

# Socio - Economic Impact Study of Raajje Transport Link (RTL) Ferry In Zone 1

October 2023



Ministry of National Planning,  
Housing & Infrastructure



## **COPYRIGHT AND ACKNOWLEDGMENTS**

Copyright © 2023

By Ministry of National Planning, Housing and Infrastructure  
Ameenee Magu, Male' 20392, Maldives

All rights reserved. The document or extracts from this publication may, however, be freely reviewed, quoted, reproduced, or translated, in part or in full, provided the source is given due acknowledgement. The views expressed in this publication are those of the author(s) and do not necessarily represent those of the Ministry of National Planning, Housing and Infrastructure.

**PUBLISHED BY:** Ministry of National Planning, Housing and Infrastructure

**AUTHORED BY:** FJS Consulting Pvt. Ltd., Male', Maldives.

### **RESEARCH AND AUTHORING TEAM:**

Hamid Sodique, Team Leader & Economic Expert

Fareeha Shareef, Technical Advisor

Maleeka Salih, Social Sector and Research Expert

Mohamed Inaz, Sustainability Expert

Dheena Shareef, Researcher & Project Coordinator

**CRITICAL REVIEW:** Aishath Saadh, Aman Khaleel, Samaha Ali Mohamed (MNPHI)

**COVER BY:** Fathimath Najjeel (MNPHI)

**LAYOUT AND DESIGN BY:** Ahmed Fayaz / FJS Consulting Pvt. Ltd.

**ISBN:** 978-99915-78-24-8

**CITATION:** FJS Consulting. (2023). Socio-Economic Study of Raajje Transport Link (RTL) Ferry in Zone 1. Ministry of National Planning, Housing and Infrastructure. Maldives

# FOREWORD

The Maldives, a nation of scattered islands in the heart of the Indian Ocean, possess a unique and vibrant culture deeply connected to the use of the ocean to commute in pursuit of better opportunities, access to essential services, and social connections. Yet, the geography that defines the uniqueness of the country has also presented challenges. The dispersion of the islands has long necessitated commuting people from one island to another. However, until recently there was no efficient or reliable means of affordable traveling between the islands.

Recognising the demanding need to strengthen Maritime Infrastructure and services to enhance socio-economic growth, the Government set an ambitious target in the Strategic Action Plan (2019-2023) that would transform the way of commuting between the islands resulting in the launch of the Integrated Public Ferry Network (INPFN) project.

Under the project, the first Passenger Ferry Network, Raajje Transport Link (RTL) set sail to Zone 1 in June 2022, encompassing Haa Alif Atoll, Haa Dhaal Atoll, and Shaviyani Atoll in northern Maldives. With a year elapsed since the commencement of RTL in Zone 1, it has become essential to comprehensively understand the socio-economic impacts of the RTL service in Zone 1. This understanding will guide improvements in the RTL ferry service that is being expanded in the other Zones.

The study is commissioned by the Ministry of National Planning, Housing, and Infrastructure and conducted by FJS Consulting Pvt Ltd.

Mr. Mohamed Aslam  
Minister of National Planning, Housing and Infrastructure



On the economic front, the RTL ferry service has significantly reduced travel expenditure, enhancing the financial resilience of our communities. It has opened new avenues for businesses and entrepreneurs, paving the way for greater prosperity and economic development and creating direct and indirect employment opportunities in the region.

RTL aligns seamlessly with the objectives of the INPFN project, contributing to Sustainable Development Goals (SDGs) and fostering inclusive regional development. Its institutional impact has optimised resource allocation and streamlined public service delivery.

I express my deepest gratitude to FJS Consulting Pvt Ltd. for conducting a very insightful study that has greatly enriched our understanding of the RTL's impact. The dedication from the National Planning Department, alongside the invaluable support of all local councils, has been instrumental in enabling us to carry out this study.

The findings of this study are a roadmap for the future that serves as a blueprint for future endeavours, lessons for the expansion of the service throughout the Maldives, and the realization of a fully integrated public transport network for the Maldives. Through RTL, we have not merely established a mode of transportation; we have forged a conduit for progress, a catalyst for change.

# ACKNOWLEDGEMENTS

This comprehensive study on the Social and Economic Impact of Raajje Transport Link (RTL) Ferry in Zone 1, encompassing Haa Alif, Haa Dhaal, and Shaviyani Atoll, owes its success to the invaluable contributions and collaborative efforts of numerous stakeholders. Their unwavering dedication has formed the bedrock of a study of immense significance.

We extend our deepest gratitude to the local governments, the business community, State-Owned Enterprises (SOEs), as well as various government and state agencies and institutes in Zone 1 who participated and contributed significantly to this study. Their impartial insights, thoughtful engagement, and invaluable contributions have been instrumental in shaping the RTL study, offering a rich tapestry of perspectives and community needs.

Our heartfelt thanks go out to the Non-Governmental Organisations (NGOs) whose active participation in various facets of the RTL study has greatly enriched its depth and scope. Their advocacy for inclusive regional development and astute identification of concerns have added substantial value.

The enthusiastic involvement and insightful feedback from the general public have provided indispensable perspectives into the day-to-day impact of the RTL network. Their experiences have played a pivotal role in shaping the study's findings.

We also recognise the substantial contributions of other key government agencies who played vital roles in facilitating and supporting this pivotal study. Their collaborative efforts have significantly enhanced the comprehensiveness of the study.

Special acknowledgment is due to the Maldives Transport and Contracting Company (MTCC) for their invaluable expertise and support, which have been instrumental in ensuring that the study accurately encapsulates the operational intricacies of the RTL network.

The dedicated team at the National Planning Department deserves special recognition for their unswerving support in orchestrating the RTL study. Their guidance and meticulous planning have been pivotal in framing the study's objectives and methodology.

Mohamed Aslam, Minister of National Planning, Housing, and Infrastructure, has been instrumental in spearheading the implementation of the RTL ferry service and was crucial to the success of this study. His strategic guidance has played a pivotal role in defining the study's objectives and ensuring alignment with broader goals of regional development and inclusive growth. His expertise and dedication have elevated the significance of this research, making it a catalyst not only for expanding RTL ferry services but also for inspiring similar studies in other zones. Minister Aslam's contributions will leave a lasting legacy in the pursuit of inclusive and sustainable transportation solutions in the Maldives.

Finally, we extend our heartfelt gratitude to FJS Consulting Pvt Ltd. for their professional and insightful conduct of the study. Their rigorous research and meticulous analysis have yielded invaluable insights into the RTL network's impact.

As we bring this study to a close, we anticipate that the lessons learned will serve as a catalyst for the expansion of RTL services and encourage similar studies in other zones. The collective endeavours of these stakeholders have elevated this study to a position of profound significance.

# EXECUTIVE SUMMARY

This report presents the findings of a detailed research study on the socio-economic impact of Raajje Transport Link (RTL) – a high-speed public ferry system – set up under the Integrated National Public Ferry Network (INPFN) project in Zone 1 of the Maldives. Zone 1 covers the three administrative atolls of Haa Alif, Haa Dhaal and Shaviyani. The ferry services commenced in June 2022, and this study was undertaken a little more than a year into its operation, in July-August of 2023.

The study aimed to understand the social and economic impacts of the ferry services on the people and communities, businesses and livelihoods, vulnerable persons and groups, and isolated islands, including on access and utilization of basic services and on connectivity and social networking. It also aimed to understand the impact on new social, economic and business opportunities, and on decentralization and regional development within the Zone.

A total of 16 islands out of 41 administrative islands in Zone 1 were selected through cluster sampling based on population density, centrality and geographical remoteness, popularity of ferry routes, availability of public services, and representing a range of primary economic activity. Based on a comprehensive multi-method approach comprising quantitative and qualitative research elements, research activities included a quantitative public survey of 787 individuals, a qualitative survey among 106 businesses, 42 stakeholder and key informant interviews with a total of 151 representatives, and 11 focus groups comprising 84 individuals in total conducted across 8 of the 16 selected islands. The focus groups were attended by members of the public as well as individuals from vulnerable groups (e.g., people with health conditions and/or a disability, etc).

The key findings cover the following aspects: travel behaviour in the region, public usage of the RTL service, public satisfaction with RTL service, impacts on businesses and livelihoods, economic impacts of RTL ferry services, impact on social connections and community relations, impact on access to healthcare services, impact on access to educational opportunities, and the impact on governance, administration and public services in the region.

The results of the study showed that people travel frequently and regularly over the sea for a variety of purposes but the most common being to seek healthcare related services. Other purposes included airport shuttles, visiting friends and family in other islands and for recreational and leisure-related purposes. The most travelled destination is Kulhudhuffushi City (KFC) – the home of the regional hospital and regional commercial hub. Those living in the hub islands (i.e., the capital islands of each atoll) travelled primarily for leisure and

recreational activities and to visit friends and family, whilst those in non-hub islands travelled primarily for medical purposes.

Since its introduction, RTL has become the predominant means of inter-island transport for the people in Zone 1. It is used nearly 7 times more often than the next most frequently used means of transport. Public satisfaction was high on all aspects of the ferry system, including accessibility, affordability, comfort, safety, connectivity and timing, ease of booking and overall experience. The vast majority believed RTL to be both affordable and accessible to individuals from different socio-economic backgrounds, and most noted that RTL had improved the standards of living of their communities. The public appreciated the sense of high safety and stability of the vessels used by RTL as well as the professional conduct of the ferry staff and did not hesitate to travel alone or to travel with children and the vulnerable on RTL.

Whilst most people did not experience any difficulties or challenges in accessing or using the RTL, those who did described issues related to booking and refund processing. The long journey to KFC was the main pain point on the route/duration nexus, especially for those on islands requiring close to 3hrs journey-time to get to this popular destination.

Most businesses did not use the RTL for business purposes, preferring to use the *Lakudi* ferries (the Comprehensive Transport Network operated by MTCC) because they could transport cargo on these ferries. Those who did use the RTL for business purposes did so for meeting suppliers and sourcing products and services. Nonetheless, the majority of businesses in hub islands stated that RTL had a very positive impact on their businesses with increased customers and sales; a comparatively smaller proportion of businesses in non-hub islands experienced such impacts. It must be also noted that a significant proportion of micro-, small-, and medium-sized enterprises stated that their business required little to no need for travelling at all. There is an associated shrinkage of private speedboat charter business, especially in non-hub islands.

There is undoubtedly a positive economic impact of RTL on the majority of households, with most reporting a reduction in the household's travel expenses and consequent economic savings. Weighted median household saving on travel expenses per month was found to be approximately MVR800 per household; this translates to a combined direct saving of MVR100 million per year on travel expenses for some 10,500 households in the 3 atolls of RTL Zone 1.

RTL also enabled the majority of people living in Zone 1 to cultivate stronger and closer ties with family and friends living on other islands. There was significant positive impact on community relations and activities as reported by respondents. Schoolchildren, university and college students, young people, special interest groups and young

professionals can organise outings and other trips, enriching their lives with educational and recreational opportunities. More inter-island activities, events and festivals have been organised because it is easier and less costly to bring people together.

The most apparent impact of RTL for people living in the region has been felt in relation to access to healthcare services. As mentioned earlier, the most frequent purpose of travel is to seek healthcare. There has been significant increase in regular timely access to and utilization of specialist consultations, laboratory tests, regular healthcare, dental services, pharmaceutical items and medicines, likely leading to improved health outcomes in the coming years. Moreover, the additional demand has led to an expansion and upgrading of healthcare services in the Zone, further enhancing easier access to improved healthcare for the region.

Access to education and educational opportunities has also improved for people living in Zone 1 as a result of available RTL services. Universities and colleges were able to offer more courses in the weekend/block mode studies, enabling young people and early-career professionals to extend their access to educational opportunities and/or further their careers. This mode of study was especially important for those seeking licensed professional qualifications (such as nursing, teaching and welding for instance). Furthermore, attending educational courses have become more affordable and accessible to students from diverse island communities in the region. In addition to the advancement in higher educational opportunities in Zone 1, the quality of general education is also likely to improve as a result of the introduction of RTL.

The study also determined that RTL has allowed for improvements in governance and administration in the region, because of the increased opportunity for Atoll Councils and other institutional bodies to provide oversight, coordination and support to island councils and other services in the region and the reduction in travel expenses enabling councils to divert funds to other community services and activities in the region. For most people living in Zone 1, RTL has also allowed them to travel more easily to access government and administrative services. The ferry services have also enabled state agencies to deliver more efficient and responsive services to the public: policing, public utility, banking and other such services.

