and Caicos Islands, U.S. Virgin Islands. See UN sustainable development goals website, <https://sustainabledevelopment.un.org/topics/sids/list> [accessed Oct. 2019].

2.1 Landscape: Tourism and the economy

The Republic of Maldives is located in the Indian Ocean at the level of the equator and comprises a land area which includes 20 natural atolls, and 1,192 islands. The estimated population accounts for 533,941 persons, according to the National Bureau of Statistics (NBS) in September 2019. The population is widely dispersed across 187 inhabited islands, and approximately 38 per cent live in the capital city Malé (an island of roughly 2 square kilometres). The population of Malé is boosted by a large transient population from the outer atolls, as well as tourists visiting the capital island (Shakeela, Ruhanen and Breakey, 2011).

Similar to other SIDS, the Maldives faces most of the problems mentioned above. It is a small, remote island, vulnerable to external shocks. Various characteristics distinguish the Maldives from other economies in the region: small size population; limited domestic demand; limited economic diversity in its sectors; lack of access to natural and mineral resources (other than fisheries) including land for agriculture. Most of the food and services required in the country are imported and accounted for 72 per cent of the gross domestic product (GDP) in 2016. The country is heavily dependent on foreign exchange earnings from tourism. Fortunately, the Maldives has a competitive advantage as a privileged tourist destination, with quality sand and beaches, transparent ocean water, and a tropical climate throughout the year.

Tourism plays a vital role in the Maldivian economy, as it represents approximately a quarter of the country's GDP with a 1.71 output multiplier, and also enjoys a robust forward linkage with the transportation sector (Pratt, 2015). On the other hand, as with the other SIDS like Tonga, Seychelles, and Saint Kitts and Nevis, the Maldives has become more vulnerable since 2010. This vulnerability is mostly due to the country's significant dependence on oil consumption for electricity generation (Praene, Payet and Bénard-Sora, 2018). These countries have also experienced an increase in their urban population which increases both energy expenditure and consumption.

The Maldives is vulnerable to natural disasters like tsunamis and climate change. None of its islands stand above 1.8 metres above sea level, which makes it vulnerable to any rise in sea levels associated with climate change and global warming. Therefore, environmental vulnerability because of extreme weather and escalation of sea levels are likely to threaten the sustainability of the economy (Bojani, Warnick and Musante, 2016).

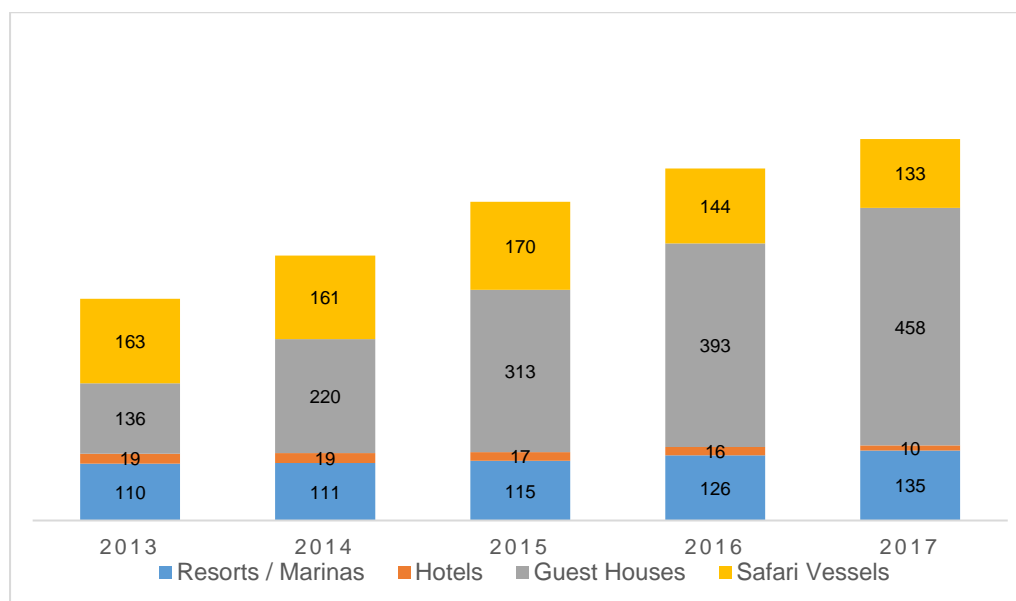
On the brighter side, tourism has been a driver of development. Maldives and countries like Samoa and Cabo Verde have changed their developing country

status because of tourism (World Tourism Organization, 2014). Since 2010, the World Bank has categorized the Maldives as an upper-middle income country.

Since 1972, the Government of Maldives, through the promotion of luxury resorts in some islands, changed the path of the country's development. Before the 1980s, most economic activities were based in the capital island of Malé, forcing people living in the atolls to migrate there. The government took the strategic decision to lease islands from all the atolls for the development of tourist resorts, which has also generated jobs in the outer islands.

After almost 50 years, the tourism industry in the Maldives has diversified into four main types of accommodation facilities that include resorts, hotels, guesthouses and safari vessels. Tourism has flourished throughout the atolls and has been a driver of economic development. Some consider the Maldivian model to be an example of successful sustainable development. According to the United Nations World Tourism Organization (UNWTO), the planned and controlled system developed by the Maldives has enabled it to present an environmentally controlled and regionally staged successful small island tourism case for the world (UNWTO, 2004). The government exercises complete control over all tourist activities in the country, and through the Ministry of Tourism requires that all facilities be registered under the respective accommodation categories, following the law.

Figure 1. Number of establishments by type of accommodation facility, 2013-17



Source: GoM, 2018.

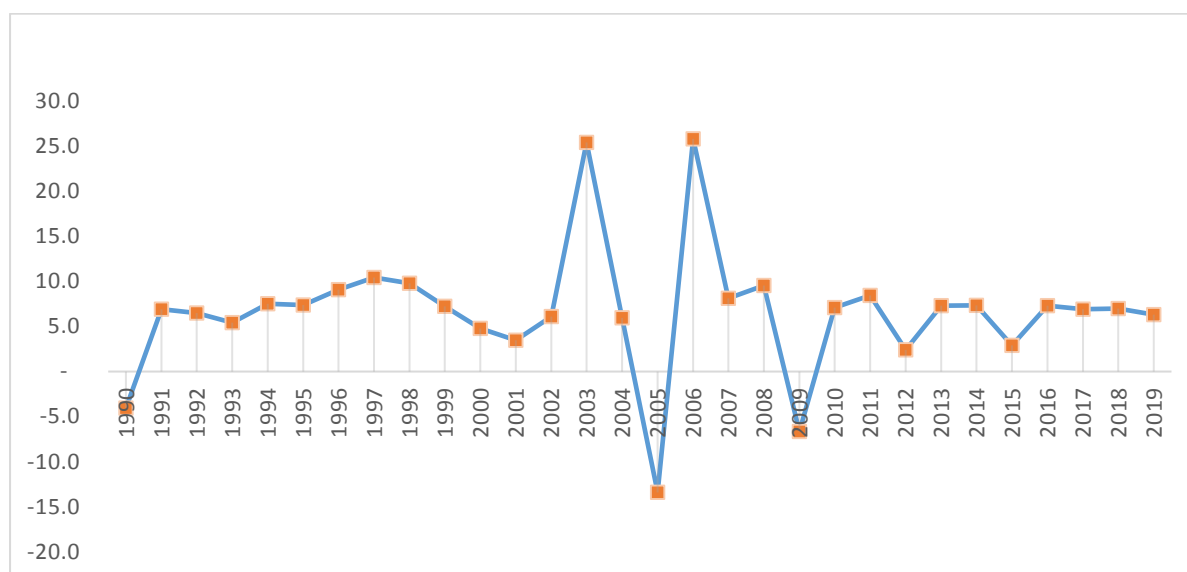
Over the last five years, the supply capacity of tourism has grown steadily in both the number of establishments and number of beds. However, only resorts and guesthouses categories have increased the number of establishments between 2013 and 2017. In 2017, both types of accommodation accounted for 81 per cent of all establishments and 90 per cent of total bed capacity in the tourism industry (figure 1).

In 2017, 324 million tourists visited Asia and the Pacific region, which represents nearly a quarter of global visits. The Maldives represents a potential tourist attraction in the region and has increased its tourist arrivals in the last few years. Over 90 per cent of total visitors to the Maldives are from Europe and Asia and the Pacific region. Both these regions have dominated tourist arrival numbers in the country over the years, leaving only 8 per cent of tourists from other parts of the world coming to the Maldives.

During 2015–17, there has been a 13 per cent increase in the flow of tourists visiting the Maldives. Around 70 per cent of the total share in this increase is from Europe and, surprisingly, the second-highest share of tourist arrivals is from the Americas at 10 per cent. Tourism continues to be the dominant sector in the Maldives and has different backward and forward linkages to other economic activities, which is crucial for the development of the country. The tourism development thrust has undoubtedly contributed to the high growth the Maldives has recorded in the last two decades.

During 1990–2019, Maldives recorded average real GDP growth of 6.6 per cent each year. This growth rate has enabled the Maldives to graduate from a least-developed country to a middle-income country in 2011. However, the country's economy is still vulnerable to exogenous shocks, and real growth plummeted twice in the same period due to the Indian Ocean tsunami of 2004, and the 2007–08 global financial crisis (figure 2).

Figure 2. Maldives' GDP growth, 1990–2019 (%)



Note: Data adapted from World Economic Outlook Database.

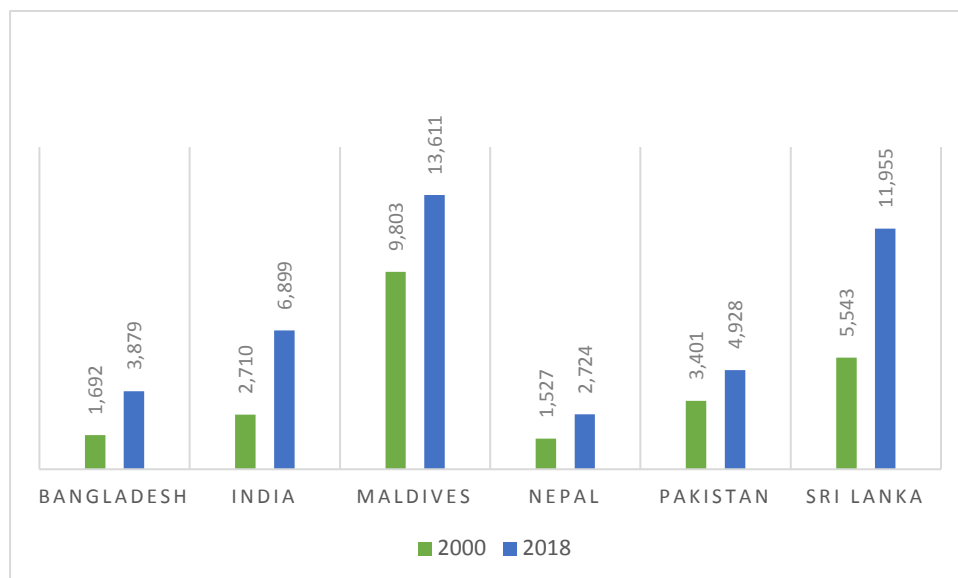
Source: Data retrieved from <https://www.imf.org/external/pubs/ft/weo/2019/02/weodata/index.aspx> [accessed 13 Oct. 2019].

Tourism has accelerated GDP growth, with indirect multiplier effects of income and employment in other sectors of the economy. However, this dependence turns very fragile when it comes to unexpected events such as natural disasters and the global economic crisis (Podhorodecka, 2018).

Overall, growth performance since the 1990s has been outstanding, considering the reverse factors the Maldives has had to face with growth downturns in 2005 and 2009 (figure 2). Among the South Asian countries, Maldives has achieved the highest GDP per capita. Its per capita GDP at constant prices in 2018 was US\$13,611 (PPP) – almost five times more than that of Nepal at US\$2,724 (PPP) and 1.14 times more than Sri Lanka which has the second-highest GDP per capita of the region – all measured in PPP 2011 International dollars⁶ (figure 3). Nevertheless, comparing the growth of GDP per capita with other South Asian countries during 2000–2018, Maldives has had the lowest real growth and other countries have been catching up.

⁶ PPP GDP per capita is gross domestic product per capita converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. <https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.KD>

Figure 3. GDP per capita, PPP\$ South Asian countries (constant 2011 international dollar prices), 2000-2018



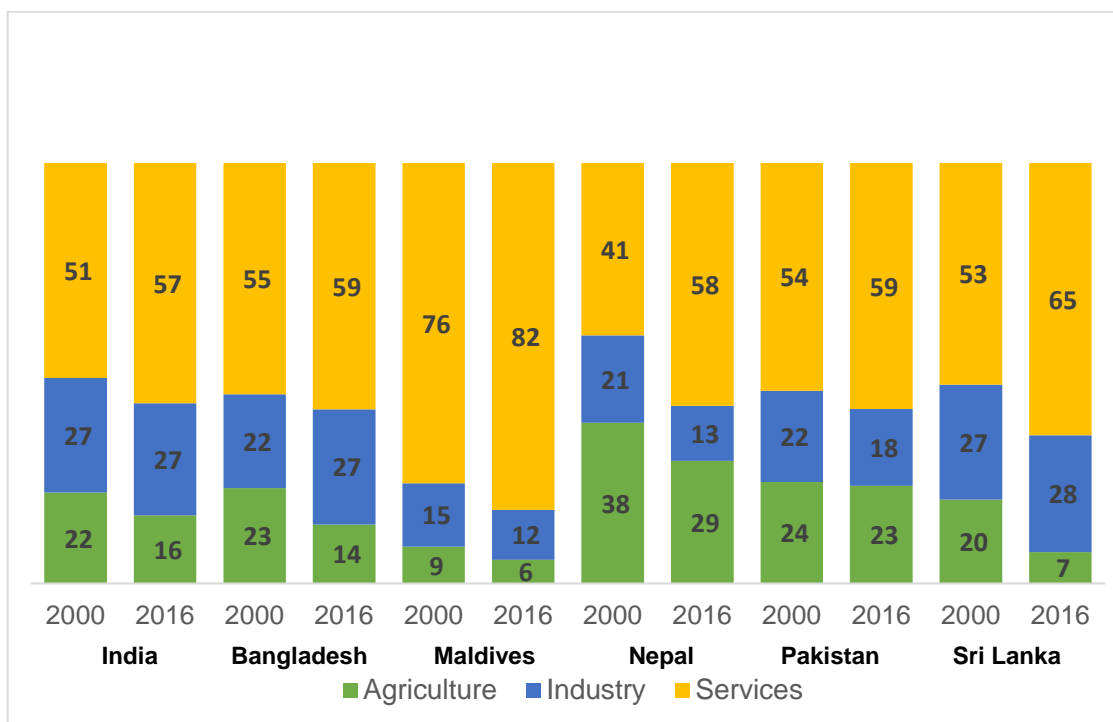
Note: Data adapted from World Bank Open Data

Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

Following a different growth trajectory than East Asian middle- and high-income countries that followed manufacturing-led growth and development, South Asia has been characterized by service-led growth. In the latter, the share of the service sector has expanded more than agricultural or industrial sectors. Indeed, similar to all countries in the subregion, Maldives' share of services of total output has increased by 6 percentage points, and the share of both agricultural and industry sectors declined by 3 percentage points each (figure 4). Agriculture has been constrained by limited productive land, while industry has limited manufacturing activities and only construction has played a more relevant role in the economy.

The contribution that agriculture and fisheries make to the GDP is low. Yet, in terms of livelihoods, economic and social welfare value, these sectors are vital to the workers and the families dependent on these sectors. Fishing and agriculture are the most important economic activities in the inhabited islands. According to the Household Income and Expenditure Survey (HIES) 2016, fisherfolk and farmers constitute 9 per cent of total employment in the country.

Figure 4. Sectoral distribution of GDP, 2000 and 2016 (%)



Note: Data adapted from World Bank Open Data
 Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

The Maldives is surrounded by the Indian Ocean which provides fish, especially tuna that constitutes a primary source of protein and calories intake in the local diet. Fish consumption is high in the Maldives and reef fishery in shallow reef waters is being increasingly exploited in response to demand from the resort hotels, as also for the export market.

Tourism continues to be the backbone of the economy. However, fishery still represents a substantial foreign exchange contributor to the economy and supports food security in the islands.

From the supply side, the service sector is the major contributor to the GDP. Nevertheless, the country's geography with a dispersed population limits the opportunity to optimize service activities and contribute to economic diversification. To address some of these challenges, the government has initiated a development strategy, channelling investments to enhance basic primary service delivery, protect communities from the impact of natural disasters and create economic opportunities (World Bank Group, 2016). This, in turn, has led to an increase in the role of the government in the whole economy.

An important and increasing driver of the economy from the demand side corresponds to household consumption and investment. Meanwhile, net exports

register a deficit outcome as the demand for imports has grown faster than exports, which includes tourism.

The balance of payments (BoP) reflects the dynamics of monetary transactions with the rest of the world. The amount of the foreign currency is crucial for the Maldivian economy, and any uncertain monetary shock will put pressure on the exchange rate devaluating the rufiyaa. In the Maldives' BoP, the outflow of remittances is of relative importance and may influence the availability of foreign reserves.⁷

As more foreign workers participate in the Maldivian economy, it is likely that the total remittances sent abroad will increase. The latter should not have significant implications in the overall result of the BoP if the economy grows in tandem. However, we should analyse the possible increase of outward remittances as a result of the new minimum wage. It is evident from the economic factors analysis (discussed ahead) that setting the minimum wage too high can also have adverse effects on the economy.

Another critical indicator – much related to foreign reserves, foreign exchange fluctuations and the external dependence of the Maldives – is the cost of living. The remoteness of the SIDS leads to high transportation costs and high dependence on international trade. Hence, as the majority of commodities are imported, this leads to higher vulnerability due to price volatility.

Oil prices have a considerable impact on domestic prices, especially for the costs directly related to production and transportation. Consequently, inflation in the Maldives has seen a slowdown in the last few years following the global decline in commodity prices with crude oil as a critical driver of this trend. Price behaviour has not had significant implications in the economy, and this is also due to the implementation of a balanced monetary and macroeconomic policy.

2.2 Poverty and inequality

Maldives' resilient economic growth performance combined with the government's regional development strategies have achieved a reduction in poverty in the last few years. The definition of the national poverty line is half the

⁷ In the BoP framework, compensation of employees is a component of income while workers' remittances are a component of current transfers; both are part of the current account. Migrants' transfers are a component of capital transfers, which is part of the capital account. Workers' remittances involve a current transfer between residents of different countries, while migrants' transfers relate to the capital account changes caused by the change of residence of a household, at the time this takes place. (Reinke, J. 2007)

median value of the total expenditure in the consumption aggregate.⁸ And the 2016 poverty headcount indicator shows that 8.2 per cent persons are poor. The incidence of poverty is considered to be marginal compared to regional indicators. The HIES indicates that Maldivians that are deemed poor consume less than 2,257 Maldivian rufiyaas (MVR) per month and 46.5 per cent of all Maldivians consume less than 4,514MVR per month (MVR148 per day equivalent that corresponds to the highest poverty line in the country).

Many Maldivians are clustered above the poverty line and face the risk of falling into poverty again.⁹ Geographically, many atolls have higher poverty headcount ratios, such as the South Huvadhu Atoll (GDh), North Maalhosmadulu (R), North Ari Atoll (AA), South Nilandhe Atoll (Dh), Kolhumadulu (Th) and Addu (S), with levels above the 16 per cent threshold. Food security, climate change and external global shocks are concerns that raise the risk for a large segment of the population who could be drawn back to lower-income categories.

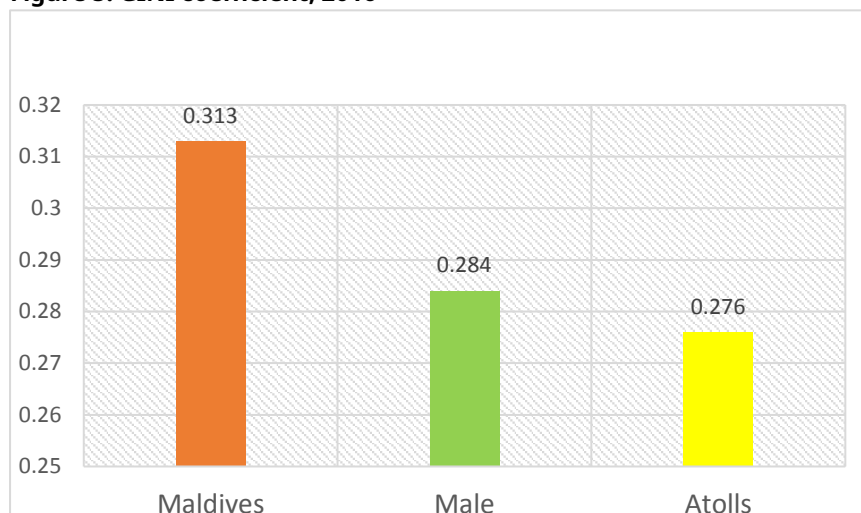
In conclusion, we can say that the distribution of poverty is unequal across the Maldives, with higher poverty rates in the atolls, outside of Malé. Malé accounts for 8.8 per cent of total impoverishment of the country, while the atolls hold 91.2 per cent difference.

The Gini coefficient measures inequality of the entire income distribution of a country. If everyone earned the same, then the Gini coefficient is 0, while an extremely unequal distribution would change the Gini coefficient to 1. The Gini coefficient in the Maldives has decreased in recent years, from 0.41 in 2003 to 0.31 in 2016 (figure 5).

⁸ A person is considered poor if his or her consumption level falls below some minimum level necessary to meet basic needs. This minimum level is usually called the “poverty line”. According to the HIES, the National Poverty Line is set at half the median of total Expenditure in the Consumption Aggregate (which is MVR74). While the High Poverty Line is set at median of total Expenditure in the Consumption Aggregate (which is MVR148).

⁹ About 46.5 per cent persons are below the High Poverty Line (MVR148), which is the median of total expenditure. A large difference in headcount rates indicates that over 38 per cent of Maldivians are bunched between the 25th and 50th percentile of total expenditures.

Figure 5. GINI coefficient, 2016



Source: ILO estimate based on HIES 2016 data

Growth in the Maldives, as with other South Asian countries, has contributed to deepening socio-economic realities. For the Maldives, there are deeper disparities at the geographical level, between the centre and the periphery or rural islands. If we measure the Gini coefficient at the regional levels for Malé (0.28) and the atolls (0.27) alone, we find that there is more equality within each region. The national Gini indicator (0.31) shows a higher level which reflects that inequality thickens between the capital city and the atolls.

2.3 Employment and wages

While Asia and the Pacific region boasts having the largest number of workers in the working-age population in the world, 59.9 per cent in 2016 (ILO, 2018b), Maldives has a slightly lower employment-to-population rate at 54.1 per cent, according to HIES 2016. In absolute numbers, Maldives has the lowest quantity of potential workers in the South Asian context that comprise 263,311 persons in the working-age population.

The Maldives male labour force participation rate (LFPR) is 4.1 percentage points lower than the South Asia average¹⁰, and female LFPR is 14.1 percentage points higher than the regional benchmark. Although it is mostly women in the Maldives that stay outside the labour market, the LFPR gender gap is relatively low compared to other South Asian countries (table 1).

¹⁰ From ILOSTAT, various tables of ILO modelled estimates.

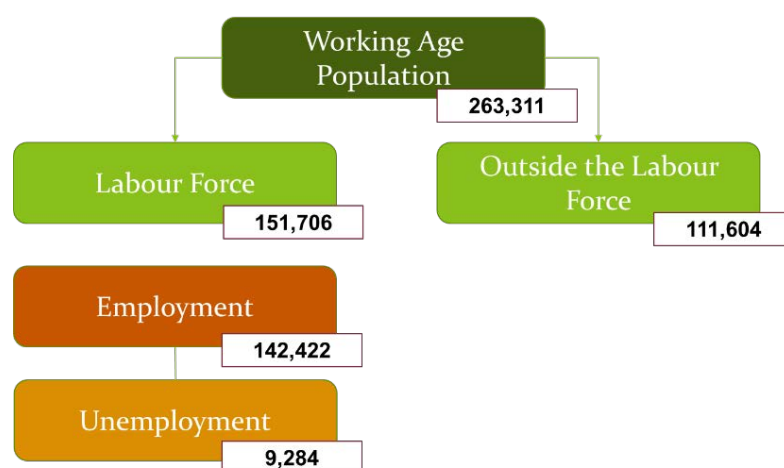
Table 1. Labour force participation rate (LFPR) from South Asia and the Maldives, 2016

	Maldives	South Asia	Difference
Total	57.6	54.2	3.4
Male	75.1	79.2	-4.1
Female	42.2	28.1	14.1
Gender gap (LFPR)	32.9	51.1	-18.2

Source: ILO estimate based on ILOSTAT and HIES 2016 data

According to HIES (2016), the overall labour force participation rate in the Maldives stands at 57.6 per cent, i.e. 151,706 persons in the labour force (figure 6).

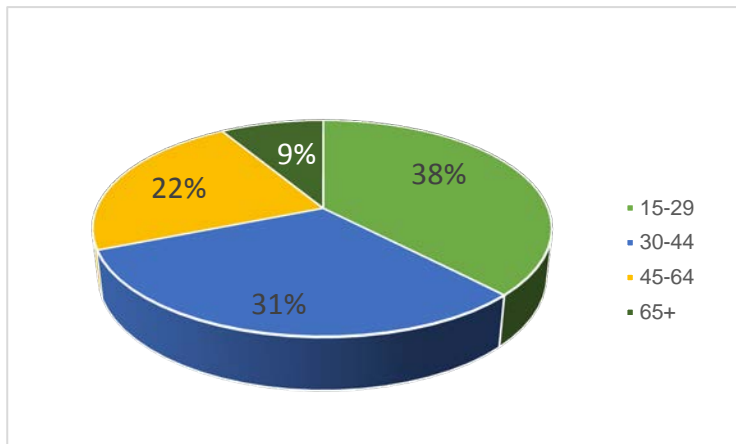
Figure 6. Maldives' working-age population, 2016



Source: ILO estimate based on HIES 2016 data

The working-age population constitutes the human capital of the Maldives. It is composed of both the potential labour supply and those who participate in the labour market. Maldives has a relatively young working population – 38 per cent constitutes the youth cohort from 15 to 29 years. Subsequently, if we include the 30- to 44-year-old group, Maldives has nearly 70 per cent of its working population under 45 years of age (figure 7).

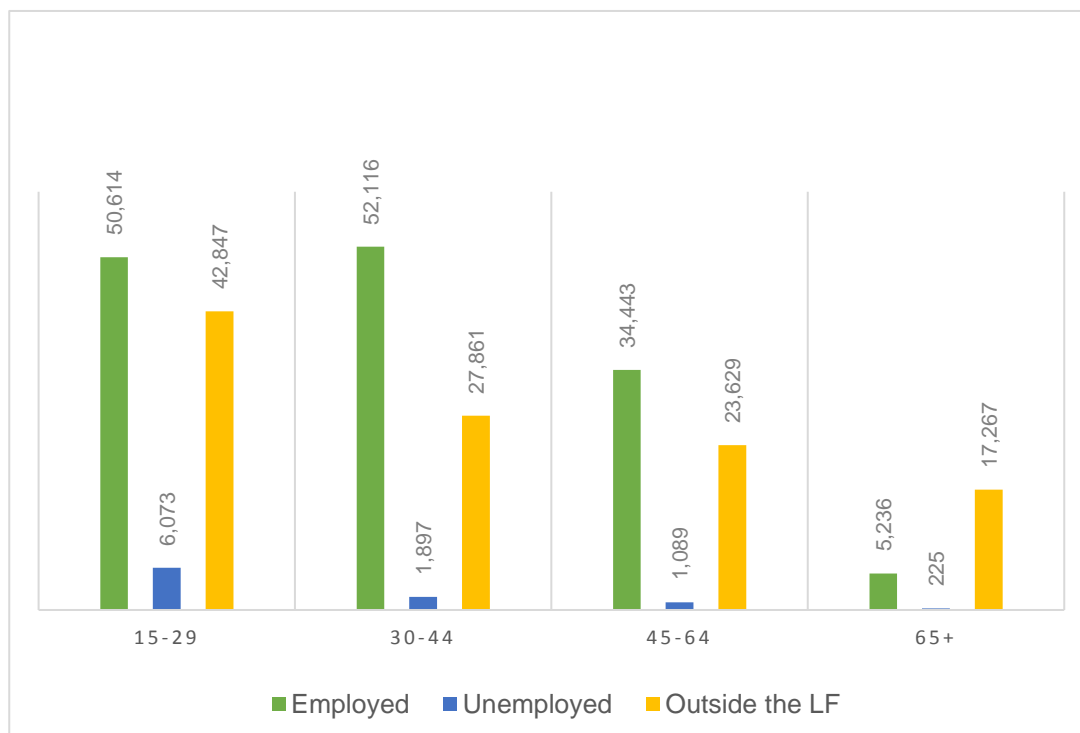
Figure 7. Working-age population (age groups), 2016



Source: ILO estimate based on HIES 2016 data

Although the retirement age in the Maldives is 65, we can find 5,236 persons aged 65 and above still working in the labour market. The numbers for the unemployed and those persons outside the labour force is rising both in absolute and relative terms for younger cohorts (figure 8).

Figure 8. Status of the working-age population, 2016

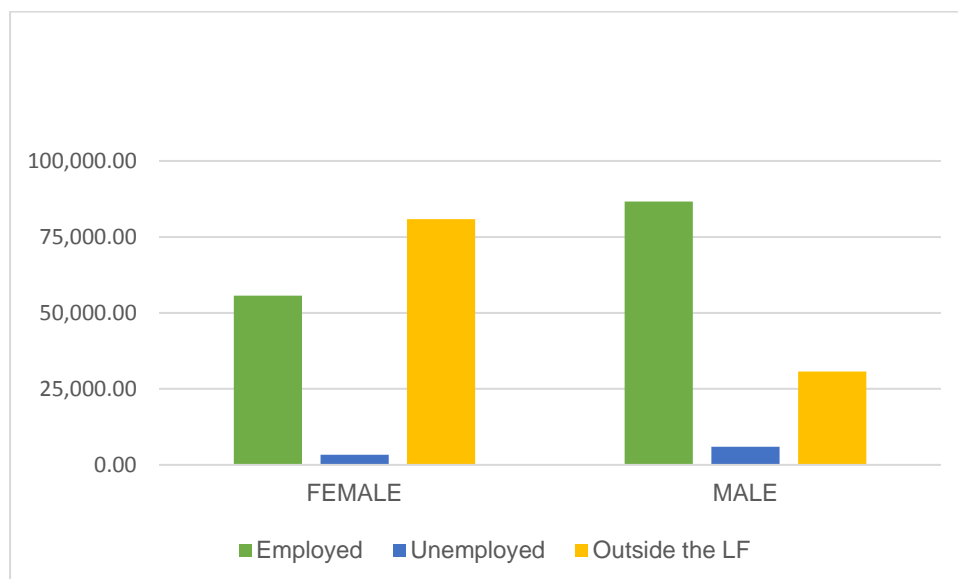


Source: ILO estimate based on HIES 2016 data

It is essential to mention that the HIES 2016 included a labour force module¹¹ especially to capture the labour supply characteristics of the working-age population residing in administrative islands and regular households. However, the 2016 HIES excluded from the sample households living in non-administrative islands (such as tourist resorts) and collective living quarters (10 or more unrelated people living together, mostly foreign workers, in labour quarters). Therefore, we may not have a complete picture of the 2016 labour market situation.

However, HIES data provides valuable information on the labour market and the behaviour of men and women participating or staying outside the labour force. For example, figure 9 shows that while men and women have similar unemployment numbers, their behaviour is different when we compare their participation in employment. Most male workers are employed, with few staying outside the labour force, while for female workers, most of them are outside the labour force.

Figure 9. Female and male working-age population, 2016

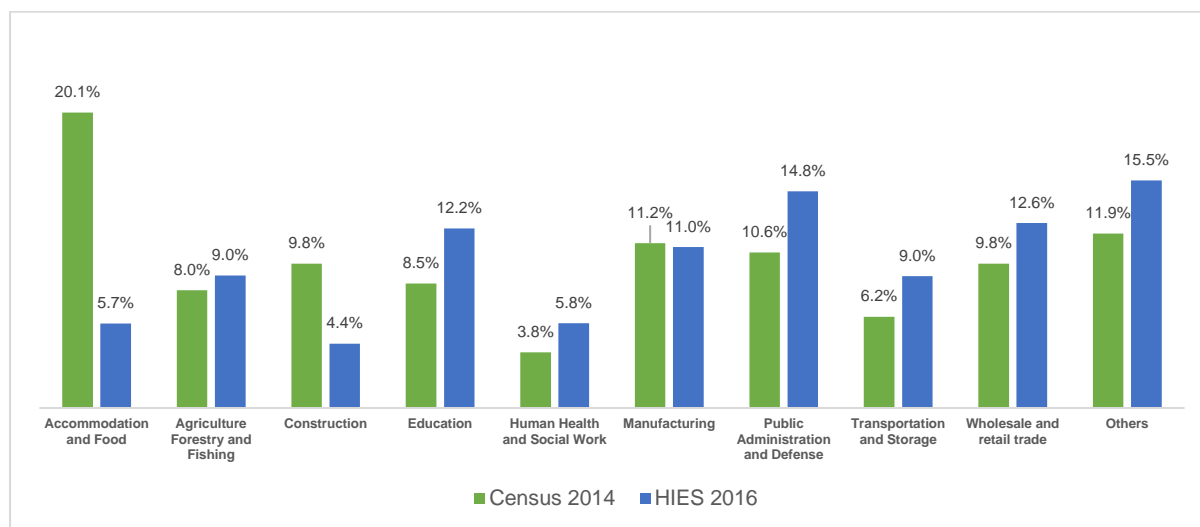


Source: ILO estimate based on HIES 2016 data

On the other hand, employment has increased over time. According to the 2014 census, the number of Maldivian residents employed rose nearly 45 per cent from 2006 to 2014. If you incorporate employed foreign workers, the total employment comes up to 205,570 workers.

¹¹ Detailed questions to capture all persons in all forms of work and to produce labour statistics and indicators and as per the ILO guidelines were included in the module.

Figure 10. Census 2014 and HIES 2016 sectoral comparison (%)



Source: ILO estimate based on Census 2014 and HIES 2016 data

The sector employing more workers is accommodation and food, with 20.1 per cent of total employment. More than a fifth of the employed were engaged in the tourism industry in 2014. Of the total employed, 27,837 or 14 per cent work in the resorts (figure 10).

Manufacturing is the second-largest sector in terms of employment, with 23,093 persons engaged in this sector. Public administration and defence is the third largest sector with 21,780 employees.

The share of workers in each sector reported in HIES 2016 is quite different from the 2014 Census. In particular, accommodation and food and construction registered much higher shares of employment in 2014 compared to 2016. The HIES employment report also highlights these differences and suggests that the difference lies in the sample design of the HIES, which excludes collective living quarters in 2016. As resorts and construction workers constitute foreigners living in collective living quarters, these sectors present underestimated values in 2016.

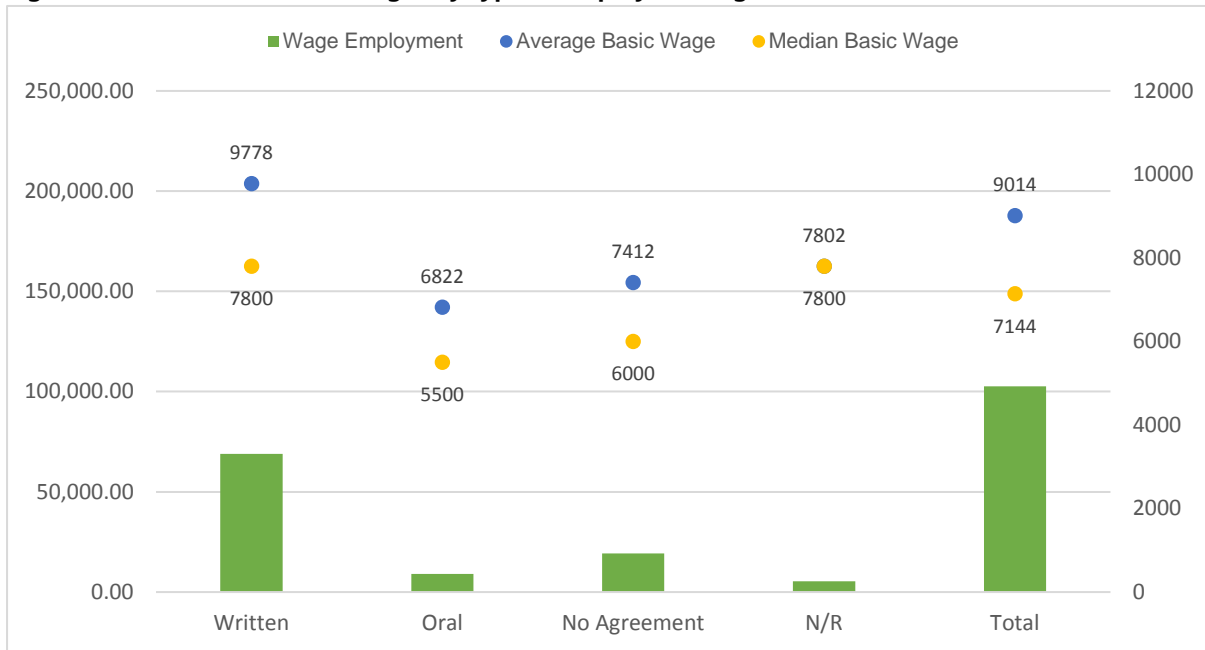
The HIES report compares the values of the Census, excluding collective living quarters, and the shares for each sector are narrowed down. The aforementioned raise a caveat regarding the underreported workers in the construction and resort sectors.