There were several issues that were identified in relation to further improving the RTL service. These include improvements to the booking and refund processes and requested changes to shorten journey times to KFC. There were also some suggestions regarding current policies and practices: on eating, privacy for breastfeeding, seats for carers of the elderly and people with disabilities, real-time travel information, clear luggage policies and better terminal services.

The study clearly indicates significant positive impacts on a range of socio-economic factors with direct influence on people's quality of life and wellbeing, available choices and opportunities, as well as their capabilities and access to resources. These factors were identified as income, education, employment and livelihood options, health and wellbeing, safety and security, and social support/connections. In addition, delivery of governance and public administrative services and potential for innovation and entrepreneurship are also recognised as key factors. The study revealed that the impact of the RTL contributed to achieving both the project objectives and a number of Sustainable Development Goals, in particular SDGs 1, 3, 4, 5, 8, 9, 10, 11, 16 and 17.

Whilst impacts on regional development requires more time than a year to be realised in the region, there is indication that the current socio-economic impacts have great potential for sustained regional development. However, for balanced development across the region, it is important to have a number of targeted interventions that drive people from the centre to the peripheries.

The main recommendations include the following: improving the RTL app; operationalising the ferry terminals, having offline booking processes available; optimising routes to KFC; delivering an integrated and economic public ferry service; introducing same-day return ferry for hub-islands on weekends; introducing small package courier services; improved cargo ferry services; and fostering entrepreneurship; and promoting local and inbound tourism in the region.

# CONTENTS

FOREWORD	01
ACKNOWLEDGEMENTS	02
EXECUTIVE SUMMARY	03
1. INTRODUCTION	10
1.1. BACKGROUND TO THE STUDY	10
1.2. METHODOLOGY	10
2. RTL IN ZONE 1: A BRIEF OVERVIEW	12
2.1. INTRODUCTION	12
2.2. GEOGRAPHY OF MALDIVES	12
2.3. THE INPFN PROJECT AND ITS OBJECTIVES	12
2.4. INTER-ISLAND TRANSPORTATION IN ZONE 1	14
2.5. DEMOGRAPHICS OF ZONE 1	16
3. KEY FINDINGS	19
4. TRAVEL BEHAVIOUR AND RTL USAGE	24
4.1. USE OF RTL FERRY SERVICES	24
4.2. SATISFACTION WITH RTL	27
4.3. APPRECIATION FOR RTL FERRIES AND SERVICE CREWS	29
4.4. CHALLENGES IN USING RTL AND SUGGESTIONS FOR IMPROVEMENTS (SURVEY)	29
4.5. OVERALL IMPACTS OF RTL	31
5. IMPACT ON BUSINESS ACTIVITIES AND OPPORTUNITIES	35
5.1. USE AND PURPOSE OF RTL TRAVEL FOR BUSINESS	35
5.2. PREFERRED MODES OF TRAVEL FOR BUSINESS	35
5.3. IMPACT OF RTL ON BUSINESS	36
5.4. IMPORTANCE OF LAKUDI/CARGO FERRIES	37
5.5. ECONOMIC IMPLICATIONS FOR BUSINESSES	37
5.6. CONCLUSIONS	39
6. ECONOMIC IMPACTS OF RTL FERRY SERVICES	41
6.1. SAVINGS AND BENEFITS RESULTING FROM RTL	41
6.2. OTHER ECONOMIC BENEFITS RESULTING FROM RTL	42
6.3. DIRECT AND INDIRECT EMPLOYMENT OPPORTUNITIES	42
6.4. OTHER ECONOMIC OPPORTUNITIES	43
6.5. FARE AFFORDABILITY	43
6.6. CONCLUSIONS	43
7. IMPACT ON SOCIAL CONNECTIONS AND COMMUNITY RELATIONS	45
7.1. RTL HELPS WITH MAINTAINING RELATIONSHIPS AND SOCIAL CONNECTIONS	45
7.2. STRENGTHENING OF FAMILY AND SOCIAL WELLBEING	46
7.3. FREQUENT INTER-ISLAND COMMUNITY EVENTS AND ACTIVITIES	46
7.4. CONCLUSIONS	47

8.	IMPACT ON ACCESS TO HEALTHCARE SERVICES	49
8.1.	ACCESS TO HEALTHCARE	49
8.2.	BENEFITS FOR PATIENTS AND THEIR FAMILIES	49
8.3.	ADDITIONAL SUPPORT AND SERVICES FOR HOSPITALS AND HEALTH CENTRES	52
8.4.	CONCLUSIONS	53
9.	IMPACT ON ACCESS TO EDUCATIONAL OPPORTUNITIES	55
9.1.	ACCESS TO EDUCATION AND EDUCATIONAL OPPORTUNITIES	55
9.2.	HIGHER EDUCATION	55
9.3.	GENERAL EDUCATION	58
9.4.	CONCLUSIONS	60
10.	IMPACT ON GOVERNANCE, ADMINISTRATION AND PUBLIC SERVICES IN THE REGION	62
10.1.	ACCESS TO GOVERNMENT ADMINISTRATIVE SERVICES	62
10.2.	IMPROVEMENTS IN GOVERNANCE AND ADMINISTRATION	62
10.3.	PUBLIC SERVICE DELIVERY – POLICING, BANKING, BUSINESS SERVICES, AIRPORTS, INFRASTRUCTURE MAINTENANCE	64
10.4.	CONCLUSIONS	66
11.	PROBLEM AREAS AND SUGGESTIONS FOR IMPROVEMENT: RESPONDENT PERSPECTIVES	68
11.1.	RESOLVING TICKETING ISSUES	68
11.2.	IMPROVING THE TRAVEL EXPERIENCE AND POSSIBILITIES	70
11.3.	TERMINALS, SERVICES AT TERMINALS AND ACCESS ROUTES TO TERMINALS	72
11.4.	CONCLUSIONS	73
12.	SOCIOECONOMIC IMPACT AND THE DEVELOPMENT OF ZONE 1: THE POTENTIAL OF RTL	75
12.1.	DEFINING SOCIO-ECONOMIC IMPACT	75
12.2.	SUMMARISING SOCIO-ECONOMIC IMPACTS	77
12.3.	CONTRIBUTION TO PROJECT OBJECTIVES AND SDGS	79
12.4.	RTL AND REGIONAL DEVELOPMENT	81
12.5.	CONCLUSIONS	82
13.	MAIN CONCLUSIONS	84
14.	MAIN RECOMMENDATIONS	88
14.1.	ENHANCING USER EXPERIENCE	88
14.2.	IMPROVING ACCESSIBILITY	88
14.3.	ENHANCING SOCIAL VALUE OF RTL	88
14.4.	STIMULATING ISLAND ECONOMIES	88
14.5.	MAXIMISING ECONOMIC BENEFITS THROUGH SERVICE INTEGRATION & HARMONISATION	89
14.6.	ADOPTING A REGIONAL DEVELOPMENT STRATEGY	89
	REFERENCES	91
	ANNEXES	93





## ACRONYMS

<b>BCC</b>	BUSINESS CENTRE CORPORATION
<b>BML</b>	BANK OF MALDIVES PLC
<b>CSO</b>	CIVIL SOCIETY ORGANISATION
<b>FGD</b>	FOCUS GROUP DISCUSSION
<b>GoM</b>	GOVERNMENT OF MALDIVES
<b>HA</b>	HAA ALIF
<b>HDH</b>	HAA DHAALU
<b>INPFN</b>	INTEGRATED NATIONAL PUBLIC FERRY NETWORK
<b>KFC</b>	KULHUDHUFFUSHI CITY
<b>KII</b>	KEY INFORMANT INTERVIEW
<b>KRH</b>	KULHUDHUFFUSHI REGIONAL HOSPITAL
<b>MOTCA</b>	MINISTRY OF TRANSPORT AND CIVIL AVIATION
<b>MNPHI</b>	MINISTRY OF NATIONAL PLANNING, HOUSING AND INFRASTRUCTURE
<b>MNU</b>	MALDIVES NATIONAL UNIVERSITY
<b>MSME</b>	MICRO- SMALL AND MEDIUM ENTERPRISES
<b>MTCC</b>	MALDIVES TRANSPORT AND CONTRACTING COMPANY PLC
<b>PWDs</b>	PEOPLE WITH DISABILITY
<b>RTL</b>	RAAJJE TRANSPORT LINK
<b>SDFC</b>	SME DEVELOPMENT FINANCE CORPORATION LTD
<b>SDGs</b>	SUSTAINABLE DEVELOPMENT GOALS
<b>SH</b>	SHAVIYANI
<b>SME</b>	SMALL AND MEDIUM ENTERPRISES
<b>WDC</b>	WOMEN'S DEVELOPMENT COMMITTEE

## LIST OF TABLES

TABLE 1: NUMBER OF PASSENGERS TRAVELLED ON RTL FERRY ROUTES IN ZONE 1 (21.6.22-20.6.23)	16
TABLE 2: GENDER BREAKDOWN BY ATOLL IN ZONE 1	16
TABLE 3: AGE GROUP BREAKDOWN IN ZONE 1 (18YRS+)	16
TABLE 4: HIGHEST EDUCATIONAL ATTAINMENT (BY ATOLL IN ZONE 1) (15YRS+ & ABOVE)	16
TABLE 5: WORKING AGE, LABOUR FORCE PARTICIPATION AND UNEMPLOYMENT RATES IN THE ZONE	17
TABLE 6: BREAKDOWN OF HIGHER EDUCATION BY MODE OF STUDY FOR ZONE 1 AND SAMPLE POPULATIONS	55
TABLE 7: APPLICATION OF MODE OF STUDY PERCENTAGES TO ZONE 1 AND SAMPLE POPULATIONS	56
TABLE 8: SUMMARY OF IMPACTS IN RELATION TO SOCIO-ECONOMIC FACTORS CONSIDERED	77
TABLE 9: IMPACTS IN RELATION TO SDGS	79
TABLE 10: BREAKDOWN OF GENDER AND GEOGRAPHICAL LOCATION FOR KII PARTICIPANTS	97

## LIST OF FIGURES

FIGURE 1: ISLANDS IN ZONE 1 SELECTED FOR THE STUDY	10
FIGURE 2: ZONE-WISE MAP	13
FIGURE 3: ROUTE MAP OF RTL FERRY NETWORK IN ZONE 1	15
FIGURE 4: MODES OF TRANSPORT USED TO TRAVEL WITHIN THE ZONE IN THE PAST 3 MONTHS	24
FIGURE 5: MODES OF TRANSPORT USED TO TRAVEL WITHIN THE ZONE IN THE PAST 3 MONTHS	24
FIGURE 6: ISLANDS TRAVELLED IN THE PAST 3 MONTHS	24
FIGURE 7: PURPOSES AND MAIN PURPOSE OF TRAVEL ON RTL	25
FIGURE 8: FREQUENCY OF TRAVEL IN THE REGION SINCE INTRODUCTION OF RTL	26
FIGURE 9: LEVEL OF SATISFACTION WITH KEY ASPECTS/FEATURES OF RTL	27
FIGURE 10: TRAVELLED ALONE ON RTL AND REASONS WHY NOT	28
FIGURE 11: EASE OF TRAVELLING WITH CHILDREN / ELDERLY / VULNERABLE PERSONS ON RTL	28
FIGURE 12: CHALLENGES/DIFFICULTIES FACED IN USING RTL	29
FIGURE 13: SUGGESTIONS TO MAKE THE RTL NETWORK MORE IMPACTFUL	30
FIGURE 14: ADDITIONAL FEATURES SUGGESTED BY RESPONDENTS	31
FIGURE 15: RTL HAS IMPROVED THE STANDARD OF LIVING FOR THE COMMUNITY	31
FIGURE 16: RTL HAS IMPROVED THE STANDARD OF LIVING FOR THE COMMUNITY (BY ATOLL)	32
FIGURE 17: RTL HAS IMPROVED THE STANDARD OF LIVING FOR THE COMMUNITY (BY POPULATION SIZE)	33
FIGURE 18: WHETHER BUSINESSES TRAVELLED ON RTL FOR BUSINESS PURPOSE	35
FIGURE 19: BUSINESS PURPOSES OF TRAVEL ON RTL	35
FIGURE 20: REASONS FOR NOT USING RTL FOR BUSINESS TRAVEL	35
FIGURE 21: PREFERRED MODES OF TRAVEL FOR BUSINESS PURPOSES	36
FIGURE 22: OVERALL IMPACT ON OWN BUSINESS AS A RESULT OF RTL	36
FIGURE 23: BENEFITS FOR OWN BUSINESS AS A RESULT OF RTL	36
FIGURE 24: RTL HELPED REDUCE HOUSEHOLD'S EXPENDITURE	41
FIGURE 25: ESTIMATED AVERAGE AMOUNT OF HOUSEHOLD SAVING ON TRAVEL DUE TO RTL	41
FIGURE 26: OTHER BENEFITS OF RTL ON HOUSEHOLD INCOME/EXPENDITURE (APART FROM SAVINGS)	42
FIGURE 27: NEW ECONOMIC OPPORTUNITIES WITNESSED SINCE THE INTRODUCTION OF RTL SERVICE	42
FIGURE 28: RTL FERRY FARES ARE AFFORDABLE AND ACCESSIBLE	43
FIGURE 29: PERSONAL RELATIONSHIPS WITH FAMILY AND FRIENDS	45
FIGURE 30: PERSONAL RELATIONSHIPS WITH FAMILY AND FRIENDS (HUB VS NON-HUB AND POPULATION SIZE)	45
FIGURE 31: COMMUNITY RELATIONS AND ACTIVITIES	45
FIGURE 32: RTL IMPROVED ACCESS TO HEALTHCARE SERVICES*	49
FIGURE 33: NUMBER OF CONSULTATIONS PRIOR TO AND AFTER INTRODUCTION OF RTL.	49
FIGURE 34: NUMBER OF CONSULTATIONS AT SH. ATOLL HOSPITAL	50
FIGURE 35: ACCESS TO EDUCATION AND EDUCATIONAL OPPORTUNITIES	55
FIGURE 36: RTL IMPROVED ACCESS TO GOVERNMENT ADMINISTRATIVE SERVICES	62
FIGURE 37: JOURNEY TIMES TO KFC	71
FIGURE 38: FACTORS CONSIDERED IN RELATION TO SOCIO-ECONOMIC IMPACTS OF RTL	75
FIGURE 39: SAMPLE DISTRIBUTION FOR GENDER, AGE AND GEOGRAPHICAL LOCATION	93
FIGURE 40: DISTRIBUTION OF EDUCATIONAL ATTAINMENT	94
FIGURE 41: EMPLOYMENT STATUS OF THE SURVEY RESPONDENTS	94
FIGURE 42: EMPLOYMENT STATUS (BY HUB AND NON-HUB ISLANDS)	94
FIGURE 43: AVERAGE TOTAL MONTHLY INCOME OF THE HOUSEHOLD (MVR)	94
FIGURE 44: AVERAGE TOTAL MONTHLY INCOME OF THE HOUSEHOLD (MVR) (BY HUB VS NON-HUB AND BY POPULATION SIZE)	95
FIGURE 45: DISTRIBUTION OF GENDER, AGE AND GEOGRAPHICAL LOCATION IN THE BUSINESS SURVEY	95
FIGURE 46: TYPE OF BUSINESS REGISTRATION BY HUB AND NON-HUB ISLANDS	96
FIGURE 47: SIZE OF BUSINESSES BY EMPLOYEES AND BY ANNUAL TURNOVER	96
FIGURE 48: TYPE OF INDUSTRY	97
FIGURE 49: GENDER, AGE AND GEOGRAPHICAL LOCATION OF FGD PARTICIPANTS	98

# 1. INTRODUCTION

## 1.1. BACKGROUND TO THE STUDY

This report presents the findings of a detailed research study on the impact of an affordable and regular public ferry transport system in Zone 1 in northern Maldives established in June 2022. It focuses on the socio-economic impacts of the commenced highspeed ferry services a little more than an year after its commencement.

The highspeed public ferry system, known as Raajje Transport Link (RTL), has been set up under the Integrated National Public Ferry Network (INPFN) project. The INPFN project document notes its strategic objective to be facilitating inclusive regional development by connecting people and services, accelerate social and economic growth, improve efficiency in the delivery of public services and improve mobility and accessibility for all citizens.

The study was commissioned by the Ministry of National Planning, Housing and Infrastructure and undertaken by FJS Consulting Pvt Ltd. The aims of the study were to understand:

- Social and economic impacts of the RTL ferry service – identify and assess the social and economic impacts of the RTL Ferry services on the people and communities, businesses, vulnerable groups and isolated islands in Zone 1 including access and utilisation of basic services (health, education and government administrative services) and the impact on livelihood and businesses activities.
- New social, economic and business opportunities enabled by the ferry services – new and potential social and economic opportunities that has come about or have the potential for development due to RTL ferry service and its impact on decentralization and regional development.
- Connectivity impacts on social mobility and social networking – how the connectivity provided by RTL Ferry services supports social mobility and social networking including impact on family and personal relations and connections and collaborations across communities.

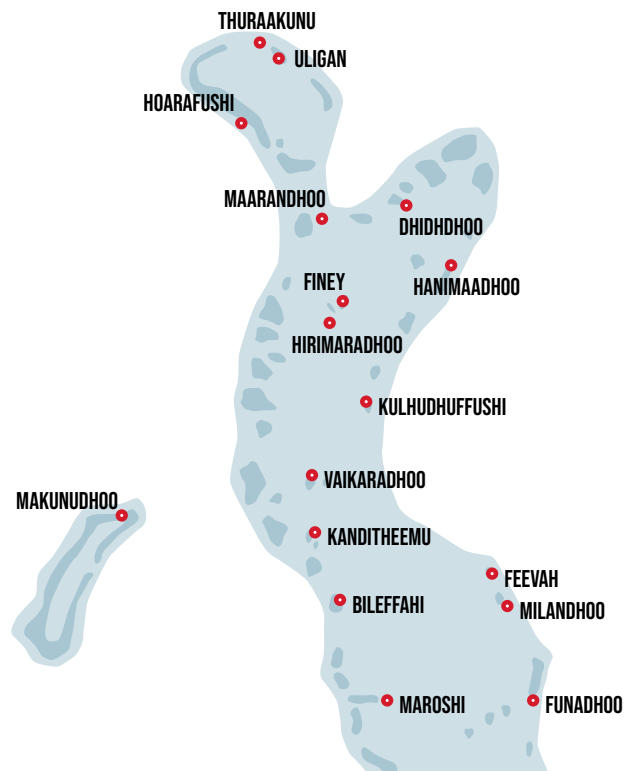
This study was conducted just a year into the commencement of the service; thus the findings represent the state of ferry use at present, and it is understood that ferry usage and its contribution to the socio-economic development of the region will likely evolve further over the course of its availability.

## 1.2. METHODOLOGY

The methodology employed for the study is a comprehensive multi-method approach. The results from the 2022 Census in the Maldives<sup>1</sup> show a total resident population of 50,761<sup>2</sup> individuals in 41 administrative islands in Zone 1 (HA, HDh. and Sh. atolls), of which the adult population (18yr+ population) projection for 2023 is 34,705. This is the sample universe for the study. An overview of sample characteristics is provided in Annex 1.

A total of 16 islands out of 41 administrative islands in Zone 1 were selected through cluster sampling based on population density, centrality and geographical remoteness, popularity of ferry routes, availability of public services, and representing a range of primary economic activity. The selected islands are shown below:

FIGURE 1: ISLANDS IN ZONE 1 SELECTED FOR THE STUDY



Four research activities were included in the study: 1) a public survey, 2) a qualitative survey among businesses, 3) stakeholder and key informant interviews and 4) focus group discussions.

The sample size for the public survey was 787 respondents selected from the 16 islands identified above. This comprises approximately 2.3% of the projected adult population or 7.5% of total households in Zone 1. Qualitative interviews were conducted with 106 businesses.

1 Census, 2022, Maldives Bureau of Statistics.

2 The total resident population of Zone 1 including those residing in administrative islands as well as resorts and industrial islands in Zone 1 is 52,810 as per Census 2022.

47 stakeholders and key informant interviews were conducted with a total of 163 representatives. 11 focus groups were conducted across 8 of the 16 islands, comprising 84 individuals. The focus groups were attended by members of the public as well as individuals from targeted groups (e.g. people with health conditions and/or a disability, etc.).

Field work was carried out between 8th and 24th August 2023 by a research team comprising senior researchers and field enumerators. All components of research work were completed as planned and under the supervisory and quality management of the senior research team. The research was conducted through face-to-face interviews, using Computer-Assisted Personal Interviewing (CAPI) program (via tablets) to collect quantitative data and an assigned notetaker for qualitative interviews.

Once cleaned and coded, the data was subjected to quantitative and qualitative analyses, exploring patterns and correlations between selected variables as well as people's perceptions and experiences of the impacts of RTL ferry services.

The findings of this study are presented in the subsequent sections of this report.



## 2. RTL IN ZONE 1: A BRIEF OVERVIEW

### 2.1. INTRODUCTION

The Raajje Transport Link (“RTL”) Ferry services has been set up under the Integrated National Public Ferry Network (INPFN) project. The INPFN project aims to connect all Maldivian citizens to the country’s economic infrastructure and social services laid out in the Strategic Action Plan 2019 – 2023, by developing an efficient, reliable, convenient, and sustainable national public ferry system. Through the INPFN, the Government of Maldives (GoM) is committed to operationalizing an efficient public ferry network in all administrative areas by 2024. This initiative serves as a crucial component for the long-term strategic planning framework (a National Spatial Plan), being designed to attain regional development in the Maldives by ensuring a balanced distribution of resources thereby fostering inclusive, integrated, smart and resilient development.

Under INPFN project, RTL is operated by the Maldives Transport and Contracting Company (MTCC), a public limited company with the GoM holding the majority shares, established with the objective to contribute towards the development of infrastructure and transport service in the country.

The establishment of the RTL ferry network is phased over a period of time; it was first introduced in Zone 1 comprising Haa Alif, Haa Dhaal and Shaviyani atolls, connecting all 41 inhabited islands in the region.

### 2.2. GEOGRAPHY OF MALDIVES

The Maldives is an archipelago of 1,192 small, low-lying islands located in the Indian ocean. The islands are clustered into 26 geographical atolls and 20 administrative atolls with a resident population of 515,132<sup>3</sup> distributed across 188 inhabited islands. The population distribution is heavily disproportionate with approximately 41%<sup>4</sup> of the resident population living in the Greater Male’ Area (Male’, Hulhumale’ and Villimale). The geographical dispersion and the very low population densities in other islands make it costly and challenging to provide socio-economic infrastructure and services due to low economies of scale.

Additionally, infrastructure and services are distributed unevenly, favouring Male’ region with the highest population density. As a result, significant socio-economic disparities exist between Male’ area and the rest of the nation. According to the National Multidimensional Poverty report (2020), multidimensional poverty is more prevalent in the Atolls (40%) compared to Male’ area (10%), indicating higher rates of deprivation in areas of health, education, information and living standard in the atolls.

<sup>3</sup> Census, 2022, Maldives Bureau of Statistics.

<sup>4</sup> Census, 2022, Maldives Bureau of Statistics.

## 2.3. THE INPFN PROJECT AND ITS OBJECTIVES

The GoM believes that these development challenges cannot be overcome without comprehensive and meaningful decentralization. Additionally, an efficient, multi-modal transport system is essential to foster inclusive regional development. In this regard, the INPFN project aims to enhance access to services and opportunities, contributing to an overall improvement in quality of life particularly for the physically and socially marginalized populations. Improved connectivity within regions and throughout the nation will bring substantial positive impacts on the lives and livelihoods of people both locally and nationally. The project aims to achieve the following outcomes:

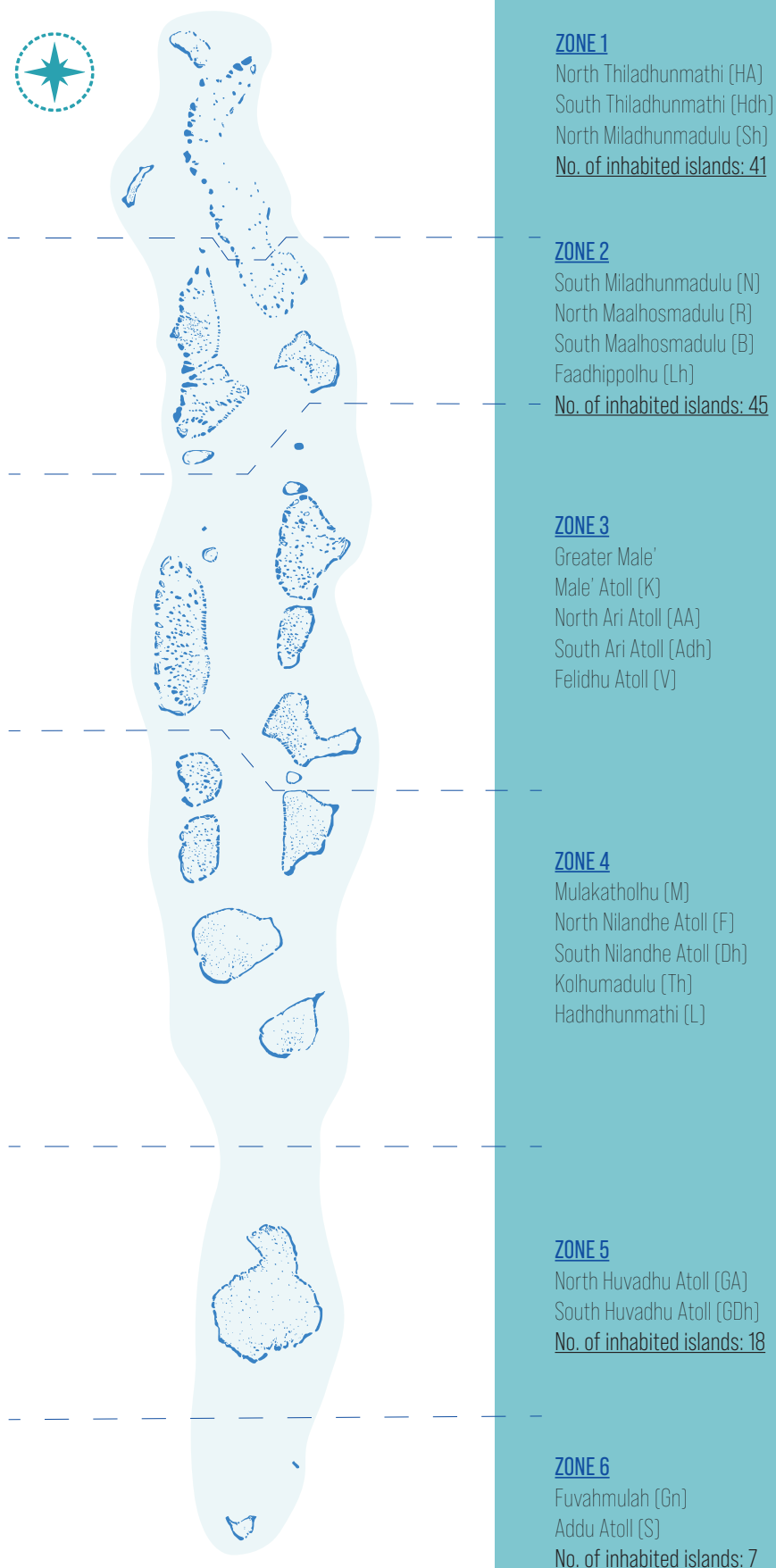
- Accelerate achievement of Sustainable Development Goals (SDGs)
- Catalyse socio-economic growth
- Facilitate inclusive, regional development
- Improve inter-island connectivity and mobility of population
- Reduced socio-economic disparities by improving access to services
- Reduced cost of transportation and improve viability of small businesses
- Efficient delivery of public services and optimisation of resources
- Improved and wider scope of choices in terms of jobs and lifestyles with better spread of job opportunities and diverse, empowered settlements
- Improved disaster preparedness and response

The INPFN project spans across the entire Maldives covering all 188 inhabited islands which are clustered into 6 zones (i.e., strategically clustered group of islands) as per Figure 2.

The establishment of the RTL ferry network is phased over a period of time; it was initially introduced in Zone 1 comprising Haa Alif, Haa Dhaal and Shaviyani atolls, connecting 41 inhabited islands with a resident population of 50,761 (approximately 10% of the total resident population of the country) as per Census 2022.

The ferry service was first introduced in Haa Dhaal in June 2022, Haa Alif in July 2022 and shortly after, commenced its operation in Shaviyani atoll in August 2022. Since then, Phase 2 of the RTL ferry service has been introduced in Lhaviyani atoll in Zone 2, Gaaf Alif and Gaaf Dhaal in Zone 5, and linking the islands in Zone 5 and Zone 6.

FIGURE 2: ZONE-WISE MAP



## 2.4. INTER-ISLAND TRANSPORTATION IN ZONE 1

The modes of inter-island transport in the region are RTL ferry, *Lakudi* ferry (wooden ferry), both operated by MTCC, and charter services by private speedboat operators. RTL ferry and *Lakudi* ferry have become the main modes of transportation in the region.

### LAKUDI FERRY

*Lakudi* ferry is operated by MTCC under their Comprehensive Transport Network (CTN). *Lakudi* ferry, carrying both cargo and passengers, travelling at a speed of 10 knots was the the only public ferry available and utilised by residents for inter-island/inter-atoll travel, prior to RTL.

### THE RTL FERRY SYSTEM & TERMINALS

The RTL ferries are custom designed, fiberglass 48-seater vessels. The ferries are equipped with reclining seats, are air-conditioned with toilet facilities, and designated additional 4 seats for wheelchair users and 1 stretcher. The ferries were designed to achieve speeds of up to 30 knots, and achieves 22-28 knots depending on weather conditions (which is 3 times faster than the *Lakudi* ferry). Currently, there are 12 vessels in operation in Zone 1.

The ferry terminals, as support infrastructure of the RTL ferry network for providing a safe and efficient transport service, have been built in nearly all the islands in Zone 1. However, not all the terminals are yet fully operationalised.

There are three types of ferry terminals categorized by the level of services available; regional ferry terminals at regional centres with various facilities including seats at boarding gates, restaurant, and shop; transit terminals located at hub islands and basic terminals in other islands.

### THE RTL FERRY NETWORK

The RTL ferry network is designed to link the islands within the regions and between regions via three types of passenger links when fully implemented across the country; commute links, non-commute links and highway links. The short distance commute links enable more frequent and regular commute for accessing services like healthcare while non-commute links connect more distance islands via a less frequent daily service. Additionally, it also includes greater links between airport islands and population centres. The highway links connect the transport hubs of each region to the adjacent region's transport hubs.

The RTL ferry operates as a collection network, connecting islands to hub islands within the same atoll and connecting the atoll hubs to the regional hub (refer to Figure 3). There are three hubs

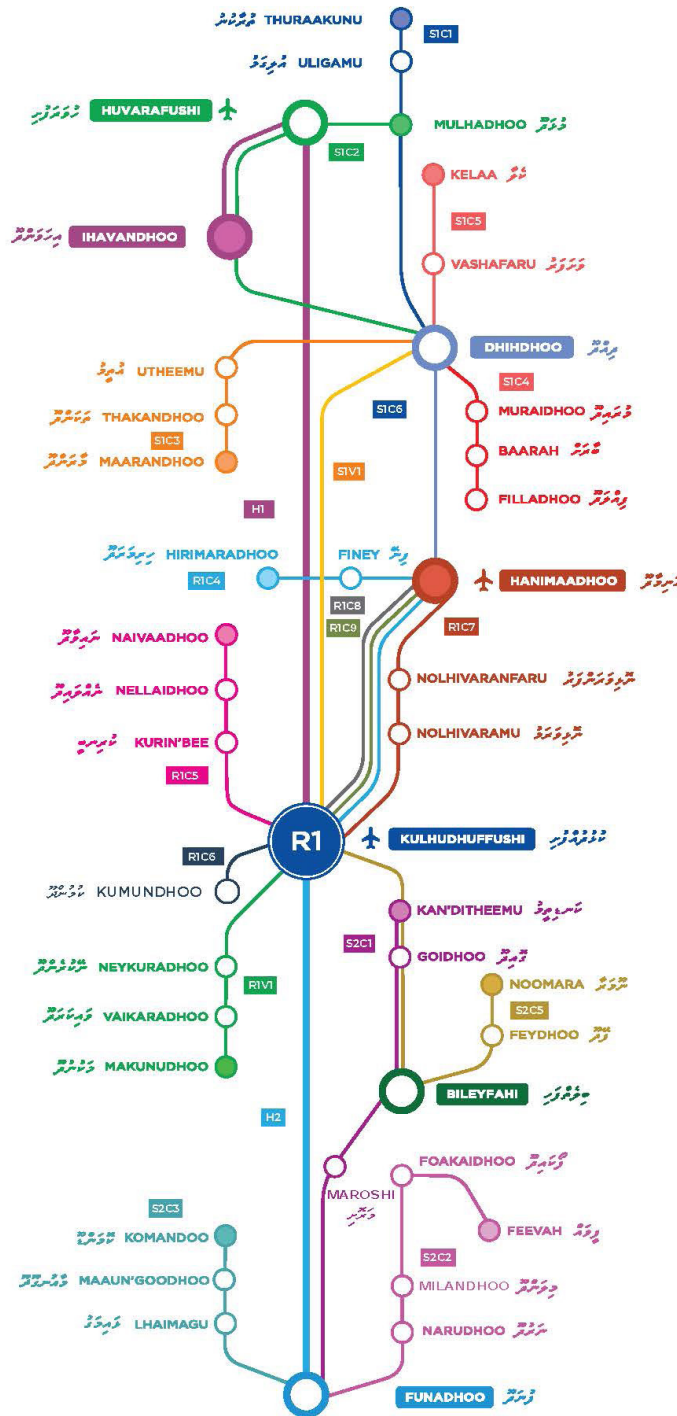
in Zone 1; Kulhudhuffushi is the regional hub, Dhidhdhoo is the Haa Alif atoll hub and Funadhoo is the Shaviyani atoll hub. Ferry routes originate from ferry stationed islands. They are Thuraakunu, Molhadhoo, Maarandhoo, Kelaa and Ihavandhoo in Haa Alif; Vaikaradhoo, Naavaidhoo, Hirimaradhoo and Hanimaadhoo in Haa Dhaal; Feevah, Kandhitheem, Komandoo and Noomara in Shaviyani.

Operating all 7 days of the week, in the morning ferry passengers are picked from their respective islands on designated routes within the same atoll and dropped off at a collection point (hub island in each atoll), and in the late afternoon return journeys starts from the hub islands all the way back to the originating islands. Highway links transport passengers directly from each of the atoll hubs to the regional hub in the morning and back in the afternoon. Additionally, there are direct ferries to and from airport islands (Ha. Hoarafushi, Hdh. Hanimaadhoo) to the regional hub.

The network is designed in a way that residents from all the islands can travel to the capital island of the atoll or even the regional hub to seek various services and return to their own islands on the same day.



FIGURE 3: ROUTE MAP OF RTL FERRY NETWORK IN ZONE 1



There has been varying degree of demand for travel on the RTL across its various routes in Zone 1 over the past year. Over the past 1 year, from 21 June 2022 to 20 June 2023, 251,000 passengers were transported on RTL ferry in this zone. This translates to transporting on average 688 persons every day. The routes with highest passenger traffic are all to Kulhudhuffushi (KFC).

**TABLE 1: NUMBER OF PASSENGERS TRAVELLED ON RTL FERRY ROUTES IN ZONE 1 (21.6.22-20.6.23)**

Route	No. of Passengers (21.6.2022 – 20.6.2023)
R1V1 Makunudhoo to Kulhudhuffushi	28,094
R1C7 Hanimaadhoo to Kulhudhuffushi	26,370
R1C5 Naavaadhoo to Kulhudhuffushi	22,668
R1C4 Hirimaradhoo to Kulhudhuffushi	21,628
H1 Ha.Ihavandhoo – Hdh. Kulhudhuffushi (Direct)	14,856
S2C2 Sh.Feevah – Sh.Funadhoo*	14,103
S1C2 Ha.Mulhadhoo – Ha. Dhihdhoo	13,728
R1C8 Kulhudhuffushi to Hanimaadhoo	12,269
S2C3 Sh.Maayun>goodhoo – Sh.Funadhoo*	11,851
S1V1 Ha.Dhihdhoo – Hdh.Kulhudhuffushi	11,416
S1C3 Ha.Maarandhoo-Ha.Dhihdhoo	10,815
S1C4 Ha.Filladhoo-Ha.Dhihdhoo	9,862
H2 Sh.Funadhoo – Hdh.Kulhudhuffushi*	8,716
S2C5 Sh.Noomaraa –Sh.Bileyfahi*	7,707
S1C1 Ha.Thuraakunu- Ha. Dhihdhoo	7,168
S1C6 Ha.Dhihdhoo – Hdh.Hanimaadhoo (Direct, Mid-day)	6,825
S1C5 Ha.Kelaa- Ha. Dhihdhoo	6,648
S2V1 Sh. Bileyfahi – Hdh.Kulhudhuffushi*	4,317
S2C1 Sh.Kanditheemu – Sh.Bileyfahi*	4,267
S2V2 Sh.Bileyfahi – Sh.Funadhoo*	3,750
R1C9 Kulhudhuffushi to Hanimaadhoo2	2,907
S1V3 Ha.Kelaa – Ha.Dhihdhoo	457
R1V2 Makunudhoo to Vaikaradhoo	270
S1V2 Ha.Dhihdhoo – Ha.Filladhoo	216
S1V4 Ha.Filladhoo – Ha.Kelaa	92
<b>Total No. of Passengers</b>	<b>251,000</b>

\*Route started in September 2023

## 2.5. DEMOGRAPHICS OF ZONE 1

This section provides a brief overview of the population living in Zone 1. The data has been taken from Census 2022 data published online by Maldives Bureau of Statistics.