In the 2015 Census, out of the 205,570 employed resident population, 73 per cent¹² work as employees. Out of the foreign resident population, 91 per cent

¹² In the HIES report, this percentage of employees accounts for 72 per cent of total employment.

work as employees. Employees are 64 per cent nationals and 36 per cent foreigners, meaning there is a ratio of 1.76 foreign to national workers. We will analyse this segment of workers to look into their wage distribution and estimate the share of workers that will be affected by the determination of the minimum wage.

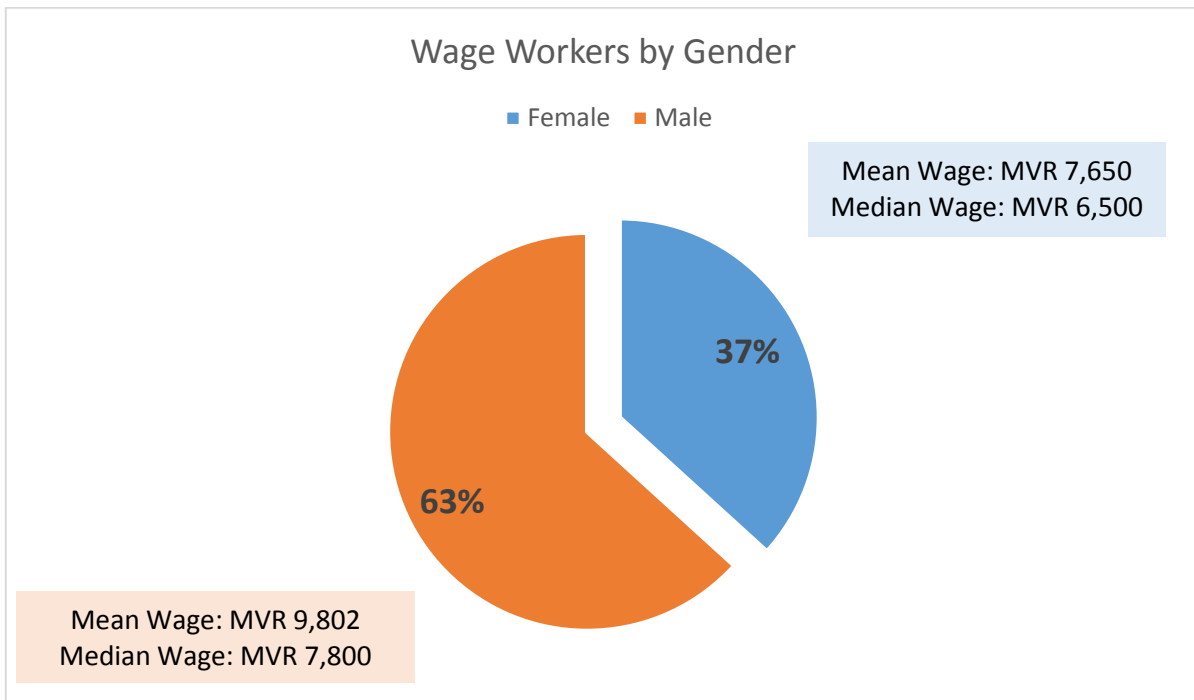
Figure 11. Mean and median wages by type of employment agreement, 2016



Source: ILO estimate based on HIES 2016 data

In 2016, wage earners were paid, on average, MVR9,014 a month. Similarly, the median value of wage employment is MVR7,144 a month, which means that at least half of the total wage earners receive this much. Most wage workers have a written agreement (67.2 per cent), and their average monthly wages go up to MVR9,778, while the median monthly wages are MVR7,800. Those who have an oral agreement, no agreement or did not respond to the type of arrangement they had, have monthly wages that on average range from MVR6,822 to MVR7,802 (figure 11).

Figure 12. Mean and median wages by gender

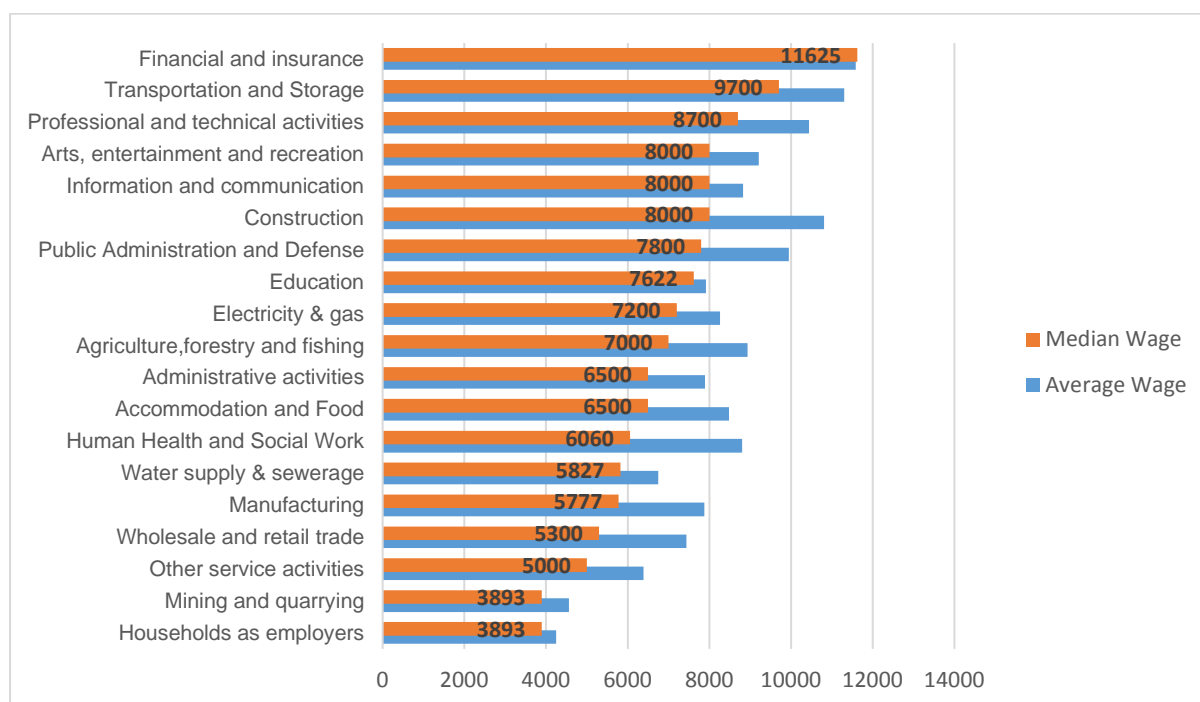


Source: ILO estimate based on HIES 2016 data

The different monthly wages between male and female workers shows there is an average gender gap of 28 per cent. Male workers that represent 63 per cent of total wage earners earn, on average, MVR9,802 a month and at the median they are paid MVR7,800 a month. Female wage workers account for 37 per cent of total wage earners, and at the median only earn 80 per cent of what their male counterparts earn (figure 12).

Wage differentials between sectors may address the demand side of the labour market and are important drivers of inter-sectoral movement of workers. In the Maldives, sectors like construction and tourism also have a higher concentration of foreign workers (figure 13).

Figure 13. Mean and median wages by sector, 2016



Source: ILO estimate based on HIES 2016 data

The highest median wage-paying sectors include the following: financial and insurance, transport, professional and technical activities, entertainment, information and communication, and construction. These sectors constitute more than 43 per cent of wage earners, and only public administration has a median wage below MVR8,000 a month.

The next best median wage-paying sectors are education, electricity and gas, and agriculture and fishery. This group has a share of 21 per cent of total workers and median wages range from MVR7,000 to MVR7,622.

Accommodation and food and administrative activities are two sectors where the median wage is equal to MVR6,500 a month. Accommodation and food requires more in-depth analyses when determining the minimum wage as this sector not only concentrates a significant number of workers (national and foreigners), it also represents the backbone of the Maldivian economy.

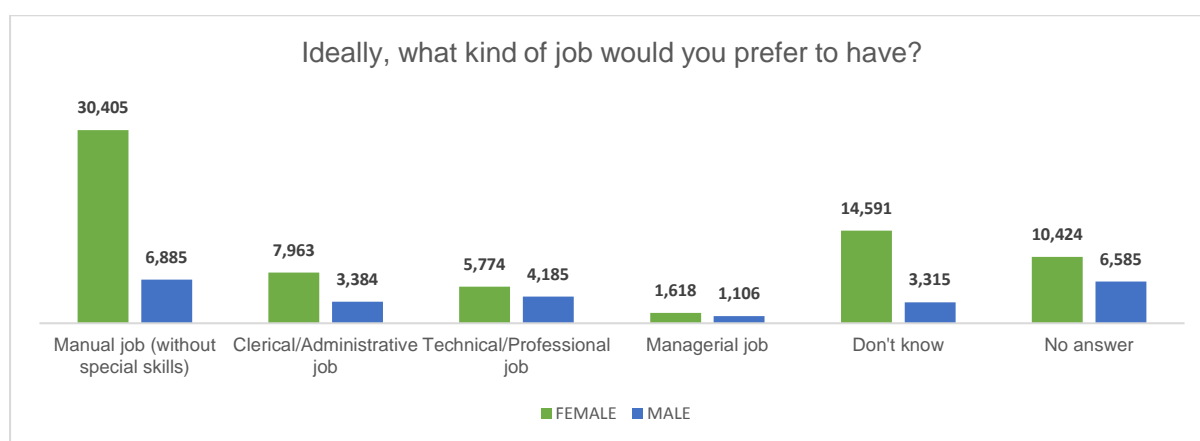
Water supply and sewerage, manufacturing, other service activities and the trade sectors pay lower wages. Manufacturing with 3 per cent and trade with 12 per cent of total wage earners, at the median level pay MVR5,777 and MVR5,300 per month, respectively.

Household as employers¹³, and mining and quarrying are the lowest paying sectors; half the wage earners in these sectors hardly reach the MVR4,000 a month threshold. Nevertheless, these sectors have a low share of wage earners, altogether 1,465 workers.

2.3.1 Wages that pull nationals into the labour market

The 2016 HIES asked a very relevant and valuable question that can be useful to this report. The question refers to the minimum income for which a person, either unemployed or outside the labour force, would be willing to work as a full-time worker. Approximately 96,000 persons replied with regard to their reservation wage, and 64 per cent even identified their ideal job.

Figure 14. Question for those outside the labour market: What job would you want?

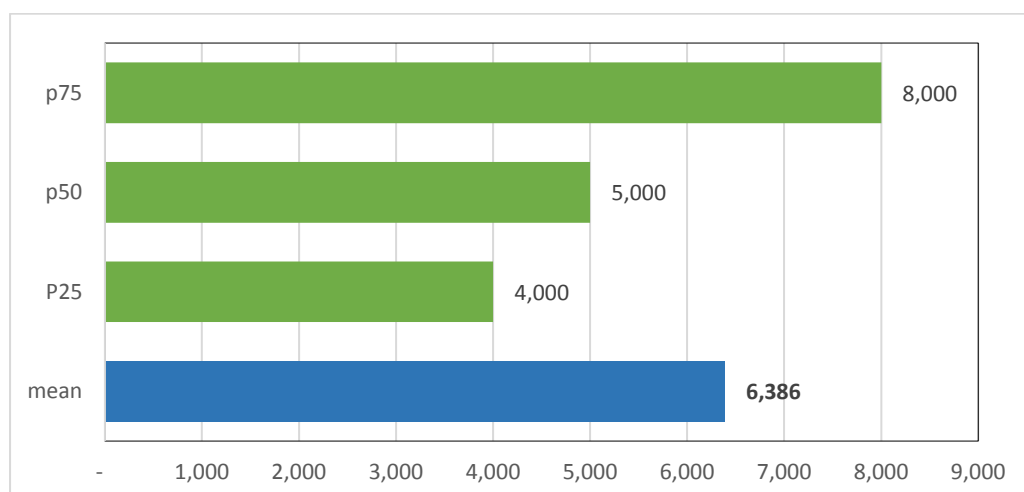


Source: ILO estimate based on HIES 2016 data

Out of the 96,000 respondents, 30,405 women and 6,885 men were willing to work in manual jobs that require no specific skills (figure 14). Half the respondents were willing to work for a monthly income of MVR5,000, and an additional quarter of the respondents were willing to work if wages reached MVR8,000 (figure 15).

¹³ “Household as employers” is a category in the HIES which covers employers of domestic workers, drivers, gardeners and other “domestic” occupations.

Figure 15. Minimum income for which workers would be willing to work as full-time workers



Source: ILO estimate based on HIES 2016 data

Even if wages were to attract Maldivian nationals to the labour market, specific policies are needed to increase employment and close gaps between effective supply and demand of labour. While other studies make similar recommendations (Salvini, Bruni and Castagnone, 2016), we also highlight the need for:

- enhanced education and skills development to improve the employability of jobseekers;
- sustained growth built on a more diversified economy, leading to the creation of more and better jobs;
- localization of employment pacts at the atoll level, critical for a country characterized by such a dispersed national labour market;
- orienting current vocational training reform to support the effectiveness of the jobs strategy;
- reduced bottlenecks to labour force participation and employment;
- employment packages targeted to individualized needs the active labour market policy of the Maldives;
- profiling young people early in life and skilling them, to meet employers' requirements, before they experience labour market failures;
- integrating labour market information into a single database.

Although we have identified a significant number of Maldivians ready to enter the labour market if there were higher wages, various strategies are needed to increase the levels of employment and the hiring of the national workforce. The Maldives needs to strengthen its employment-oriented policies to improve the effectiveness of employability once the minimum wage system is in place. It is

important to take into account the above-mentioned recommendations to progressively increase the active participation of Maldivians in the labour market.

2.3.2 Unemployment in the Maldives

The economy of the Maldives as a whole shows an unemployment rate of 6.1 per cent. Malé has a higher unemployment rate of 7.5 per cent compared to the 4.9 per cent unemployment rate of the atolls. Most of the unemployed are part of the youth population (15–34 years).

Youth unemployment seems to be on the rise, even among the educated youth, and educational qualifications may not guarantee a secure job. The Maldives has a relatively young working-age population, a key characteristic of the country. The young unemployment rate (15–24 years) represents 70 per cent of total unemployment. Hence, the transition from school to the labour market is characterized by particular challenges, including limited opportunities to access jobs focused on younger cohorts.

The participation of women and youth in the labour market is meagre. Also, low wages and the existing working conditions at many workplaces do not attract Maldivians to many job categories. Another limitation is related to the necessary skills Maldivians require to access higher-paying jobs.

The Human Rights Commission of the Maldives assessed the employment conditions in the country back in 2009. Many of the findings found in the research are still quite relevant and are also highlighted in the present report. In summary, the Human Rights Commission acknowledges that the labour market has increased the participation of migrant workers in the Maldives. Although employers express their desire to employ nationals, they identify various reasons for hiring foreign workers instead.

Most Maldivians who work in tourist resorts are from the atolls. It seems that urban Maldivians, especially the youth, are less interested in working in tourist resorts or remote islands. Women, both married and with children, are unable to work in tourist resorts or isolated, uninhabited islands as this would require care facilities and services for children. Vocational training should address the existing mismatch between the requirements and needs of employers in different sectors.

Among the characteristics of Maldivian workers, the Commission's report highlights the perception that Maldivian employees lack discipline and a commitment to work. Maldivian workers may not return after leave and might

quit the job after being trained by their employer. However, national employees perceive wages to be low, especially with regard to the cost of living. There is a lack of opportunities for career development, training and professional guidance. Other aspects that limit workers' participation in the labour market are lack of job security, inadequate working conditions, inability to complain as a foreign worker, and verbal and social abuse by employers. In conclusion, employers employ foreign workers as these workers have a lower reservation price than the Maldivian nationals and will work for lower wages and other benefits.

Against this backdrop, the Government of Maldives introduced a quota scheme at the ratio of 55:45 between foreign workers and local workers. The system gives the flexibility to resort owners to comply or apply for permission to extend the quota to more foreign workers, justifying that there is no national expertise available in the country.

The implementation of an effective minimum wage system opens up the possibility of increased job opportunities that match the aspirations of the Maldivian nationals, especially the youth. However, a minimum wage policy alone will not resolve all the problems identified in various studies. Weak human capabilities, adequate upskilling programmes, proper public employment services, and cultural mindset changes require attention from different policies to obtain better labour market outcomes for nationals. Also, accessing opportunities requires investing in infrastructure and productive assets.

The Government of Maldives, to promote inclusiveness, needs to address the above-mentioned constraints through integrated strategies that will accompany the roll-out of the minimum wage system. The private sector has benefited from cheap unskilled labour from different parts of the region. Although the introduction of a minimum wage system might affect the competitiveness of key industries by increasing the cost of labour, it will also be an opportunity to attract better-skilled workers and raise labour productivity, as well as attract national youth and women to these industries.

2.4 Social protection schemes

Social protection systems are the key to reducing inequality and contributing to more inclusive growth (ILO, 2018a). The basic or essential needs should be addressed through both wages and social protections schemes that mainly target low-income households.

Social protection can be implemented through diverse actions. Direct payments to low-income households, pensions or health-care coverage especially guaranteed for low-income households are amongst the actions to strengthen a social protection system. The appropriate social protection design can lift the reservation price of labour. A balance between both contributory and non-contributory social protection schemes can reduce the government's budgetary constraints and may facilitate targeting of low-income groups. Minimum wage and social protection policies complement each other effectively by tackling poverty and inequality.

In the Maldives, social protection is expressed in the form of social security schemes. The implementation of these schemes reflects a commitment to reducing poverty and inequality. The government not only subsidizes school fees, but also helps low-income households to access textbooks and uniforms.

The national health insurance scheme called Madhana provides medical consultation and patient care free of cost. The scheme provides access to all national citizens without an age limit. Foreign citizens may also access social insurance by paying an insurance premium.

In 2012, health insurance coverage was expanded as a universal health insurance scheme called Aasandha. All nationals have universal health-care insurance covering medical expenses, inpatient and outpatient services. The services also include emergency, medicine, and diagnostic services for MVR100,000 a year. If treatment is not accessible in the country, the health insurance covers treatment abroad.

The insurance system in the Maldives has evolved and made improvements. The Husnava Aasandha, launched in 2014, has established a health insurance scheme for everyone without a protection limit. The new scheme additionally covers transport fees in case of emergency, medical coverage during pregnancy, and medical coverage for terminally ill patients.

One significant benefit is from the Maldives Pensions Act (Act No 8/2009). A pension is for all resident citizens of 65 years and above.

In conclusion, the Maldivian social protection system has schemes that guarantee essential benefits that may reduce the risk of financial burden throughout the life cycle of the person.

3. ILO minimum wage policy guidelines and international labour standards

3.1 ILOs Conventions on minimum wages

The minimum wage issue has been a matter of rigorous debate and discussion in the International Labour Organization (ILO) since its constitution in 1919. The use of minimum wages in modern history dates back to the late nineteenth century. Countries such as Australia¹⁴ and New Zealand¹⁵ adopted this legal instrument to protect workers from exploitative practices. England and the United States (at the state level) are the other countries that followed and introduced minimum wages at the beginning of the twentieth century. It is no surprise that the first experiments of minimum wage in developing countries are from erstwhile British colonies.

Sri Lanka and India were amongst the first countries that drafted minimum wage regulations to protect most vulnerable workers in certain industries or occupations. During the 1930s, several minimum wage ordinances, along with other forms of protective legislation, were issued in British colonies, both in Africa and in the Caribbean.

As countries made use of the minimum wage instrument, ILO elevated the discussion to construct an international labour standard on this subject. International labour standards are legal instruments which set out basic principles and rights at work. These are mainly Conventions and Recommendations. While Conventions are legally binding instruments that may be ratified by member States, Recommendations¹⁶ are usually non-binding guidelines on how to implement a Convention.

The Minimum Wage-Fixing Machinery Convention, 1928 (No. 26), and the accompanying Minimum Wage-Fixing Machinery Recommendation, 1928 (No. 30), was conceived after a double discussion procedure. Convention No. 26 focused on the creation and maintenance of the machinery to set minimum

¹⁴ The wages board did not set a universal minimum wage; minimum wages in Australia were determined at the state level and focused on key industries.

¹⁵ In 1899, New Zealand set a nationwide minimum wage, which was primarily intended to prevent employers from hiring children, or apprentices at no pay (Neumark and Wascher, 2008).

¹⁶ Recommendations can also be autonomous, not linked to a Convention, e.g. Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204).

wages in sectors (trades) where no arrangements effectively regulated wages, including collective agreements, or where meagre wages prevailed. Each member State could decide the creation of minimum wage fixing machinery on the trades or “part” of trades, after consulting with employers’ and workers’ organizations.

Convention No. 26 was a sectoral policy instrument, albeit excluding agriculture from this selection.¹⁷ There was no specific mention of agriculture in Convention No. 26; the term “trades” refers only to manufacture and commerce.

Two relevant ILO resolutions highlighting the importance of wage policies came in two different moments in history: at the end of the Second World War and at the outbreak of the 2008 world economic crisis. In 1944, ILO presented a visionary document which contributed to shaping the global order, the Declaration of Philadelphia, which focused on the key principles that embodied ILO’s work. The aims and purposes of ILO included wage policies “to ensure a just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection”. This historical statement is addressed in similar terms by the 2008 ILO Declaration on Social Justice for a Fair Globalization.

After the Second World War, many European countries enacted regulations to introduce a national or general application of minimum wages¹⁸. Therefore, it seems that industrialized countries initiated general minimum wage systems. Initially, the major goal of the general application of minimum wages was, to some extent, to protect a large number of workers who were not covered by collective agreements. However, even in countries where collective agreements exist, general minimum wages have gradually been introduced.

Before the 1970s, several countries had introduced broader minimum wage coverage to target satisfying the basic needs of workers and their families. ILO prepared a comprehensive report on minimum wage fixing machinery in 1968, primarily focusing on developing countries. The document set the baseline for the adoption of the Minimum Wage Fixing Convention, 1970 (No. 131) (Marinakis, 2008).

It seems, from a historical perspective, that the concept of a minimum wage policy evolved from a selective policy tool targeting specific low-paid sectors to

¹⁷ Until the second half of the twentieth century, the agriculture sector had no international labour standard relating to the setting of minimum wages. It was only in 1951 that a similar international labour standard was developed for agriculture: the Minimum Wage Fixing Machinery (Agriculture) Convention, 1951 (No. 99) protecting workers employed in agricultural undertakings and related occupations.

¹⁸ In Luxembourg, general minimum wages were fixed for the first time by legislation in 1945. After the gradual lifting of controls during the 1960s, statutory minimum wages of general application were again introduced.

an instrument of broader coverage. The changes mentioned above are also reflected in the ILO Conventions. In 1970, Convention No. 131 gives this broader scope, complementing Convention No. 26 and Convention No. 99¹⁹ and the Equal Remuneration Convention, 1951 (No. 100). Convention No. 131 pays special attention to developing countries, providing protection to wage earners against unduly low wages.

There are a number of provisions that Convention No. 131 introduces for countries to effectively establish a system of minimum wages which covers all groups of wage. In particular, Article 3 brings forward a balanced approach in determining the level of minimum wages. There are two groups of indicators that need to be considered:

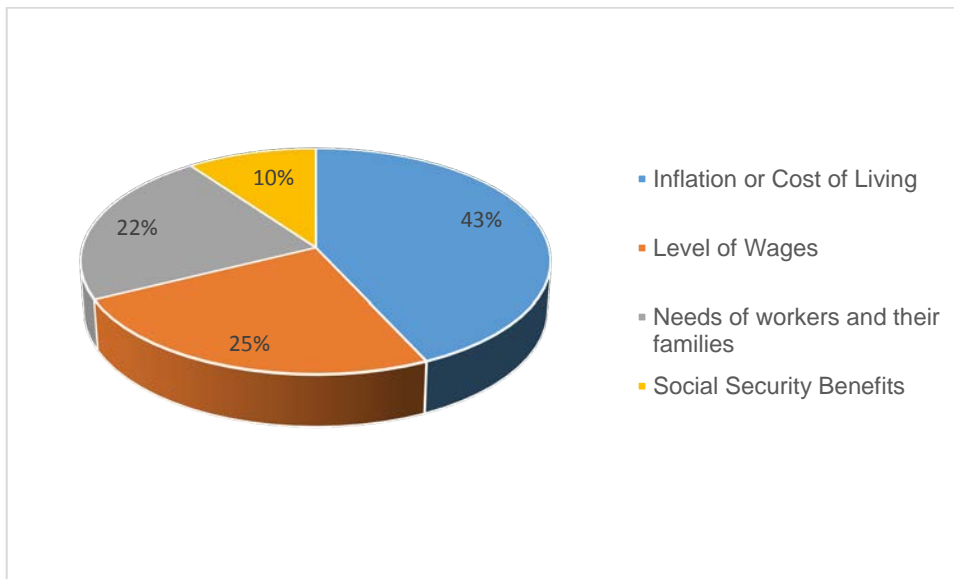
- (a) the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups;
- (b) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment.

These two groups of indicators are sometimes referred to as the criteria factors for determining the minimum wage. The Committee of Experts for the application of Convention No. 131 agree that the elements to set the minimum wage level are not exhaustive to those found in Article 3 of Convention No. 131. Nevertheless, the General Survey of Minimum Wage Systems (2014) finds that most countries make much use of them.

A 2005 analysis of 98 national minimum wage systems (Eyraud and Saget, 2005) indicates that countries use more than one criterion when determining minimum wages. The most commonly used indicator was inflation or the cost of living (43 per cent of countries). However, most countries use the criteria factors found in Convention No. 131 (See figures 16 and 17).

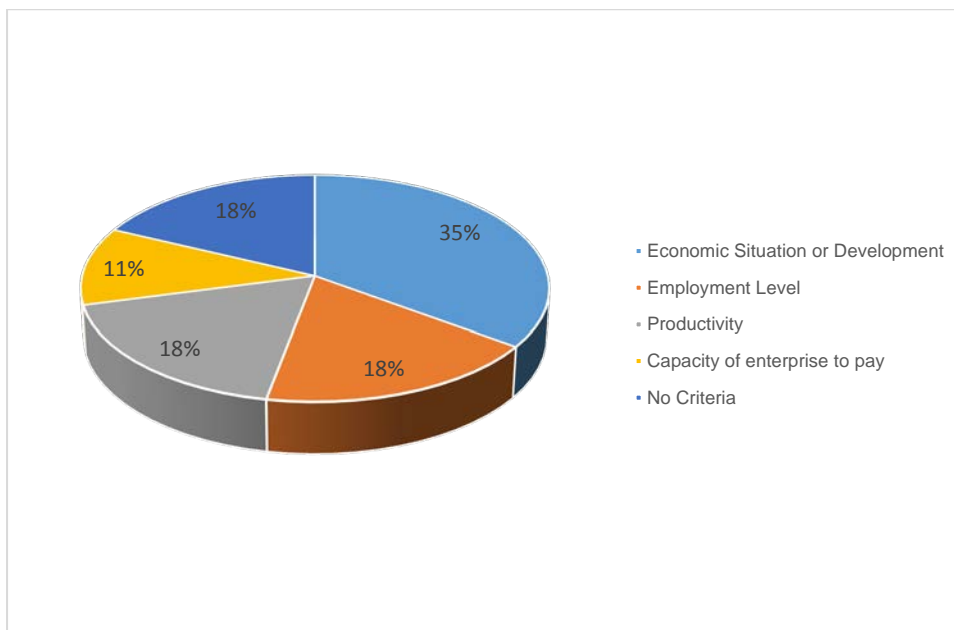
¹⁹ These Conventions remained open for ratification by member States.

Figure 16. Used criteria related to workers' needs



Source: Eyraud and Saget, 2005; criteria from 98 national minimum wage systems.

Figure 17. Used criteria related to economic factors



Source: Eyraud and Saget, 2005; criteria from 98 national minimum wage systems.

Full consultation lies at the heart of Convention No. 131. The role of the social partners is crucial in setting and adjusting the minimum wage. Representative organizations of both employers and workers should be on equal footing in the consultative process. The establishment, operation and modification of the

minimum wage machinery are also issues that need to be discussed and determined through consultation.

As we shall see in the section on international experiences with minimum wage, experts and independent bodies participate in some minimum wage systems. Their technical capacity and evidence-based analysis are necessary to support policy-makers' decisions on the minimum wage issues. Consequently, Convention No. 131 determines that independent persons representing the general interests of the country may be appointed to be part of the process of fixing the minimum wage. Again, consultation between social partners is necessary to appoint such persons.

The Minimum Wage Fixing Recommendation, 1970 (No. 135) accompanies Convention No. 131. This non-binding guideline encourages the use of timely information, especially statistics and other data needed for analytical studies in the minimum wage determination. Recommendation No. 135 establishes a baseline for evidence-based social dialogue.

With regard to coverage, the minimum wage system may use a single minimum wage rate or differential minimum wage rates²⁰. Recommendation No. 135 indicates that no prescription exists on the application of national versus sectoral minimum wages, or even a combination of both. These two forms may coexist as long as minimum wage fixing does not interfere with or prejudice the exercise of free collective bargaining.

However, systems should not be too prescriptive in setting minimum wages for every particular circumstance. Systems should be kept simple, such that they are understood and enforced easily. The effectiveness of implementing minimum wage provisions calls for raising awareness and strengthening administrative measures (e.g. through a sufficient number of inspectors, by providing adequate penalties and sanctions against violations of the law, through effective coordination with other government institutions such as social security or tax administration entities).

Workers need adequate channels to exercise their rights under minimum wage provisions. Employers' associations and workers' organizations can both play an essential part in protecting workers against abuses, and in setting a level playing field for all.

Convention No. 131 and Recommendation No. 135 provide key elements to construct a minimum wage system according to national circumstances. At the

²⁰ Based on cost of living in different regions or zones.

global level, several member States have recently ratified Convention No. 131. Among the new member States are: Albania, Antigua and Barbuda, Armenia, Central African Republic, Kyrgyzstan, Montenegro, Republic of Korea, Republic of Moldova, Serbia, Ukraine, Malaysia and Morocco (Guardiancich, 2018). The last country to ratify Convention No. 131 was Bulgaria in March 2018.

However, it is important to mention other Conventions that may strengthen minimum wage policy in protecting all workers without discrimination and promoting equal pay for work of equal value. The latter is a concern of Equal Remuneration Convention, 1951 (No. 100). Reducing discrimination based on pay should be addressed with an adequate legal framework that provides the right to equal remuneration for work of equal value and effective channels to justice to claim this right. On the former, Discrimination (Employment and Occupation) Convention, 1958 (No. 111) highlights the need for a policy design to promote equality of opportunity and treatment in respect of employment and occupation, to eliminate any form of discrimination.

Other Conventions must also be revised, specific to the protection of particular group of workers such as domestic and migrants workers²¹. For example, the Domestic Workers Convention, 2011 (No. 189) makes special emphasis that domestic workers are entitled to a minimum wage coverage. And the Migration for Employment Convention (Revised), 1949 (No. 97), determines that treatment to migrants lawfully within a national territory should be no less favourable than that which is applied to nationals regarding remuneration, and other matters regulated by law.

3.2 Effective minimum wage policies

An effective minimum wage policy requires that the minimum wages be clearly defined in order to strengthen their binding nature. In defining a minimum wage, it is important to be specific about which components²² of a wage can be counted in the minimum. Similarly, it is important to specify the extent and conditions under which payment in kind can be allowed.

²¹ Article 25.1 of the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, adopted by the General Assembly of the United Nations, recognizes the right of all migrant workers to enjoy treatment not less favourable than that which applies to nationals of the State of employment in respect of remuneration.

²² Usually allowances and premiums for non-standard work hours or overtime are not included because workers should not be forced to work overtime to obtain the minimum wage. In principle, a worker should be entitled to the minimum wage for each hour of actual working time, averaged over the worker's normal pay reference period up to a maximum of one month (Belser, Rani and Sobeck, 2012).

A comprehensive definition of the minimum wage refers to minimum wage as: “the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract” (ILO, 2014). It is a binding instrument that protects workers from unduly low pay.

However, a minimum wage policy may have a broader objective than just protecting workers from being poor. In many countries, strengthening minimum wage systems helps not only the working poor, but also reduces inequality, including gender pay gaps, and also works as an instrument to achieve inclusive growth. A well-designed and effective minimum wage system can contribute to reach these objectives. However, poorly designed minimum wage systems can undermine effective implementation and risk encouraging informality.

ILO has developed minimum wage policy guidelines buttressed on existing international labour standards, and drawing from the latest global review of national laws and practices. The *Minimum wage policy guide* (ILO, 2016) reflects the diverse experiences in setting minimum wage, depending on national preferences and country circumstances. It stresses the fact that the determination of adequate wages can only be achieved through social dialogue and collective bargaining, balancing between the legitimate needs of both workers and enterprises.

In practice, the effectiveness of minimum wages depends on many factors, some of which are common to most effective systems: a clear definition of the minimum wage; focused minimum wage policy objectives; extension of the minimum wage coverage to all workers in an employment relationship; a balanced criteria when setting an adequate minimum wage; and, regular adjustment of the minimum wage with regard to changes in cost of living and other economic factors.

3.3 Evidence-based setting and adjustment of the minimum wage

An evidence-based social dialogue implies that social partners need to build the discussion around a common framework. The criteria to set the minimum wage should be clear to all stakeholders and should guide and facilitate discussions on the level of minimum wages. Data and reliable statistical indicators are essential to support social partners in their deliberations. Identification of data sources,

selection of statistics and methodologies for calculation are only the starting point of the process of the minimum wage fixing discussion.

In a minimum wage system, the most challenging issue is to set the appropriate level of the minimum wage. It requires a balanced approach, highlighted in Convention No. 131. Otherwise, if set too low, minimum wages may not protect workers and their families against unduly low pay or working poverty. If set too high, minimum wages will either have adverse effects on employment or poor compliance may prevail.

The revision of minimum wages implies assessing if levels are sufficient to meet the needs of the workers and their families while taking into account economic factors. The involvement of social partners is crucial, for they are the best informed regarding the needs of workers and the paying capacity of companies (Guardiancich, 2018). Also, they can facilitate the implementation and enforcement of a minimum wage, once it has been determined and fixed.

However, decisions need to be supported by statistical information and evidence-based analysis in the national context. There is no unique method of setting a minimum wage. Consultation is necessary, taking into account the arguments and views of all social partners and capturing the voices affected by the decisions. Some indicators commonly utilized in this process are highlighted in ILO's minimum wage policy guidelines.

3.3.1 Estimates of the needs of workers and their families

The needs of workers and their families must be understood in relation to a country's level of economic and social development. The threshold of a minimum standard of living requires discussions taking into account the views of social partners. A socially accepted standard of living may vary from time-to-time, and even on geographical location.

Countries use both absolute and relative indicators to estimate the needs of workers and their families. Absolute benchmarks can be estimated by taking into account the cost of basic needs that ensure a decent standard of living for a worker and his or her family (Anker, 2017). In contrast, relative benchmarks estimate the proportion of expenditure of specific household income groups.

If national poverty lines exist, these may constitute the lowest benchmark in this process. National poverty lines usually include adequate nutrition requirements (often 2,100 calories per person per day) and other non-food items for ensuring basic needs. More developed economies make use of relative poverty lines. In

general, poverty lines are important benchmarks to address the basic needs of workers and their families. The minimum threshold identified by the poverty line allows a typical household to lead a basic but decent lifestyle (Anker, 2006).

Whether a minimum wage is sufficient to cover family needs depends on demographic information: the size of a household, the composition of the household²³, the number of family members that earn the minimum wage. On the other hand, the expenditure items – food and non-food components – of the household and the costs require special attention to estimate the needs.

The household size enables conversion of per capita expenditure of food and non-food items into total household expenditure. When estimating a need-based minimum wage, some methodologies suggest including basic elements such as food, housing and other essential expenses such as health, children’s education and participation in society, amongst others.

The use of expenditure surveys provides the necessary information to accomplish much of this work. Nevertheless, some methodologies are more normative in nature, especially when it comes to the food component. A low-cost nutritious diet may be proposed to estimate what constitutes food quantities that assure the adequate calories and macronutrient intake to ensure a healthy lifestyle. Another normative approach may consider the use of the average number of members of all households or wage dependent households when defining a typical household.

3.3.2 Increases in prices and cost of living

Any change in the cost of living reduces the purchasing capacity of a worker. Therefore, indicators that capture the general level of prices and the cost of living are commonly used to adjust minimum wages. The consumer price index (CPI) tracks the evolution of prices for a basket of goods and services over time. Most countries report monthly and annually CPI figures.

However, certain countries compute tailored CPIs to address consumption patterns of lower income households. These adjusted CPIs are used to explain the price changes of those items that are more relevant for lower income households and minimum wage earners. The composition of food and service

²³ The consumption units of each member of the household are usually weighted and expressed at a different level of consumption between adults and children.

baskets for poorer households usually shows higher expenditure on food items relative to non-food items.

The needs of the workers and their families are estimated based on household income and expenditure surveys. If surveys are not produced every year, the values can be updated by inflation using CPI.

Countries revise and adjust minimum wages at regular periods. Provisions must ensure that minimum wage adjustments occur from time to time according to the changes in the cost of living and economic factors. Most countries make these adjustments every year. The most frequently used indicator for this adjustment is the CPI. If the minimum wage adjusts to the changes in CPI, it neutralizes the effects of inflation. As a result, the minimum wage maintains its purchasing capacity. It reduces the worker's risk of any adverse change to his or her standard of living.

Some countries not only take into account inflation but also other economic factors such as labour productivity²⁴ to adjust minimum wages. Consequently, the minimum wage also increases in tandem with economic growth.

3.3.3 Possible impact on labour costs and employment

A minimum wage increase or the determination of a minimum wage in the case of the Maldives will have implications for both workers and enterprises. Consequently, social partners should analyse the characteristics of workers and enterprises that are more likely to be affected by the minimum wage.

The proportion of employees affected by the introduction or adjustment of a minimum wage reflects the magnitude of the policy impact. The estimates for both the headcounts and the wage bill constitute essential information for policy-makers.

A sectorial approach can contribute to the analyses of the proportion of workers that will be affected in specific industries. If the minimum wage is set too high, this may unexpectedly raise labour costs that employers must pay. This, in turn, could trigger price inflation, hurt exports and reduce the level of employment (ILO, 2016). The impact of the wage increase in prices will then depend on the

²⁴ Labour productivity is an important economic indicator that is closely linked to economic growth, competitiveness and living standards within an economy. Labour productivity represents the total volume of output (measured in terms of gross domestic product or GDP) produced per unit of labour (measured in terms of the number of employed persons) during a given time reference period. Proposed SDG indicator 8.2.1 refers to the annual growth rate of real GDP per employed person. For the official list of proposed SDG indicators, see: <http://unstats.un.org/sdgs/indicators/indicators-list/>

share of labour in total production costs and if the sectors affected are more labour-intensive. It is critical to foresee the wage bill impact of the new minimum wage in the Maldives, at both general and sectorial levels. Industries that already employ high levels of low-wage labour are likely to influence higher price outcomes.

Most of the academic literature on minimum wages focuses on debates on the impact and size of the potential effects of employment (Brown et al., 1982; Card and Krueger, 1995, 2015; Card et al., 1994; Neumark and Wascher, 1992, 1994; Neumark et al., 2014a, 2014b). It is essential to permanently monitor the effects of employment. A meta-analysis on minimum wage impacts by Belman and Wolfson (2016) contrasts the different research analyses and results of these impacts. Nevertheless, if a minimum wage leads to great job loss, serious questions arise with respect to its relative benefits with regard to the protection of workers and the improvement of their living standards.

3.3.4 The ratio of minimum to mean and median wages

The ratio of the minimum wage to the mean or to the median wage can provide meaningful information relating to economic factors. Average wages²⁵ to some extent not only capture a part of average productivity levels in a country or region, they reflect, to some extent, the average performance of the economy and, to some extent, the capacity to pay workers.

The ratio of the minimum wage to the average (mean or median) wage is often called the Kaitz index. This indicator mainly looks at wage distribution in the country. Empirically, some studies find that in developed countries the minimum wages are set between 35 per cent and 45 per cent of the average wage. The minimum wage to median wages usually records higher ratios when estimated for developing countries compared to developed countries (Rani et al., 2013a). The ratio of the minimum wage to mean or median wages can be taken as a referential indicator to understand how other countries have set their minimum wages with respect to their mean or median wages.

Even if we make use of the Kaitz ratio to address economic factors, this indicator should be complemented with other studies and analysis. For example, the

²⁵ Average wages may be calculated either through the use of the mean or median values; both provide useful information. But for countries with high inequality, the calculation of the average wage using the mean is likely to provide a result that is influenced by extreme values or outliers. In this case, it is better to use the median wage that constitutes a better point of reference to portray what an “average worker” earns in the country.

disaggregation of Kaitz ratios for specific regions, sectors or types of workers that are most likely to be affected by the minimum wage determination.

3.3.5 Economic growth and labour productivity

With regard to economic factors, Convention No. 131 refers to employment, productivity and economic development. The latter needs to be understood according to the country's requirements to improve economic performance. Many countries use the real gross domestic product (GDP) to track macroeconomic development and also as a variable to take into account in the discussion of minimum wages.

While economic factors may constrain increases in minimum wages – if a country is likely to lose competitiveness as this may hinder exports – it also provides an opportunity to raise minimum wages even beyond the bare minimum needs – if a country's economic performance shows high levels of GDP growth or productivity.

A common economic factor indicator to take into account when setting the level of the minimum wage is that of labour productivity. Labour productivity²⁶ provides the market value an average worker produces in a country, *ceteris paribus*. Some international experiences use labour in the adjustments to minimum wages. As a result, workers receive a fair share of the fruits of economic progress. Data on sector-level productivity may become useful when sectoral minimum wages are set for different industries.

²⁶ Average labour productivity in a country is usually measured as GDP per worker, or GDP per hour worked.

4. International experiences with minimum wage systems

Article 1 of the Minimum Wage Fixing Convention, 1970 (No. 131) establishes that each member State of the ILO ratifying the Convention should establish a system of minimum wages. In 2014, ILO published the General Survey on Minimum Wage Systems, based on reports submitted by 129 member States. The report showcases a diverse variety of practices and minimum wage setting machineries of different countries.

The minimum wage system involves not only the establishment of minimum wage fixing machinery, but also its implementation to ensure that workers receive the social protection that they need. It, therefore, requires a more articulated and sometimes integrated approach. It uses evidence-based social dialogue to set the minimum wages, adequate provisions to enforce them, and mechanisms to monitor not only the levels of compliance, but also the effects of minimum wage policy on key variables of the economy.

ILO's General Survey of 2014 analyses different international country experiences with regard to the essential elements defined in Convention No. 131. The survey revised the scope of the coverage; the mechanism of consultation and the machinery with regard to the design and operation of the minimum wage system; the criteria used to set the level of minimum wages; the periodic adjustment of minimum wage; and the implementation of appropriate measures to ensure the effective application of all provisions relating to minimum wages.

In the context of this report, we present two specific country experiences of Asian background to highlight the main features of their minimum wage systems.

4.1 Minimum wages in Asia

In recent years, many countries in Asia have strengthened their minimum wage systems to lift workers out of poverty and to reduce levels of inequality. The long-drawn economic slowdown that originated in the 2008 financial crisis has also influenced countries to implement better-designed minimum wage systems.

A minimum wage policy can serve as a redistributive and an inclusive mechanism contributing to more resilient and sustainable economic development. Furthermore, countries in Asia and the Pacific have used minimum wages as an

essential policy tool to promote industrial restructuring towards higher value added activities (Basu and Tateno, 2013).

The evolution of minimum wage regulation in Asia has been atypical compared to other regions. The scope of the coverage has been limited to specific groups of workers, and only recently have some countries expanded the minimum wage to protect all wage earners.

In South Asia, countries like India and Sri Lanka were the first to develop unique pieces of minimum wage legislation.²⁷ In both cases, the application of minimum wages was specific to employments and trades, respectively.

In 2016, Sri Lanka introduced the National Minimum Wage of Workers Act, No. 3. The Sri Lankan national minimum wage applies to all workers in any industry or service. On the other hand, India just recently passed the Code on Wages, 2019. The new legislation came into force, expanding minimum wages to all categories of workers in both formal and informal sectors (Menon and Estupinan, 2019).

Nepal, a country that has ratified Convention No. 131, needs to adapt its minimum wage system aligned to the Labour Act, 2074, which has replaced the previous labour law. The Minimum Wage Fixation Committee, constituted by the Ministry of Labour, Employment and Social Security, recommends a national minimum wage or a minimum wage for a particular region or industry. It usually meets for this purpose every two years. The new law aims to give the Committee a permanent status. Currently, Nepal has a monthly minimum wage of 10,781 Nepalese rupees (NPR) for the “Tea Estate”, and a higher monthly minimum wage of NPR13,450 for all other sectors in the economy.

Pakistan introduced an industry minimum wage regulation in 1961. The Minimum Wage Ordinance was limited to industrial establishments with decisions taken by centralized boards. Since the 18th Amendment to the Constitution in 2010, minimum wage determination is assigned to the Provincial Governments. Minimum Wage Boards, which are tripartite bodies, recommend minimum wage rates to the Provincial Governments, which in turn have the responsibility to fix the rate and issue the respective notifications.

Bangladesh followed similar legislation as Pakistan before independence. Currently, fixing the minimum wage is regulated under the Labour Act, 2006. The number of sectors (41) subject to minimum wage regulation has increased.

²⁷ Sri Lanka’s Wage Boards Ordinance (No. 27 of 1941) and India’s Minimum Wages Act 1948.

However, minimum wages cover only a small proportion of the non-agricultural labour force in the country.

In Asia and the Pacific, after the Second World War, some countries also followed British practices to develop their legislation. Burma (today Myanmar) and Malaysia established a minimum wage machinery similar to the British wages council system.

In 1957, Fiji established minimum wage councils through the Wages Councils Ordinance. A national minimum wage was set for the first time in early 2014, under section 33 of the Constitution.

In March 2013, Myanmar replaced the Minimum Wage Act, 1949 with a new piece of legislation for minimum wages. The National Minimum Wage Committee (NMWC), a tripartite board with independent experts, took two years to set the minimum wage, which applies to all industries nationwide. The minimum wage coverage has progressively increased. In 2017, minimum wage coverage included enterprises with more than 10 workers. Before, the coverage was only for enterprises with more than 15 workers.

The Philippines is one of the first countries in the region to implement general minimum wages. In 1951, the coverage of the minimum wage included both agricultural and non-agricultural workers. Thailand set its minimum wages back in 1973. It established a geographical minimum wage system, based mainly on the cost of living and other economic conditions. It was in 2011 that the government announced changes in the regulations to work progressively towards a national minimum wage (Lathapipat and Poggi, 2016).

Indonesia, on the other hand, since the early 1970s, has made substantial variations in minimum wage over time, across industry sectors and territories (Del Carpio et al., 2012).

In conclusion, minimum wage systems in the region have evolved. Most countries are now using a minimum wage policy that fosters inclusive growth. However, significant challenges in designing a sound minimum wage system are underpinned by the effective use of evidence-based information integrated into the consultative machinery. Two countries (Vietnam and Malaysia) in the Asian region have improved their minimum wage systems with the use of evidence-based social dialogue. Their systems have evolved positively, introducing different provisions to strengthen their minimum wage policy. The Maldives can adapt some of these experiences to the design of their minimum wage scheme.

4.2 Vietnam's minimum wage system

Vietnam has established different wage scales for ranks in the public sector since 1948. Until 1985, there was a central planning economy that stipulated wage rates and other related labour regulations through administrative orders. From 1985 to 1995, the economic system changed to a socialist-oriented market economy, with market reforms taking place from 1989. The objective of the reforms was to make way for industrialization and thrive towards international economic integration. A new legal framework was necessary to improve the efficiencies of the state-owned enterprises (SOEs) and encourage the development of the private sector, including foreign investment. Consequently, Vietnam set statutory minimum wages in 1992 exclusively for foreign enterprises depending on location and sectoral characteristics.

The Labour Code, enacted in 1994, provided guiding provisions on minimum wages. The minimum wages under this legal framework are set consistently with the cost of living, but also taking into account economic growth rates and state budget constraints. A process of consultation determines the general minimum wage for the public sector and both regional²⁸ and sectoral minimum wages. Although the government seemed to consult social partners on some issues, the final decision came directly from the central authority. Also, the government involves the Vietnam General Confederation of Labour (VGCL) and employers' representatives mainly to ensure that real wages are not affected with the rise in the cost of living.

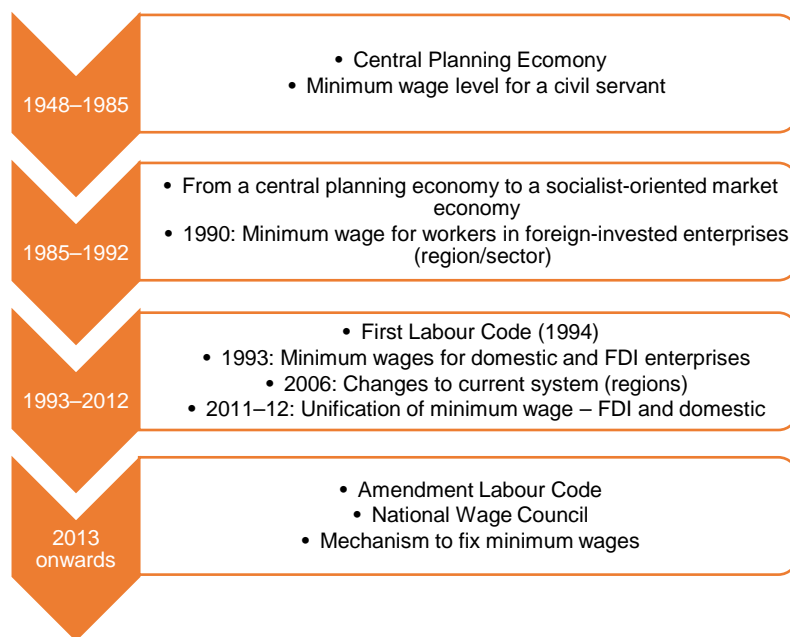
The current minimum wage system was first introduced in 2006, dividing national coverage into four regions²⁹. Until 2011, the system had a combination of regional and sector minimum wages. Vietnam's accession to the World Trade Organization (WTO) in 2007 resulted in an agreement stipulating the alignment of minimum wages of domestic and foreign enterprises. In 2012, domestic minimum wages increased significantly to equalize foreign enterprises' minimum wages and to comply with the realization of a sole minimum wage in the private sector. Also, industry-based minimum wages are determined through national sectoral collective bargaining. They shall not be less than the region-based minimum wage announced by the government (Dieu, 2012).

²⁸ Minimum wages by region have been regulated since 1995. However, in practice, the regional minimum wage was only applied to foreign enterprises. Since 2006, domestic firms have differentiated regional minimum regional (Thanh et al., 2017).

²⁹ Minimum wages are determined in four regional areas. Region I covers the urban areas of Hanoi and Ho Chi Minh City; Region II covers the rural areas of Hanoi and Ho Chi Minh City, and the urban regions of Can Tho City, Da Nang City and Hai Phong City; Region III covers the cities and the districts of Bac Ninh Province, Bac Giang Province, Hai Duong Province, and Vinh Phuc Province; and Region IV covers the remaining localities.

Since 2013, the establishment of the National Wage Council has strengthened Vietnam’s minimum wage system. See figure 18 for the evolution of Vietnam’s minimum wage policy.

Figure 18. Evolution of the minimum wage policy in Vietnam



Source: Authors’ compilation

4.2.1 Minimum wage setting machinery and minimum wage coverage

In line with the amendment of the 2012 Labour Code, Decision No. 1055/QD-TTg was issued in July 2013, establishing the National Wage Council.³⁰ The creation of the institution marks a turning point in the minimum wage policy for Vietnam. The main function of the Council is to advise the Vietnamese government on scientific grounds and available data.³¹ The Council has five member representatives from the Ministry of Labour, Invalids and Social Affairs (MOLISA), five representatives from the trade unions (VGCL), and five representatives from employers’ organizations. The Council becomes a consultancy body for the

³⁰ ILO has worked closely with Vietnam in both the lawmaking process and the preparation for the Council launch, as part of the activities of the Vietnam Industrial Relations Project.

³¹ A National Wage Council officially debuted on 6 August 2013 to advise on the 2014 regional minimum wage (<https://en.nhandan.com.vn/society/item/1914802-vietnam-rok-journalists-cement-ties.html>).

government, replacing the indirect consultation that was in practice before the existence of the tripartite body.

Regarding the consultative process, Vietnam has only one trade union and two main employers' organizations. This structure facilitates negotiations comparatively to other country's labour market institutions with more competing organizations. Nevertheless, challenges remain regarding the capacity to support the use of timely statistics in evidence-based dialogues.

The National Wage Council has a technical department³² or division meant to conduct studies and support the Council in the minimum wage analysis. The Council recommended a minimum wage³³ adjustment for 2020 of 5.5 per cent, and the technical department calculated that this would enable 95 per cent of workers' needs to be covered.

Adjustments are carried out on an annual basis, and implementation of the new minimum wage begins from 1 January of the following year.

4.2.2 Setting and implementing minimum wages

The minimum wage rate is determined per month, day or hour. In practice, however, calculations are mostly focused on the monthly minimum wage. The minimum wage analysis seeks to address the needs of workers and their families, taking into account the cost of living in every region.³⁴ Additional indicators such as the share of poor households, consumption levels of different items, and the share of wage earners help determine the regional variation in minimum wages (Hansen, Rand and Torm, 2016).

Similarly, the economic factor analysis includes the revision of indicators such as labour productivity, GDP per capita, CPI for cost of living, and the ratio of minimum to median or mean wages.

The Department of Labour and Wage, MOLISA, is responsible for the development of most of the Implementation Decrees, for technical support to the National Wage Council and for development of the minimum wage law. With

³² As part of the organizational structure of the National Wage Council, Decree No. 49/2013/ND-CP mentions that a technical division and a permanent division will assist the Council in studying, surveying, summing, and formulating the plan on region-based minimum wages. In order to operate, a fund is established in the state budget, included in the annual budget estimates of MOLISA and other legally-mobilized sources in accordance with the law.

³³ In 2019, minimum wages were fixed at four different levels – Region 1 with 4,180,000 Vietnamese dong (VND), Region 2 with VND3,710,000, Region 3 with VND3,250,000, and Region 4 with VND2,920,000. Region 1 includes cities like Hanoi and Ho Chi Minh City and Region 4 covers rural areas.

³⁴ According to the Vietnam Household Living Standards Survey (VHLSS) data for every two years, it is 2,300kcal/person/day.

regard to enforcement, the responsibility of enforcing labour issues, including minimum wages, is on MOLISA. A decree is the legal instrument used to stipulate the new minimum wages. It usually refers to the scope and subjects of application, minimum wage rates for each region, the effective date of implementation and the responsibilities of other institutions. Most of the work to ensure that the provisions of minimum wage decrees are implemented falls under the labour inspection system.

4.3 Malaysia's minimum wage system

Similar to other Asian countries, Malaysia enacted the Wages Councils Act 1947 (Act No. 195) to fix minimum wages for specific occupations and industries. Through these regulations, orders had been made effective over time to determine minimum wages for specific categories of workers:

- Wages Regulation (Catering & Hotel) Order 1967 (amended in 1982)
- Wages Regulation (Cinema Worker) Order 1972 (amended in 1981)
- Wages Regulation (Stevedores & Cargo Handlers) Order 1970 (amended in 1977)
- Wages Regulation (Shop Assistants) Order 1970 (amended in 1981)
- Wages Regulation (Shop Assistants) (Sarawak) Order 972
- Wages Regulation (Private Security Guards) Order 2011

The wages councils were created only for those vulnerable groups of workers for whom no wage regulations or collective agreements existed. However, Act No. 195 made tedious the establishment of orders through a long and ad hoc process. Subsequently, minimum wage rates were not revised regularly, and the objective to protect workers from changes in the cost of living was not practical. Besides, the coverage was limited to these few categories of workers which left the majority of the workforce out of the scope of coverage.

The discussion for a national minimum wage started back in 2007 when the Malaysian Trade Union Congress proposed to the government to set a minimum wage of 1,200 Malaysian ringgit (RM).

The prime minister later announced the minimum wages initiative for Malaysia in his budget speech in 2010. Subsequently, the Ministry of Human Resources launched a blog as a platform for discussions on the national minimum wage. A series of consultations and meetings were held with different stakeholders, including technical workshops with government agencies. International Agencies such as ILO and World Bank also collaborated in this process.

On 15 September 2011, Act No. 195 was replaced by the National Wages Consultative Council (NWCC) Act (Act No. 732) to constitute the NWCC.

4.3.1 Minimum wage setting machinery and minimum wage coverage

The NWCC is a tripartite council with representatives of workers, employers, government and independent experts.³⁵ The total number of members shall not exceed 29 persons at any one time. The Council's members are made up of a Chairman, a Deputy Chairman, a Secretary and at least five representatives of each of the following groups: employers, employees, public sector and independent members. Employees' and Employers' representatives must be on equal footing and the Chairman, and Deputy Chairman must have knowledge and experience in labour and industrial relations.

The main function of the Council is to undertake research relating to minimum wages and to determine minimum wage recommendations for the government. The Council shall have a minimum of four meetings in a year and the quorum is determined with the presence of two-thirds of its members.

The national minimum wages cover the entire country in three distinct geographical areas. Minimum wage is calculated for each area: Peninsular Malaysia, Sarawak and Sabah. Minimum wage coverage extends to groups of wage earners except domestic workers, apprentices and government workers.

The Council has the mandate to review the minimum wage at least every two years. The technical body that provides support to the NWCC is the National Wages Technical Committee (NWTC). The NWTC conducts studies on wages and socio-economic indicators. It collects and analyses data and information to recommend the NWCC minimum wage rates. It also analyses possible impacts and implications of the adjustment of the proposed minimum wages.

Furthermore, the process for consultation³⁶ requires a series of steps:

- i. undertaking a study on the impact of the minimum wages on the economy (workers and employers);
- ii. consulting the public through focus group discussions (FGDs) throughout the country with the involvement of employers' associations, trade unions and other associations;

³⁵ The NWCC term shall not exceed three years and members may be reappointed.

³⁶ Section 25 (1) of Act 732: The Council shall, at least once in every two years, review the MW order.

- iii. analysing secondary data on socio-economic indicators such as employment and income;
- iv. retrieving inputs from the public through a web portal, from non-governmental organizations (NGOs), and the ministry's programme;
- v. gathering inputs from research findings and studies from various parties;
- vi. consulting the labour department; and,
- vii. seeking advice and opinions from other organizations such as the ILO.

4.3.2 Setting and implementing minimum wages

The NWTC is responsible for estimating the reference minimum wage value based on an agreed methodology and criteria. The Independent Technical Unit would calculate the value based on a model that is already publicly available. The innovative formula serves as a baseline for the discussion in the NWCC. After deliberations, the NWCC votes and approves the recommended minimum wage by a simple majority.

The formula considers essential variables. The first part of the formula contrasts what would be the needs of the workers and their families and what would be the firm's ability to pay (Ibrahim and Said, 2015). The latter uses the median wage indicator and the former uses the regional poverty line income (per worker). Both these variables are estimated for the initial period and are averaged together to set the base criteria of the minimum wage. The second part of the formula takes into account the changes in the cost of living and productivity using CPI and GDP per worker variations since the last minimum wage revision. Finally, the formula revises the level of unemployment for each region. If unemployment is above 4 per cent, it penalizes the adjustment previously calculated.

$$MW_i = Avg \left(\frac{PL_i}{Average\ workers\ per\ HH} + Median\ Wage_i \right) \times \left[1 + \left(\frac{P_i}{100} \right) + \left(\frac{CPI_i}{100} \right) - \left(\frac{UE_i}{100} \right) \right]^{37}$$

³⁷ MW = Minimum Wages; PLI = Poverty Line Income; P = Productivity Growth (%); CPI = Consumer Price Index (% change); UE = Real Unemployment Rate (%) = (Unemployment rate – 4%) and i = Region (Peninsular Malaysia, Sabah and Sarawak).

The Technical Committee may suggest different adjustments based on the set criteria, namely cost of living, CPI, productivity, producer prices, competitiveness, size of the informal economy, unemployment rate and GDP growth. The recommended minimum wages are sent to the NMWC for deliberation.

The NMWC votes to either accept the recommendations or requests alternative scenarios. The Technical Commission, within a specific timeline, would resubmit to the NMWC possible adjustments to the proposals.

Once a decision is taken, the minister announces the minimum wages and publishes the binding provisions in the gazette.

The first time the minimum wage was enforced through this process was in 2013. Initially, the NMWC decided that enforcement applied only to enterprises with six or more workers. Meanwhile, enterprises with less than six workers were given six months to comply with the minimum wage. If they faced difficulties adapting to the minimum wage after this period, they could file a case. Depending on the situation, they were given a three- to nine-month deferent period to comply (ibid., 2015).

Enforcement plays an essential role in the minimum wage system in Malaysia. Under Act 732, penalties are established for employers who do not comply with the minimum wage. The monetary values increase if the offence is repeated. An employer who fails to pay the basic wages as established in the minimum wages order is liable to a fine of not more than RM10,000 for each employee. The court may order the employer to pay the difference between the minimum and the basic wages paid by the employer and other accrued payments

If an employer repeats an offence, he is liable to a fine up to RM20,000 or even imprisonment for a term not exceeding five years.

The secretariat of the NWMC follows up with MOLISA on the labour inspections and the complaints relating to minimum wages. It also receives the results of the number of claims received and settled in the labour court.

One mechanism commonly used to enforce minimum wages is awareness raising. The secretariat of the NMWC and MOLISA have conducted education and awareness programmes on minimum wages through different media platforms including panel discussions, television and radio, newspapers and exhibitions at the local level.

In line with the implementation of a minimum wages policy, Malaysia decided to ratify Convention No. 131 as one of the instruments to increase protection of workers in terms of wages.

There are still many challenges on the path to improving the minimum wage system in Malaysia. In August 2018, at a regional minimum wage workshop in Delhi, the secretary of the NMWC of Malaysia emphasized that the minimum wage policy intervention aims to transform the Malaysian labour market. However, amongst the challenges of the minimum wage system, there is still no coverage of minimum wages to domestic workers, and there is a shortage of enforcement officers.

5. Determining the methodology for fixing the national minimum wage in the Maldives

In the following paragraphs, this section presents minimum wage fixing methods on two dimensions: (i) needs of workers and families, and (ii) economic factors. The implementation of the methods is fully grounded in the latest data available on the various indicators related to the cost of living, nutritional intake, unit prices of different items of consumption, employment and wage distributions, etc., for the Maldives. In addition, these wage fixing methods provide various robustness checks by using alternative data at various levels and also offer solutions in case of lack of adequate data on one or other indicator.

Additionally, to estimate national-level minimum wages, this section also presents a mechanism of adjustment of minimum wages over time and methods to estimate regional/sectoral minimum wages. It also presents estimates on the number and percentage of workers likely to be affected by minimum wages and the related financial implications in terms of the increased wage bill (which will be needed to implement the minimum wages). Finally, this section analyses the implications of remittances, considering that a large percentage of foreign workers will increase their income by benefiting from the minimum wage determination.

5.1 Methodologies

5.1.1 Data sources and methods

The analysis in this report builds upon data from a range of sources. The main data sources include: (a) the nationally representative Household Income and Expenditure Survey 2016 (HIES, 2016) of the National Bureau of Statistics (NBS), Republic of Maldives; (b) the Food and Agriculture Organization (FAO) of the United Nations (FAO/WHO, 2001); and (c) the Institute of Nutrition (2014). In addition, for a robustness check, the analyses also uses information on the normative food consumption basket as recommended by the Health Protection Agency (HPA), Ministry of Health, Government of Maldives (HPA, n.d.). For the purpose of wage analysis, we have alternatively used data from the Maldives Pension Administration Office (pension data 2019) and work permit data from the emigration office (work permit data 2019). A brief description of these data sources is presented below.

1. HIES data by NBS

The HIES 2016 is the third nationwide household income and expenditure survey conducted by the National Bureau of Statistics (NBS) of the Maldives. It is a household sample survey conducted regularly, once every five years, by NBS. The latest HIES 2016 used the data from HIES 2009/10 for estimating the sampling errors and design effects for the estimates of average household expenditure and average household income. These results were useful in determining the most effective sampling strategy for HIES 2016. The total sample size of HIES 2009/10 was 1,917 households spread over 115 enumeration blocks in eight different regions of the Maldives. HIES 2016 was conducted over a period of six months from March to November 2016, with a break in between June and July 2016. The response rate in the survey varied from 96 per cent to over 99 per cent, depending on the atolls.

The survey is representative at both national and atoll levels, with a sample of 4,910 households (26,453 individuals) across 21 atolls. The sample weighted estimated population in the survey is 379,467, living in an estimated 72,208 households. The survey included different tools of data collection related to consumption, both food and non-food items, consumption expenditure on a wide range of consumption items, labour force and employment, wages and earnings of persons of age 15 years and above, and many other socio-economic characteristics of households and individuals.

HIES 2016 has been used to produce the latest evidence on a range of indicators related to the following: (a) average number of persons and consumption units per household (food and non-food consumption patterns); (b) the unit price of various consumption items; (c) the demographic structure; (d) average nutritional intake; (e) food, non-food and total consumption expenditure at a highly disaggregated level of items of consumption, etc.

This data source was also used to estimate size of the labour force, employment, and wages and earnings of workers. On the subject of income from occupations, the survey collected data on total monthly emoluments to workers from all sources related to their primary and secondary occupations. For employees or wage earners, the surveys collected information on total monthly emoluments, including: (a) wages and salaries (including food and medical allowances); (b) overtime, bonus, commission, living allowances; (c) uniform, laundry allowances; (d) travel expenses (on official purposes); and (e) services in kind (medical care, accommodation, clothing, food and other goods, and the like). For the wage analysis, wages and earnings from primary occupation were used.

2. Recommended nutritional intakes data by FAO

Different institutions come up with recommended energy requirements by age-gender composition of a population. The present analysis uses recommendations made by FAO (FAO/WHO, 2001). The publication from FAO provides information on energy requirements by detailed age and gender groups. The publication also provides information on adult equivalence of family members of a household based on the energy requirements of each individual in a family disaggregated by age and gender. We use this information to estimate per consumption unit (adult equivalent) requirement of calories in a household and number of consumption units in the household. The methods to estimate consumer unit per household are described in detail in the section on methods.

3. Recommended food consumption basket by the HPA

The Health Protection Agency (HPA) of the Ministry of Health, Republic of Maldives published a report on “National food based dietary guidelines for Maldives” (HPA, n.d.), which recommends the required quantity of different food items to be consumed per day by an average Maldivian for healthy living. The consumption basket also allows for variations in the types of food items to be consumed across five major food groups and the number of meal servings per day based on activities performed by an individual.

The information from the HPA publication was used to construct a recommended consumption basket, and consumption expenditure was estimated using retail consumer prices of the different food items needed. Consumption expenditure was estimated using highest, medium and lowest priced food items in each broad food category.

4. Calorie content of food items

To estimate the actual consumption of calorie by virtue of consuming different food items by the population in the Maldives, we used two alternative data sources. First, we used the calorie content of each food item as estimated by the NBS. This data is not available in the public domain and was made available to the research team on a special request to the NBS for the same. Alternatively, we also used the ASEAN Food Composition Tables, published by the Institute of Nutrition, Thailand (Institute of Nutrition, 2014). FAO has developed a database on nutrients content of different food items for a range of countries. However, Maldives is not available in this database. For this reason, we used the calorie content of food items representative of Asian countries. The ASEAN Food Composition Tables contain food and nutrient data systematically compiled from

six ASEAN national food composition tables. This publication generally provides average nutrient data on food consumed in ASEAN countries.

5. Wages and salary data from pension and work permit offices

In addition to using HIES 2016 data, we accessed more recent data on wages and salaries as collated by the pension office³⁸ and work permit data from the work permit office. Pension data provides information on monthly basic and basic allowance commuted at the individual level of the worker. The database of 104,097 registries from October 2019 also contains specific information on gender and sectors.

5.1.2 Needs of workers and their families

There are various methodologies to estimate household needs with regard to total cost of a basic acceptable living standard. Most methodologies are based on separate estimates of food costs and non-food costs (Anker, 2011). Instead of using any predetermined normative consumption basket, we estimated the basic consumption needs of an individual and a household across the two broad categories of consumption: (a) food expenditure (FE) and (b) non-food expenditure (NFE) using HIES 2016 data. Taken together, FE+NFE constitute the total consumption expenditure (TCE) of the individual/household.

$$TCE = FE + NFE \dots\dots\dots (1)$$

The methods to estimate minimum expenditure needed to meet these expenditures under the two major categories, for the general population in the Maldives, as identified above, is presented as follows.

5.1.2a Food component

1) Food requirements and expenditure

Adequacy of food consumption for healthy living is often measured in terms of a minimum threshold of nutritional intakes. Various types of nutritional intakes are considered for this purpose, ranging from macronutrients such as carbohydrates, fat and proteins to a range of micronutrients such as calcium, iron, vitamins, folic acid, zinc, etc. (FAO, 2002). From the workers' point of view, most of the existing evidence suggests focusing on calories intakes mainly because workers need more frequent burning of calories compared to the

³⁸ The Maldives Pension Administration Office ("pension office") came into existence following the ratification of the Maldives Pension Act (henceforth Pension Act) on 13 May 2009 by the president.

general population or a population leading a comparatively sedentary life. To assess the nutritional requirements of workers and her/his family, we only focused on the minimum level of calories requirements.

Nutritional requirements and adult equivalence

In general, the calorie requirement of a person varies with age, gender and work types gradients. A recent publication from the Institute of Medicine, United States (2005), recommends that an average worker in the age group of 30–59 years engaged in heavy work needs approximately 3,500 calories per day. These calories can be drawn from food rich in carbohydrates, fat and proteins. There are a number of studies that suggest approximately similar calorie intakes requirement by workers (ICMR, 2010; Institute of Medicine, 2005; Ministry of Health, 2017; WHO, 1997). One of the most recent studies by the Indian Council of Medical Research (ICMR) recommends different range requirements of calories, fats and proteins based on 17 different age–sex–occupation disaggregation. FAO, however, provides this information for a range of age groups, separately for male and female (FAO/WHO, 2001). We used this information to summarize the calorie requirements in 20 different age groups, separately for male and female categories.

However, one of the most important issues with household consumption and expenditure data is that most household surveys collect food consumption data (quantity consumed) at the household level and not at the individual level. To handle this, we used a scale of “adult equivalent energy intake” (AEEI) as suggested by FAO/WHO (ibid.). The method converts the individuals in a household into male adults (between 30 and 60 years old) that require 2,950 K/cal per day according to the FAO/WHO recommendations for each category (ibid.). Per person calorie requirement in different age groups across the two sexes and the scale of adult equivalence coefficients are presented in table 2.

Table 2. Average per day per person calorie requirement (K/cal) and adult equivalence coefficients in different age groups and sex

Age group (in years)	Calorie requirements (Kcal/person/day)		Adult equivalence coefficient	
	Female	Male	Female	Male
1–2	850	950	0.29	0.32
2–3	1 050	1 125	0.36	0.38
3–4	1 150	1 250	0.39	0.42
4–5	1 250	1 350	0.42	0.46
5–6	1 325	1 475	0.45	0.50
6–7	1 425	1 575	0.48	0.53
7–8	1 550	1 700	0.53	0.58

8-9	1 700	1 825	0.58	0.62
9-10	1 850	1 975	0.63	0.67
10-11	2 000	2 150	0.68	0.73
11-12	2 150	2 350	0.73	0.80
12-13	2 275	2 550	0.77	0.86
13-14	2 375	2 775	0.81	0.94
14-15	2 450	3 000	0.83	1.02
15-16	2 500	3 175	0.85	1.08
16-17	2 500	3 325	0.85	1.13
17-18	2 500	3 400	0.85	1.15
19-30	2 550	3 050	0.86	1.03
30-60*	2 400	2 950	0.81	1.00
>60	2 200	2 450	0.75	0.83

Note: * weighted average using weights of individuals and moderate physical activities
Source: FAO/WHO, 2001

Using the information in table 3 and HIES 2016 data on age and gender of each individual, we estimated the weighted average of adult equivalence to be referred to as “consumption units”, henceforth, for households. In brief, the formula used for generating the calories per day weighted average of consumption unit is given as follows:

$$RCA_h = \sum_{a=1}^{20} \sum_{g=1}^2 RCA_{ag}^c * S_{ag}^p \dots\dots\dots (2)$$

Where, RCA is recommended calories allowance, Subscripts “h” stands for household, “c” for calorie requirement, “a” for age groups divided into 20 groups, and “g” for gender of individual, “p” for population and “S” represents share of population in each age group and gender.

Accordingly, the weighted average adult equivalence (consumption unit) is estimated as the proportion of calorie requirement by each age group and gender to that of male in the 30-60 age group. The exact formula is given as follows:

$$CU = K_{cal}_i / K_{cal}_{m30-60} \dots\dots\dots (3)$$

Where, CU is consumption unit, K_cal is calorie requirement of individual “I” and “m30-60” is male in the age group of 30-60 years. This scale is used to estimate per consumption unit (PCU) consumption of quantity of food items, calorie intakes and expenditure on food items.

Cultural constraints

The recommended norm for nutrient requirement may be obtained with various combinations of food items, with a profound impact on the total food expenditure. For instance, 2,400–2,700 K/cal calories may be acquired with rice, wheat or sugar, with a much lower expenditure compared to food items like milk, meat and vegetables for the same nutrient content. One of the most relevant issues to consider would be to identify culturally acceptable food items that should constitute the consumption basket with the minimum nutritional requirements. The best way to address this issue is to make the proposed food basket “palatable”, following the approach of Darmon et al. (2002a, 2002b). Hence, the consumption basket of food items should be prepared in a way, say by drawing evidence from the actual consumption pattern, that the same should be culturally acceptable to the general population. Using HIES 2016 data, we estimated actual consumption of different food items in terms of quantity and expenditure. The average per consumption unit quantities of different food items by population, meeting the calorie norms, was taken as a representative consumption basket in the Maldives context.