Gender is fairly balanced across the three atolls, with a very slight difference in Shaviyani Atoll. 44% of the population in Zone 1 live in Hdh. Atoll.

**TABLE 2: GENDER BREAKDOWN BY ATOLL IN ZONE 1**

Atoll	Population		Population Distribution by Atoll		%
	Total	Female	Male		
HA	14623	7307	7316		29
HDh	22440	11433	11007		44
Sh	13698	7002	6696		27
<b>Zone 1</b>	<b>50761</b>	<b>25583</b>	<b>25240</b>		<b>100</b>

Source: Census, 2022. Maldives Bureau of Statistics<sup>5</sup>

**TABLE 3: AGE GROUP BREAKDOWN IN ZONE 1 (18YRS+)**

Age group	Total (approx.)	%
18-34 yrs	13507	40
35-59 yrs	14968	45
60+ yrs	4943	15
<b>Zone 1</b>	<b>33418</b>	<b>100</b>

Source: Census, 2022. Maldives Bureau of Statistics<sup>6</sup>

Most people in Zone 1 have attained secondary education.

**TABLE 4: HIGHEST EDUCATIONAL ATTAINMENT (BY ATOLL IN ZONE 1) (15YRS+ & ABOVE)**

Atoll	Primary education	Secondary education	Higher secondary education	Certificate/ Diploma	Degree & above
HA	2559	3301	270	1061	481
HDh	3334	5304	437	1910	783
Sh	2087	3213	266	1037	443
<b>Zone 1</b>	<b>7980</b>	<b>11,818</b>	<b>973</b>	<b>4008</b>	<b>1,707</b>

Source: Census, 2022. Maldives Bureau of Statistics<sup>7</sup>

Hdh. Kulhudhuffushi has the highest population at 10,131 and has the most number of services (see Table 5). The next most populous island is Ha. Dhihdhoo with 3,412, showing a big disparity with Kulhudhuffushi and other islands in the Zone.

5 Maldives Bureau of Statistics. (2023a). *Island and Atoll Level Indicator Sheets*.

6 Maldives Bureau of Statistics. (2023b). *Maldives Population and Housing Census Provisional Results and Summary*.

7 Maldives Bureau of Statistics. (2023c). *Census Results Summary Tables – Education 2022*.

**TABLE 5: WORKING AGE, LABOUR FORCE PARTICIPATION AND UNEMPLOYMENT RATES IN THE ZONE**

Atoll	Island	Population	Resident	Resident Population		Services available
			Maldivian	Working Age Population (15 - 64 yrs)	Labour force participation rate [%]	
HA	Boarah	1,141	639	57.4	8.0	
HA	Dhidhdhoo	3,412	1,818	54.7	2.2	Atoll Hospital, Atoll Education Centre
HA	Filladhoo	559	342	71.1	4.1	
HA	Hoarafushi	1,841	999	60.8	4.9	Airport, Private dental clinic, Atoll School
HA	Ihavandhoo	2,873	1,590	54.7	5.1	
HA	Kelaa	1,115	579	70.8	4.7	
HA	Maarandhoo	668	344	55.6	2.0	
HA	Mulhadhoo	286	158	82.2	1.1	
HA	Muraidhoo	534	261	61.9	1.9	
HA	Thakandhoo	279	158	67.1	-	
HA	Thuraakunu	427	245	60.1	0.5	
HA	Uligamu	400	229	56.0	7.3	
HA	Utheemu	612	347	61.4	5.0	
HA	Vashafaru	476	248	68.2	5.0	
HDh	Finney	409	232	70.2	2.5	
HDh	Hanimaadhoo	2,664	1,188	70.4	0.9	Airport
HDh	Hirimaradhoo	293	172	69.5	6.8	
HDh	Kulhudhuffushi	10,131	5,735	58.9	4.2	Regional Hospital, MNU Campus, Airport, MI College, Villa College, Atoll Education Centre, Afeefudin School, Jalaaludin School, Business Centre
HDh	Kumundhoo	997	608	49.2	9.9	
HDh	Kuribi	492	290	65.4	2.3	
HDh	Makunudhoo	1,265	686	60.2	2.4	
HDh	Naivaadhoo	495	251	66.5	3.1	
HDh	Nellaidhoo	1,038	574	65.0	2.9	
HDh	Neykurendhoo	641	337	71.5	0.6	
HDh	Nolhivaramu	1,985	1,074	50.0	3.5	
HDh	Nolhivaranfaru	1,254	676	65.6	14.0	
HDh	Vaikaradhoo	776	395	60.0	3.0	Atoll School
Sh	Bilehffahi	502	272	69.8	2.5	
Sh	Feevah	694	372	70.2	3.5	
Sh	Feydhoo	854	467	60.0	2.2	
Sh	Foakaidhoo	1,571	875	53.8	12.6	
Sh	Funadhoo	2,255	1,290	66.6	4.1	Atoll Hospital, Airport
Sh	Goidhoo	592	318	59.6	3.6	
Sh	Kaditheemu	1,193	677	63.0	2.4	Atoll School
Sh	Komandoo	921	555	59.8	4.6	Atoll Education Centre
Sh	Lhaimagu	684	333	67.3	5.2	
Sh	Maaugoodhoo	944	546	65.3	4.9	
Sh	Maroshi	479	263	65.4	5.6	
Sh	Milandhoo	2,094	1,177	59.6	4.2	
Sh	Narudhoo	544	317	58.4	3.7	
Sh	Noomaraa	371	212	61.9	3.2	



112

### 3. KEY FINDINGS

#### TRAVEL BEHAVIOUR IN THE REGION

- Overwater travel is a part of everyday life in the island communities. 93% of respondents have travelled across the sea at least once in the past 3 months.

The main modes of travel used for intra-atoll and intra-zone transport is RTL ferry, with 83% of respondents having travelled on RTL ferry within the past 3 months. Other modes of inter-island transport include private speed ferries (12%), private speedboat charter (11%), MTCC *dhoani* ferry (*Lakudi* ferry) (6%), and private *dhoani*/dinghy charter (6%).

- Most common purposes of travel on RTL are to seek healthcare, followed by shuttle to airports, visiting friends and relatives in the islands, and leisure travel.
- Kulhudhuffushi City (KFC), being home to the regional hospital and commercial hub, is the most travelled destination (travelled by 74% of respondents in the past 3 months). Other frequent destinations were also atoll capitals and airport islands.

#### PUBLIC'S USAGE OF RTL SERVICE

- Since its introduction, RTL has taken over as the predominant means of inter-island transport for the masses. As stated above, 83% of respondents had travelled on RTL in the past 3 months, which is nearly 7 times higher than the next most frequently used means of transport. This signifies that RTL addresses travel needs of the island communities in the region better than any other available alternative modes.
- For two-third of the population, the main purpose of travel on RTL is seeking medical services (68%), which includes general medical consultations, specialist consultations and obtaining other medical services such as laboratory tests. Airport transfers (8%) and visits to friends and relatives (8%), are the next two most common purposes.
- Purpose of travel is markedly different for residents of hub-islands and non-hub islands. Leisure and recreational travel (27%) and visiting friends and relatives (22%) are the main motives for travel for residents of hub-islands, as opposed to seeking medical services (74%) for residents of non-hub islands.
- 39% of respondents have travelled more frequently since the introduction of RTL and 1 in 3 respondents (31%) have travelled once or more per month on RTL.

#### PUBLIC'S SATISFACTION WITH RTL SERVICE

- Public satisfaction is markedly high on all aspects of the ferry system including accessibility, affordability, comfort, safety, connectivity and timing, ease of booking and overall experience.
- On a 5-point scale, from very satisfied to very dissatisfied, 50% of respondents reported very satisfied and a further 41% reported satisfied with their overall experience of RTL. Those who reported dissatisfied and very dissatisfied stood at 4% and 1% respectively.
- Vast majority (93%) believed that RTL is both affordable and accessible to individuals from different socio-economic backgrounds. And 79% believed that RTL has improved the standard of living of their communities.
- Sense of high safety and vessels' stability on the sea in rough weather is one of the most appreciated features of RTL. Hence, most people do not have a hesitation to travel alone or to travel with children and the vulnerable on RTL.
- Majority (62%) reported they did not face any challenges or difficulties in accessing or using RTL. Among those who reported any concerns, vast majority of issues were related to booking and refund processing.
- Long journey time to Kulhudhuffushi is the main pain point in route/duration for those few islands requiring the longest journey time to Kulhudhuffushi City, which is the main target destination for most due to the presence of regional hospital and being the commercial hub of the region.
- Suggestions by respondents for making the RTL network more impactful include ticket refund (50%), booking modification (47%), reducing layover time and increasing direct connections (36%) and frequency of trips (28%).

#### IMPACT ON BUSINESS ACTIVITIES AND OPPORTUNITIES

##### TRAVEL ON RTL FOR BUSINESS:

Most businesses traveling for business purposes do not use the RTL; only 19% of business interviewed reported having done so recently. 53% of businesses interviewed for this study (n=106) preferred to use *Lakudi* ferries (the Comprehensive Transport Network operated by MTCC) to the RTL because they could transport goods.

- Nonetheless, businesses also noted that the introduction of RTL has largely had a positive impact on their business. This was most evident in hub islands – 70% of businesses based in hub islands stated that RTL has had a very positive

business on their own businesses whilst 16% did so in non-hub islands. Since ferry routes are primarily designed to facilitate people from non-hub islands (outer islands) to the hubs, it gives businesses in hub islands access to greater visitor customer base.

- Amongst those businesses who used RTL for business travels, primary purpose of travel was meeting suppliers and/or sourcing products and services. RTL's utility for MSME sector is expected to increase over time as commercial activities grow in the region and ferry connections are scheduled more frequently.

#### PREFERRED MODES OF TRAVEL FOR BUSINESS:

- Among those businesses who have not used RTL for their travel purposes, most have not used RTL for business travel mainly because they do not have a need for inter-island travel (60%). Second most frequently quoted reason was, because it does not suit the travel needs of their business (40%), such as transporting cargo.
- Most businesspeople preferred to use the *lakudi* ferries because they allow cargo (53%) and only 15% prefer the RTL ferry.

#### IMPACT ON BUSINESS AS A RESULT OF RTL:

- Businesses who benefitted from RTL highlighted increased revenue (33%), greater customer base (32%), and improved ability to source goods and equipment (13%).
- Lack of daily return to hub islands mean that non-hub islands on the route do not benefit proportionately in terms of increased visitors from the travel possibilities offered by RTL ferry services. Businesses in hub islands rated the impact of RTL very positively for their business compared to non-hub islands (70% vs 16%) In contrast, 52% of businesses in non-hub islands reported a neutral impact on their business.

#### ECONOMIC IMPLICATIONS FOR BUSINESSES:

- Increased spending power have meant that private businesses have had more customers and clients, leading to stronger business performance.
- Easier travel options in Zone 1 at affordable prices facilitate local tourism and overnight stays, benefiting guesthouses and room rental businesses. Small businesses and small-scale traders also find RTL ferry services to be useful, with some drawbacks linked to luggage and goods restrictions.
- Anticipated further business growth in the region resulting from a range of factors including greater connectivity, inbound tourism, property and real estate development,

and airports expansion.

- There is a shrinkage of private speedboat charter business, as the masses opted for RTL for most of their travel needs.

While RTL provides reliable passenger ferry service, relatively poor service of MTCC's *Lakudi* ferries in some Atolls and on some routes means that people cannot rely on the cargo service for business-related movement of goods, thereby hindering the potential for regional economic growth.

## ECONOMIC IMPACTS OF RTL FERRY SERVICES

- 86% of respondents believed RTL has reduced the household's travel expenditure.
- Reduced travel costs and consequent savings improve the economic situation and lifestyle possibilities for families and households. Travel costs are the 2nd highest expenditure category in the atolls according to Household Income and Expenditure Survey of 2019.
- Weighted median household saving on travel expenses per month is found to be approximately MVR800. This translates to a combined direct saving of MVR100 million per year on travel expenses for some 10,500 households in the 3 atolls of RTL Zone 1.
- Limited possibilities were created for commuting for work from elsewhere and close-by islands. Infrequent schedule and timing of RTL ferries is not suited for daily work commute needs. It is to be noted that the prime objective of the project is to provide access to the services for the residents of Zone 1.