Calorie content of food items in the Maldives

Households purchase and consume different food items in a given time period. To determine the minimum level calorie requirements for each person, it is important to estimate how much of the different food items a person consumes and what is the calorie content of each of those food items consumed. This essentially requires determining the calorie content of each food item consumed by an individual. There are different studies which provide this database. For instance, the FAO database on “Nutrition: Food Composition” provides contents of different nutrients for each item.³⁹

In addition, NBS estimated a conversion table of calorie consumption using HIES 2016 data for each food item. As a robustness check, we also compared the NBS estimates on the calorie content of each food item with the average Asian standard of calorie content of food items available from the FAO publication on “Asian Food Composition Database” (Institute of Nutrition, 2014). We used this database to construct a table of calorie contents for the food items (and/or close substitutes of the food items) consumed in the Maldives. The list of food items consumed in the Maldives was derived using HIES 2016 consumption data. Comparing the calorie content of food items across the two data sets (NBS and FAO), for the food items constituting more than 90 per cent of total quantity

³⁹ See <http://www.fao.org/nutrition/food-composition/en/>.

consumed, we find that the NBS estimates are marginally higher⁴⁰ in terms of total calories consumed by all households. Although, in total, the estimates varied across different food items consumed, since for most of the food items with higher weightage of consumption (e.g. normal rice, basmati rice, wheat, fish, etc.) the variation was in the range of -5 per cent to +5 per cent.

While estimating actual calorie consumption, we also included expenditure incurred on food at restaurants and takeaway food. To determine calorie content of food at restaurants and takeaways, we used the expenditure proportion of households across food items, restaurant food and takeaway. First, the calorie content of all food items for which calorie content is available, per unit of expenditure (MVR), was estimated. The calorie content of restaurant food and takeaway food was estimated by multiplying total expenditure on restaurant food and takeaway food with per calorie expenditure.

We finally used calorie consumption weighted by quantity of consumption of each food item for each household using NBS estimates. We estimated parallel calorie consumption estimates of different food items across the FAO and NBS data for each household. Appendix table A2 presents the calorie content of different food items as estimated using the FAO database.

Minimum cost of food basket with recommended calorie intakes

HIES 2016 data provides information on expenditure incurred for each food item purchased during the survey period. We estimated per household and per consumption unit food expenditure for each household and classified them across 20 equal fractile groups based on total (food and non-food) household expenditure per person per month. We identified the lowest fractile group which meets the minimum required calorie per consumption unit per day and considered the average expenditure on food by the identified fractile group as representative of the minimum cost required for meeting the calorie consumption norm.

As an alternative, we estimated a food basket for all those households who met the calorie norm and valued the consumption basket using information on implicit prices (per unit expenditure incurred on the food items in the consumption basket consumed by households). We finally estimated per consumption unit quantity monthly expenditure by dividing the total cost of such a basket by total number of consumption units in the population.

⁴⁰ However, this difference may be because of conversion rates of different food items which are reported in the HIES data in terms of packets or other units.

However, to estimate the food basket we considered a 10 per cent plus and minus consumption of 2,400 K/cal. The available literature reflects that a lower or higher intake of calorie consumption in the margin of 10 per cent on a daily basis is not likely to affect a person's working capacity (Sukhatme, 1981). Accordingly, a food basket in the range of 2,260 K/cal on the lower side and 2,640 K/cal on the higher side was estimated. This also helps having a sizeable sub-sample of households for the purposes of estimation.

The value of such a consumption basket may be significantly different from the value of the food consumed by the lowest fractile group meeting the calorie norms. For a comparison and alternative estimation purpose, we also estimated the value of such a food basket only for those households who belonged to the fractile group where the calorie norm was met at the lowest. All these estimations were used to provide a range of food expenditure required to meet the minimum calorie consumption under different scenarios.

Normative food basket

In addition to using behavioural data, such as HIES 2016, a culturally acceptable normative food consumption basket can also be prepared. A number of medical and nutritional research institutes frequently recommends a normative dietary pattern which provides information on how much quantity of which food items should be consumed for healthy living and what levels of nutritional requirements are fulfilled with which food items (Anker and Anker, 2017).

A recent publication by HPA presents a normative food basket in the context of the Maldives. We collated information on per adult person per day required consumption of different food items as available from the HPA publication. This can be considered as an ideal food basket in the context of the Maldives. Using the unit market price of each item in consumption, we estimated the price of the total consumption basket and compared this with the behavioural data derived from HIES 2016 for a robustness check. Table 3 presents the composition of the food basket according to HPA along with an estimated quantity per unit of serving.

Table 3. A normative food basket for adequate nutrition requirement: Per day per adult person consumption

Any one of the food items in a single serve in each food group	Number of servings per day per adult		Weight (in grams) per serving*
	High	Low	
Cereals			
1 Slice bread	10	6	28
1 <i>Roshi</i>	10	6	20
¼ <i>Huniroshi</i>	10	6	20
½ cup Cooked Rice	10	6	100
½ cup Cooked Oats Porridge	10	6	40
2/3 cup Wheat Cereal Flakes	10	6	25
½ cup Sweet Potato/Yam	10	6	100
½ cup Boiled plantain (<i>Maalhoskeyo</i>)/breadfruit	10	6	100
Fruits and dry fruits			
1 cup Fresh Fruits (e.g. watermelon/papaya)	3	2	250
1 Medium Fruit (e.g. banana/apple/guava)	3	2	118
1/4 cup Dried Fruits (e.g. dates/raisins)	3	2	50
Vegetables			
1 cup Green Leafy Vegetables or Raw Vegetables	5	3	75
1/2 cup Cooked Vegetables	5	3	40
1/2 cup Canned/Frozen Vegetables	5	3	40
Fish, Poultry, Egg, Meat, Legumes and Seeds			
Cooked Chicken	2	2	80
Cooked Fish	2	2	100
2 Large Eggs	2	2	136
Nuts/Pumpkin Seeds/Peanuts	2	2	30
Cooked Beef/Mutton	2	2	65
1 cup Cooked Lentils/Chickpeas/Kidney beans	2	2	75
Milk and dairy products			
1 glass UHT Milk	2	2	250
2 and 1/2 tablespoon Full Cream Milk Powder	2	2	20
2 slices of Cheese	2	2	56
3/4 cup Yoghurt	2	2	183

Note: * quantity per serving estimated by the Technical Committee Research Team
Source: HPA, 2015

Data presented in table 3 essentially implies that an adult person needs any one of the food items simultaneously from each broad category, in the given amount and number of servings, to maintain the required level of nutrients (including calories). However, the HPA document does not provide information on how many calories are consumed with such a food basket. The number of servings is

categorized by high and low for a person involved in active and sedentary activities, respectively.

5.1.2b Non-food component

2) Non-food requirements and expenditure

The second component of the total consumption expenditure of households is the non-food expenditure. Estimating non-food expenditure in determining minimum wages has hitherto been a relative approach in most countries. According to Anker and Anker (2017), estimates of non-food costs are usually determined using Engel's law. If you have estimated the food cost from a model diet and the percentage of total expenditure for food from Engel's law, it is an easy arithmetic calculation to estimate non-food costs and total cost. Other countries use the mean non-food share of a household, which becomes sensitive to the distribution of total consumption expenditure across households. In the present analysis, however, instead of using Engel's law, we estimated the average per consumption unit of actual non-food expenditure in the Maldives by fractile groups using HIES 2016 data. We estimated the non-food expenditure by fractile groups for each of the non-food items for which data was collected in HIES 2016. For the purpose of a need-based minimum wage estimation, these items were further classified into three distinct categories.

In general, non-food items such as fuel and electricity, house rent, education, medical expenses, clothing and footwear, and transport (or conveyance) should be included in the essential non-food item group. The second group would cover all the other non-food items of usual household consumption, recreation, personal care, furnishing, household equipment, utility bills, as reported in HIES 2016. The identification of non-food items into the two categories passed through a range of consultative processes. First, we prepared a general list of non-food items in the two categories. The list was presented in various fora and went through several rounds of reclassification based on stakeholders' feedback. Here, it is important to note that the Government of Maldives partially or fully subsidizes many non-food items for its entire population. Health expenditure is exclusively covered under the National Health Insurance Scheme, Aasandha. Expenditure incurred by households on such items cannot be considered either as essential or even falling in the "other" category. In particular, these include expenditure on health and education. Further, there are also a few other non-food items which are absolutely not necessary and only households with a certain

level of income consume those non-food items. The final list of non-food items in the three categories, as follows, was prepared through a consultative process with different stakeholders in the Maldives.

- a) Essential non-food items (NFEe)
- b) Other non-food items (NFEo)
- c) Excluded non-food items (NFEEx)

A list of all the non-food items classified into the three categories is presented in appendix table A3. The total non-food expenditure of households is a sum total of all the three categories. However, for the need-based minimum wage estimations we considered the first two categories “NFEe” and “NFEo”. The present method further proposes that the average monthly expenditure of the median class (50th percentile) of the consumption distribution may be used as the representative non-food expenditure for essential non-food items.

For the second group – other non-food items⁴¹ – we have used expenditure on all those non-food items of the fractile group where the poverty line falls. In the Maldives, the poverty line is defined as half of the median consumption expenditure. Hence, the poverty lines fall in the 5th fractile of total consumption expenditure. Accordingly, the total non-food expenditure is obtained by adding the two groups’ expenditure together. Hence, the total non-food expenditure will be estimated as follows:

$$NFE = NFEe (med) + NFEo (pov) \dots\dots\dots (4),$$

Where, “med” is median class and “pov” is the poverty line fractile group.

3) Total household expenditure

The required minimum total consumption expenditure of a worker’s family to be supported by the wage earnings of workers will include three components as follows:

$$TCE = FE + NFEe (med) + NFEo (pov) \dots\dots\dots (5)$$

However, a wage worker’s family may have more than one employed worker earning their wages separately, although one full-time worker per household is the most common assumption. Some methodologies use an estimate of the

⁴¹ In the results we have also used expenditure on all those non-food items of the lowest fractile group where the calories norm is met (i.e. in the 2nd or 3rd fractile). NFEo (ith fract) where, “I” is the lowest fractile group where the calorie norm is met.

average number of full-time workers per household based on labour force participation rates and part-time employment rate. We estimated the number of full-time equivalent wage workers per family, estimated from HIES 2016 data, and estimated total consumption expenditure of households per worker. For this purpose, we only considered employees (excluding self-employed) who earn their income as wage-employed. Finally, the expenditure need of the workers and her/his family is estimated as follows:

$$NBE = (TCE_{pcu} * \text{number of consumption unit}) / N \dots\dots\dots (6)$$

Where, NBE is need-based household expenditure, TCE_{pcu} is per consumption unit consumption expenditure, and N is number of wage-employee per household.

5.1.3 Economic factors

Simply considering need-based household expenditure to set minimum wages may result in too high or too low wage rates with significant implications for the economy. We consider several economic factors to decide the level of minimum wages which could be implemented in the Maldives without serious implications for the economy as a whole.

First, the “*Kaitz index*” helps in understanding the relevance of need-based expenditure in setting the minimum wage. The Kaitz index is an economic indicator represented by the ratio of the nominal legal minimum wage to prevailing actual average wage (Askenazy, 2003). The use of “kernel density” plots of the prevailing minimum wage provides a clear picture of the structure of wages in the Maldives and can serve to estimate minimum wages based on the Kaitz index from similar economies in terms of labour productivity or economic development. The proportion of workers affected by the minimum wage can be calculated at the national or industry level. We estimate the proportion of workers affected at 1-digit and 2-digit level of sectoral classifications. These disaggregated analyses provide a more detailed understanding of the wage distributions related to a particular industry or group of workers in the economy. They also allow the determination of those individuals, regions or industries that will be more affected by the minimum wage.

5.1.3a International comparison and robustness check

In the United Nations (UN) system, Small Island Developing States (SIDS) are recognized as a distinct group of developing countries.⁴² SIDS, by virtue of their size and island geography, are confronted with special vulnerabilities that impact their developmental prospects. Maldives, because of its geographic and many economic characteristics, is part of part of the AOSIS⁴³ and categorized as SIDS in the UN system. The UN System categorized the member states of SIDS into three groups, namely: (a) Africa, Indian Ocean, Mediterranean and South China Sea (AIMS); (b) Caribbean; and (c) Pacific. The common characteristics used for SIDS relate to: (a) insularity and remoteness; (b) small domestic markets; (c) external dependence; (d) relatively high cost of living; and (e) vulnerability to natural hazards (e.g. the impact of climate change). A list of countries analysed in the three groups is presented in appendix table A4. In this list, Maldives is grouped with the first category, AIMS. However, we compare the estimates of minimum wages in the Maldives with the prevailing minimum wages in the member states of the SIDS with similar geographic and economic characteristics as of those of the Maldives.

We identify SIDS with similar characteristics as that of the Maldives by using similar criteria as suggested by Mounsey and Singh (2018). For identifying similar characteristics, Mounsey and Singh identify four different dimensions of SIDS: (a) small, (b) island, (c) development, and (d) geo-economic impact. Using this framework, we identify five different dimensions and seven indicators for grouping SIDS with similar characteristics as that of the Maldives. The dimensions and the indicators are as follows:

1. Small

A. Small internal market

- i. Gross domestic Product (GDP) measured in terms of Purchasing Power Parity (PPP)
- ii. Population

B. Extent of external dependence

- i. Trade as a percentage of GDP
- ii. Tourism receipt as a percentage of exports

⁴² The United Nations Conference on Environment and Development in June 1992 acknowledged that SIDS are a special case for sustainable development (given their unique and particular vulnerabilities).

⁴³ Alliance of Small Island States is an intergovernmental organization of low-lying coastal and small island countries.

2. Island

A. Marine area relative to land-based area

- i. Coast to land ratio

3. Development

A. Average income level

- i. GDP per capita PPP

B. Prevalence of migrants

- i. International migrant stock as a percentage of total population

Based on these indicators, the states were classified into three groups, and Group 1 and Group 2 were found to have indicators closer to the Maldives. The states in Group 1 and Group 2 were further classified as the states with characteristics similar to the Maldives. Each indicator in these countries was matched in the range of 75 per cent higher and lower of the Maldives' values. We compiled information on seven different indicators in a dichotomous manner (see appendix table A5). States with value of an indicator as ± 75 per cent of the Maldives' value were identified as having similar characteristics. Further, all these indicators for all the states in Group 1 and Group 2 were arranged in a dichotomous manner with value "1" for indicators falling in the range and "0" otherwise. The count of number of indicators falling in the range of ± 75 per cent of the Maldives' values produced a maximum value of 6 (six indicators falling in the range) and a minimum value of 3 (three indicators falling in the range). We divided the list into two groups – Group 1 with value of 4 and above and Group 2 with value 3 (see appendix table A5 for the list of states). Finally, we classified the states from Group 1 into higher-income, upper-middle and lower-middle income countries. Since the Maldives is an upper-middle income country, all the states from Group 2, with composite indicator values 4 and above and as upper-middle income, were finally selected to compare with the Maldives for the minimum wages purpose.

Identification of states with characteristics similar to the Maldives helped establish minimum wage benchmarks from those who already have minimum wage systems in place. Lastly, we also estimated the different ratio of minimum wages to GDP per capita PPP in these states and used the averaged weighted ratio of these countries to estimate a minimum wage for Maldives based on its economic development.

5.1.3b Other robustness check

For a comparison with the methods adopted for fixing minimum wages in other countries, we also estimate the value of the monthly minimum wages using the Malaysian formula for setting minimum wages. The Malaysian model estimates

minimum wages at the regional level using the formula previously mentioned in section 4:

$$MW = avg \left(\frac{PLi}{Avg\ Work\ HHi} + MedWi \right) x [1 + (Pi + CPIi - UEi)] \dots (7)$$

Where, MW = Minimum Wages; PLI = Poverty Line Income; P = Productivity Growth (%); CPI = Consumer Price Index (% change); UE = Real Unemployment Rate (%) = (Unemployment rate - 4%) and i = Region (Peninsular Malaysia, Sabah and Sarawak).

To estimate national-level minimum wages, the subscript “i” in the formula becomes irrelevant. However, “i” can be used if minimum wages are required to be estimated at sectorial or geographical levels.

Other robustness checks included estimating mean and median wages and Kaitz index-based estimation of wages using pension data 2019 and work permit data 2019.

5.1.4 Impact analysis

5.1.4a Economic implications of setting minimum wages in the Maldives

Finally, to understand the likely economic situation after the minimum wage is implemented in the Maldives, we present a headcount of workers who will be affected by the minimum wages, implying counting the number of workers who are currently below the threshold of minimum wages and who will benefit after the implementation of minimum wages. In addition, we also estimated the total wage bill which will be required to meet the additional wage payment after the implementation of the minimum wages. These statistics are calculated in the present report using HIES 2016 and pension 2019 data. The two statistics are estimated as follows:

$$HCw = \frac{1}{n} \sum_i^n 1. (w_i \leq mw) \dots \dots \dots (8)$$

$$MWG = \frac{1}{\sum_{i=1}^j e_i} (mw - w_i) | w_i \leq mw \dots \dots \dots (9)$$

$$WB = \sum_{i=1}^n MWG_i * w_i \dots \dots \dots (10)$$

Where, *HCw* is headcount (%) of workers with prevailing wage (*w_i*) below the minimum wage (*mw*), *MWG* is mean wage gap per worker, *e_i* is number of wage-paid employees, and *WB* is total wage bill.

To estimate the implications of minimum wages on outward remittance by foreign workers, we estimated monthly and annual volumes of remittances using

the information from work permit data, the Human Resources and Employment Department of the Ministry of Economic Development, data collected by the Maldives Inland Revenue Authority (MIRA) on remittance tax, and from the monthly statistics published by the Maldives Monetary Authority (MMA). We estimated wage gap per worker (MWG) and monthly wage bill gap (WB) using equations (9) and (10) for different wage bands of the foreign workers. The proportion of foreign workers’ earnings sent to their home countries as remittance was estimated based on discussions during the consultation process. We estimated the percentage increase in outward remittance using a coefficient “k” of the total increased wage bill as follows:

$$RM=k*WB..... (11)$$

Where “RM” is the increased amount of outward remittance, “k” is a coefficient with value equal to remittance as a percentage of foreign workers’ earnings and “WB” is the increased wage bill estimated using equation (10) only for foreign workers.

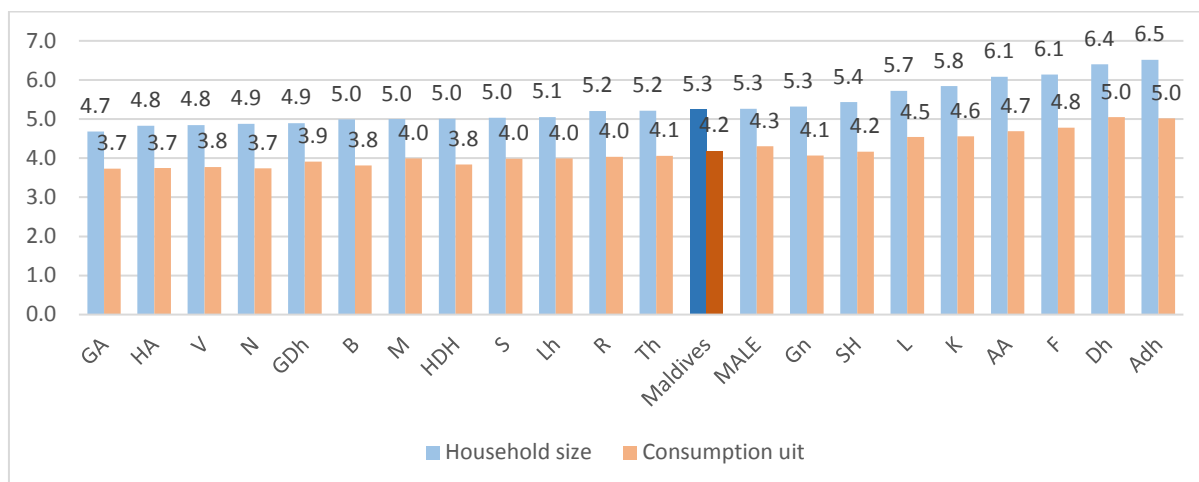
5.2 Results

5.2.1 Needs of workers and their families

5.2.1a Household size, consumption unit and calorie requirements

The average household size (number of persons per household) in the Maldives is 5.3, which translates into an average consumption unit (adult equivalent) of 4.2 per household (figure 19). The average household size (consumption unit) varies across the atolls, from a low of 4.7 persons (3.7 consumption units) in the North Huvadhu Atoll (GA) to as high as 6.5 persons (5.0 consumption units) in South Ari Atoll (Adh).

Figure 19. Mean household size and consumption unit per household in the atolls and the Maldives



Note: Highlighted bars are for Maldives' average.

Source: Estimated using HIES, 2016.

To estimate the average calorie requirement of households in the Maldives, we further classified the population across 20 different age groups and by gender, and estimated the weighted average of the calorie requirement per consumption unit (table 4) using FAO data on recommended calorie requirements as presented in table 1 earlier.

The average weighted calorie consumption requirement for the general population in the Maldives is estimated to be 2,358 K/cal (rounded to 2,400 K/cal) per consumption unit per day. The calorie requirement is higher for males (2,543 K/cal) compared to females (2,179 K/cal). Considering the 2,358 K/cal per consumption unit per day calorie requirement as a standard norm, we compared the actual consumption of calories in the Maldives using HIES 2016 data.

Table 4. Population share and weighted calories (K/cal) requirement per person per day

Age group (in years)	Population distribution (HIES data)			Calorie requirement per consumption unit per day (weighted average)		
	Female	Male	Person	Female	Male	Person
1-2	5.2	6.22	5.69	44.2	59.1	52.0
2-3	1.91	2.24	2.07	20.1	25.2	22.7
3-4	1.86	1.92	1.89	21.4	24.0	22.7
4-5	2.1	2.47	2.28	26.3	33.3	29.9
5-6	2.18	2.38	2.28	28.9	35.1	32.0
6-7	2.01	2.35	2.18	28.6	37.0	33.0

7-8	1.91	2.31	2.1	29.6	39.3	34.7
8-9	1.87	2	1.93	31.8	36.5	34.1
9-10	1.73	1.83	1.78	32.0	36.1	34.0
10-11	1.24	1.34	1.29	24.8	28.8	26.8
11-12	1.54	1.88	1.7	33.1	44.2	39.0
12-13	1.54	1.69	1.61	35.0	43.1	39.1
13-14	1.71	1.63	1.67	40.6	45.2	42.8
14-15	1.41	1.61	1.51	34.5	48.3	41.6
15-16	1.76	2.02	1.88	44.0	64.1	54.4
16-17	1.46	1.84	1.64	36.5	61.2	49.8
17-18	1.77	1.98	1.87	44.3	67.3	56.0
19-30	23.43	21.3	22.41	597.5	649.7	621.2
30-60	35.92	32.14	34.1	862.1	948.1	901.0
>60	7.44	8.85	8.11	163.7	216.8	191.5
All population	100	100	100	2178.9	2542.5	2358.2

Note: The weighted average of the calorie requirement is arrived at using equation (2) and table 1.
Source: Estimated using HIES, 2016 and FAO data.

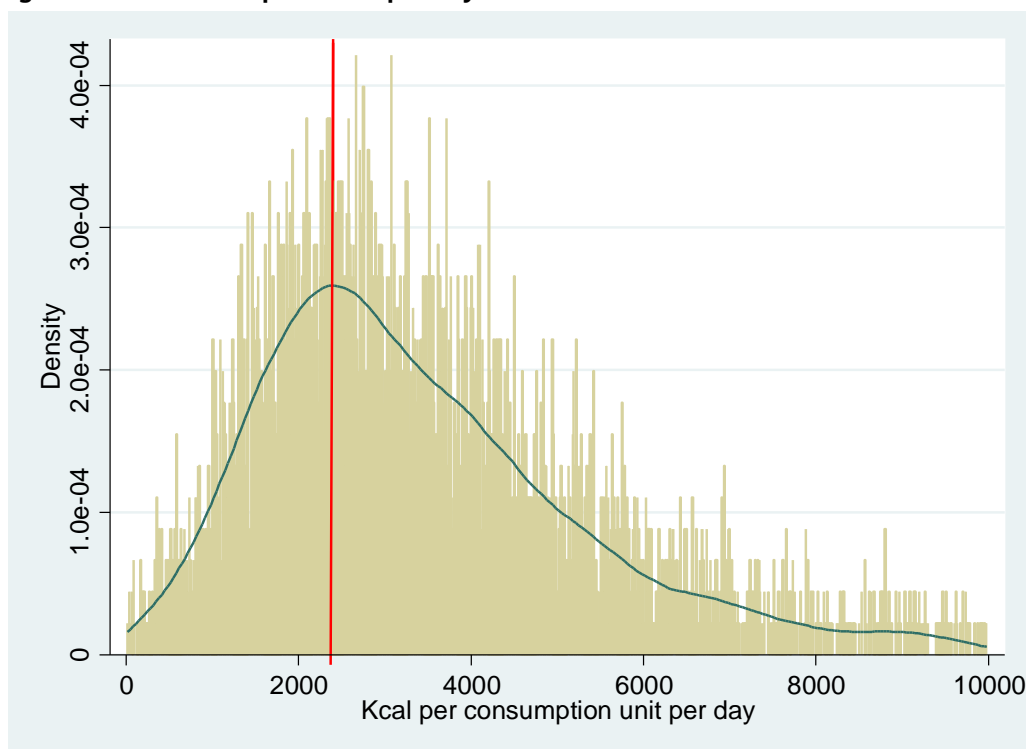
Table 5 presents the results for per person and per consumption unit per day intake of calories in the Maldives using NBS and FAO estimates of the calorie content of food items. Per person daily consumption of calories is estimated to be 2,702 K/cal and 2,482 K/cal, respectively, based on NBS and FAO data on the calorie content of different food items (table 5). This includes consumption of all food items, consumption of food at a restaurant and takeaway food. In terms of adult equivalent, per consumption unit per day consumption of calories is estimated to be approximately 3,402 K/cal, and 3,125 K/cal based on NBS and FAO estimates, respectively. A full distribution of calorie consumption indicates that approximately 40 per cent of Maldivians consume less than 2,400 K/cal per consumption unit per day (figure 20). Individuals consuming less than 2,400 K/cal per consumption unit per day are distributed across all income groups and are not only from the lower-income group households. A fractile distribution of individuals consuming less than 2,400 K/cal per consumption unit per day reflects that even in the top three fractile groups of households, 19 per cent to 22 per cent of individuals fall short of consuming 2,400 K/cal per consumption unit per day. However, this percentage is about 68 among the lowest fractile group (figure 21). Also, it is important to note that even in the lower fractile households, many households meet the calorie norm of 2,400 K/cal per consumption unit per day.

Table 5. Per person and per consumption unit per day consumption of calorie

Atoll	Using NBS estimate		Using FAO estimates	
	Per person	Per consumption unit	Per person	Per consumption unit
MALE	2 844	3 484	2 509	3 073
HA	3 072	3 962	2 795	3 604
HDH	2 656	3 468	2 417	3 156
SH	2 665	3 481	2 416	3 155
N	3 031	3 954	2 843	3 708
R	2 504	3 239	2 320	3 001
B	2 600	3 407	2 379	3 118
Lh	2 975	3 779	2 747	3 490
K	2 513	3 226	2 285	2 934
AA	2 606	3 376	2 456	3 182
Adh	2 697	3 512	2 461	3 204
V	3 103	3 998	2 822	3 636
M	2 626	3 323	2 405	3 044
F	2 658	3 418	2 409	3 098
Dh	1 924	2 445	1 756	2 231
Th	2 231	2 869	2 088	2 686
L	2 618	3 306	2 436	3 077
GA	2 920	3 660	2 748	3 444
GDh	2 316	2 904	2 189	2 744
Gn	2 489	3 255	2 307	3 018
S	2 275	2 878	2 091	2 645
Maldives	2 702	3 402	2 443	3 077

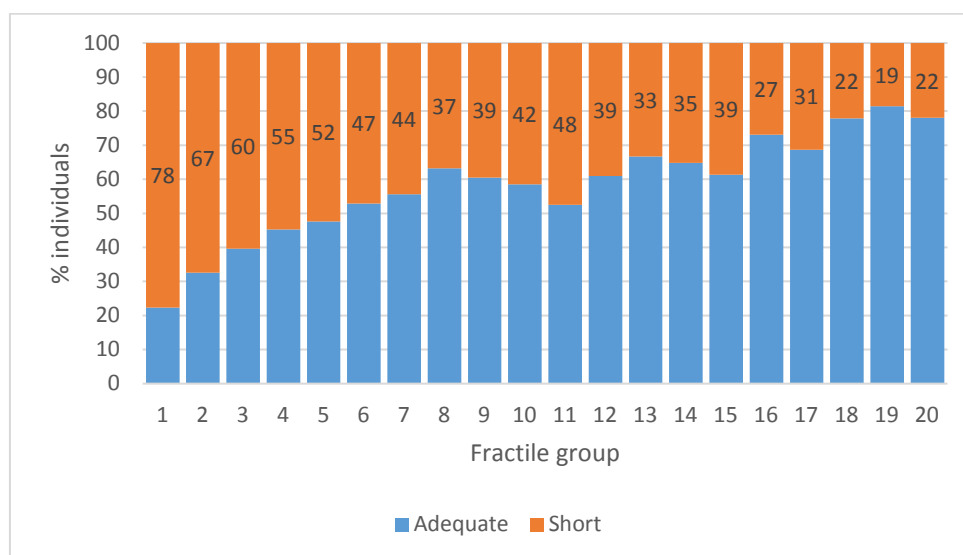
Source: NBS data made available to SAWAB on request; Institute of Nutrition, 2014.

Figure 20. Per consumption unit per day calorie intakes in the Maldives



Source: FAO/WHO 2001; HIES, 2016

Figure 21. Percentage population consuming adequate calories and falling short of the 2,400 K/cal norm, by different fractile groups



Source: HIES, 2016

Minimum cost of the food basket

Using information as presented in table 4 on per consumption unit calorie requirement and table 5 on per consumption unit actual calories intake, we estimated a range of minimum costs required to meet the normative calorie requirement. We consider various scenarios:

i) Lowest fractile group meeting the calorie norm: We identified the lowest fractile group which, on average, met the calorie requirement of 2,400 K/cal, alternatively using NBS and FAO estimates on the calorie content of different food items. The monthly food expenditure incurred by such a group was considered as representative of the minimum cost of food for estimating minimum wages. In an alternative scenario, we also estimated food expenditure of those households who at least meet the calorie norm and belong to the lowest fractile group where the calorie norm is met.

Table 6 shows that the 2,400 K/cal norm is met at lowest, by the second fractile as per NBS calorie data and by the third fractile as per FAO calorie data. The per consumption unit monthly food expenditure of these two groups is MVR627 and MVR773, respectively. However, if we only consider households who at least consume 2,400 K/cal per consumption unit per day within these two fractile groups, the monthly food expenditure is MVR715 as per NBS and MVR907 as per FAO calorie estimates for different food items.

Accordingly, using the fractile distribution of food expenditure, the minimum monthly per consumption unit cost of food for the recommended calorie norm varied in the range of MVR627 to MVR907 per consumption unit per month.

Table 6. Per consumption unit per day calorie intake (K/cal) and monthly food expenditure (MVR) by fractile group

Fractile	Per consumption unit per day calorie intake (K/cal)		Per consumption unit monthly food expenditure (MVR)	
	HIES estimates	FAO estimates	All households	Households consuming at least 2,400 K/cal
1	2 156	1 995	389	423
2	2 446	2 267	627	715
3	2 592	2 423	773	907
4	2 768	2 572	891	974
5	2 944	2 697	1 012	912
6	3 140	2 864	1 148	1 048
7	3 138	2 822	1 164	1 005
8	3 319	3 019	1 272	1 136
9	3 516	3 185	1 364	1 229
10	3 402	3 029	1 433	1 223
11	3 278	2 990	1 505	1 395
12	3 435	3 055	1 591	1 071
13	3 474	3 105	1 773	1 961
14	3 417	3 064	1 878	1 297
15	3 755	3 310	1 927	1 445
16	3 947	3 593	2 214	2 515
17	3 990	3 594	2 160	1 469
18	4 367	3 885	2 326	1 509
19	5 541	5 026	3 112	3 158
20	5 740	5 025	4 125	1 493
Total	3 402	3 077	1 519	1 209

Source: HIES, 2016

ii) Behavioural food basket meeting the calorie norm: Next, using the HIES data on consumption of detailed food items, we estimated a food basket which is actually consumed by Maldivians and also meets the calorie norm in the range of 2,260 K/cal to 2,640 K/cal per consumption unit per day. A list of food items in such a food basket, along with quantity of food consumed and expenditure incurred, is presented in appendix table A7. Restricting the sample to consumption of calories in the range of 2,260 K/cal to 2,640 K/cal resulted in 340 households (weighted 5,154 households) and mean per consumption unit per month expenditure incurred estimated as MVR1,078. Obviously, the cost of food items estimated from the consumption basket is higher compared to the fractile group analysis because the former considers all households meeting the calorie norm irrespective of which fractile group they belonged to.

iii) Normative consumption basket: Finally, we also valued the normative consumption basket as presented in table 3 in the method section. We used prevailing market prices at the unit level and multiplied the recommended quantity with the unit price. We estimated values under different scenarios of high, medium and low servings and high, medium and low priced items in each broad food category. Per adult person per month values of the consumption basket ranged from MVR2,968 (high serving and high priced items) to MVR866 (low serving and low priced items). However, if we consider the average number of serving with low priced items, the value of the consumption basket comes to MVR1,036 per adult person per month.

Based on the foregoing results on the minimum expenditure required for food consumption meeting the required calorie norm, the range of alternative estimates is summarized in table 7.

Table 7. Alternative estimates on food consumption expenditure required to meet the minimum calorie norm

Monthly total food expenditure (MVR) per consumption unit	Estimation method
627	HIES food-calorie tables – calorie meets norm, the 2nd fractile – All HH
715	HIES food-calorie tables – calorie meets norm, the 2nd fractile – HH with CR
773	FAO food-calorie tables – calorie meets norm, the 3rd fractile – All HH
907	FAO food-calorie tables – calorie meets norm, the 3rd fractile – HH with CR
840	Average results from FAO food-calorie tables analysis – 3rd fractile
1 077	Total national household that meets the norm, average item expenditure

Source: Elaborated by authors

However, the use of the FAO food to calorie conversion tables seems to provide more robust results. The averaging of the two results that are identified in the 3rd fractile provided a consistent result (MVR840) to be utilized as the appropriate food estimate from a need-based approach.

Minimum cost of non-food consumption

In this section, we present the results on household expenditure on non-food items classified in three categories: (a) essential, (b) other, and (c) excluded, by fractile groups. Here it is important to clarify that while analysing the items in the essential group, rent has a different behaviour. A large proportion of households didn't report paying any rent, particularly in the atolls other than Malé. We present a separate analysis on rent later. Total per consumption unit for monthly non-food expenditure varies from MVR716 in the lowest to MVR18,405 in the

highest fractile group households, with an overall mean value of MVR4,227 (table 8).

To recall from the method section, we considered expenditure incurred on essential non-food items by the median class of the distribution, while for the other non-food items we considered two alternatives: (i) the lowest fractile where the calorie norm was met and (ii) the expenditure of the poverty line fractile group. We do not consider the excluded category for the purpose of estimating minimum wages. Accordingly, the required expenditure of the households will be MVR1,448 for the essential non-food items; MVR435 and MVR530 (2nd and 3rd fractiles where calorie norm was met as per HIES and FAO calorie data, respectively) and MVR732 (considering the 5th fractile) for the other category of the non-food items. This essentially implies that a total of MVR1,978 (MVR1,448 + MVR732) will be needed to meet the non-food expenditure per consumption unit per month. Here it should be clarified that the estimated expenditure for essential non-food items includes: MVR522 as monthly rent per consumption unit. Essential non-food items, excluding rent, per consumption unit per month will be MVR926.

Table 8. Monthly per consumption unit of non-food expenditure (MVR), classified by essential, other and excluded total by fractile groups

Fractile	Essential	Other	Excluded	Total non-food
1	330	246	140	716
2	462	435	224	1 122
3	558	530	296	1 384
4	641	668	328	1 637
5	691	732	478	1 902
6	883	805	487	2 175
7	941	892	643	2 476
8	1 242	865	697	2 805
9	1 401	922	822	3 145
10	1 448	1 087	882	3 417
11	1 624	1 182	970	3 776
12	1 964	1 104	1 215	4 283
13	2 150	1 261	1 282	4 693
14	2 423	1 343	1 602	5 368
15	2 791	1 425	1 605	5 821
16	2 786	1 597	1 864	6 247
17	3 151	1 652	2 546	7 349
18	3 931	2 000	2 888	8 819
19	4 555	2 283	3 761	10 599
20	6 028	3 507	8 870	18 405
Total	1 783	1 124	1 321	4 227

Note: Highlighted numbers represent the non-food expenditure in the “essential” and “other” categories, which fall in the median and 2nd/3rd fractiles of calorie consumption class, respectively.
Source: HIES, 2016

However, a detailed analysis of different non-food items reveals that the value of housing rent is highly underestimated for the lower fractile groups and that is why we have to undertake a detailed analysis when estimating the expenditure to be included as part as the minimum wage.

An overwhelmingly high proportion of households in poorer fractile groups and living in atolls other than Malé do not pay house rent. In fact, it is only in the starting 6th fractile that a notable proportion of households report paying house rent. Between the 6th and 8th fractiles, the percentage of households reporting paying any rent varied between 7 per cent and 21 per cent at the national level and between 26 per cent and 53 per cent in Malé.

A distribution of households who actually pay rent in different fractiles shows that the median consumption class pays MVR1,751 per consumption unit or MVR9,433 per household across all atolls, and MVR1,789 per consumption unit or MVR10,519 per household in Malé (table 9).

We considered a weighted average of rent value between the 6th and 8th fractiles across all atolls to be representative of house rent for the minimum wage purpose. The weighted average of rent value for the households across the 6th (MVR1,254 mpcu) and 8th (MVR1,614 mpcu) fractiles is estimated to be MVR1,468 monthly per consumption unit. Since rent value of MVR522 monthly per consumption unit is already included in the overall essential non-food item expenditure, an additional MVR946 monthly per consumption unit can be included only for the house rent.

Table 9. Percentage of households reporting rent payment and average value (MVR) of rent per paying household

Fractile	Atolls except Malé			Malé			Maldives		
	% HH reporting	Mean rent value (only reporting HH)		% HH reporting	Mean rent value (only reporting HH)		% HH reporting	Mean rent value (only reporting HH)	
		Per HH	Per CU		Per HH	Per CU		Per HH	Per CU
1	1.14	1 667	278	0.0	0	0	0.9	1 667	278
2	1.59	1 515	280	14.5	4 500	546	2.4	2 682	411
3	3.26	2 109	449	0.0	0	0	3.0	2 109	449
4	3.26	2 749	604	0.0	0	0	3.1	2 749	604
5	2.59	2 449	564	8.0	3000	546	3.3	2 628	557
6	3.68	2 628	921	25.8	12 055	1 329	7.4	8 115	1 254

7	2.21	3 969	1 216	33.2	8 718	1 303	8.6	7 743	1 294
8	3.10	2 880	840	53.3	10 238	1 659	21.0	9 542	1 614
9	6.02	3 886	1 170	53.2	10 985	1 566	22.2	9 722	1 529
10	6.43	3 414	1 291	54.3	10 519	1 789	25.4	9 433	1 751
11	4.44	3 274	1 027	65.7	11 062	1 840	28.2	10 312	1 796
12	3.30	3 901	2 103	60.4	11 549	2 393	32.6	11 171	2 388
13	6.50	4 785	1 646	72.6	10 803	2 182	42.4	10 381	2 160
14	5.27	5 057	1 744	68.4	11 240	2 492	47.0	11 005	2 474
15	9.03	2 494	1 489	67.0	12 874	2 504	48.3	12 248	2 483
16	8.35	4 079	2 401	67.6	11 887	2 816	47.7	11 427	2 805
17	18.10	2 123	1 271	69.1	12 230	3 275	53.1	11 146	3 173
18	15.67	7 341	2 280	81.1	12 777	3 593	66.0	12 479	3 527
19	16.81	4 316	2 298	78.9	14 980	4 531	63.3	14 269	4 444
20	13.80	7 290	4 183	74.7	16 940	5 782	57.5	16 288	5 716
Total	4.95	3 748	1 292	62.8	12 554	2 813	29.2	11 686	2 712

Source: HIES, 2016

Minimum total cost of food and non-food consumption

The foregoing analysis on food and non-food consumption reflects a range of estimates on the minimum cost of living. This required expenditure must be earned by workers to maintain their work efficiency and maintain the livelihood of their families. However, a worker household may have more than one wage employee. Accordingly, the total cost of living for the family may be divided over the number of workers in the family. The average number of wage-paid employees among households exclusively depending on a wage employee for their livelihood is estimated to be two workers per household. Hence, we distribute the total cost of living of the households over two workers per household to estimate the required minimum wage that must be earned per worker. A summary of all the relevant estimates is presented in table 10.

Depending on the different approaches adopted in the foregoing analysis, need-based wage ranges between MVR6,008 and MVR8,981 per month per worker as of May 2019 (adjusting the 2016 values by inflation).

The lowest of the range – option 1 – is arrived at because the fractile group identified to meet the required calories norm, using FAO data on the calorie content of food items, falls in the third-lowest fractile group (MVR733). The other non-food estimate is also calculated for the 3rd fractile (MVR530), and we take the lowest rent value (MVR522), which was identified as being undervalued. Essential non-food items without rent comes to MVR926 for all options. Total household expenditure for option 1 (MVR11,554) is calculated summing up food

and non-food expenditure for a consumption unit adult equivalent (MVR2,751) and multiplying that by the 4.2 average consumption units.

Options 2 and 3 take the FAO food-calorie conversion estimates. Option 2 uses the food value expenditure for all households in the 3rd fractile, where the norm matches the average consumed calories by fractile. Meanwhile, option 3 takes the value of food expenditure of only those households found in the same 3rd fractile that consume 2,400 calories a day per consumption unit or more. With regard to rent, both options take the call that rent should be estimated by the weighted average of those households paying rent that fall between the 6th and 8th fractiles of the expenditure distribution. Total household expenditure for option 2 is MVR16,376 and for option 3 is MVR16,939. The values are then divided by two household members and adjusted for inflation to arrive at the 2019 need-based minimum wage estimates of MVR8,515 and MVR8,808.

Option 4 makes two adjustments. For the food value it takes the average of the estimates generated by the FAO food-calorie conversion rates that were identified in the 3rd fractile. The food value per consumption unit adult equivalent is MVR840, and the other non-food value comes to MVR732. On the other hand, it takes the higher fractile between the 6th and the 8th, for those households paying rent, to estimate rent at MVR1,6114 monthly per consumption unit. Total household value of food and non-food expenditure comes to MVR17,270, and the need-based minimum wage estimate adjusted by inflation registers the highest value of MVR8,981.

Table 10. Summary of different estimates of monthly cost of living and estimation of need-based monthly minimum wage per worker

Consumption expenditure (MVR)	Option 1	Option 2	Option 3	Option 4
<i>Per consumption unit</i>				
Food	773	773	907	840
Rent	522	1 468	1 468	1614
Non-food (essential) without rent	926	926	926	926
Non-food (total essential)	1 448	2 394	2 394	2 540
Non-food (other)	530	732	732	732
Total food and non-food	2 751	3 899	4 033	4 112
<i>Per household</i>				
Total food and non-food for household	11 554	16 376	16 939	17 270
Number of wage earners per household	2	2	2	2
<i>Per worker</i>				
Minimum Wage – Need-based (2016)	5 777	8 188	8 469	8 635
Price adjustment for May 2019 (1.04%)	6 008	8 515	8 808	8 981

Source: Elaborated by authors

5.2.2 Economic factors

Table 11 presents the broad characteristics of Maldives' labour market and employment situation in 2016. The labour force participation rate (LFPR) in the Maldives is 57.6 per cent (female 42 per cent and male 75 per cent). Accordingly, the worker population ratio for age 15 years and above is estimated to be 54 per cent (female 40 per cent and male 70 per cent). Within the labour force, the unemployment rate is approximately 6 per cent among both males and females. The percentage of wage-paid employees is 74 among male workers and 67 among female workers. An estimate from the NBS (NBS, 2016) suggests that wages and salaries constitute up to 59 per cent of total household income from all sources (MVR26,395).

Table 11. Characteristics of the labour market, 2016

	Total	Female	Male
Total population	379 466	197 521	181 945
Population 15 years and above	263 311	139 956	123 354
Labour force	151 706	59 047	92 659
Labour force participation rate (age 15+ years)	57.6	42.2	75.1
Employed	142 422	55 721	86 701
Wage earners	101 492	37 333	64 159
Worker population ratio (age 15+ years)	54.1	39.8	70.3
Self-employed (%)	20	30	13
Wage-paid employed (%)	71	67	74
Other workers (%)	8	3	13
Unemployed	9 284	3 326	5 958
Unemployment rate (%)	6.1	5.6	6.4

Source: NBS, 2016

Table 12 presents results on the mean and median prevailing monthly emoluments to wage workers from primary occupation in the Maldives in 2016. Mean total emolument of workers was 10,579 (median being 9,000), which includes all kinds of allowances, namely overtime, bonus, commission, living allowances, uniform and laundry allowances, travel expenses and services in kind. Mean monthly emoluments to female workers is lower (9,057) compared to that of male workers (11,460). On average, wages and salaries (including food and medical allowances) constituted approximately 84 per cent of the total emoluments, while other allowances in cash or kind constituted less than 2 per cent. On average, overtime and bonus constituted approximately 14 per cent of the total emoluments to workers. However, median workers receive other emoluments (Overtime, bonus, commission, living allowances) that account for only 5 per cent of their wages and salaries.

Table 12. Prevailing mean and median monthly wage (MVR) payments by heads of payment for primary occupation, 2016

Heads of payments	Female		Male		Total	
	mean	p50	mean	p50	mean	p50
Wages and salaries (including food and medical allowances)	7 650	1 6 500	9 802	7 800	9 014	7 144
Overtime, bonus, commission, living allowances	337	496	1 521	300	1 454	350
Uniform, laundry allowances	44	0	43	0	43	0
Travel expenses (on official purposes)	73	0	102	0	91	0
Services in kind (medical care, accommodation and alike)	83	0	115	0	103	0
Services in kind (clothing, food and other goods)	37	0	77	0	62	0
Total	9 219	8 000	11 659	10 000	10 765	9 000

Source: Estimated using HIES 2016 data

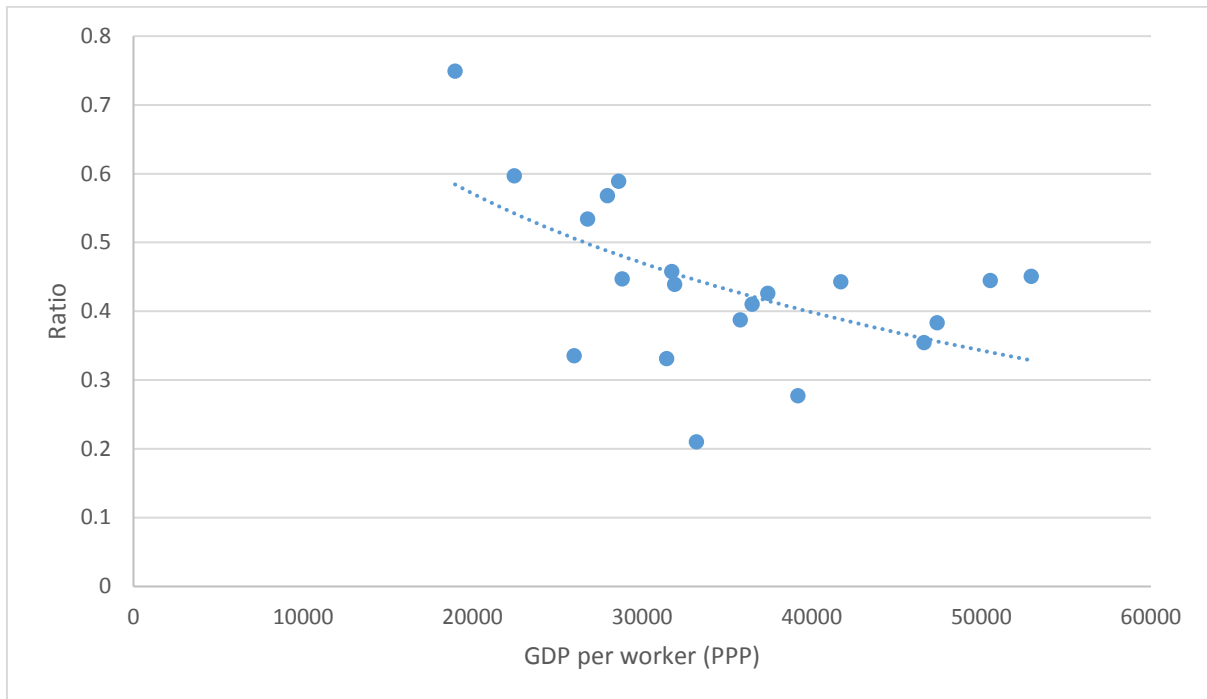
Kaitz index and international evidence

The analysis of the distribution of wages can certainly be a baseline to guide evidence-based social dialogue. In figure 22, with data of different upper-middle income countries, we compare the ratio of minimum wages to mean wages, with productivity measured in GDP per worker (PPP). We notice there is an inverse modest correlation between the level of productivity and how minimum wages are fixed in relation to the average wages.

The Kaitz index (minimum to mean wage ratio) is lower in countries with higher GDP PPP per capita resulting in an inverse relationship between log GDP per capita and Kaitz index, with a slope of -0.249. This essentially implies that 1 per cent increase in GDP PPP per capita leads to 0.249 unit decline in the Kaitz value in upper-middle income countries. However, figure 23 also reflects the conglomeration of countries with a Kaitz index of approximately 0.44, implying that most upper-middle income countries would set their minimum wages at 44 per cent of mean wages.

What is the range of the Kaitz index in other countries with similar characteristics as the Maldives? We explored data related to the relationship between GDP per capita PPP with the Kaitz index in different countries with similar GDP per capita PPP as that of the Maldives. These countries are mainly upper-middle income countries from Europe and Central Asia, Americas, Asia and the Pacific, and Africa.

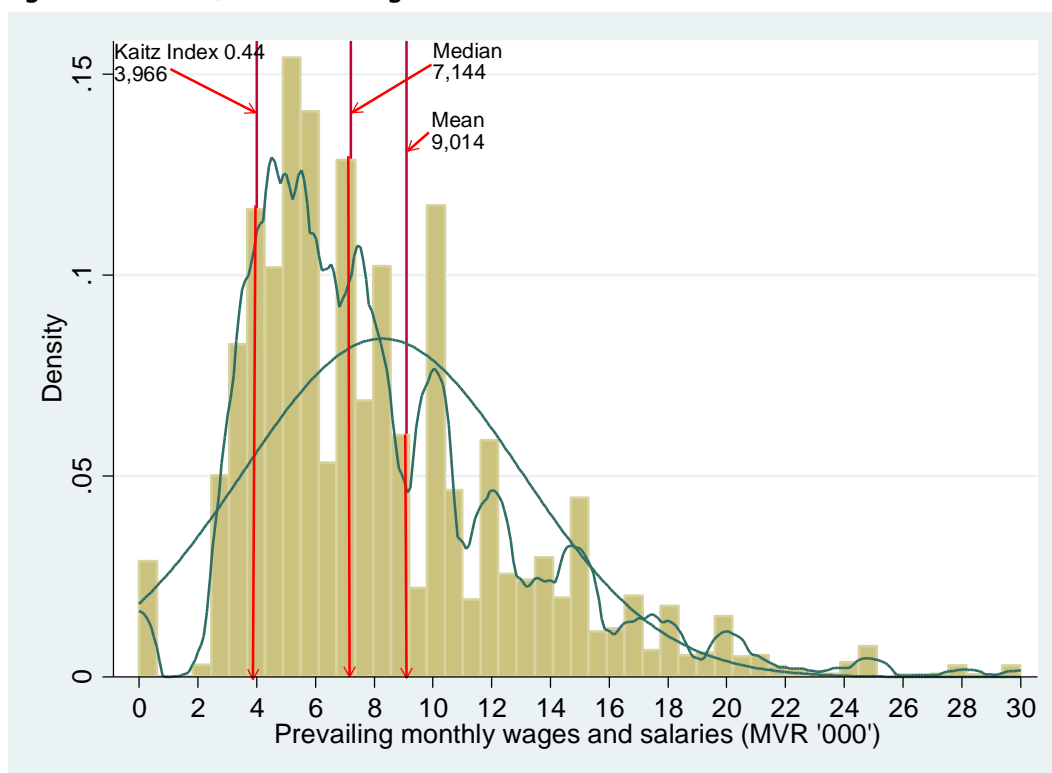
Figure 22. Productivity and ratio of the minimum wage to mean wages of upper-middle income countries, 2016



Source: ILO calculation. ILO Global Wage Database; ILO Global Employment Trends (GET).

For wage distribution in the Maldives, we have considered only the basic (including food, medical and other allowances in kind) wage. However, we also analysed total emoluments to workers including overtime, bonus, and other reimbursements. Using the basic wage, a Kaitz ratio of 0.44 produces a minimum wage rate of MVR3,966 (figure 23).

Figure 23. Distribution of basic wages and salaries (including payments in kind), mean and median wages and salaries, minimum wages at a Kaitz ratio of 0.44



Note: Approximately 2.4 per cent of workers earning more than MVR30,000 per month are excluded in the graph, mainly to avoid the long tail of the distribution.

Source: Estimated from HIES, 2016

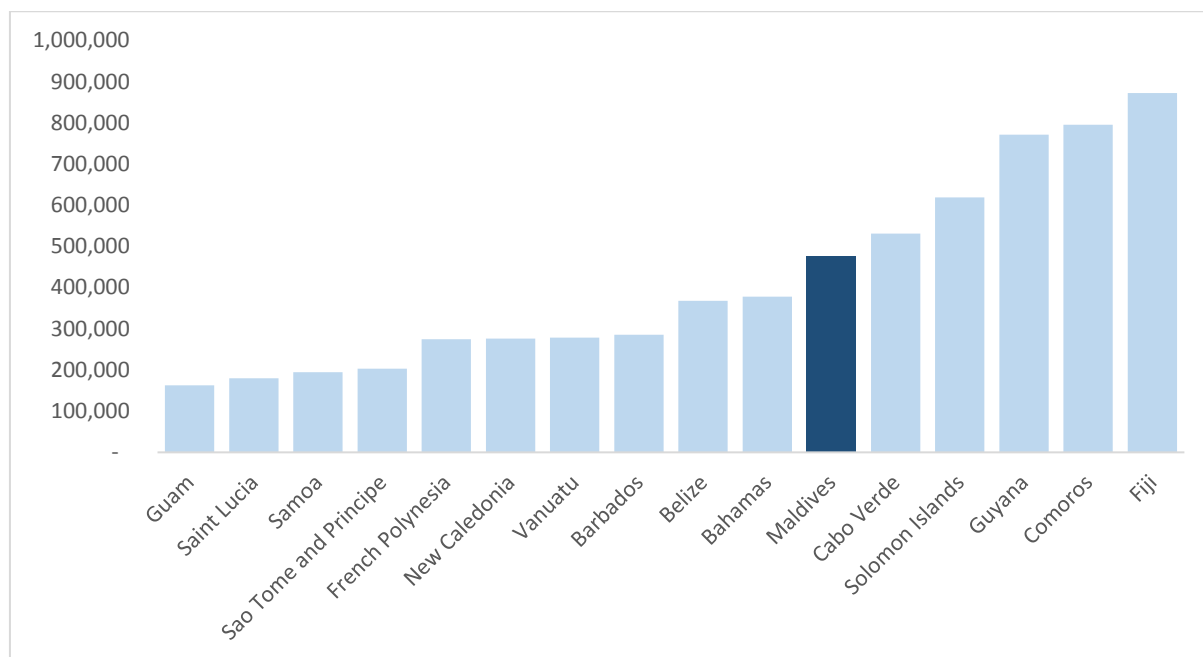
Small Island states

As presented in the theoretical framework, we have identified Small Island Developing States (SIDS) as having specific characteristics and facing unique challenges in their socio-economic development. Consequently, with the use of particular indicators to address insularity and remoteness, small domestic markets, external dependence, relatively high cost of living, migrant to national population, and vulnerability to natural hazards, we have identified those SIDS with similar characteristics to the Maldivian context.

Maldives has a small domestic market characterized by a small population and limited GDP, which is measured in terms of Purchasing Power Parity (PPP). SIDS with a population size similar to the Maldives (ranging from 163,000 to 873,000 persons living in the country) are Guam, Saint Lucia, Samoa, Sao Tome and Principe, French Polynesia, New Caledonia, Vanuatu, Barbados, Belize, Bahamas, Cabo Verde, Solomon Islands, Guyana, Comoros, and Fiji (figure 24). Being small in size (small population states with less than 1.5 million inhabitants), SIDS face

more challenges in their pursuit of sustained development. All the SIDS identified fall under this category and are bound to face capacity constraints, leading to significant migration to increase the economic potential of the country.

Figure 24. Total Population 2016, selected SIDS (including the Maldives)

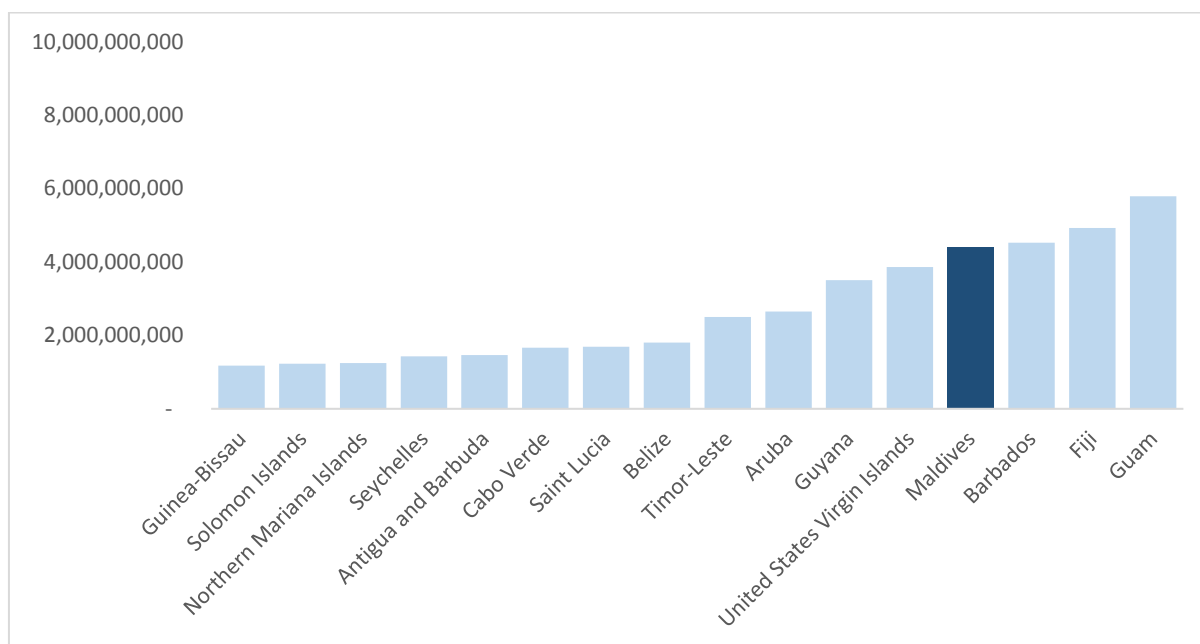


Note: Data adapted from World Bank Open Data, 2016
 Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

On the other hand, SIDS constitute a heterogeneous group of countries. Even if their small size and populations limit them, their development trajectories may vary extensively. SIDS are often discussed in their regional categories. However, their small country size and remote location from markets often constitute common denominators for lower economies of scale and higher internal costs. Hence, in our context, the total output or GDP in USD indicates the domestic production capacity of SIDS similar to the Maldives.

We use the GDP measured in US current dollars in 2016 to identify those SIDS with similar GDP to the Maldives. In 2016, Maldives had a GDP of 4,414 million current dollars. In figure 25, we have identified SIDS countries in 2016 with GDP in current USD ranging from 1,178 million (Guinea-Bissau) to 5,793 million (Guam). Barbados had the closest production to the Maldives, with only 2.6 per cent higher GPD in 2016 current dollars. We have identified 16 SIDS countries for this category related to a small market or economy.

Figure 25. GDP in current USD 2016, selected SIDS (including the Maldives)



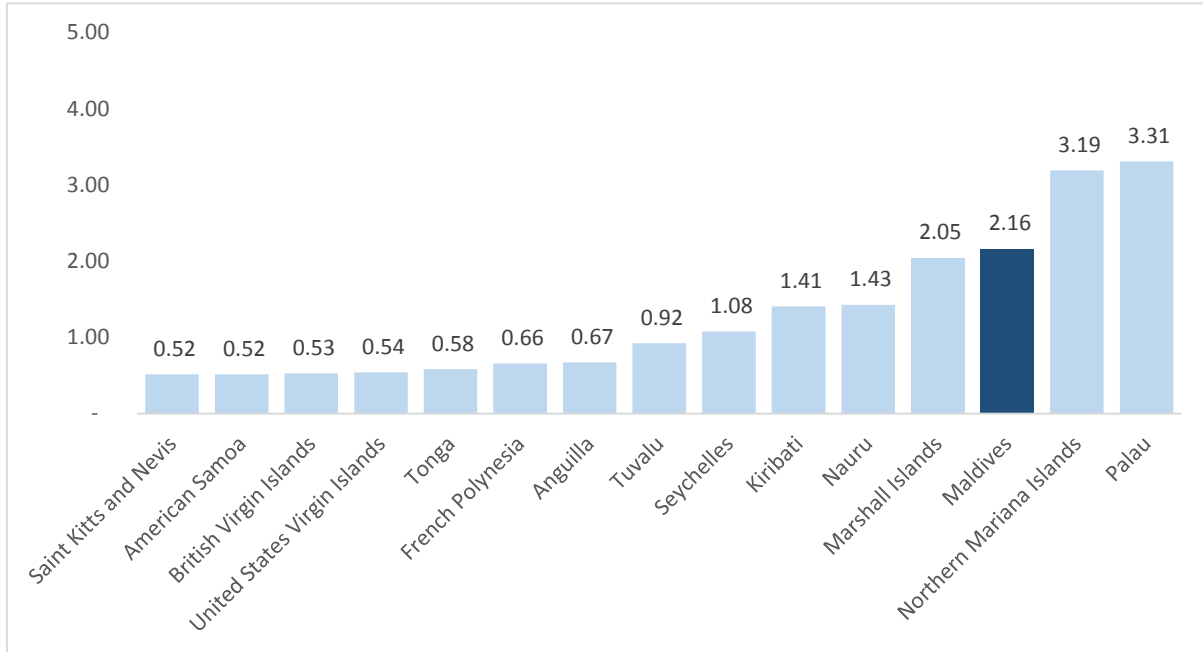
Note: Data adapted from World Bank Open Data, 2016

Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

SIDS' geographical location is a critical feature which makes them extremely vulnerable to natural disasters and climate change. SIDS are located in the most disaster-prone regions (OECD, 2018). The islands are threatened by climate change and rising sea levels due to being low-lying areas, which is also likely to impact economic sectors such as agriculture, fisheries and tourism in these countries.

SIDS have a large coastal area relative to their land mass ratio. While their coastal environment is important to promote marine exclusive economic zones, extend fisheries and other marine resources, it also exposes these islands to the above-mentioned natural disasters. Indicators such as coastline relative to land mass (coast to land ratio or CLR) can also provide useful benchmarks to identify SIDS which face similar environmental vulnerabilities as the Maldives. Maldives is one of the countries with the highest CLR, with 2.05 metres of coastline per square kilometre. However, for this study, we have chosen those SIDS in the 0.52 to 3.31 CLR range (figure 26). From the 15 selected states, only Palau and Northern Mariana Islands have a higher CLR than that of the Maldives.

Figure 26. Coastline (km) to land area (km²) ratio, selected SIDS (including the Maldives)



Note: Data for CLR is calculated based on land area and coastline data from the 2013–4 CIA

Source: CIA World Factbook available at <https://www.cia.gov/library/publications/the-world-factbook/> [accessed Oct. 2019]

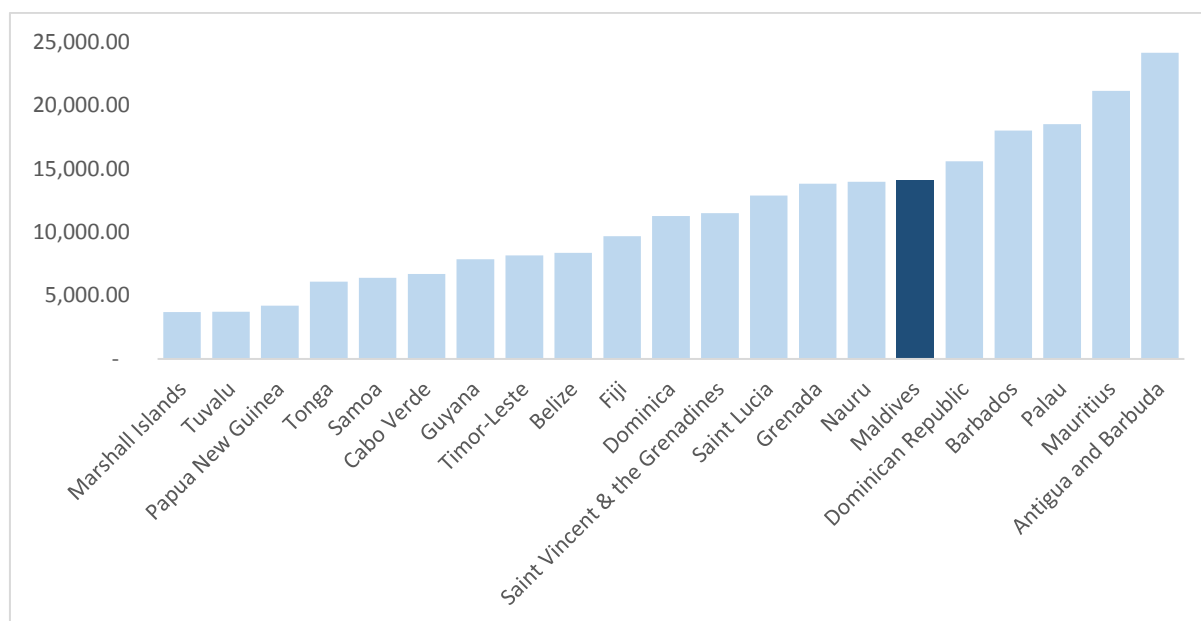
A development indicator for cross-country comparisons is the GDP per capita, measured by the GDP and divided by the total population. This allows for both fluctuations in product and population. Furthermore, we measure GDP per capita in international dollars using PPP rates. This allows us to capture the purchasing capacity of those dollars taking into account the cost of products and services in one country in relation to another.

It is commonly discussed that SIDS or small economies can attain a relatively high level of GDP per capita if they adopt appropriate development strategies. One important characteristic to achieve this per capita growth is due to economic resilience (Briguglio et al., 2009). Economically resilient countries or small states, as in the case of Singapore, have been able to build resilience against external shocks and register high rates of economic growth. Economic resilience is strongly and positively associated with GDP per capita (Briguglio, 2016). For this reason, it is very relevant to use this indicator to identify those countries that have achieved similar growth per capita in PPP terms. We identify 21 countries that had a relatively similar GDP per capita to the Maldives in 2016, measured in current PPP \$ International (figure 27).

In 2016, Maldives had a per capita GDP of 14,055.94 PPP \$ International. For example, states like Aruba (104,872) and the Seychelles (94,677), with smaller

populations, have a much higher GDP per capita than the Maldives. The GDP per capita is so much higher they were not included in this “common” category. Per capita GDP in PPP \$ International ranged from 3,702 (Marshall Islands) to 24,178 (Antigua and Barbuda). Most similar in growth per capita states are Grenada and Nauru (figure 27).

Figure 27. GDP per capita in PPP \$ International 2016, selected SIDS (including the Maldives)



Note: Data adapted from World Bank Open Data, 2016
 Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

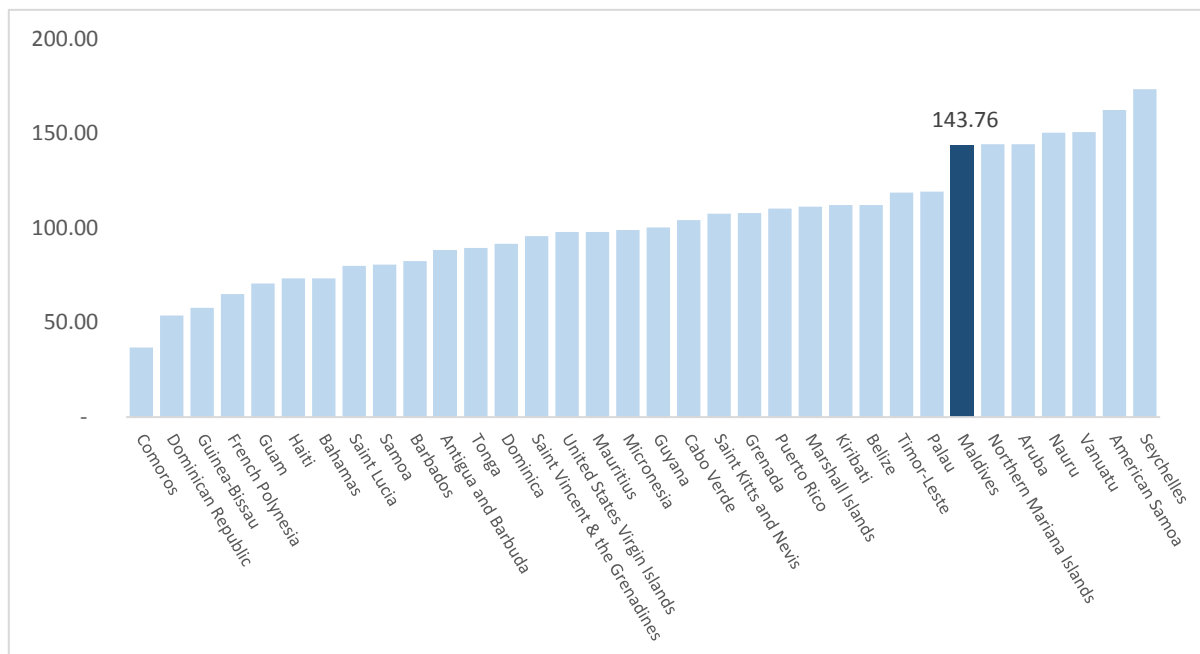
Another dimension of particular importance in the context of the Maldives is that of external dependence. The country faces high dependence, both in terms the external market and the reliance on tourism. Therefore, we find that countries in the SIDS category that have high indicators measured in terms of trade as a percentage of GDP and tourism receipts as a percentage of exports will have closer ties to the Maldivian external dynamics.

Although some states have achieved important benefits from openness, they are exposed to the changes in global markets. Current economic trends of increased protectionism, sluggish global trade and uncertainty exacerbate SIDS’ vulnerability to external shocks. Therefore, these two indicators are quite unique to the Maldivian context, and will allow an understanding of which other states share these external market-related commonalities.

The percentage of trade in GDP measures how open an economy is to the world. Within the SIDS, Maldives has one of the highest levels of trade in relation to its production – trade accounts for 143.76 per cent of its GDP. However, from the

33 countries, only six have higher trade percentages (Northern Mariana Islands, Aruba, Nauru, Vanuatu, American Samoa, and Seychelles) than the Maldives, and Northern Mariana Islands (144.4 %) and Aruba (144.7 %) show closest trade indicators similar to the Maldives (figure 28).

Figure 28. Trade as a percentage (%) of GDP 2016, selected SIDS (including the Maldives)

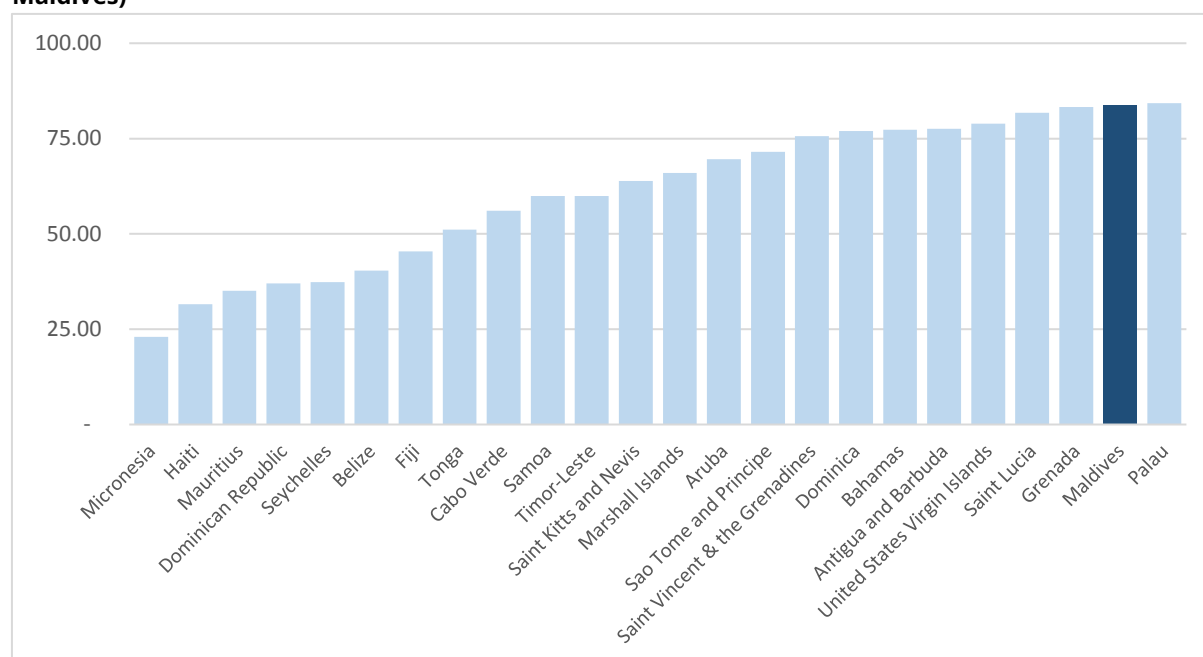


Note: Data adapted from World Bank Open Data, 2016
 Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

Due to their economic constraints, most SIDS are not able to diversify and are limited to just a few products and sectors. The external dependence is also narrowed to a few exports, thus increasing the risk associated with economic openness (Briguglio et al., 2009). Hence, another characteristic indicating Maldives has high dependence on tourism receipts from total exports. In 2016, tourism receipts represented 83.87 per cent of exports. Only Palau from the SIDS had a higher percentage of tourism receipts in 2016. This indicator narrows the result to 23 countries with similar levels to the Maldives (figure 29). We can say that Palau, Dominica, Bahamas, Antigua and Barbuda, United States Virgin Islands, Saint Lucia, and Grenada are countries very similar to the Maldives with highest level dependency on tourism. We also conclude that there are 20

countries⁴⁴ which show a high openness in trade and external dependence on tourism such as the Maldives.