## IMPACT ON SOCIAL CONNECTIONS AND COMMUNITY RELATIONS

#### MAINTAINING RELATIONSHIPS AND SOCIAL CONNECTIONS:

- RTL enabled the majority of people living in Zone 1 to cultivate stronger and closer ties with family and friends living on other islands. 89% of respondents believed RTL has enabled closer ties with family members on other islands. 84% felt the same with regards to friends and acquaintances on other islands.
- Significant positive impact on community relations and activities. 88% of respondents believed RTL has enabled better access to social opportunities and build better relations.
- Affordable travel within the region has made it possible to maintain and strengthen family relationships and social connections.
- Young people and special interest groups can potentially

organise outings and other trips that provide enriching and educational experiences for themselves and others.

- Ferry services to and from airport islands mean that people can fly out and into the region more easily, making domestic air travel much easier.

### FREQUENT INTER-ISLAND AND COMMUNITY EVENTS AND ACTIVITIES

- Travel cost savings and easier travel opportunities mean it is easier to organise inter-island activities, events and festivals but are not frequently used.
- Educational and recreational trips for schoolchildren, university and college students and young professionals are also possible following the establishment of the RTL ferry services.

## IMPACT ON ACCESS TO HEALTHCARE SERVICES

### BENEFITS FOR PATIENTS AND THEIR FAMILIES:

- 94% of respondents living outside of Kulhudhuffushi City believed RTL has enabled better access to healthcare services.
- Increase in regular timely access to specialist consultations and laboratory tests for people with serious and chronic illness.
- Increase in the use of healthcare and dental services earlier at state and private clinics to treat illness before situations become more serious.
- Ferry schedules allow for a quick turnaround of consultation, testing and post-test consultations with reports the same day for a large majority of patients.
- Easier sourcing of medicines and pharmaceutical items as needed across the regions, for households, health centres and hospitals.
- Referrals for specialists or further testing are easier and can be coordinated between health centres and hospitals.
- Expansion of healthcare services at hospitals to support the increase in patient load following the establishment of RTL.

### ADDITIONAL SUPPORT AND SERVICES FOR HOSPITAL AND HEALTH CENTRES:

- RTL tri-partite agreement between Kulhudhuffushi Regional Hospital, MTCC and HDh. Island Health Centres allows smooth operation of mobile laboratory services and reduces hospital costs in HDh Atoll.
- RTL Ferry services operating 7 days a week enables a better distribution of patient load over the week helping to provide a better hospital service.
- Hospital administrations have ensured there is sufficient

alignment between healthcare service availability and ferry schedules to enable an efficient service to patients visiting from other islands.

- Healthcare staff use RTL ferry services for rotation duties, attending courses and workshops, conducting public health programs, and weekend family visits.
- Limitations in RTL experienced by hospitals and health centres, due to the lack of ability to do one-day outward trips from hub-islands limiting the extent to which hospitals could conduct outreach programs and quick staff airport transfers.

## IMPACT ON ACCESS TO EDUCATIONAL OPPORTUNITIES

### HIGHER EDUCATION:

- 79% of respondents believed that the RTL has enabled better access to education and educational opportunities for people living in the region.
- Although mentioned in the KIs and in FGDs as RTL having a notable impact on higher education in the region, the percentage of respondents who used the RTL to travel for tertiary education is the lowest (1%). This is because a comparatively smaller subset of the population undertakes higher education in the Atolls compared to Male'; a large proportion of courses are online and those that are in the popular blended mode of study have a set schedule for in-person sessions.
- Increase in demand for weekend/block mode studies at Maldives National University (MNU) and other colleges: RTL has enabled youth and early-career professionals to extend their education by facilitating access to educational opportunities via the popular weekend/ block mode of study.
- Increased possibility of studying in higher education courses that require a practical experience component (licensed professions) which cannot be pursued through online medium.
- Alignment by education service providers between course timings and ferry schedules to facilitate access to higher education for students visiting from other islands, to attend class conveniently.
- Increase in number of students from different islands attending university/college courses contribute to institutional growth and sustainability. As reported by key informants, there has been an increase in number of students for weekly classes from Shaviyani and Haa Atoll due to RTL ferry services.

- Lower costs of travel lead to affordable, higher-quality and a more sustainable educational experience for students in higher education.
- Comfortable and reliable travel facilities increase the quality of educational experience for students at universities/colleges.
- Opportunities (with limitations of RTL in terms of limited travel frequency and capacity availability for large groups of travellers) for outward field trips from universities/colleges to other islands.
- Easier access to and distribution of important official documents and procedures needed by people in their daily lives.
- The increased recognition of potential for regional development has contributed to ambitious Land Use Plans and motivation for further business in the region.
- Greater accessibility to the capital island has allowed Sh. Atoll Council to set up certified courses and programs in a range of subjects that would help build capacities in key areas related to governance, administration, and empowerment.

#### GENERAL EDUCATION:

- More opportunities for teacher training and professional development at lower travel costs. Participation in regional-level workshops and training programs are less costly for schools and teachers than earlier.
- Greater safety and wellbeing, stronger family relations and sustained connections for unaccompanied A' level students who migrate to other islands in the region.
- Potential for school field trips, exchange programs and study experiences recognised but currently under-utilised (owing to limited travel frequency and capacity availability for large groups of travellers).
- Schools and teachers are able to more easily source and pick up materials, and other resources from other islands that are not readily available in their own islands for use in school.
- Challenges of not having well-aligned routes and schedules for school-related responsibilities and administrative operations.
- Anticipated positive longer-term impacts on quality of education services in the region from the above developments.

## IMPACT ON GOVERNANCE, ADMINISTRATION AND PUBLIC SERVICES IN THE REGION

#### IMPROVEMENTS IN GOVERNANCE AND ADMINISTRATION

- 77% of respondents believed RTL has enabled better access to government administrative services.
- Regular and affordable travel opportunities have made it easier for Atoll Councils and other institutional bodies to provide oversight, coordination and support to island councils and other services in the region.
- RTL ferry services allows broadening of the recruitment pool, enable resource-sharing and help address staffing issues.

#### PUBLIC SERVICE DELIVERY:

- RTL ferry services have made policing easier in the region and contribute to cost savings; however greater mobility also creates additional policing challenges.
- Increased access to banking and business services for people in the region. With the RTL ferry service, people find it easier to access ATMs and bank branches for money and financial services – services that require people to travel physically to a bank.
- Improved service delivery with regards to banking and financing, with BML KFC branch finding it easier and more cost-effective to ensure a better service across the region.
- SME business development services delivered by Business Centre in KFC are made easier by use of RTL ferry services. Delivery of marketing and awareness campaigns and training programs, and undertaking inspection visits for SDFC loans are less costly and speedier.
- Boosting in-bound and local tourism is essential for regional development and sustainability of public ferry network. Tourism development requires overall regional service and infrastructure development.
- Improved uninterrupted delivery of utility services (electricity, water, etc.) enabled by availability of RTL for transfer of service technicians and critical items for maintenance works.





## 4. TRAVEL BEHAVIOUR AND RTL USAGE

### 4.1. USE OF RTL FERRY SERVICES

#### MODES OF TRANSPORT USED IN THE PAST 3 MONTHS

Data from the public survey (n=787) was used to determine the modes of transport used within Zone 1 in the past 3 months. As shown below, RTL has been the predominant mode of transport, with 83% of respondents having travelled on RTL within the past 3 months. Residents of hub islands who have not travelled at all in the past 3 months are significantly higher than those of non-hub islands (18% vs 4%).

FIGURE 4: MODES OF TRANSPORT USED TO TRAVEL WITHIN THE ZONE IN THE PAST 3 MONTHS

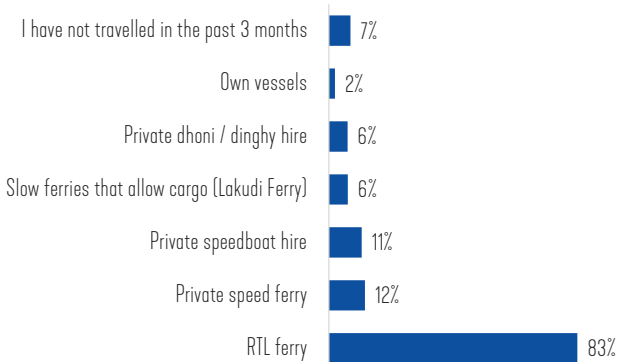
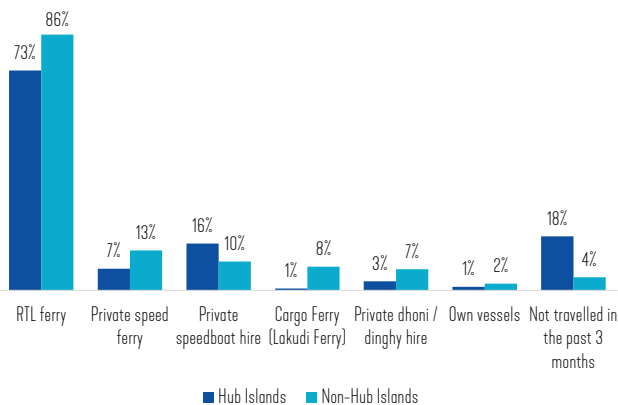


FIGURE 5: MODES OF TRANSPORT USED TO TRAVEL WITHIN THE ZONE IN THE PAST 3 MONTHS

#### (HUB VS NON-HUB ISLANDS)



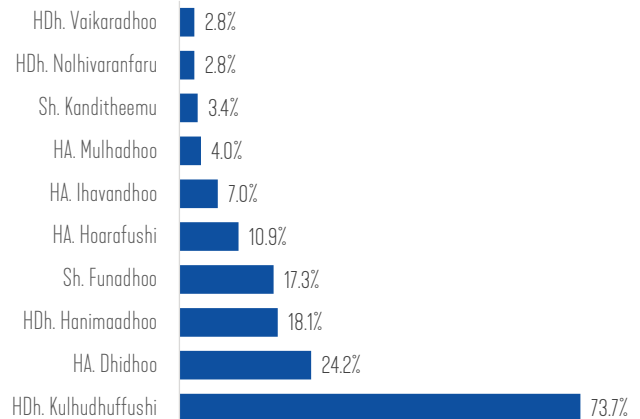
#### TRAVEL DESTINATIONS IN THE PAST 3 MONTHS

Figure 6 shows the travel destinations in the past 3 months for respondents in the public survey (n=787). Kulhudhuffushi City (KFC) is the most travelled destination, with 73.7% of respondents from across the region having travelled to KFC during the past 3 months. Other prominent locations are atoll capitals and airport islands.

Kulhudhuffushi City has the largest population in the region and has the greatest number of established services in the region; Regional Hospital, a campus of Maldives National University, Mianz International College (MI College), Villa College, a branch of the Bank of Maldives, and an office from the Business Centre Corporation and an airport. It is well-served with a range of shops, clinics and other services. While it is not surprising that the KFC is a significant travel destination in the region, the large gap between the frequency of travel amongst respondents to KFC and to other hub islands is notable.

As mentioned by one of the key informants, KFC experience having around 500 visitors from across the region every day since the introduction of RTL.

FIGURE 6: ISLANDS TRAVELLED IN THE PAST 3 MONTHS



#### PURPOSES AND MAIN PURPOSE OF TRAVEL ON RTL IN THE PAST 3 MONTHS

The figure below shows purposes and the main purpose of travel on RTL, as stated by public survey respondents (n=787).

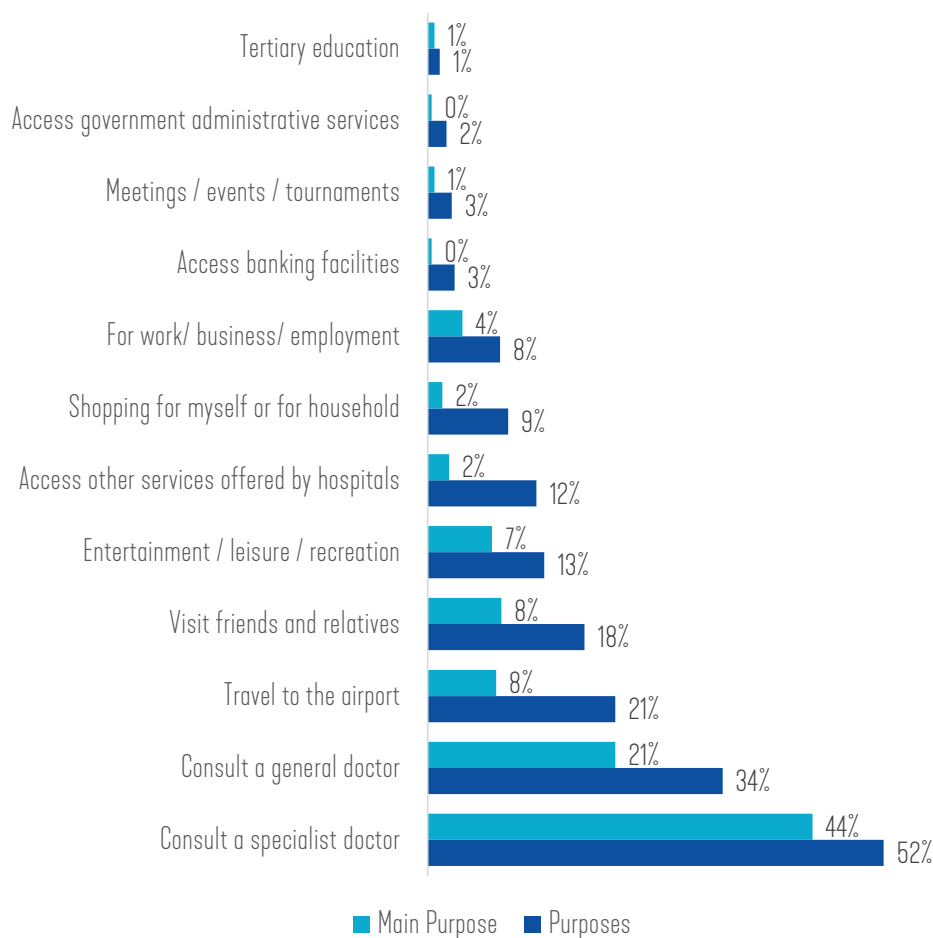
The main purpose of travel within the region is by far for medical needs. 68% of people stated their main purpose of travel are for specialist medical consultations, general consultations and medical services such as lab tests. Medical services are the most established on KFC, since it has a Regional Hospital, and the majority of passengers travel to seek medical attention. Referrals from other health centres and even the Atoll Hospitals is to the Regional Hospital as it has a wider range of specialists and diagnostic capacity. Hence it is unsurprising that a large number of people travel here from across the region. The healthcare model in the Maldives is a self-referral one, and people

prefer to see specialists straight away, rather than waiting for referrals from general physicians. As such their main preference is to be seen at the Regional Hospital.

Most people travel for medical purposes, which aligns with one of the primary goals of the establishment of RTL; to serve essential needs of the population. This finding is also keeping in line with data from elsewhere. For example, the HIES 2019 study notes that the 53% of people living in Atolls travelled within the country for medical treatment.<sup>8</sup>

The other most common purposes are airport transfers (21%) and visits to friends and relatives (18%). It appears that people travel primarily for healthcare but also fulfil other purposes during this travel time such as seeking recreation and entertainment (13%), shopping (9%) or accessing government administrative services (such as picking up IDs and passports) and banking (3%).

**FIGURE 7: PURPOSES AND MAIN PURPOSE OF TRAVEL ON RTL**



Although mentioned in the KIIs and in FGDs as RTL having a notable impact on higher education in the region, the percentage of respondents who used the RTL to travel for tertiary education is the lowest (1%). There are a number of reasons for this; firstly, the number of people who seek tertiary education in a population is a much smaller subset. A report from the Ministry of Higher Education indicated a total of 19,969 students (corresponding to approximately 5% of population) enrolled in higher education programs across the Maldives in 2020<sup>9</sup>. It is well-recognised that there are significant regional disparities in the Maldives, with Male' City showing positive indicators compared to other atolls across important human development aspects, including that of higher education. For instance, those living in rural areas have a 13% rate of completing higher education compared to 33% in urban areas<sup>10</sup>. Given population differences, the total number of students enrolled in higher education in this region is also expected to be small in number. For example, the MNU Annual Report 2022 notes 436 students in its KFC campus<sup>11</sup>. In KIIs with representatives from MNU and MI College campuses, it was shared that 365 and 340 students were currently enrolled at the respective institutions.

8 National Bureau of Statistics. (2019). *Household Expenditure: Household Income and Expenditure Survey 2019*.

9 Ministry of Higher Education. (2020). *Higher Education Statistics 2019*.

10 United Nations ESCAP. (2021). *Inequality of Opportunity: Who Are Those Left Behind? Maldives and Other Asia-Pacific SIDS*.

11 Maldives National University. (2023). *Annual Report 2022*.

Furthermore, they also noted that many courses were now offered online and that many students preferred online studies for its greater convenience. For instance, of the 340 students in MI College, approximately 100+ are taking in-person courses and the remainder are students enrolled in online studies. Similarly, nearly half of the courses at MNU KFC campus are blended (in-person and online)/weekend, with other full-time in-person daytime or evening classes<sup>12</sup>. The increase in online components reduces the need for travel overall. Weekend classes are primarily directed towards very specific professions (nursing, teaching, welding, etc.) and are on a set schedule.

Finally, it was noted in the KIs that a few students travel daily from nearby islands using the RTL. For this study, the spread of islands across the atoll was fairly evenly spaced in order to capture the perspectives and experiences from across the atoll. As such, it is possible that the study sample did not include the islands where these few students reside.

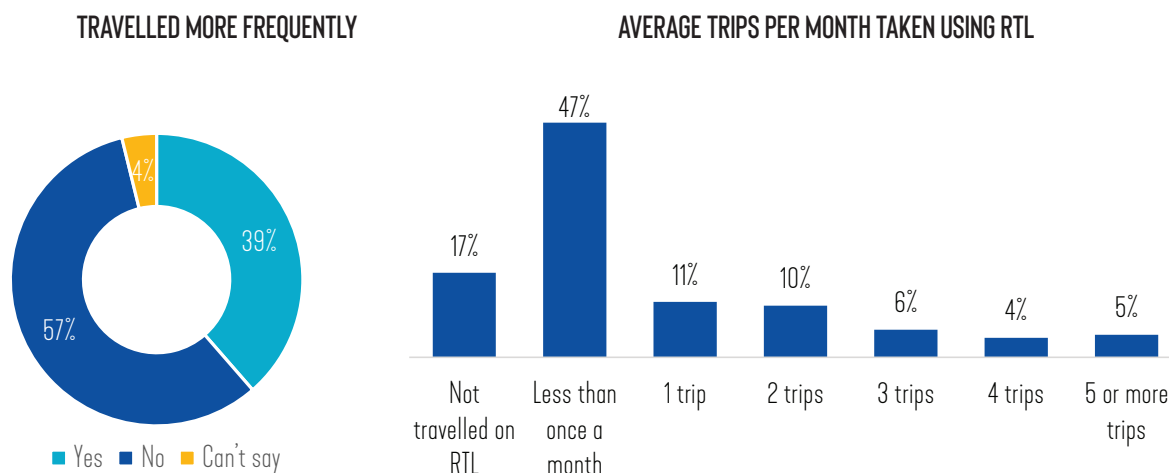
For these overall reasons, that 1% of respondents use RTL for tertiary education indicates that access to higher education has been increased by existence of RTL. This is especially so for those students who choose to undertake subjects which require weekend travelling. As stated by the representative from the MNU KFC campus, “undertaking further studies for nurses working in island health centres have been made possible because of RTL.”

### IMPACT ON FREQUENCY OF TRAVEL SINCE INTRODUCTION OF RTL

Purposes and the main purpose of travel on RTL, as stated by public survey respondents (n=787) are shown below. 39% of respondents have travelled more frequently since the introduction of RTL and 1 in 3 respondents (31%) have travelled once or more per month on RTL. Moreover, 83% of respondents have used RTL. This indicates that RTL is enabling people to meet their needs. It represents greater mobility within the population. Greater mobility is linked to socio-economic and regional development, as it enables people to move easily to meet their needs and improves their life opportunities<sup>13</sup>. This is explored in greater depth in Chapter 12.

Because the majority of travel is currently linked to health and medical needs, the current rates and frequency of RTL use are not unsurprising. Most people (47%) travel less than once a month as can be expected; there is often no need to travel for consultations, diagnostics or treatments on a weekly basis. Those who use the RTL for other or additional purposes are likely to travel more frequently. For instance, 9% take 4 or more trips every month (i.e. almost weekly) on average.

FIGURE 8: FREQUENCY OF TRAVEL IN THE REGION SINCE INTRODUCTION OF RTL



12 Maldives National University. (2022). *Course Information Sheet 2023, Term 1*.

13 Rodrigue, J.-P. (2020). Chapter 3: Socioeconomic Benefits of Transportation. In *The Geography of Transport Systems, 5th Edition*. New York.

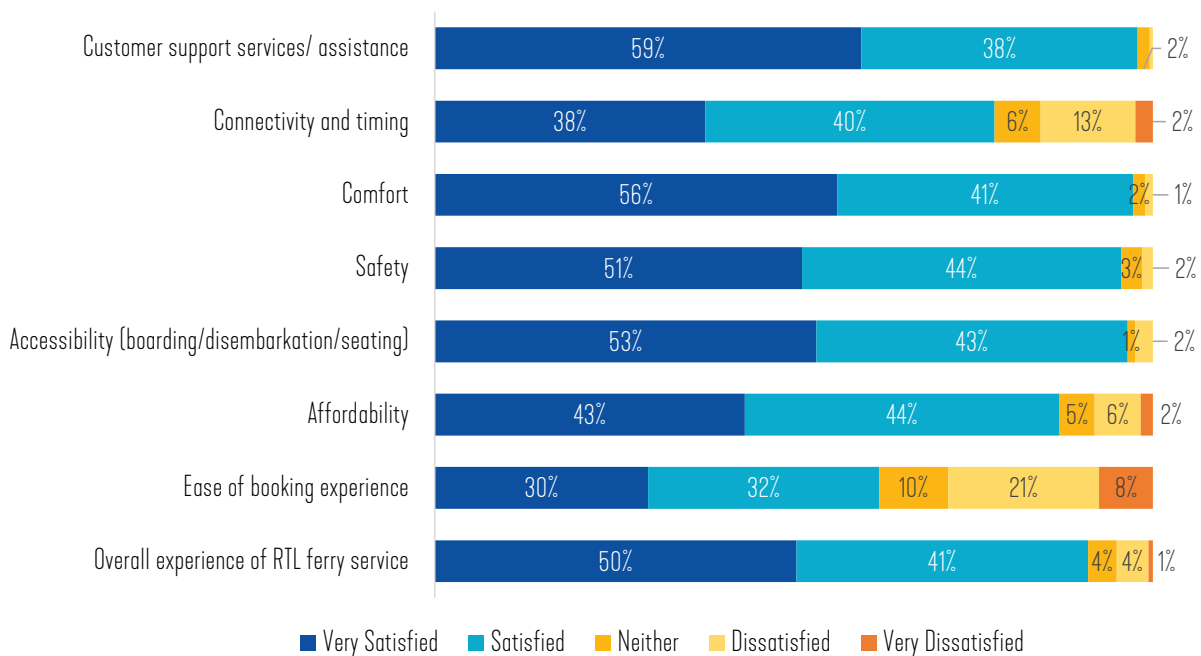
## 4.2. SATISFACTION WITH RTL

### LEVEL OF SATISFACTION WITH KEY ASPECTS/FEATURES OF RTL

Respondents in the public survey (n=787) indicated high levels of satisfaction on most aspects of the ferry system. 50% of travellers are very satisfied and 41% satisfied with the overall experience of traveling on the RTL. Very high levels of satisfaction were indicated for customer support services and assistance, comfort, safety, and accessibility aspects. Throughout the study, in the survey, interviews and FGDs, there was great appreciation indicated for the quality of customer support and assistance shown by RTL ferry crew. They were noted to be extremely helpful, friendly and supportive. One FGD participant described their service as one of the best, and this was agreed by all participants in the discussion – a sentiment that was expressed elsewhere in the study as well.

Least satisfaction was noted in relation to the ease of booking followed by connectivity and timing. In particular, a number of issues were highlighted with regards to ticketing and routes. Even so, 62% are either very satisfied or satisfied with booking experience, and 78% with connectivity and timing. Booking issues appeared to cause the most dissatisfaction, with 21% currently dissatisfied and 8% very dissatisfied. Information obtained in stakeholder discussions indicate that MTCC will launch a new version of the app addressing several issues that have been noted. The introduction of the updated app is very likely to lead to a reduction of dissatisfaction on this aspect.