Figure 29. Tourism receipts as a percentage (%) of exports 2016, selected SIDS (including the Maldives)

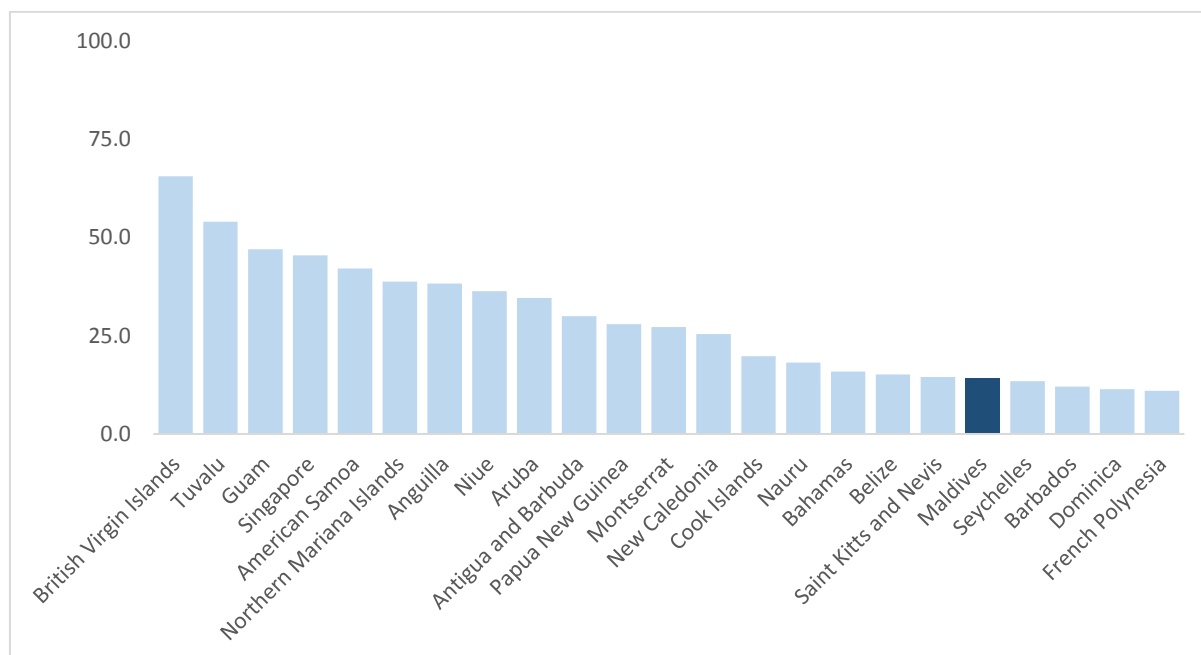


Note: Data adapted from World Bank Open Data, 2016
 Source: Data retrieved from <https://data.worldbank.org/> [accessed Oct. 2019]

Another unique characteristic of the Maldives is the prevalence of migrants within its workforce. A comparable indicator that can, to some extent, capture this feature in a country is the international migrant stock as a percentage of the total population. There are 22 countries from SIDS with a percentage of migrants of total population ranging from 11 per cent to 65 per cent (figure 30). There are 18 SIDS countries with higher migrant to population ratios than the Maldives. However, we know that this indicator is very relevant in the context of the Maldives and the minimum wage determination. States like Bahamas, Belize, Saint Kitts and Nevis, Seychelles, and Barbados had levels of international migrant stock as a percentage of total population that were very similar to the Maldives in 2015, according to the United Nations Department of Economic and Social Affairs (UNDESA).

⁴⁴ Antigua and Barbuda, Aruba, Bahamas, Belize, Cabo Verde, Dominica, Dominican Republic, Grenada, Haiti, the Marshall Islands, Mauritius, Micronesia, Palau, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Seychelles, Timor-Leste, and Tonga have high levels of both trade as a percentage of GDP and tourism receipts as a percentage of exports, compared to other SIDS.

Figure 30. International migrant stock as a percentage (%) of total population 2015, selected SIDS (including the Maldives)



Note: Data adapted from UNDESA International migrant stock Data 2015
 Source: Data retrieved from <https://www.un.org/en/development/desa/> [accessed Oct. 2019]

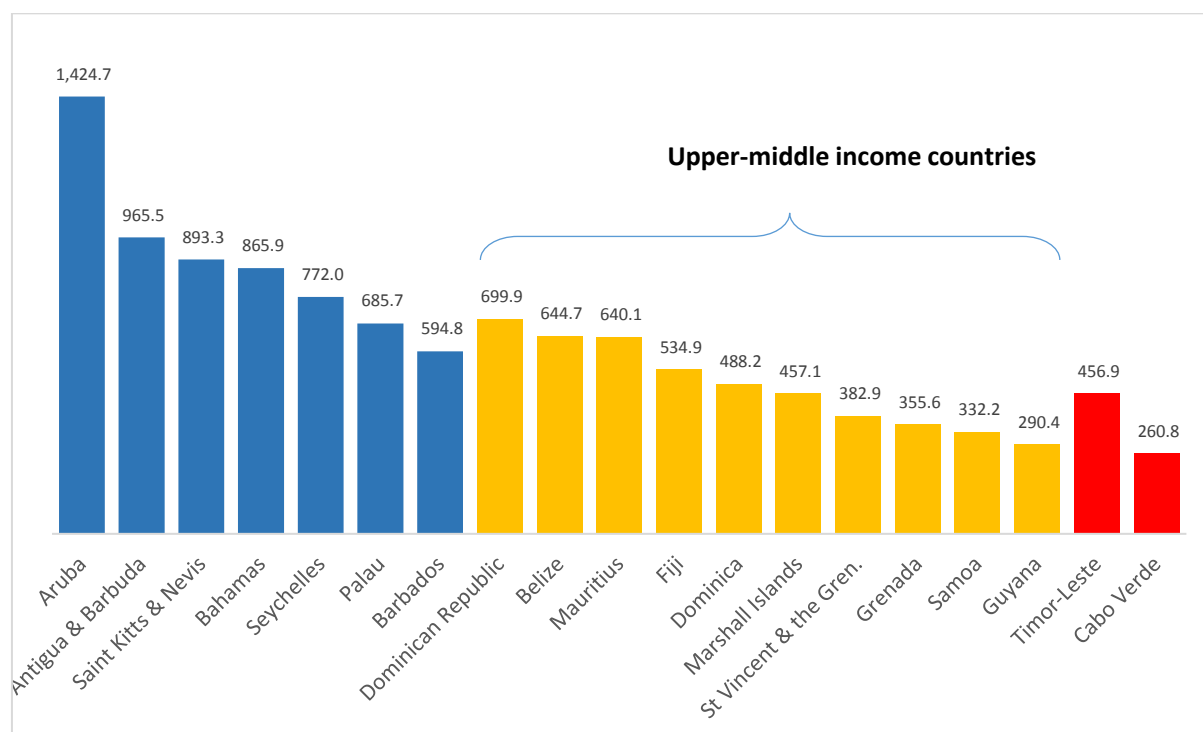
Based on the above indicators, the states were classified into three groups (appendix table A4). Group 1 (22 countries) is composed of Belize, Seychelles, Antigua and Barbuda, Barbados, Cabo Verde, Saint Lucia, Bahamas, Guyana, the Marshall Islands, Aruba, Dominica, Fiji, French Polynesia, Guam, Nauru, Northern Mariana Islands, Palau, Saint Kitts and Nevis, Samoa, Timor-Leste, Tonga, and the United States Virgin Islands. Group 2 (six countries) is composed of Tuvalu, American Samoa, Dominican Republic, Grenada, Mauritius and Saint Vincent and the Grenadines. Group 3 (19 countries) comprises Haiti, British Virgin Islands, Guinea-Bissau, Kiribati, New Caledonia, Anguilla, Comoros, Cook Islands, Micronesia, Papua New Guinea, Sao Tome and Principe, Solomon Islands, Vanuatu, Montserrat, Niue, Puerto Rico, Singapore, Cuba, and Trinidad & Tobago. The latter group of SIDS has fewer commonalities with the Maldives, hence we do not analyse them further.

However, Group 1 and Group 2 of the SIDS show indicator results closer to Maldives' reality with regard to insularity and remoteness, small domestic markets, external dependence, migrant to national population and vulnerability to natural hazards. We revised the 2016 minimum wage levels estimated in PPP \$ International for the following countries: Group 1 (15 countries) – Belize, Seychelles, Antigua & Barbuda, Barbados, Cabo Verde, Bahamas, Guyana,

Marshall Islands, Aruba, Dominica, Fiji, Palau, Saint Kitts & Nevis, Samoa, and Timor-Leste; Group 2 (four countries) – Dominican Republic, Grenada, Mauritius, and Saint Vincent and the Grenadines. Additionally, countries from both these groups are classified according to their economic development based on their income country groups.

Eleven countries are classified as high income, 15 countries similar to the Maldives are classified as upper-middle income, two countries are classified as lower-income and one country as low-income group, according to their GNI per capita in US\$ based on the World Bank classification. Out of all 28 countries, 19 had a minimum wage in 2016 (figure 31).

Figure 31. Minimum wages 2016 from selected SIDS (PPP \$ International)



Source: Authors' compilation
 Data adapted from ILOSTAT and WORLD BANK Data in Doing Business 2017. All minimum wages are current as of June 1, 2016

The ten upper-middle income countries from SIDS have set minimum wages in 2016, ranging from 290.4 to 699.9 PPP \$ International. Group 1 countries which include Belize, Fiji, Dominica, Marshall Islands, Samoa, and Guyana average a minimum wage of \$469.07 PPP. On the other hand, Group 2 countries composed of the Dominican Republic, Mauritius, Saint Vincent and the Grenadines, and Grenada average a minimum wage of \$544.08 PPP. The aforementioned values are relevant benchmarks based on the minimum wages of countries with similar characteristics as the Maldivian context. Converting these 2016 values to

Maldivian local currency provides a lower band of MVR4,761 and a higher of MVR5,522 a month. Similarly, we also calculated a weighted average for these countries using their GDP per capita, and the result is MVR5,193 a month.

Another indicator we also used to establish a similar minimum wage benchmark is the minimum wage to GDP per capita ratio. The weighted average ratio of these ten countries was calculated at 4.41 per cent (appendix table A6). The ratio applied to the Maldives 2016 GDP per capita establishes a higher minimum wage monthly benchmark of MVR6,292.

The revision of the 2016 minimum wages, in PPP \$ International, of SIDS with characteristics similar to the Maldives establishes a range of minimum wage benchmarks in PPP \$ International, ranging from MVR4,761 to MVR6,292 a month.

Malaysian formula

Next, using the Malaysian formula (equation 6) for setting minimum wages, we take only the base criteria part. The formula uses a poverty line income, specified as the household average gross monthly income, and divides it by the average workers per household. The result of the division is averaged together with the median wage of the country. The value of the estimated parameters required to estimate the Malaysian formula is presented in table 13.

Table 13. Estimated values of the parameters for estimating equation 6

Parameters	Value and unit
Poverty Line valued in monetary units (PLI) ⁴⁵	MVR 74 per person per day
Average number of workers per household (Avg work Hhi)	2 per household
Median wage (MedWi)	7 144

Source: Estimated using HIES 2016 data

Using only the base criteria of equation (6), the value for the monthly minimum wages in the Maldives is estimated to be as follows:

⁴⁵ In the base criteria, PLI is divided by the average workers per household because the PLI is specified as the household average gross monthly income with more than one person working per household. Minimum wage, on the other hand, is specified as per worker. Adjustment has to be made so that they are comparable per worker (Ibrahim and Said, 2015).

$MW = avg\left(\frac{74*30*5.3}{2} + 7,144\right)$ produces a value of MVR6,514 for 2016.

We only use the base criteria because we will only adjust the figure by inflation as we have done with previous estimates. Adjusting the 2016 values by inflation gives the result MVR6,774. However, we must point out that the formula proposed by Malaysia has been designed for their national context. Hence, the poverty line is estimated very differently from the Maldivian context. The national poverty line income (PLI) in Malaysia is an absolute poverty line, where food expenditure is calculated from a standard food basket meeting the nutritional requirements of each surveyed household. In contrast, Maldives calculates the national poverty line at half the median of total Expenditure in the Consumption Aggregate. The difference in poverty line calculations is likely to push for a higher value when using the formula for the Maldivian context.

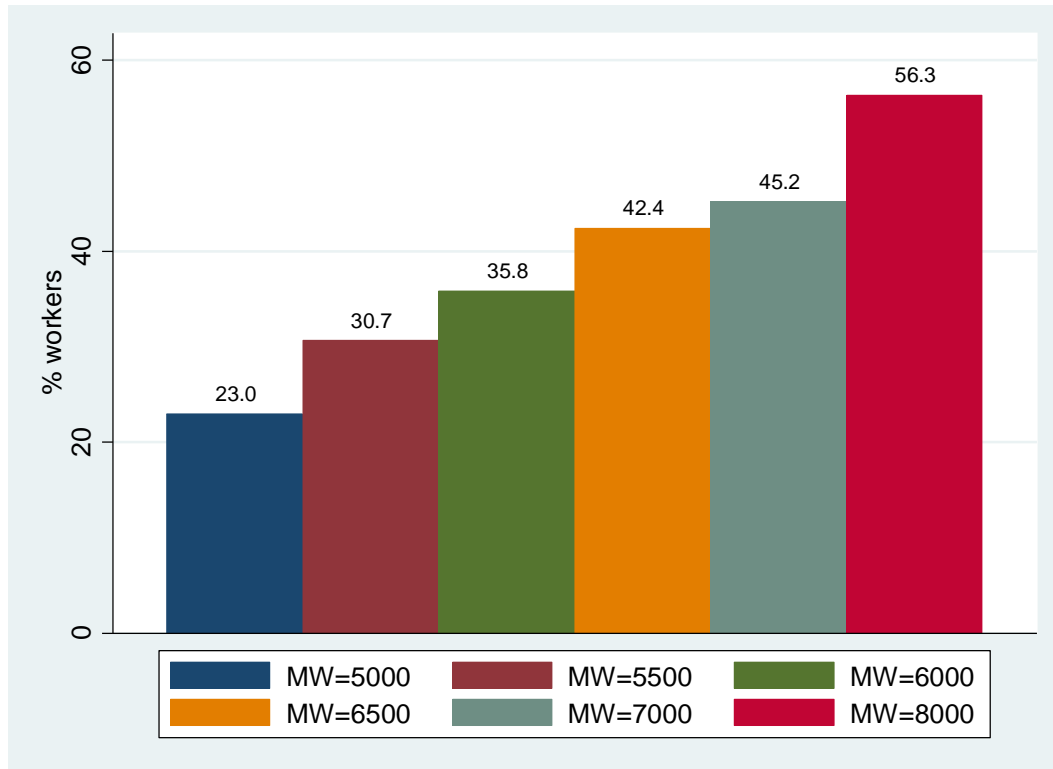
As a robustness check, we revised wage rates using pension 2019 data. Pension data reflects significantly lower basic wages compared with HIES 2016 data. According to the pension data, per worker mean basic wage is MVR7,233 (median 5,628). This could be possible mainly because the pension data doesn't consider any kind of allowances paid to workers. The full distribution of the basic wages and salaries, estimated monthly wages at the 0.44 Kaitz ratio using the basic wages in the pension data, is presented in appendix figure A2. A Kaitz index of 0.44 produces the value MVR3,183, which is again significantly lower to the value arrived at using HIES 2016 data.

5.2.3 Economic implications of minimum wages on workers, wage bill and remittances

Given the range of estimates, using varied methods as presented above (need-based, Kaitz index, and Malaysian formula), we estimated the percentage of workers who are currently below the different thresholds of wages, i.e. how many workers will be affected (benefited) if minimum wages are implemented. In addition, we also estimated the total wage bill gap which will be required to be paid to workers if the minimum wage is implemented. Based on the estimates as presented in the preceding sections, we use different thresholds: 5,000, 5,500, 6,000, 6,500, 7,000 and 8,000

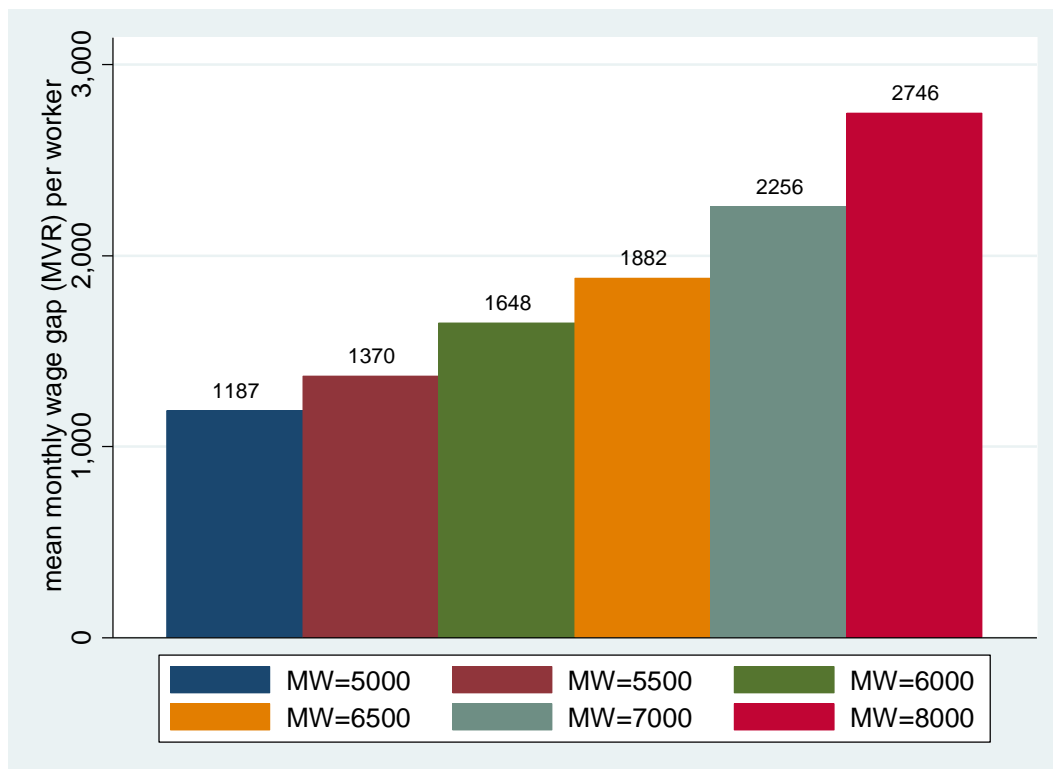
Figures 32a and 32b, respectively, present the percentage of workers currently receiving their wages and salaries below different thresholds of minimum wages and per worker mean wage gap for those below the thresholds.

Figure 32a. Percentage of workers receiving wages and salaries below different thresholds



Source: Estimated from HIES, 2016

Figure 32b. Mean wage gap ('000 MVR) for those workers receiving wages and salaries below different thresholds



Source: Estimated from HIES, 2016

Estimated from HIES 2016, figures 32a and 32b together show that approximately 23 per cent of workers are currently receiving wages and salaries below the threshold of MVR5,000 and their monthly wage gap per worker is approximately MVR1,187 per worker. At higher thresholds of minimum wages 5,500, 6,000, 6,500, 7,000 and 8,000, the percentage of workers and the mean per worker wage gap increases.

Based on these numbers, we estimated a total monthly wage bill required for paying at least the minimum wages to all workers at all the referred thresholds. Using HIES 2016 data on prevailing wages in 2016, it is estimated that the total wage bill gap will be MVR27.8 million at the 5,000 threshold, with 23.1 per cent workers and a mean per worker monthly wage difference of MVR1,211, and the estimated number of workers as 22,941 below the threshold. Accordingly, the monthly wage bill implications will be MVR43.8 million, 61.2 million, 83.4 million, 106.4 million and 160.5 million, respectively, at the 5,500, 6,000, 6,500, 7,000 and 8,000 thresholds (table 14).

Table 14. Estimates of total wage bill needed to meet the wage gap if minimum wages are implemented at different thresholds

Parameters	Thresholds					
	<MVR 5,000	<MVR 5,500	<MVR 6,000	<MVR 6,500	<MVR 7,000	<MVR 8,000
Number of wage workers	99,174					
Workers below threshold (%)	23.1	30.9	36.0	42.6	45.4	56.6
Estimated number of workers below threshold	22,941	30,601	35,733	42,253	44,987	56,105
Monthly wage gap per worker	1,211	1,431	1,717	1,974	2,365	2,861
Total monthly wage bill needed ('000' MVR)	27,777	43,799	61,341	83,403	106,413	160,520
% increase needed at current wage	32.0	35.2	40.1	43.6	51.0	55.7

Source: HIES, 2016

Next, we present the implications of minimum wages at the broad sectoral level. The percentage of workers below different thresholds and the related wage gap (MVR) per worker at major sector level (1-digit classification) is presented in table 15. Among major economic sectors, "Activity of households" reflects the highest proportion (79 per cent) of workers receiving minimum wages less than MVR5,000. This is followed by "Mining and quarrying" (56 per cent). The per worker monthly wage gap at the 5,000 threshold are respectively MVR1,240 and MVR 1,587. At higher thresholds, obviously both percentage of workers and the wage gap increases in each major economic sector. These are relatively smaller economic sectors, employing only up to 1,500 wage workers in total. Even for larger sectors such as wholesale and retail trade and transport of storage, the

proportion of wage workers below different thresholds and the related wage gaps are significant. For instance, in “Wholesale and retail trade; repair of motor vehicles and motor cycles”, the percentage of workers below the thresholds increases from 41 per cent to 71 per cent at the 5,000 and 8,000 thresholds, respectively. The related monthly wage gaps are MVR1,321 and MVR3,266, respectively. More detailed information on the 2-digit classification of sectors is presented in appendix table A8.

Accordingly, we estimated the total wage bill at the sectoral level by multiplying the monthly wage gap per worker with the number of workers employed in the sector. The monthly wage gap bill (MVR) at the broad sectoral level is presented in table 16.

Table 15. Percentage of workers below different thresholds and the related wage gap (MVR) per worker at the sectoral level

Sectors	<MVR 5,000		<MVR 5,500		<MVR 6,000		<MVR 6,500		<MVR 7,000		<MVR 8,000	
	% workers	Wage gap (MVR)	% workers	Wage gap (MVR)	% workers	Wage gap (MVR)	% workers	Wage gap (MVR)	% workers	Wage gap (MVR)	% workers	Wage gap (MVR)
Agriculture, forestry and fishing	17.8	1 433	25.8	1 468	30.3	1 724	45.8	1 639	46.6	2 107	59.7	2631
Mining and quarrying	55.7	1 587	55.7	2 087	55.7	2 587	100.0	1 942	100.0	2 442	100.0	3442
Manufacturing	30.8	1 346	47.0	1 365	53.8	1 663	60.3	1 979	62.5	2 408	70.2	3125
Electricity, gas, steam and air-conditioning supply	21.9	999	29.9	1 195	38.2	1 394	42.0	1 752	44.3	2 153	63.1	2426
Water supply, sewerage, waste management and remediation activities	4.1	2 236	29.3	800	52.6	894	55.2	1 349	57.3	1 799	63.9	2580
Construction	16.1	1 234	28.7	1 185	34.8	1 461	38.6	1 811	40.3	2 230	47.2	2849
Wholesale and retail trade; repair of motor vehicles and motor cycles	41.3	1 321	50.8	1 567	53.2	1 981	57.6	2 326	59.0	2 768	71.1	3266
Transportation and storage	11.5	1 085	15.8	1 271	20.9	1 414	29.1	1 501	32.0	1 840	39.1	2471
Accommodation and food service activities	31.4	1 179	38.0	1 462	42.7	1 786	49.8	2 020	52.6	2 405	59.5	3111
Information and communication	17.0	810	22.7	1 023	27.3	1 314	28.2	1 771	36.2	1 835	48.9	2245
Financial and insurance activities	1.8	1 026	5.7	720	8.3	996	14.7	1 027	14.7	1 527	21.8	1858
Professional, scientific and technical activities	12.3	912	16.8	1 155	25.4	1 199	27.9	1 577	32.2	1 855	43.6	2335
Administrative and support service activities	27.1	1 181	32.6	1 481	39.3	1 700	49.0	1 863	51.1	2 286	56.3	3041
Public administration and defence; compulsory social security	17.6	1 122	24.7	1 276	29.7	1 533	37.1	1 707	41.1	2 019	50.9	2570
Education	19.2	1 091	25.3	1 309	30.6	1 555	37.0	1 776	39.0	2 179	58.2	2319
Human health and social work activities	27.8	1 102	37.5	1 289	44.3	1 562	51.8	1 827	55.5	2 189	66.0	2763
Arts, entertainment and recreation	8.6	1 754	11.8	1 775	16.3	1 741	25.0	1 633	27.4	1 986	42.5	2154
Other service activities	43.8	1 419	61.3	1 498	63.5	1 946	69.8	2 259	72.1	2 680	84.8	3173
Activities of households	78.8	1 240	90.8	1 564	90.8	2 064	90.8	2 564	90.8	3 064	100.0	3750
Extraterritorial organizations and bodies	0.0		0.0		100.0	344	100.0	844	100.0	1 344	100.0	2344

Source: HIES, 2016

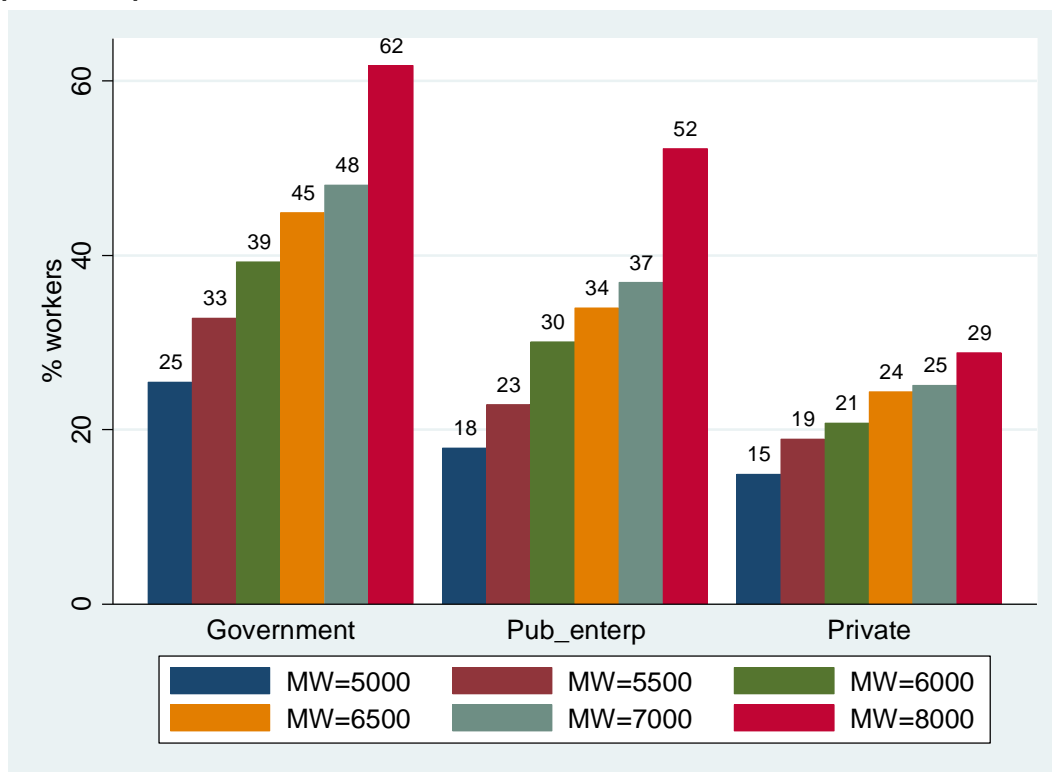
Table 16. Monthly wage gap bill ('000 MVR) below different thresholds at the sectoral level

	<MVR 5,000	<MVR 5,500	<MVR 6,000	<MVR 6,500	<MVR 7,000	<MVR 8,000
Agriculture, forestry and fishing	746	1 107	1 525	2 195	2 871	4 589
Mining and quarrying	31	41	51	69	87	122
Manufacturing	1 282	1 985	2 769	3 693	4 656	6 792
Electricity, gas, steam and air-conditioning supply	747	1 222	1 820	2 519	3 264	5 237
Water supply, sewerage, waste management and remediation activities	53	134	268	425	588	940
Construction	746	1 275	1 907	2 623	3 370	5 044
Wholesale and retail trade; repair of motor vehicles and motor cycles	6 466	9 426	12 500	15 877	19 363	27 542
Transportation and storage	1 396	2 241	3 300	4 875	6 568	10 768
Accommodation and food service activities	2 531	3 792	5 216	6,881	8,650	12 644
Information and communication	244	413	637	888	1 179	1 952
Financial and insurance activities	28	63	126	229	341	616
Professional, scientific and technical activities	357	616	967	1 401	1 899	3 237
Administrative and support service activities	716	1 081	1 495	2 043	2 615	3 832
Public administration and defence; compulsory social security	4 132	6 578	9 498	13 213	17 342	27 336
Education	2 954	4 682	6 722	9 277	11 993	19 060
Human health and social work activities	2 490	3 934	5 632	7 695	9 880	14 825
Arts, entertainment and recreation	138	192	260	375	500	841
Other service activities	736	1 089	1 465	1 869	2 290	3 190
Activities of households	1 397	2 031	2 680	3 329	3 978	5 360
Extraterritorial organizations and bodies			3	6	10	17

Source: Estimated by ILO

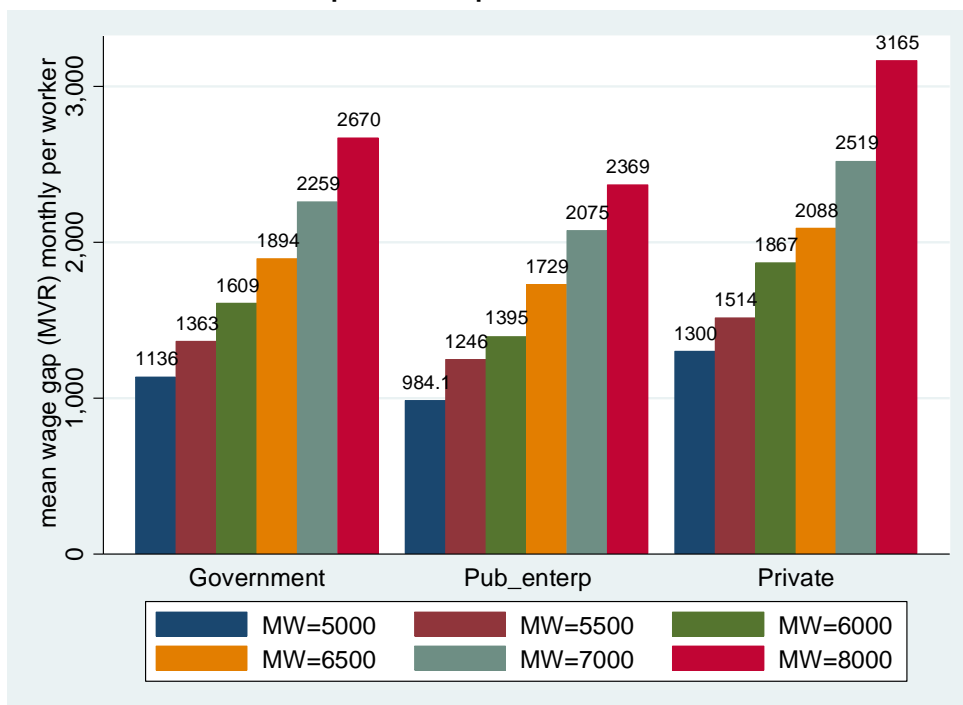
We also estimated the percentage of workers and total wage bill needed below different thresholds across public and private sectors (figures 33a and 33b). We divided all the establishments into three categories: (i) government, (ii) public enterprises, and (iii) private. The analysis essentially shows that the percentage of workers receiving minimum wages below different thresholds are higher in government and public enterprises compared to private enterprises (figure 34a). For instance, the percentage of workers receiving their basic wages at less than MVR5,000 is 10 per cent higher in the public sector (25 per cent) compared to the private sector (15 per cent). This difference is more than 33 per cent at the MVR8,000 threshold. However, the monthly mean wage gap per worker is significantly higher in the private sector compared to both government as well as public enterprises (figure 33b). This is precisely because workers with wages below different thresholds in the private sector received wages far lower in comparison with government and public sector enterprises.

Figure 33a. Percentage of workers receiving wages and salaries below different thresholds across public and private sectors



Source: HIES, 2016

Figure 33b. Mean wage gap ('000 MVR) for those workers receiving basic wages and salaries below different thresholds across private and public sectors



Source: HIES, 2016

Next, we also estimated the implications of minimum wages only for foreign workers. Using the work permit data 2019, we estimated average monthly wages, percentage of workers below different thresholds of monthly wages and per worker wage gap for all those foreign workers who were issued the work permit and arrived in the Maldives. The following analysis considers only those workers who were issued a permit and who had arrived.

Mean and median monthly wages of workers are estimated to be MVR5,693 and MVR3,850, respectively. The average monthly wages is the lowest (MVR3,169) for workers from Bangladesh, who constituted more than 62 per cent of all workers. Next to Bangladesh, Indian workers (16.3 per cent) received the second-lowest wages (MVR7,199). Table 17 presents number and percentage of workers along with mean and median wages for the top 15 countries in terms of number of workers (table 17).

Table 17. Number and percentage of workers along with mean and median monthly wages (MVR) of foreign workers in the Maldives

Country	% of workers	Mean wage, MVR	Median wage, MVR
Bangladesh	62.10	3 169	3 080
India	16.25	7 199	5 590
Sri Lanka	9.09	8 901	6 160
Nepal	3.01	6 226	4 620
China	2.80	17 869	11 550
Philippines	1.60	11 636	7 700
Indonesia	1.34	7 807	6 160
Thailand	0.49	9 768	7 392
Egypt	0.33	18 827	15 077
Italy	0.25	20 277	12 320
Malaysia	0.23	16 246	9 240
Pakistan	0.22	15 478	8 747
Germany	0.16	23 885	12 320
United Kingdom	0.13	37 866	15 400
France	0.12	32 356	15 400
Other	1.89	24 885	19 718
All	100.00	5 693	3 850

Source: Work permit data 2019

Approximately three-fourths of all workers received their monthly wages below the threshold of MVR5,000, with a wage gap of MVR1,800 per worker. At the highest threshold of 8,000, approximately 89 per cent of workers are below the threshold with a wage gap of 4,265 per worker per month (table 18).

Table 18. Percentage and number of workers below different thresholds of monthly wages and per worker monthly wage gap (MVR)

Parameters	Thresholds of minimum wages					
	<5,000	<5,500	<6,000	<6,500	<7,000	<8,000
mean						
% workers below threshold	73.5	77.6	79.0	83.0	84.9	88.7
Wage gap per worker monthly	1 800	2 185	2 645	3 007	3 431	4 265

Source: Work permit data 2019

Wages are less than MVR5,000 per month for more than 97 per cent workers from Bangladesh. Next to Bangladeshi workers, the second- and third-highest proportions of workers receiving wages below different thresholds are from India and Sri Lanka (Bangladesh, India and Sri Lanka are among the top 15 countries in terms of number of workers receiving a work permit). The percentage of workers with monthly wages below the thresholds varied between 40 per cent and 80 per cent for Indian workers and between 34 per cent and 70 per cent for Sri Lankan workers.

Lastly, as a robustness check, we also analysed the pension data 2019. Pension data 2019 provides information on 104,097 workers working across different sectors. Using this information we estimated that approximately 39 per cent of workers received basic wages below the MVR5,000 threshold. This results in an estimated 40,318 workers receiving their basic wages below MVR5,000, and MVR57.8 million is needed to meet this gap. The estimates based on the pension office data are invariably higher compared to the estimates based on HIES 2016, but lower compared to the estimates from work permit data 2019 at each threshold. These are different databases; work permit data covers only foreign workers, while HIES and pension data covers, almost exclusively, Maldivians. However, the results in each set provide a robustness check to understand which groups are likely to be affected by the setting of a minimum wage.

Outward remittances

It is essential to analyse the possible impact of minimum wage determination on outward remittances. It is particularly important in the case of the Maldives, as the majority of low-paid workers in the key sectors of the economy – tourism and construction – are foreign workers. Additionally, change in outward remittances will significantly impact the Gross International Reserve of the country. This will consequentially put more pressure on the exchange rate. Since the Maldives is a highly import-dependent country, with a dollarization ratio of

51.8 (GoM, 2019), any impact on the exchange rate will directly affect the economy.

In this regard, we have carried out an impact analysis on the outward remittance with the introduction of a minimum wage. These analyses are based on data collected from the Human and Employment Department of the Ministry of Economic Development, the Maldives Inland Revenue Authority (MIRA) on remittance tax, and the monthly statistics published by the Maldives Monetary Authority (MMA).

The first step of this analysis was to determine the number of foreign workers working in the Maldives using data from the Ministry of Economic Development (MED). These data were compiled from various forms and information sheets submitted to the ministry during the process of acquiring work visas for foreign workers.

According to the MED data, a majority of foreign workers in the construction and tourism sectors are in the lower-income spectrum in both these industries. As such, it is estimated that more than 82 per cent of foreign workers in the country earn less \$400 per month (MVR6,168).

According to the latest publication by the MMA, it is estimated that US\$531.7 million – workers' remittance – were remitted out of the Maldives in the year 2018. The amount is estimated to increase to \$593.5 million and US\$664.8 million in 2019 and 2020, respectively (GoM, 2019). Based on this data, approximately US\$49.2 million are remitted out from the Maldives on average per month. Data received from MIRA shows a significantly lower amount, as workers may be remitting out from unofficial sources to avoid remittance taxes.

Additionally, it was estimated that foreign workers remit a major part of their salary out of the Maldives to their home countries. This assumption was based on feedback received from consultations with various experts in the field, as well as from responses received from foreign workers working in the country. Using this proportion and data received from the MED, an assessment was carried out to estimate the increase in the wage per worker who is earning wages below various ranges of possible minimum wages. The results are presented ahead.

Table 19. Estimation of outward remittances with different minimum wage scenarios

		Addition to the wage bill according to proposed new minimum wage (MVR in millions)					
Salary range (US\$)	% of workers	MVR	MVR	MVR	MVR	MVR	MVR
No. foreign workers		5,500	6,000	6,500	7,000	7,500	8,000
1-101	2%	13.8	15.3	16.8	18.3	19.9	21.4
101-201	40%	249.3	282.9	316.4	349.9	383.4	417.0
201-301	30%	135.7	160.6	185.5	210.4	235.3	260.3
301-401	9%	25.7	33.5	41.3	49.1	56.9	64.8
401-501	6%	6.6	11.9	17.2	22.5	27.8	33.1
+502	12%	0	.8	2.7	5.4	8.5	12.1
Total	100%	431.1	504.9	579.9	655.7	731.9	808.6
Addition Outward Remittance per Month (MVR in millions)		258.7	303.0	348.0	393.4	439.1	485.2
Addition Outward Remittance per Month (US\$ in million)		16.8	19.6	22.6	25.5	28.5	31.5
Addition Outward Remittance per year (MVR in millions)		3,103.9	3,635.5	4,175.4	4,720.9	5,269.7	5,821.9
Addition Outward Remittance per year (US\$ in million)		201.3	235.8	270.8	306.2	341.7	377.6
% increase in Outward Remittance		34%	40%	45%	51%	57%	63%

Source: Work permit data from Human Resources and Employment Department, Ministry of Economic Development; monthly statistics (October 2019), Maldives Monetary Authority.

Using equation (9) and equation (10), as mentioned in the method section, and salary data from the work permit database, we estimated the percentage and number of workers and total wage gap bill below each threshold of different options of minimum wages. Total volume of remittances was estimated in the range of MVR259 to MVR485 million per month. This essentially implies that the addition to the current volume of remittance is likely to be in the range of 34 per cent to 63 per cent, depending on the threshold of the minimum wages.

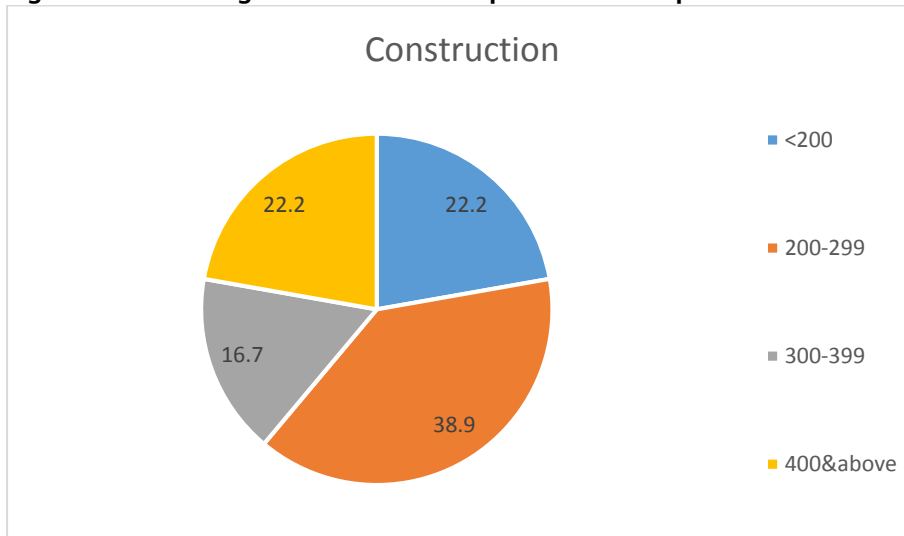
The analysis is based on the foreign workers who are currently in the system and working with legal permits. However, many foreign workers are working illegally in the Maldives. The MED has initiated a regularization programme on 19 September 2019, to re-regularize these workers back into the workforce. Most of these workers are estimated to be in the lower-income categories (who will be impacted by a minimum wage). The number of foreign workers who will be regularized is not determined at this stage.

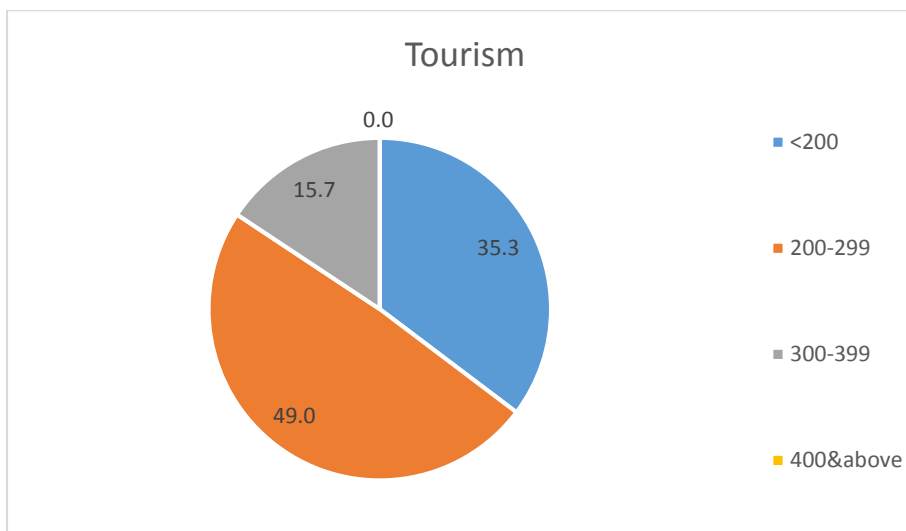
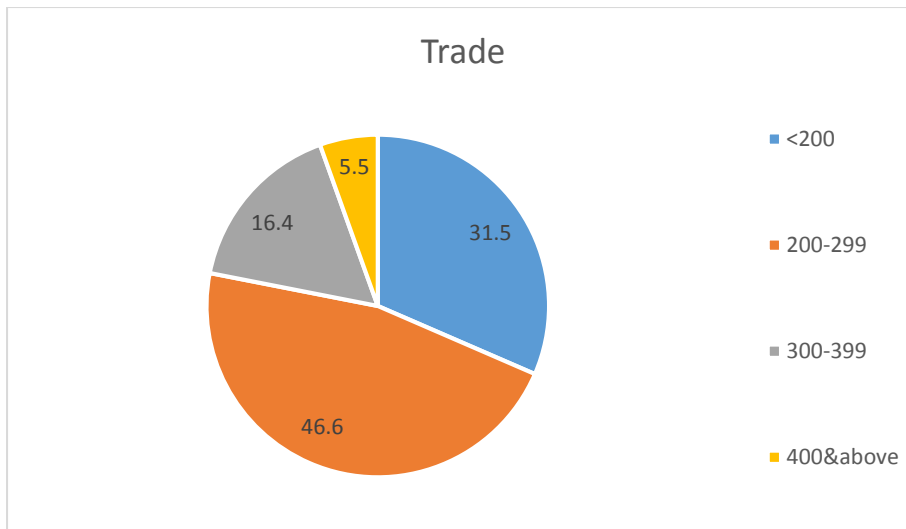
5.2.4 Sectorial enterprise survey: Enterprises' opinion on minimum wages

A sample enterprise survey of 144 enterprises was undertaken for “Construction”, “Wholesale and retail trade”, “Accommodation and food service”, and “Tourism” (including resorts) in the Maldives, by the Salary and Wage Advisory Board (SAWAB) in 2019. The survey collected opinions of enterprise owners in three sectors – construction, trade and tourism – on the possible value of minimum wages in the Maldives. They responded to the question “What should be the value of minimum wages in the country?” Their responses to the minimum wage rate are classified in four categories: below US\$200, US\$200 to US\$300, US\$300 to US\$400, and above US\$400. Figure 34 presents the percentage distribution of the responses of enterprise owners/managers across the three sectors separately.

Overall, 47 per cent of the enterprise owners/managers responded that minimum wages should be in the range of US\$200 to US\$300 per month. However, more than 21 per cent of the enterprises also responded in favour of minimum wage being more than US\$300 per month.

Figure 34. Percentage distribution of responses of enterprise owners/managers





Source: SAWAB Source: Establishment Survey, 2019. SAWAB

One interesting fact that emerged from the analysis is that although the construction sector reported wage-to-revenue ratio (average for three years 0.77), approximately 22 per cent of owners/managers favoured minimum wages above US\$400 per month. In the trade sector, too, more than 5 per cent responded in favour of more than US\$400 per month. However, in the tourism sector, the most favoured response was between US\$200 and US\$300 per month.

5.3 Regional or sectoral minimum wages

A frequently asked question in minimum wage policy is on the number of different minimum wage rates that should be fixed in a country. Minimum wage systems range from very simple systems with only one national minimum wage,

to very complex systems that have many different rates based on dimensions such as industry, occupation and location, amongst other alternatives. Simple systems are easier to enforce. One national minimum wage may be easily disseminated and will not cause any confusion. Neither will it create any ambiguity about whom it should apply to or in what circumstance. More complex systems can better address particular circumstances, but they require greater institutional capacity and effort to disseminate.

As the Maldives introduces its minimum wage system for the first time, it is better to have a simpler system with few minimum wage rates, as this will address the institutional capacity of the labour administration and the quality of the wage statistics required to monitor and enforce the minimum wage provisions.

If regional (Malé and the atolls) minimum wages are to be defined, we suggest using a similar methodology to the national minimum wage. The food component should follow a normative approach and can be the same for both regions; for the non-food components, the use of all households' monthly per consumption unit expenditure by fractiles may be utilized for each specific region (appendix table 9 for Malé and table A10 for the atolls). Usually, different regional minimum wages are used not only to address cost of living differentials, but to also make use of development strategies to attract and pull investment to less developed areas. However, if other policies are not aligned with these strategies, larger disparities are likely to increase between regions.

Nevertheless, the idea to reduce wage disparities between both regions may be underpinned in a national minimum wage at this point.

A national minimum wage may be supplemented by higher sectoral minimum wages, especially in the absence of collective bargaining practices. In a number of countries, minimum wage rates, including sectoral minimum wages, are traditionally set by collective agreements.

In the 2014 General Survey of Minimum Wages Systems, there is evidence that countries tend to use productivity indicators where the minimum wage system applies regional or sectoral/occupational rates. In light of these practices, we suggest using the available Supply and Usage Tables to estimate different ratios of productivity per sector, or even revise the differentials of compensations to labour within sectors to identify if this could be a proxy for defining different minimum wages by sector (appendix table A11 for productivity ratios and table

A12 for compensation ratios). However, we reiterate that the more complex a minimum wage system, the more difficult it is to monitor.

In addition to the enterprise survey, we have also extended our analysis to determine the current wage-to-profit ratio of four main sectors of the economy, i.e. tourism, construction, and trade (including wholesale and retail, and accommodation and food service sector). Wage-to-profit ratio is an indicator used to determine the performance of employees. This indicator is also used as a rule-of-thumb to determine efficiency and for comparison with similar sectors. In the service sector, this indicator usually is higher than in other sectors, as employees are valued higher in such sectors.

For this analysis, we have used data from MIRA, which is based on the information provided by the businesses in their Business Profit Tax returns for the year 2017 and 2018, to compute a wage-to-profit ratio at the sectoral level. The tourism sector was further classified into Resorts, Guesthouses and Other Sectors in order to capture the dynamics across these sub-sectors.

As such, table 20 shows the ratio across the main three sectors of the Maldives.

Table 20. Wage-to-profit ratio across three main sectors

	MIRA	
	2017	2018
Construction	0.26	0.34
Trade	0.15	0.15
Tourism		
<i>Tourist Resorts</i>	0.15	0.19
<i>Tourist Guesthouses</i>	0.25	0.33
<i>Other Tourist Establishments</i>	0.19	0.26

Source: MIRA 2019

Table 20 indicates that the wage-to-profit ratio has increased in the construction sector during the year 2018, while it remains the same in the trade sector for both 2017 and 2018. As for the tourism sector, the ratio has increased across three sub-sectors in the year 2018 when compared with 2017. Tourist resorts, which almost entirely include large enterprises and employees and most of the workers in this sector, have the lowest ratio compared to Guesthouses and Other Tourist Establishments. Table 20 provides elements to consider that the

resort as part of the tourism sector could have a differentiated minimum wage from all other sectors.

5.4 Mechanism for adjustment

Labour regulations in the Maldives indicate that minimum wages should be revised every two years.⁴⁶ The revision should take into account evidence-based information to set a new level of minimum wage in the $t + 2$ year period. If surveys are not produced every two years to capture both the needs of the workers and economic factors, we may have to look for alternative indicators to underpin the minimum wage adjustment. An alternative method to set the new minimum wage could use indicators that may capture changes in both the cost of living and other economic factors of the country.

Some countries have adopted a mathematical formula to fix or adjust minimum wages regularly. This “scientific” approach may increase predictability, avoid tedious discussions and facilitate a final result. However, a formula may not address all the key considerations. Therefore, it is always important to give space to social dialogue or even take decisions based on political considerations.

If formulas are used, they should be adopted after full consultation with social partners, as they can provide further support to the evidence-based social dialogue.

Adjustment should at least take into account the changes in the cost of living. If minimum wages are updated through the use of consumer price indexes (CPI), or by compensating for inflation, this, in turn, would guarantee minimum wages maintaining their purchasing capacity.

If the adjustment would also take into account the changes in the economy, it can also use growth-related indicators such as changes in GDP or GDP per capita/worker. Hence, the required mechanism of adjustment in minimum wages should consider the following two points:

1. Regular minimum wage updates with price inflation
2. Revision in base rates because of changes in other economic factors including cost of living

⁴⁶ An Act establishing a minimum wage for employees must be reviewed by the Board once every two years.

The brief method along with the required periodicity for these two types of revisions are presented as follows:

1. Regular update with price inflation

Price increase has direct bearing on the purchasing capacity of a population. It affects the worker class severely as their wages and salaries usually do keep pace with each increase in the price level. The effect is likely to be more severe for workers at the lower end of the workforce pyramid, mainly because of the subsistence nature of their wages. Any significant price increase has the potential to disrupt the consumption pattern of these workers. Given the fairly annual inflation rates in the Maldives (ranging between 0.4 per cent and 0.5 per cent), the present method proposes to adjust the minimum wage rates once in two years, maybe on 1 January. The most suited inflation index for this purpose could be the CPI.

2. Revision in the base rate

In addition to adjustment of the minimum wage rates for general price inflation once in two years, the method also proposes to revise the base rates every five years, along with the latest Household Income and Expenditure Surveys. This is required mainly because a five-year period can be considered a good time to look into the changing consumption patterns of the Maldivian population. There is the likelihood that relative weights of different food items in the food basket of an average Maldivian may change over time. This again has a profound impact on food consumption expenditure and, ultimately, on minimum wage rates. Also, the ratio of food to non-food expenditure is likely to change during a five-year period.

6. Recommendations

The principle of minimum wages is based on the concept of social justice, implying that workers should be protected from excessively low wages. Hence, workers must earn a minimum level of income that must be paid by an employer to wage earners for the work performed during a given period. The concept stems from the fact that a minimum level of earning is required to maintain the work efficiency of workers and meet the consumption needs of workers and their families (Anker and Anker, 2017). However, any methods for fixing the minimum wage must also consider international labour standards, such as the Minimum Wage Fixing Convention, 1970 (No. 131), which suggests that a balanced approach be taken while addressing the needs of the workers and their families and economic factors.

If the minimum wage is set too high or increased too much, this may have an unexpectedly large impact on the labour costs that employers must pay. This, in turn, could trigger price inflation, hurt exports, and reduce the level of employment (ILO, 2016). Compliance is partly dependent on the level of the minimum wage. Hence, a minimum wage set too high could provoke low levels of compliance, thereby weakening the objective of the minimum wage policy.

Similarly, if the minimum wage is set too low, it is likely to affect consumption expenditure of too few households with little impact on the economic welfare of the country. A third important dimension relevant in the context of setting minimum wages is the frequency with which the minimum wage is revised and adjusted over time. Since socio-economic factors and cost of living evolves with time, there is a need for the regular revision and adjustment of minimum wages.

In this context, this report has three main objectives:

1. To propose methodologies to determine the minimum wage based on available evidence, addressing the needs of the workers and their families and economic factors.
2. To recommend a range of minimum wage base values according to suggested methods.
3. To recommend the process of revising and adjusting minimum wages.

These recommendations have been used to support the deliberations of the Salary and Wage Advisory Board (SAWAB).

In addition, the report recommends specific measures to ensure that the minimum wage system of the Maldives works effectively in line with international labour standards and ILO's minimum wage policy guidelines, and also draws from international country experiences. It must be understood that a minimum wage policy needs to be complemented with other strategies to ensure not only the well-being of the workers and their families, but also an enabling environment for sustainable enterprises.

Accordingly, the report suggests the following recommendations:

1. Most effective minimum wages should afford adequate protection to all workers (without discrimination) in an employment relationship. We recommend that minimum wages cover all groups of wage earners, including women, youth, domestic workers, homeworkers and migrant workers, regardless of their contractual arrangements.
2. If in-kind benefits are to be included as part of the minimum wage, then appropriate measures should exist to ensure: (a) such allowances in kind are appropriate for the personal use of the worker and his or her family; (b) the value attributed to such allowances is fair and reasonable; and (c) when a provision is made for the payment in kind, it should be restricted to a limited proportion of the remuneration.
3. Once the minimum wage is determined, it is appropriate to define the minimum rate(s) for monthly, daily and hourly rates to facilitate equal treatment between full- and part-time employees by providing additional information to both workers and employers. The daily rate should be estimated, dividing the monthly wage by the number of working days in the month (countries with one day of rest in a week should consider 26 working days). The hourly wage is calculated by dividing the daily wage by normal daily working hours⁴⁷.
4. The number of normal working hours in the Employment Act, 2008 differs from the working hours established in the SME Law. We recommend both legal frameworks be revised in light of minimum wages and working hours to avoid discrimination among different categories of workers.
5. The minimum wage fixing machinery in the Maldives is determined by the government – Minister of Economic Development – after consultations

⁴⁷ Normal hours in the Employment Act, 2008 (Act No.1/2008) and SME Law of Maldives the are not the same.

with the social partners in SAWAB. Although the SAWAB has members, appointed by the president of Maldives, who represent the interests of employers and workers, it is recommended that in the legal framework SAWAB is composed of an equal number of employers' and workers' representatives, nominated by their organizations while ensuring representation of both women and men.

6. In determining the representative status of the organizations participating in the minimum wage fixation process, such determination should be carried out following a procedure that offers every guarantee of impartiality, by an independent body that enjoys the confidence of the parties, and without political interference.
7. For a meaningful agreement or full consultation with representative organizations of employers and workers, the workers must be ensured the right to form independent trade unions that can engage in effective collective bargaining.
8. The consultation and participation of social partners in SAWAB are crucial for an effective minimum wage system. We also recommend following current practices, to engage in bilateral consultations with other non-represented groups or the academia in different forums, incorporating different views for SAWAB to analyse and consider when setting the level of the minimum wage.
9. The use of evidence-based information, analysis and research is required to provide SAWAB with appropriate support for their deliberations when fixing the minimum wage level. It is suggested that a Technical Board or Technical Secretariat be appointed permanently.⁴⁸ The technical body may jointly work or coordinate with official institutions such as the National Bureau of Statistics (NBS) and other institutions that may be determined. It is also recommended that the Technical Board or Technical Secretariat of SAWAB should have the legal authority to acquire data from official sources and public and private enterprises for the purpose of monitoring the objectives and effects of minimum wages.
10. Statistical information is required to conduct appropriate analysis and studies to underpin the decisions of SAWAB. We recommend regular production of good and reliable national data on expenditure, employment, wages, productivity, and hours worked. Income and

⁴⁸ Monitoring the effects of minimum wage which is aligned to the objectives of the minimum wage policy is work which is of a permanent nature.

expenditure, labour force and establishment surveys should be conducted to capture the realities of the labour market in the Maldives, so policy-makers can make informed decisions.

11. To ensure the effective implementation of minimum wages, a number of measures should be addressed, which include the following:

- a. Strengthening the unit responsible for labour and employment for inspecting, supervising and monitoring the implementation of minimum wage provisions; establishing grievance channels (e.g. toll-free hotlines and web-based and desk complaint mechanisms); handling statistics of statutory inspections, number of complaints regarding non-compliance of minimum wages, claims presented to the labour inspectors, prosecutions relating to minimum wages, notifications, sanctions imposed and recovery of wages, amongst other measures to enforce compliance of minimum wages.
- b. Strengthening labour inspection through the provision of adequate staff, facilities, and training.
- c. Strengthening the powers of the labour inspectorate to enforce legislation, including the power to notify, sanction and recover claims for workers.
- d. Implementing sanctions and penalties for effective enforcement of minimum wages. The use of minimum wage equivalent values to set appropriate penalties may be considered. The current enforcement process and penalties in the Employment Act, 2008 are not sufficient to establish a minimum wage effectively.
- e. Making use of bank transfers or other measures to improve documentation of wage payments is recommended to improve monitoring of prompt and effective payment of wages and compliance of minimum wages.
- f. Raising awareness of minimum wages and related provisions is required on various dimensions:
 - i. capacity-building activities for employers' and workers' representatives and other stakeholders;
 - ii. education and awareness programmes conducted by the ministry;
 - iii. use of media (social media, television and radio campaigns) to publicize minimum wages and related provisions;
 - iv. empowering workers to claim their rights through a national toll-free hotline to handle complaints.

- g. Monitoring the implementation of minimum wages and detecting levels of non-compliance. A system of periodic surveys to monitor compliance under labour legislation may be instituted.
- 12. As practices and the law are aligned to ILO's Minimum Wage Fixing Convention, 1970 (No. 131) and Minimum Wage Fixing Recommendation, 1970 (No. 135), we recommend the ratification of Convention No. 131. International labour standards provide guidelines as well as useful frameworks for the evolution of legislative and administrative measures for an enabling environment ensuring decent work.
- 13. Other measures accompanying the minimum wage policy should consider:
 - a. Promoting productivity growth among sustainable enterprises to permit higher average wages. Examples of such policies may include industrial or tax policies promoting employment and productivity growth of micro-enterprises and small and medium-sized enterprises, or investment in innovation that improves the quality of services and products.
 - b. Strengthening vocational programmes to foster the accumulation of skills according to the demands of employment-driven industries and sectors. The Government of Maldives can facilitate these developments through quality public education, vocational skills-training programmes and job-matching services.
 - c. Establishing a Public Employment Service as an important channel for implementing employment and labour market policies. Job mismatch disparities can be shortened through services which include access to labour market information and by channelling training and job intermediation. Maldives has initiated a programme called "Job Center" in order to provide information regarding availability of jobs and a channel to shorten job mismatch disparities. We recommend strengthening the programme in line with a public employment service.
 - d. Reducing wage gaps through appropriate national legislation prohibiting discrimination, providing the right to equal remuneration for work of equal value, in line with the ILO Equal Remuneration Convention, 1951 (No. 100) and the Discrimination (Employment and Occupation) Convention, 1958 (No. 111), ratified by the Republic of Maldives, and providing effective access to justice to claim this right. Strengthening policies on maternity and

paternity leave and advocacy for better sharing of family responsibilities.

14. Complex systems that determine many different rates depending on the sector of activity, occupation, and/or geographical region require greater institutional capacity and may lose their effectiveness when implemented. This report recommends setting the least number of minimum wage rates as possible.
15. To set the level of an adequate minimum wage, we recommend taking a balanced approach based on Convention No. 131. The legal framework should emphasize that for setting the minimum wages, SAWAB should balance both (a) the needs of workers and their families and (b) economic factors, including, among others, indicators such as cost of living, social security benefits, the relative living standards of other social groups, the requirements of economic development, levels of productivity, and the desirability of attaining and maintaining a high level of employment.
16. The minimum wage discussion should be constructed over solid evidence-based information of the country, using methodologies to support the aforementioned balanced approach.

6.1 Needs of the workers and their families (NWF)

1. This report recommends that the needs of the workers and their families should be able to meet a working family's minimum required expenditure on food and non-food items, which should be adequate enough to preserve the efficiency of workers at their jobs and the health of their families.
2. The original methodology proposed to estimate the NWF recommends elaborating a nationally representative and culturally palatable food basket, by adopting an approach that focuses on a balanced diet rather than merely its calorie intake. This approach should not only concentrate on the minimum requirement of calories, but also on the minimum requirement of protein and fats. For this purpose, for future analysis, we recommend that a food composition table be developed for the Maldivian context to capture calories, proteins, fats and other macronutrients of the food items consumed in the country.
3. The methodologies used require to be updated in light of the latest available evidence relating to per household consumption units, number

of household members and adult equivalent consumption units, food and nutritional requirements, changing consumption patterns, and non-food expenditure requirements. To estimate the NWF, this report recommends the use of 4.2 adult equivalent consumption units per household, and two earners per household.

4. Using three different methods to estimate the value of the minimum recommended intake (per adult equivalent consumption unit per day) of 2,400 calories, the report calculated monthly food values between 773 Maldivian rufiyaa (MVR) and MVR1,070. The report recommends the use of MVR840 monthly, averaging the values that meet the calorie requirements at the 3rd fractile.
5. To estimate the required expenditure on non-food items, we recommend identifying two groups of items: (i) essential non-food items and (ii) other non-food items.
6. This report recommends that the required expenditure of essential non-food items – not including rent – be equal to the median class of the expenditure distribution, and that of the other non-food items be equal to the expenditure at the lowest fractile group where the calories norm is met or at the poverty line. The monthly adult equivalent consumption unit value estimated for the former corresponds to MVR926, and for the latter it ranges from MVR530 to MVR732.
7. The value of housing rent using the national median estimate is highly underestimated for the lower fractile groups. This report recommends that for rent the value be calculated between the 6th and 8th fractile percentage of households paying rent. The weighted average of rent value for the households across the 6th and 8th fractiles is estimated to be MVR1,468 monthly per adult equivalent consumption unit.
8. The total monthly per adult equivalent consumption unit for food and non-food expenditure estimates range from MVR11,554 to MVR17,270. This report recommends that the minimum wage need-based approach (NWF) for 2016 be estimated between MVR5,777 and MVR8,635.
9. This report recommends that the values of the minimum wage need-based approach (NWF) for 2016 be adjusted by CPI to arrive at the 2019 values. The updated 2019 minimum wage need-based values range from MVR6,008 to MVR 8,981.

10. If regional minimum wages are to be set, this report recommends estimating the NWF for Malé and the atolls independently. The report recommends using the national food estimate for all regions. The required expenditure for non-food items – both essential and other – will be estimated separately for each region using the proposed methodology.

6.2 Economic factors (EF)

1. This report recommends comparing the minimum to mean wage ratios of other countries with characteristics similar to the Maldives. Additionally, it recommends identifying countries with characteristics similar to the Maldives that already have minimum wage systems in place, and using their minimum wage levels as a benchmark to set levels within the Maldivian context.
2. Taking into consideration the economic factors of upper-middle income countries from 2016, this report uses a 0.44 minimum to mean wage ratio (Kaitz index) as a reference point to set the level of minimum wages in the Maldives. Using this indicator on the 2016 wage distribution of the Household Income Expenditure Survey (HIES), the minimum wage should be set at a MVR3,966 monthly rate.
3. Utilizing indicators to address common features such as insularity and remoteness, small domestic markets, external dependence, relatively high cost of living, migrant to national population, and vulnerability to natural hazards, Small Island Developing States (SIDS) with characteristics similar to the Maldives have been identified. The report recommends studying the minimum wage levels set in the following countries: Belize, Seychelles, Antigua and Barbuda, Barbados, Cabo Verde, Saint Lucia, Bahamas, Guyana, Marshall Islands, Aruba, Dominica, Fiji, French Polynesia, Guam, Nauru, Northern Mariana Islands, Palau, Saint Kitts and Nevis, Samoa, Timor-Leste, Tonga, the United States Virgin Islands, Tuvalu, American Samoa, Dominican Republic, Grenada, Mauritius, and Saint Vincent and the Grenadines.
4. This report analysed the levels of minimum wages in PPP \$ International of the following countries: Group 1 (15 countries) – Belize, Seychelles, Antigua & Barbuda, Barbados, Cabo Verde, Bahamas, Guyana, Marshall Islands, Aruba, Dominica, Fiji, Palau, Saint Kitts & Nevis, Samoa, and Timor-Leste; Group 2 (four countries) – Dominican Republic, Grenada, Mauritius, and Saint Vincent and the Grenadines. The report recommends

using the benchmarks of countries with similar economic development based on GDP PPP per capita and the status of upper-middle income country groups.

5. This report revised the 2016 minimum wages in PPP \$ International of SIDS with characteristics similar to the Maldives. The report recommends using the range of minimum wages of these countries as a benchmark to set the minimum wage for the Maldives. The minimum wage weighted average from each group is estimated in PPP \$ International at 469.07 and 544.08, which corresponds to MVR4,761 and MVR5,522 a month.
6. This report estimated the weighted average of the ratio of minimum wage to GDP per capita in PPP \$ International (4.41 per cent) of the SIDS with characteristics similar to the Maldives. The ratio calculated with the GDP per capita PPP \$ International and converted in local currency recommends MVR6,292 per month as an international minimum wage benchmark.
7. This report, based on benchmarks from the international context, recommends that minimum wages in the Maldives should be set in the range of MVR3,966 to 6,292 a month. The 2019 minimum wage benchmarks (updating the 2016 values by inflation) correspond to a range from MVR4,125 to MVR6,544 a month.
8. Finally, the report also used the Malaysian formula (base criteria) to provide another point of reference according to the way minimum wages are estimated in the Asian country. The obtained result shows a monthly figure of MVR6,774 (adjusting the 2016 values by inflation).

6.3. Setting the level of minimum wages in the Maldives

1. This report suggests adopting a balanced approach when setting the national minimum wage of the Maldives, contrasting the 2019 values of the NWF approach, ranging from MVR6,008 to MVR8,981, and those of the EF approach, ranging from MVR4,125 to MVR6,544 a month. Hence, it recommends that the updated monthly minimum wage of the Maldives falls within the range of MVR6,008 and MVR6,544; balancing both NWF and EF approaches.

2. This report has analysed the impact of minimum wages on the share of workers affected, at both national and sectoral levels, and also on the wage bill. There is also an analysis on remittances due to the increase in wages of foreign workers. The report recommends that SAWAB considers these implications when defining the level of the national minimum wage.
3. This report also suggests the use of productivity ratios or compensation of workers ratios of different sectors, if there would be an interest in defining a sectoral minimum wage level for specific sectors. If sectoral minimum wages are set, keep the number of sectors to a minimum.
4. This report recommends that minimum wages be fixed at round numbers, which are much easier to disseminate. This will also facilitate the minimum wage enforcement process.

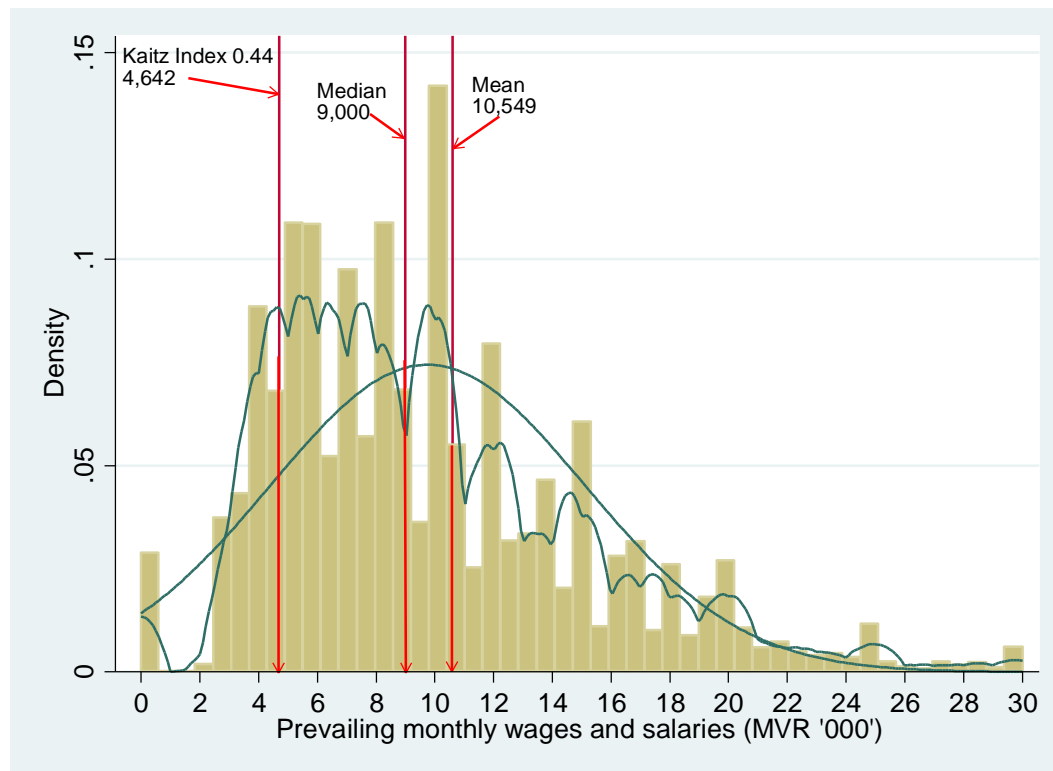
6.4 General recommendations

1. The report recommends continuing using evidence-based information and similar methodologies to revise and set the minimum wages for the next revisions (every two years). If the information or data of the surveys is not produced every two years, it is recommended that the minimum wage be adjusted by the consumer price index (CPI) to reflect changes in the cost and also be adjusted by the change in labour productivity measured by the change in gross domestic product (GDP) per worker.
2. This report recommends that a minimum wage campaign be launched with awareness-raising activities and information dissemination strategies at the national level.

Appendix I. Figures and tables

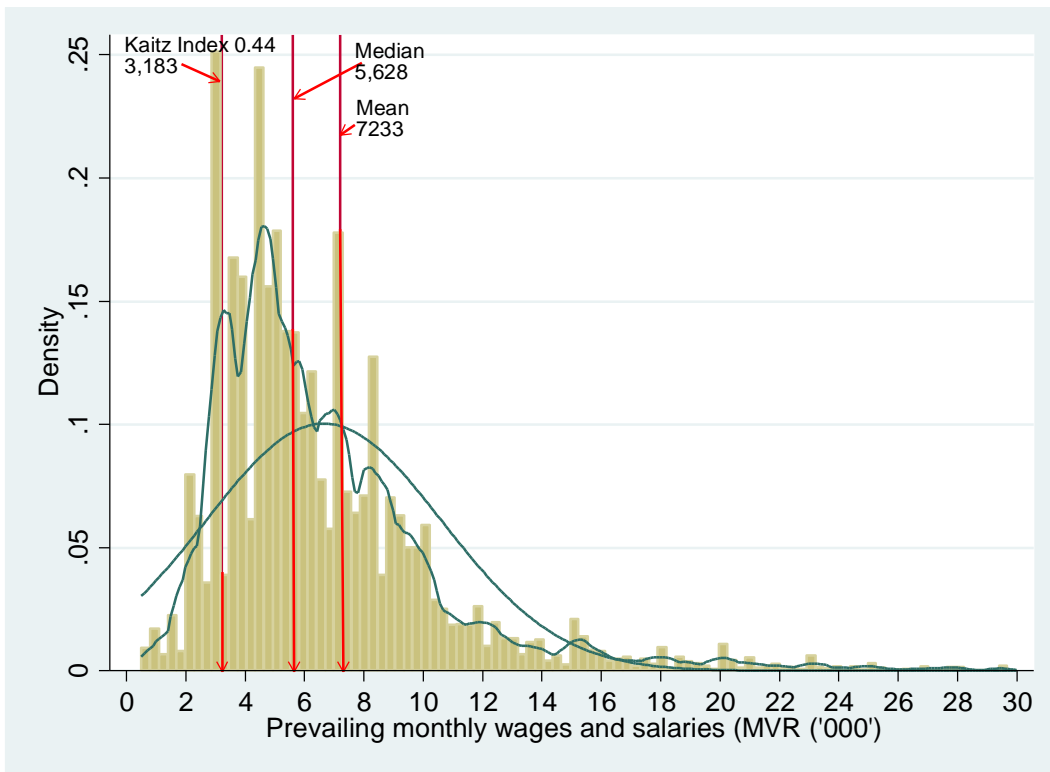
Figures

Figure A1. Distribution of total wages and salaries, mean and median wages and salaries, Kaitz indices and values of wages and salaries at Kaitz indices.



Note: Approximately 2.4 per cent of workers earning more than MVR30,000 per month are excluded in the graph mainly to avoid the long tail of the distribution.
Source: Estimated from HIES, 2016

Figure A2. Distribution of total wages and salaries using pension data, mean and median wages and salaries



Source: Pension data 2019

Tables

Table A1. Government ministries and other organizations met

#	Government ministries and other government organizations met
1	Ministry of Economic Development, Business Registration Unit
2	Ministry of Economic Development, Human Resources and Employment Department
3	Ministry of National Planning and Infrastructure
4	National Bureau of Statistics (NBS)
5	Ministry of Housing and Urban Development
6	Ministry of Finance
7	National Pay Commission (NPC)
8	Ministry of Health
9	Health Protection Agency (HPA)
10	Ministry of Tourism
11	Maldives Monetary Authority (MMA)
12	Ministry of Fisheries, Marine Resources and Agriculture
13	Ministry of Education
14	Ministry of Communication, Science and Technology
15	Maldives Pension Administration Office (MPAO)
16	Maldives Inland Revenue Authority (MIRA)
17	Male' City Council
18	Maldives Immigration

#	Stakeholders met
1	Tourism Employees Association of Maldives (TEAM)
2	Teachers Association of Maldives (TAM)
3	School Principals
4	Maldives Ports Authority
5	Indhira Gandhi Memorial Hospital (IGMH)
6	Orca Media Group
7	Fenaka Corporation Limited
8	Maldives Association of Human Resources Professionals (MAHRP)
9	Silver Sands Group
10	Pearl Medical
11	Maya Clinic
12	United Food Suppliers
13	ADK Group
14	State Trading Organisation
15	Maldives Association of Tourism Industry (MATI)
16	Maldives National Association of Construction Industry (MNACI)
17	CDE Consulting
18	Small and Medium Enterprises (SME) and Entrepreneur Federation of Maldives (SEFM)
19	Maldives Democratic Party (MDP) – Economic Policy Team
20	EPIC Consulting Group
21	FJS Consulting
22	Ahmed Mohamed (Fourmea)
23	Muna Mohamed
24	Lh. Hinnavaru Council
25	Uthema
26	Abdul Ghafoor Latheef
27	Fathimath Saeed
28	Fazeel Najeeb
29	Hassan Hilmy

30	Athif Shakoor
31	Nafaa Ahmed
32	Raniya Sobir
33	Mohamed Jinah
34	Humaidha Abdul Ghafoor
35	Aishath Rukshana
36	Haifa Mohamed
37	Fathimath Zimna
38	Mohamed Adhuham
39	Abdul Hameed
40	Riyan Pvt Ltd
41	Ace Travels
42	Capital Travels
43	Guesthouse Association of Maldives (GAM)
44	Maldives Association of Travel Agents and Tour Operators (MATATO)
45	Navaanavai
46	Ensis Fisheries Pvt Ltd
47	Waste Management Corporation Limited (WAMCO)
48	Villa Group
49	Sun Siyam Group
50	South Enterprises

Table A2. Calorie content of different food items

Food items	Unit	Per unit calorie (K/cal)
Normal rice	1gm	3.46
Basmathi rice	1gm	3.46
White rice	1gm	3.46
Brown rice	1gm	3.46
Bread (sliced, loaf)	1gm	2.45
Bread (rolls)/Buns	1gm	2.45
Brown bread	1gm	2.45
Spaghetti/Pasta/ Macaroni	1gm	3.52
Noodles/Vermicelli	1gm	3.52
Cup noodles	1gm	3.52
Milk rusk	1gm	3.41
Frozen parotta	1gm	3.41
Wheat flour	1gm	3.41
Whole wheat flour	1gm	3.41
Rice flour	1gm	3.46
Oats (e.g. oatmeal)	1gm	2.615
Cornflakes	1gm	2.615
Cornflour	1gm	2.09
Pancake mix	1gm	2.09
Cereal	1gm	2.615
Choco's	1gm	2.615
Frozen beef	1gm	1.146
Chicken legs	1gm	1.09
Boneless chicken	1gm	1.09
Kukulhu fai packet	1gm	1.09
Sausage	1gm	1.09
Kurandi	1gm	1.09
Chicken nuggets	1gm	1.09
Corn beef	1gm	1.146
Luncheon meat	1gm	1.18
Canned chicken	1gm	1.09
Tuna	1gm	1.05
Reef fish	1gm	1.05
Badaindhoo	1gm	1.05
Cuttle fish, Octopus, lobsters, Prawns & alike seafood	1gm	1.05
Dried fish (Hikimas)(loose or packed)	1gm	1.05
Smoked fish	1gm	1.05
Lonumas	1gm	1.05
Raakani	1gm	1.05
Mas packet (dhalhu mas)	1gm	1.05
Canned fish	1gm	1.05
Rihaa Kuru	1gm	1.05
Masmirus	1gm	1.05

Sambol	1gm	1.05
Thelli faiy/Masfaiy	1gm	1.05
Asaara	1gm	1.05
Processed liquid milk	1gm	1
Processed low fat milk	1gm	1
Milk powder	1gm	4.96
Baby milk powder	1gm	3.57
Condensed milk	1gm	4.96
Yoghurt	1gm	0.6
Flavoured milk pkt, Milo, Dutch lady, etc.	1ml	1
Eggs	1no	0.1
Butter	1gm	7.29
Margarine	1ml	9
Olive oil	1ml	9
Cooking oil (including salad oil)	1ml	9
Coconut oil	1ml	9
Lemons/Lime	1gm	0.01
Oranges/Madarine	1no	0.05
Bananas	1gm	0.116
Green Banana/Maalhuskeyo	1gm	0.116
Apples	1gm	0.59
Pears	1gm	0.52
Ranbusthaan	1gm	0.61
Strawberries	1gm	0.53
Mango	1gm	0.74
Grapes	1gm	0.71
Watermelon/karaa	1gm	0.16
Papaya/falho	1gm	0.32
Pineapple	1gm	0.46
Breadfruit	1gm	0.88
Dates fresh	1gm	3.17
Young coconut, kurumba	1no	0.06
Leach dhalhu	1gm	0.61
Feyru	1gm	0.51
Raisins	1gm	3.08
Dates - dried/Unspecied	1gm	3.17
Coconut	1no	0.66
Badhan	1gm	4.1
Pineapple, canned	1gm	0.46
Fruit cocktail, canned	1gm	0.46
Meyvaa dhalhu (ranbusthaan)	1gm	0.61
Jack fruit can	1gm	0.46
Lettuce	1gm	0.27
Curry leave, Hikandhifaiy	1gm	0.8
Pandan leave, Raaba faiy	1gm	0.8
Copy faiy	1gm	0.8

Cauliflower	1gm	0.3
Muraga faiy	1gm	0.27
Leaks	1gm	0.55
Broccoli	1gm	0.3
Cabbage	1gm	0.27
Tomato	1gm	0.2
Beans, tholhi	1gm	0.244
Cucumber	1gm	0.0048
Green chilly, Githeyo Mirus	1gm	0.29
Pumpkin, barabo	1gm	0.176
Butternut	1gm	0.176
Eggplant, bashi	1gm	0.24
Faaga	1gm	0.176
Ladies finger	1gm	0.35
Chichandaa	1gm	0.176
Carrot	1gm	0.48
Garlic	1gm	0.55
Onion	1gm	0.55
Taro	1gm	0.0221
Dhandi aluvi	1gm	0.0221
Mugu, Dhal Red, Yellow, Sanaa Mugu	1gm	3.4
Baked beans canned	1gm	0.244
Green peas canned	1gm	0.0221
Potatoes	1gm	0.967
Sweet potatoes	1gm	0.967
Sugar-White	1gm	3.98
Sugar-Brown	1gm	3.98
Icing sugar	1gm	1.66
Jam	1gm	1.66
Jelly	1gm	1.66
Diabetic sugar	1gm	3.98
Salt	1gm	0
Ginger	1gm	0.67
Dried chilli/Packed	1gm	2.46
Curry powder/Packed	1gm	0.8
Turmeric	1gm	3.6
Pepper/Pepper powder	1gm	3.6
Coriander seeds/Powder	1gm	2.9
Cumin seeds/Powder	1gm	3.6
Fennel seeds/Powder	1gm	3.6
Clove	1gm	3.6
Cinammon	1gm	3.6
Cardamon	1gm	3.6
Dhivehi Havaadhu fulhi	1gm	3.6
Mixed herbs	1gm	3.6
Baby food	1gm	3.57

Paapar	1gm	3.6
Coffee	1gm	0
Tea leaves/Green tea	1gm	0
Drinking water in bottles (including Mineral water)	1ml	0
Carbonated (lemonade, coke, fanta, Appy, etc)	1ml	0.32
Energy Drinks (Redbull, XL & alike)	1ml	0.32
Tang Juice & alike	1ml	0.25
Sunquik & alike	1ml	0.25
Rose syrup	1gm	0.25

Table A3. List of non-food items in essential, other and exclude categories

Essential	Other	Exclude
Rent	Kerosene bill	Telephone instrument
Electricity	House repair	Landline bill
Gas	Mobile purchase	Letter posting
Waste disposal	Furniture	Parcel
Water bill	Utensils	Edu-primary
Internet bill	Kitchen appliances	Edu-secondary
Pre-primary school	Routine maintenance	Edu-higher secondary
Pre-primary tuition	Outpatient Medicine Maldives	Edu-tertiary
Special needs education fee	Contact lens	Edu-O level
Inpatient Maldives	Petrol	Edu-A level
Bus ticket	Taxi fare	Edu-Quran
Ferry ticket	Sea-land transp medical abroad	Edu-other
Other sea transport ticket	Other medical abroad	Boarding school fee
Air transport medical Maldives	Trasp non-med inland	Inpatient laboratory Maldives
Sea transport medical Maldives	Other non-med inland	Inpatient hospital Maldives
Other transport medical Maldives	Insurance Life	Inpatient laboratory Abroad
School dress	Insurance vehicle	Inpatient medicine Abroad
School shoe	Insurance house	Inpatient hospital Abroad
Insurance health	Insurance content	Outpatient laboratory Maldives
Clothing	Insurance education	Outpatient general doc Maldives
Footwear	Insurance other	Outpatient specialist Maldives
Domestic servant	Personal care	Outpatient other Maldives
	Air travel domestic	Outpatient tradition Maldives
		Outpatient laboratory Abroad
		Outpatient medicine Abroad
		Outpatient general doc Abroad
		Outpatient specialist Abroad
		Outpatient other Abroad
		Outpatient tradition Abroad
		Medical no-prescription
		Medical with prescription
		Engine oil
		Vehicle cleaning
		Car
		Bicycle
		Motorcycle
		Speedboat
		Air travel Abroad
		Non-med transp abroad
		Non-med transp other
		Recreation
		Primary tuition
		Secondary tuition
		Higher secondary tuition

Table A4. List of SIDS in the three groups identified in the United Nations System

Africa, Indian Ocean, Mediterranean and South China Sea (AIMS)	Caribbean	Pacific
Maldives	Cuba	Timor-Leste
Guinea-Bissau	Dominica	Tonga
Cabo Verde	Dominican Republic	American Samoa
Comoros	Bahamas	Tuvalu
Seychelles	Barbados	Kiribati
Sao Tome and Principe	Montserrat	Vanuatu
Mauritius	Haiti	Samoa
	Trinidad & Tobago	New Caledonia
	United States Virgin Islands	Niue
	Anguilla	Northern Mariana Islands
	Antigua and Barbuda	Palau
	Aruba	Papua New Guinea
	Puerto Rico	Singapore
	Saint Kitts and Nevis	Solomon Islands
	Saint Lucia	Marshall Islands
	Belize	Fiji
	British Virgin Islands	French Polynesia
	Grenada	Guam
	Guyana	Cook Islands
	Haiti	Nauru
	Saint Vincent & the Grenadines	Micronesia (Federated States of Surinam)

Table A5. Group of States (SIDS) with similar characteristics as that of the Maldives – using dichotomous results on seven different indicators

Group	Country	Population	GDP PPP	Trade	Tourism	%Migrants	CLR	GDP per	Total
1	Belize	1	1	1	1	1	0	1	6
1	Cabo Verde	1	1	1	1	0	0	1	5
1	Saint Lucia	1	1	1	1	0	0	1	5
1	Seychelles	0	1	1	1	1	1	0	5
1	Antigua and Barbuda	0	1	1	1	1	0	1	5
1	Barbados	1	1	1	0	1	0	1	5
1	Bahamas	1	1	1	1	1	0	0	5
1	Guyana	1	1	1	0	0	0	1	4
1	Fiji	1	1	0	1	0	0	1	4
1	Timor-Leste	0	1	1	1	0	0	1	4
1	Aruba	0	1	1	1	1	0	0	4
1	Marshall Islands	0	0	1	1	0	1	1	4
1	Palau	0	0	1	1	0	1	1	4
1	Samoa	1	0	1	1	0	0	1	4
1	Tonga	0	0	1	1	0	1	1	4
1	Dominica	0	0	1	1	1	0	1	4
1	French Polynesia	1	0	1	0	1	1	0	4
1	Nauru	0	0	1	0	1	1	1	4
1	Saint Kitts and Nevis	0	0	1	1	1	1	0	4
2	United States Virgin Islands	0	0	1	1	0	1	0	3
2	Guam	1	0	1	0	1	0	0	3
2	Northern Mariana Islands	0	0	1	0	1	1	0	3
2	Comoros	1	1	1	0	0	0	0	3
2	Dominican Republic	0	0	1	1	0	0	1	3
2	Grenada	0	0	1	1	0	0	1	3
2	Mauritius	0	0	1	1	0	0	1	3
2	Saint Vincent & the Grenadines	0	0	1	1	0	0	1	3
2	Tuvalu	0	0	0	0	1	1	1	3
2	American Samoa	0	0	1	0	1	1	0	3
3	Guinea-Bissau	0	1	1	0	0	0	0	2
3	Haiti	0	0	1	1	0	0	0	2
3	Kiribati	0	0	1	0	0	1	0	2
3	Micronesia	0	0	1	1	0	0	0	2
3	Sao Tome and Principe	1	0	0	1	0	0	0	2
3	Vanuatu	1	0	1	0	0	0	0	2
3	British Virgin Islands	0	0	0	0	1	1	0	2
3	New Caledonia	1	0	0	0	1	0	0	2
3	Papua New Guinea	0	0	0	0	1	0	1	2
3	Solomon Islands	1	0	0	0	0	0	0	1
3	Puerto Rico	0	0	1	0	0	0	0	1
3	Singapore	0	0	0	0	1	0	0	1
3	Cuba	0	0	0	0	0	0	0	0
3	Trinidad & Tobago	0	0	0	0	0	0	0	0

Table A6. Selected SIDS GDP PPP per capita and ratio minimum wage to GDP per capita, 2016

Group	Country	GDP-PPP per capita	Ratio min-GDP per capita
1	Marshall Islands	3,701.80	12.35%
1	Belize	8,388.18	7.69%
1	Fiji	9,683.62	5.52%
1	Samoa	6,407.34	5.18%
1	Guyana	7,864.89	3.69%
1	Dominica	11,287.58	4.32%
2	Dominican Republic	15,613.15	4.48%
2	Mauritius	21,151.25	3.03%
2	Grenada	13,844.14	2.57%
2	Saint Vincent & the Grenadines	11,496.99	3.33%
			4.41%

Table A7. List of food items in food basket meeting calorie norm, quantity of food consumed and expenditure incurred

Food items	# hh consuming	Weekly Per consumption unit		Monthly Per consumption unit
		Quantity (grams)	Expenditure (MVR)	Expenditure (MVR)
Long grain rice, parboiled - Haru handoo	4280	804.59	7.26	31.46
Basmati rice	1638	101.73	2.56	11.10
White rice (Iha handoo)	183	8.73	0.19	0.80
Brown rice	335	13.78	0.45	1.93
Bread (sliced, loaf)	2855	38.97	6.00	25.98
Bread (rolls)	544	6.11	0.39	1.70
Cream cracker	2596	183.78	4.72	20.44
Maree biscuits	626	12.53	0.81	3.50
Other crackers and alike	591	7.70	1.28	5.57
Sandwich biscuits	972	24.09	1.82	7.87
Apollo/wafers/ cream crackers	910	15.02	1.21	5.25
Other & Assorted Hard Biscuits and Crack	9	0.11	0.02	0.09
Brown bread	8	0.11	0.01	0.03
Music biscuit	12	0.04	0.01	0.06
Spaghetti/pasta /macaroni	1566	42.22	1.83	7.95
Noodles/vermicelli	3098	78.40	4.81	20.85
Cup noodles	320	2.33	0.43	1.85
Packet Cakes	1013	54.76	1.63	7.08
Hard buns, (Faaroshi, hikki banas)	945	37.07	0.88	3.82
Frozen Parotta	36	0.95	0.07	0.32
Wheat flour	4497	562.61	5.24	22.70
Whole wheat flour (Aataa)	866	30.41	0.69	2.97
Rice Flour	81	3.03	0.02	0.08
Oats (E.g. Oat-meal)	283	8.14	0.18	0.76
Cornflakes	865	7.82	1.60	6.92
Chocos	48	0.37	0.00	0.00
Frozen Beef	83	2.50	0.09	0.40
Fresh/Frozen Chicken	2706	207.03	10.55	45.70
Chicken - Drumsticks	9	0.38	0.02	0.10
Sausages unspecified	1426	31.04	2.22	9.63
Chicken gizzard (Kurendi)	12	0.43	0.01	0.05
Tinned Corned Beef	51	1.06	0.24	1.04
Tinned Luncheon Meat (e.g., Spam)	150	1.55	0.12	0.52
Tinned Poultry (chicken)	3	0.04	0.00	0.01
Other deep sea fish	4399	985.13	23.79	103.10
Reef fish unspecified	1130	124.27	0.64	2.79
Any other sea fish Not Classified Above	3	0.02	0.00	0.00
Cuttle fish, Octopus,Lobsters, Prawns, &	40	1.09	0.02	0.09
Dried Fish	473	10.79	0.77	3.32
Smoked fish	2325	50.75	4.73	20.49

Any other dried/smoked/salt fish or seaf	12	0.40	0.02	0.10
Tinned Tuna	3139	97.02	8.57	37.14
Fish paste	2292	32.98	7.57	32.81
Chilli paste with fish, (Mas mirus)	1550	10.09	0.77	3.35
Sambol	117	1.29	0.27	1.18
Fish with leaves, Mas faiy, thellifaiy	1573	10.17	0.72	3.14
Pickle (Asaara)	7	0.10	0.00	0.00
Processed liquid milk	991	68.51	1.90	8.23
Processed low fat liquid milk	573	45.97	1.10	4.75
Milk powder (sunshine brand and similar)	4212	84.29	14.59	63.24
Baby milk powder (Ienfalac, lactogen, SM	685	14.09	5.17	22.40
Milo in sold form	2501	25.38	8.29	35.92
Horlick and similar	175	1.43	0.21	0.90
Condensed milk	1855	52.77	1.68	7.28
Yoghurt	1190	35.05	2.48	10.75
Coconut cream	400	10.43	0.18	0.78
Cheese/including cream cheese	370	6.75	0.36	1.56
Flavoured milk packed, Milo packet, liqu	2241	192.14	6.20	26.86
Eggs	3159	65.53	5.07	21.98
Butter	574	3.58	0.22	0.94
Margarine	670	4.02	0.29	1.24
Olive oil	475	4.80	0.42	1.83
Cooking oil (including. salad oil)	4478	141.04	5.87	25.42
Coconut oil	60	0.59	0.00	0.00
Lemons/ Lime	3892	49.21	3.62	15.69
Oranges/Mandarin	1724	50.25	1.70	7.35
Bananas	2056	80.88	2.69	11.68
Green banana, (Maalhuskeyo)	110	3.30	0.04	0.16
Apples	2403	77.93	3.25	14.07
Pears	4	0.18	0.00	0.00
Mango, ripe, green (hui, dhon)	850	95.83	1.85	8.04
Grapes	818	8.97	1.02	4.40
Water Melon, (karaa)	690	41.82	0.76	3.28
Papaya, (falho)	540	36.73	0.42	1.84
Pineapple	117	5.11	0.23	0.98
Passion fruit	464	13.25	0.21	0.91
Breadfruit	1002	176.11	0.65	2.80
Dates- Fresh	121	3.26	0.26	1.11
Fresh Fruit - Coconut (drinking nut), ku	546	44.03	0.42	1.84
Avocado	4	0.06	0.00	0.00
Gauva	7	0.08	0.00	0.00
Raisins	247	2.58	0.14	0.61
Dates- Dried or unspecified	543	8.84	0.15	0.64
Coconut (dry nut), Kaashi	3175	297.90	2.98	12.90
Pineapple, canned	471	15.22	0.44	1.91
Fruit cocktail, canned	532	13.37	0.50	2.16

Lettuce	572	13.27	0.75	3.25
Curry leave, (Hikandi faiy)	4246	26.10	0.17	0.76
Pandan leave, (Raaba faiy)	3231	6.18	0.16	0.69
Cabbage	52	0.77	0.07	0.31
Tomato	1342	17.94	0.64	2.77
Beans, (tholhi)	977	8.88	0.43	1.87
Cucumber	1727	50.13	1.41	6.11
Green chilly, (githeyo mirus)	3954	16.76	5.58	24.19
Pumpkin , (baraboa)	758	26.06	0.66	2.87
Egg plant, (bashi)	390	14.09	0.34	1.49
Capsicum	634	5.64	0.30	1.28
Mixed fresh vegetables	152	6.82	0.06	0.25
Frozen Vegetables (including mixed veget	64	1.97	0.03	0.13
Carrot	2301	49.26	1.86	8.06
Garlic	3705	14.74	1.70	7.37
Onion	4643	203.01	3.61	15.64
Taro	199	11.51	0.04	0.16
Cassava	12	0.24	0.01	0.05
Dhal red, yellow, Chick Peas (Sanaa mugu	1034	10.16	0.74	3.23
Potato Chips, cassava chips etc	18	0.13	0.01	0.03
Baked beans canned	1306	16.23	1.37	5.95
Green peas canned	132	2.19	0.15	0.64
Tomato paste	3602	107.57	1.58	6.84
Other canned/Bottled vegetables	164	3.10	0.14	0.61
Potatoes	1624	62.43	1.11	4.80
Sweet potatoes	219	9.91	0.20	0.86
Sugar - White	4895	210.89	4.14	17.95
Sugar - Brown	9	0.00	0.00	0.00
Jam	763	5.59	0.48	2.07
Jelly	43	1.28	0.03	0.13
Honey	872	9.70	0.96	4.15
Chocolate bars	1011	12.58	1.91	8.29
Chocolate crumpy, Peanut butter with cho	1039	11.20	1.43	6.18
Ice cream	583	16.27	1.67	7.23
Ice cone	12	0.58	0.04	0.16
Chewing gum	553	4.42	0.24	1.02
Diabetic sugar	430	2.01	0.34	1.46
Soya sauce/Oyster sauce	1768	8.07	0.32	1.37
Tomato Sauce/Chilli Sauce/Chilli & garli	2260	22.04	1.04	4.51
Vinegar	121	0.11	0.02	0.08
Salt	4915	39.12	0.70	3.01
Ginger	1979	11.66	0.43	1.86
Chillie packed,powdered/Dried chilli	2321	8.62	0.60	2.60
Curry powder, hawaadhu, mixed spices pac	2482	23.19	1.14	4.96
Turmeric	2282	3.52	0.10	0.44
Pepper/papper packed	2285	4.60	0.39	1.68

Coriander seeds	349	1.78	0.10	0.44
Cumin Seeds	1433	2.79	0.23	1.01
Fennel seeds	332	0.72	0.07	0.31
Clove	1552	2.51	0.17	0.72
Baby food	381	8.94	0.76	3.30
Yeast	163	0.11	0.00	0.00
Baking Powder	268	0.08	0.06	0.24
Custard powder	397	2.41	0.14	0.59
Soup sachets	294	1.57	0.07	0.31
Chicken rings and kind	426	2.33	0.34	1.48
Aji no moto	1819	9.30	0.42	1.81
Pop Corn, Potato chips and kind	272	4.85	0.29	1.26
Coffee	1730	16.90	2.38	10.32
Coffee mix	1444	97.91	1.73	7.48
Chilled ready to drink coffee in a bottl	246	17.20	0.34	1.48
Black Tea/ Green tea	3675	73.96	1.05	4.54
Cocoa powder	61	0.49	0.01	0.02
Drinking Water in Bottles (including Min Carbonated (lemonade, coke, fanta etc)	2860	1718.46	11.62	50.36
Energy drinks	1135	58.46	1.60	6.93
Ready made Fruit Juices (eg: Juicy)	540	37.38	2.32	10.05
Powered form juice packed in bottle or p	565	25.85	0.81	3.50
Liquid form concernrated juice packed in	1437	25.92	2.08	9.02
Other beverages n.e.c.	1542	37.22	2.48	10.76
Total	10	0.62	0.02	0.11
	186215		248.75	1077.90

Table A8. Percentage of workers below different thresholds and the related wage gap (MVR) per worker at 2-digit sectoral level

ISIC_2	% of workers below thresholds						Wage gap (MVR) per worker					
	cou~5000	cou~5500	cou~6000	cou~6500	cou~7000	cou~8000	gap5000	gap5500	gap6000	gap6500	gap7000	gap8000
Crop and animal production, hunting and related service activities	61.0	67.2	67.2	73.6	73.6	94.3	1408	1778	2278	2579	3079	3402
Forestry and logging	0.0	0.0	0.0	0.0	0.0	0.0	.	.	.	.	.	.
Fishing and aquaculture	15.2	23.3	28.2	44.5	45.4	58.1	1439	1409	1636	1536	2002	2548
Other mining and quarrying	55.7	55.7	55.7	100.0	100.0	100.0	1587	2087	2587	1942	2442	3442
Manufacture of food products	29.4	47.7	50.8	54.7	59.0	63.4	1088	1159	1575	1961	2314	3138
Manufacture of beverages	11.4	11.4	28.8	28.8	34.6	49.0	1452	1952	1107	1607	1837	2138
Manufacture of textiles	0.0	0.0	100.0	100.0	100.0	100.0	.	.	200	700	1200	2200
Manufacture of wearing apparel	74.7	100.0	100.0	100.0	100.0	100.0	1828	1866	2366	2866	3366	4366
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	39.1	66.7	66.7	100.0	100.0	100.0	1134	1165	1665	1611	2111	3111
Printing and reproduction of recorded media	0.0	32.8	62.8	62.8	62.8	100.0	.	500	686	1186	1686	2059
Manufacture of other non-metallic mineral products	60.6	84.0	84.0	100.0	100.0	100.0	1165	1340	1840	2010	2510	3510
Manufacture of fabricated metal products, except machinery and equipment	69.9	85.6	85.6	85.6	85.6	85.6	905	1155	1655	2155	2655	3655

Manufacture of other transport equipment	23.4	37.2	41.1	55.8	57.9	66.4	1001	1096	1480	1582	2023	2742
Manufacture of furniture	28.9	48.3	54.4	65.1	65.1	69.9	1787	1536	1834	2019	2519	3348
Other manufacturing	0.0	0.0	0.0	0.0	0.0	0.0						
Repair and installation of machinery and equipment	0.0	0.0	0.0	0.0	0.0	26.1						1000
Electricity, gas, steam and air conditioning supply	21.9	29.9	38.2	42.0	44.3	63.1	999	1195	1394	1752	2153	2426
Water collection, treatment and supply	0.0	27.1	49.2	52.4	55.0	60.6		479	722	1175	1619	2447
Sewerage	0.0	0.0	54.3	54.3	54.3	75.4			300	800	1300	1798
Waste collection, treatment and disposal activities; materials recovery	47.6	82.8	82.8	82.8	82.8	82.8	2236	1786	2286	2786	3286	4286
Construction of buildings	14.9	25.8	26.8	28.7	30.1	38.5	1080	1114	1564	1960	2356	2771
Civil engineering	11.6	25.4	40.4	45.9	49.0	55.3	1214	1036	1113	1472	1873	2603
Specialized construction activities	27.9	43.7	50.4	57.4	57.4	60.9	1505	1462	1768	2043	2543	3383
Wholesale and retail trade and repair of motor vehicles and motorcycles	28.7	42.7	44.7	46.1	46.1	56.2	1194	1278	1721	2156	2656	3180
Wholesale trade, except of motor vehicles and motorcycles	16.1	22.1	22.1	28.4	29.1	34.3	1051	1267	1767	1871	2326	2972
Retail trade, except of motor vehicles and motorcycles	47.8	57.8	60.9	65.0	66.6	80.5	1346	1605	2010	2379	2817	3298
Land transport and transport via pipelines	3.1	8.2	15.6	41.9	41.9	43.1	937	851	950	853	1353	2305
Water transport	10.7	14.2	17.1	33.4	33.8	43.2	1142	1351	1581	1298	1783	2364

Air transport	14.1	14.7	16.6	20.7	22.0	31.3	1157	1604	1907	2005	2369	2588
Warehousing and support activities for transportation	12.8	18.6	24.8	27.5	32.4	39.0	1055	1191	1339	1695	1898	2542
Postal and courier activities	2.9	2.9	17.5	57.7	57.7	65.5	400	900	517	547	1047	1923
Accommodation	22.3	28.9	34.3	42.4	44.6	53.0	1219	1417	1672	1837	2242	2870
Food and beverage service activities	50.0	56.6	59.9	65.0	69.1	72.7	1142	1509	1920	2264	2620	3471
Publishing activities	0.0	0.0	0.0	0.0	0.0	0.0	.	.	.	.	.	.
Motion picture, video and television programme production, sound recording and music publishing activities	100.0	100.0	100.0	100.0	100.0	100.0	500	1000	1500	2000	2500	3500
Programming and broadcasting activities	17.6	23.4	31.9	33.4	46.3	58.7	874	1054	1195	1642	1618	2117
Telecommunications	18.9	27.0	30.0	30.8	37.6	50.2	833	1002	1397	1860	1990	2408
Computer programming, consultancy and related activities	0.0	0.0	0.0	0.0	0.0	42.4	.	.	.	.	.	1000
Information service activities	0.0	0.0	0.0	0.0	0.0	24.6	.	.	.	.	.	1000
Financial service activities, except insurance and pension funding	2.0	6.5	6.5	10.6	10.6	18.7	1026	720	1220	1184	1684	1734
Insurance, reinsurance and pension funding, except compulsory social security	0.0	0.0	29.2	59.5	59.5	59.5	.	.	500	745	1245	2245
Activities auxiliary to financial service and insurance activities	0.0	0.0	0.0	0.0	0.0	0.0	.	.	.	.	.	.

Legal and accounting activities	2.3	2.3	14.7	14.7	23.6	33.5	1700	2200	716	1216	1242	1817
Activities of head offices; management consultancy activities	14.7	20.8	26.6	30.1	34.3	42.6	897	1119	1336	1666	1948	2544
Architectural and engineering activities; technical testing and analysis	0.0	0.0	22.1	22.1	22.1	46.4	.	.	400	900	1400	1667
Advertising and market research	0.0	0.0	0.0	0.0	0.0	0.0	.	.	.	.	.	.
Other professional, scientific and technical activities	19.5	19.5	40.9	40.9	40.9	82.3	848	1348	920	1420	1920	1865
Rental and leasing activities	0.0	0.0	0.0	0.0	0.0	0.0	.	.	.	.	.	.
Employment activities	0.0	0.0	27.1	74.1	74.1	74.1	.	.	500	683	1183	2183
Travel agency, tour operator, reservation service and related activities	12.3	17.1	25.4	29.3	29.3	40.1	890	1142	1176	1520	2020	2378
Security and investigation activities	37.6	37.6	43.0	65.9	85.2	85.2	1657	2157	2387	2058	2090	3090
Services to buildings and landscape activities	74.4	88.6	88.6	88.6	88.6	88.6	1168	1481	1981	2481	2981	3981
Office administrative, office support and other business support activities	0.0	0.0	0.0	25.1	25.1	25.1	.	.	.	500	1000	2000
Public administration and defence; compulsory social security	17.6	24.7	29.7	37.1	41.1	50.9	1122	1276	1533	1707	2019	2570
Education	19.2	25.3	30.6	37.0	39.0	58.2	1091	1309	1555	1776	2179	2319
Human health activities	26.4	36.5	42.8	50.5	54.2	65.0	1089	1261	1546	1801	2161	2719
Residential care activities	53.5	60.3	79.4	86.3	93.1	93.1	1244	1579	1674	2028	2378	3378

Social work activities without accommodation	52.3	52.3	63.5	63.5	63.5	73.6	1184	1684	1851	2351	2851	3433
Creative, arts and entertainment activities	0.0	0.0	0.0	0.0	0.0	50.6	.	.	.	.	.	200
Libraries, archives, museums and other cultural activities	23.2	61.6	61.6	61.6	100.0	100.0	535	702	1202	1702	1541	2541
Sports activities and amusement and recreation activities	8.6	10.4	15.6	25.5	26.4	39.0	1914	2085	1846	1625	2068	2343
Activities of membership organizations	47.7	62.7	64.0	66.0	69.4	87.3	1412	1553	2020	2454	2822	3098
Repair of computers and personal and household goods	8.5	44.2	54.3	92.9	92.9	97.4	500	596	986	1034	1534	2430
Other personal service activities	53.4	67.8	67.8	67.8	67.8	67.8	1537	1711	2211	2711	3211	4211
Activities of households as employers of domestic personnel	78.8	90.8	90.8	90.8	90.8	100.0	1240	1564	2064	2564	3064	3750
Activities of extraterritorial organizations and bodies	0.0	0.0	100.0	100.0	100.0	100.0	.	.	344	844	1344	2344

Table A9. Male all households monthly per consumption unit expenditure by fractiles (MVR)

Monthly per consumption unit expenditure (MVR)				
Fractile	Essential	Other	Excluded	Total
1	421	109	127	657
2	664	439	160	1 263
3	755	343	276	1 373
4	878	508	267	1 654
5	811	503	512	1 827
6	1 430	434	397	2 260
7	1 307	598	672	2 578
8	1 771	562	655	2 988
9	1 940	692	770	3 402
10	1 956	817	824	3 596
11	2 286	886	754	3 926
12	2 497	787	1 131	4 415
13	2 681	976	1 194	4 851
14	2 952	1 161	1 256	5 370
15	3 265	1 225	1 418	5 908
16	3 367	1 274	1 586	6 227
17	3 732	1 449	2 181	7 362
18	4 291	1 860	2 687	8 839
19	5 252	1 941	3 610	10 803
20	7 188	3 309	8 480	18 977
Average	3 019	1 185	1 769	5 973

Table A10. Atolls all households monthly per consumption unit expenditure by fractiles (MVR)

Monthly per consumption unit expenditure (MVR)				
Fractile	Essential	Other	Excluded	Total
1	312	274	143	728
2	442	435	230	1 107
3	540	547	298	1 385
4	624	679	332	1 635
5	672	768	473	1 913
6	762	887	508	2 157
7	813	994	633	2 440
8	862	1 083	728	2 673
9	964	1 108	864	2 936
10	973	1 340	937	3 249
11	1 043	1 441	1 160	3 645
12	1 189	1 564	1 337	4 090
13	1 232	1 753	1 435	4 420
14	1 201	1 763	2 400	5 363
15	1 360	2 027	2 171	5 558
16	1 419	2 358	2 518	6 295
17	1 445	2 246	3 619	7 310
18	2 449	2 577	3 712	8 739
19	1 883	3 596	4 338	9 818
20	2 585	4 095	10 027	16 708
Average	845	1 077	980	2 903

Table A11. 2014 productivity ratios aggregated (total GVA/total employment) (million MVR per worker)

	Agriculture, forestry	Fishing and aquaculture	Processing and preserving	Manufacturing of other products	Electric power generation	Water collection, treatment	Construction	Wholesale and retail	Transportation	Postal and Telecom	Resorts	Total
TOTAL GVA	783	2,235	279	850	482	398	2,776	5,354	3,723	1,688	13,297	50,683
Employment	1,012	12,244	2,179	4,667	2,731	597	37,112	14,583	11,023	2,451	26,138	1,83,640
2014 Productivity Ratios	2.80	0.66	0.46	0.66	0.64	2.42	0.27	1.33	1.22	2.50	1.84	1.00
	Other accommodation	Food and beverage service	Financial intermediation	Insurance and auxiliaries	Real estate activities	Professional, scientific	Administrative	Public Administration	Education	Human health and social	Arts, entertainment	Total
TOTAL GVA	605	441	2,122	139	4,166	851	1,736	4,372	1,704	1,512	1,170	50,683
Employment	6,751	4,846	1,296	401	562	3,019	2,248	22,045	14,576	7,669	5,490	1,83,640
2014 Productivity Ratios	0.32	0.33	5.93	1.26	26.86	1.02	2.80	0.72	0.42	0.71	0.77	1.00

Source: 2014 Supply and Use Table, National Accounts and Economic Statistics Division, National Bureau of Statistics (NBS)

Table A12. 2014 sectoral to national employment compensation ratios (million MVR)

	Agriculture, forestry	Fishing and aquaculture	Processing and preserving	Manufacturing of other products	Electric power generation	Water collection, treatment	Construction	Wholesale and retail	Transportation	Postal and Telecom	Resorts	Total
Compensation of employees	44	1,131	126	271	349	91	1,287	1,004	1,608	535	3,338	18,450
Employment	1,012	12,244	2,179	4,667	2,731	597	37,112	14,583	11,023	2,451	26,138	1,83,640
Average monthly compensation	3,623.19	7,697.65	4,818.72	4,838.94	10,649.33	12,702.40	2,889.90	5,737.27	12,156.40	18,189.85	10,642.23	8,372.36
Ratio national Compensations	0.43	0.92	0.58	0.58	1.27	1.52	0.35	0.69	1.45	2.17	1.27	1.00
	Other accommodation	Food and beverage service	Financial inter-mediation	Insurance and auxiliaries	Real estate activities	Professional, scientific	Administrative	Public Administration	Education	Human health and social	Arts, entertainment	Total
Compensation of employees	386	309	363	58	13	395	257	3,372	1,479	1,292	741	18,450
Employment	6,751	4,846	1,296	401	562	3,019	2,248	22,045	14,576	7,669	5,490	1,83,640
Average Monthly compensation	4,764.73	5,313.66	23,341.05	12,053.20	1,927.64	10,903.17	9,526.99	12,746.65	8,455.68	14,039.21	11,247.72	8,372.36
Ratio National Compensations	0.57	0.63	2.79	1.44	0.23	1.30	1.14	1.52	1.01	1.68	1.34	1.00

Source: 2014 Supply and Use Table, National Accounts and Economic Statistics Division, National Bureau of Statistics (NBS)

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