FIGURE 9: LEVEL OF SATISFACTION WITH KEY ASPECTS/FEATURES OF RTL

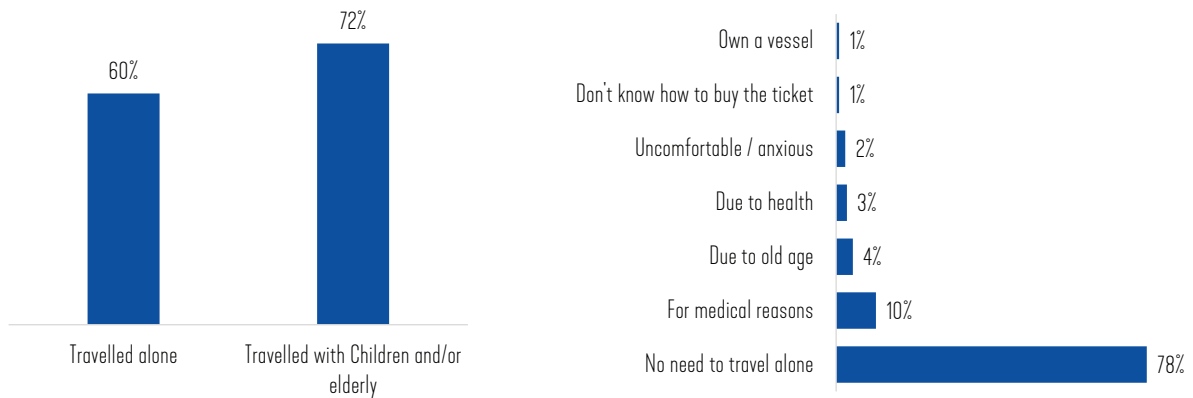


### TRAVELING ALONE OR WITH CHILDREN AND/OR THE ELDERLY

60% of respondents have travelled alone and 72% have travelled with children and/or elderly, suggesting that RTL is suitable and safe transport for people whether going for an individual purpose or when traveling with family members, including more vulnerable persons.

Of those who have not travelled alone, most did not choose to do so because they had others with whom they could travel together and therefore did not need to travel alone.

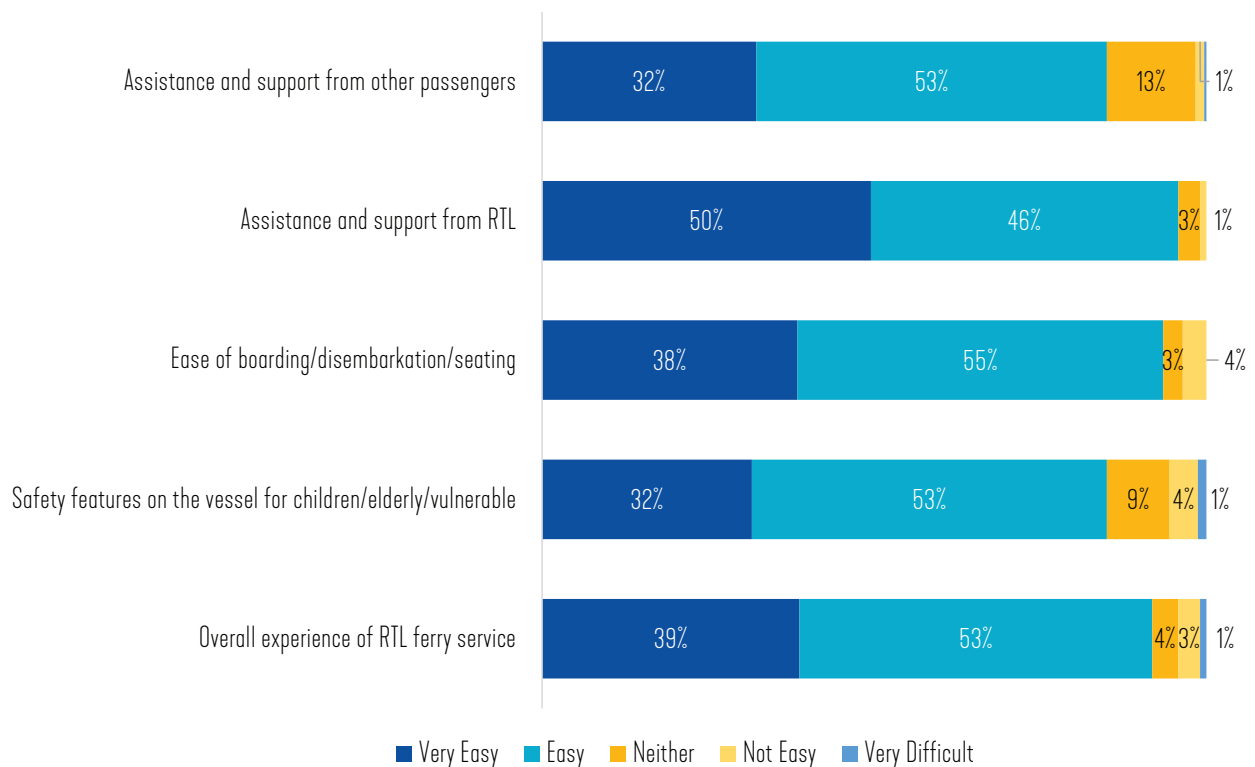
**FIGURE 10: TRAVELLED ALONE ON RTL AND REASONS WHY NOT**



Rough weather is a common occurrence in the region, especially in HA Atoll, and therefore safety is a key consideration of sea travel. The ferries are large and sturdy and able to handle rough weather and seas, according to respondents in the study.

For parents and caregivers accompanying children and/or the elderly, it is important that they feel comfortable and find it easy to navigate and undertake the journey, as this is a key aspect of family-friendly travel. 85% of respondents found it easy or very easy to travel with children and/or elderly persons. (See Figure 11 below). This aspect of family-friendly travel is important in a service aimed towards meeting essential needs of a population, especially where most people travel for health purposes. In the longer-term, family friendly travel is likely to also assist with increasing RTL use for leisure and recreational activities.

**FIGURE 11: EASE OF TRAVELLING WITH CHILDREN / ELDERLY / VULNERABLE PERSONS ON RTL**



### 4.3. APPRECIATION FOR RTL FERRIES AND SERVICE CREWS

#### STANDARD OF THE VESSELS AND THEIR FACILITIES ARE HIGHLY APPRECIATED

While it is clear from the public survey that almost all travellers are satisfied with the overall experience of RTL journeys, key informant interviews and FGD participants were able to describe in greater detail, the elements they found good.

Firstly, all noted that RTL customer service to be exceptional, one of the best public services they had experienced, according to some of them. Staff are reported to be very helpful; they are kind and attentive, even to those with travel anxiety. They are ready and willing to assist the elderly, people with disabilities or a mobility issue, including help them with ferry changes, luggage transfers and support boarding and disembarking. There are always children on board, and staff are friendly and kind towards them. Women noted that they feel safe on the journeys even if/when traveling alone, since the crew members are both respectful and helpful. RTL staff are communicative and work long hours but remain cheerful and helpful. Equally, they felt that the crew is well-trained; speedboat captains come across as very confident and competent.

Moreover, ferries are very reliable and punctual. Some noted that ferries slow speed down to reach at the appointed time. This causes some frustration and impatience for some customers. However, it was also noted that the punctuality of this service has also changed public behaviour. Passengers arrive on time and have come to expect reliability from the service. Cancellations are relatively rare, be it due to bad weather or technical issues. Even weather-related cancellations are few, with ferries able to cope with white alert conditions.

The ferry is sturdy and built for most-weather travel (excepting severe and extreme weather events). People reported being able to arrive at their destinations, feeling ready to start their day and not needing time to recover or change clothes. The ferry is airconditioned, the seats are comfortable, and it is kept clean. There are strict restrictions on messy food and smells, meaning that those feeling queasy on the sea are also kept at ease. Making allowances for some snacks and eating however would be appreciated by many, especially for those on the longer journeys and those travelling with children. Water is available onboard. Additionally, there is possibility to charge the phones, and the toilet onboard is clean and well-maintained. Some people also reported feeling reassured because there is camera surveillance.

Priority seating and seat allocation for those who are pregnant or those who are 65+ is helpful and appreciated. There is special space

for wheelchairs and stretchers. While boarding and disembarking can be sometimes difficult, the staff are helpful and would go out of their way to help people in difficulty.

Vast majority find RTL to be reasonably priced and affordable for most people. The service is described as a huge cost-savings and one of the best public interventions in recent times. However, there are some challenges in using RTL, and these are proffered cursorily in the next section but presented in greater detail in Chapter 11.

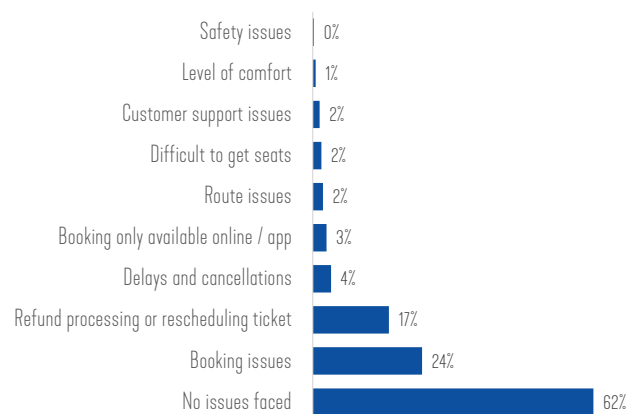
### 4.4. CHALLENGES IN USING RTL AND SUGGESTIONS FOR IMPROVEMENTS (SURVEY)

#### CHALLENGES IN USING RTL FERRY SERVICES

As can be seen in Figure 12, 62% of respondents from the public survey (n=787) did not face any challenges/difficulties in accessing or using RTL. However, for those who did experience difficulties, booking (24%) and refund related issues (17%) comprised the major issues.

The remaining issues account for less than 15% of the issues put forward by respondents, with 4% of respondents noting delays and cancellations that had affected them, and 2% noting issues such as routes, difficulty getting seats and customer support each. Only 3% noted difficulties because the booking was only available online or via an app. These relatively low rates are important to keep in mind when discussing issues related to improving services for passengers related to use of RTL and meeting their satisfaction on different aspects of travel, in order to retain a reasonable perspective on them. Whilst important to note and address, respondents in FGDs and KIs were keen to share their overall satisfaction with the service, reiterating their appreciation of the service and noting its benefits on their lives.

FIGURE 12: CHALLENGES/DIFFICULTIES FACED IN USING RTL



## MAKING THE RTL NETWORK MORE IMPACTFUL

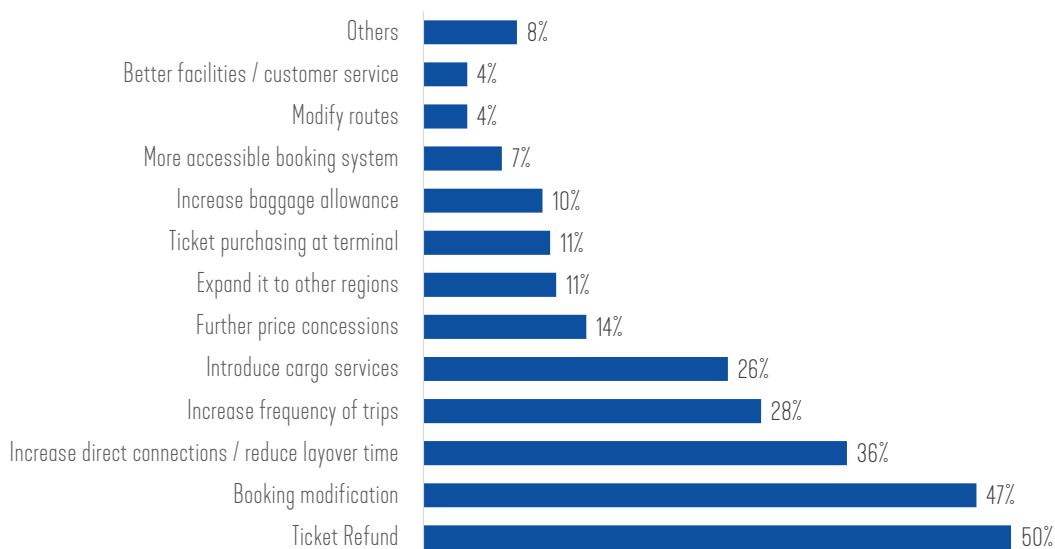
Respondents in the public survey (n=787) noted several ways in which the service could be made more impactful. Apart from improving the key difficulties related to getting refunds and booking issues (which was noted by 50% and 47% of respondents respectively), the other key suggestions were to layover time and increasing direct connections (36%) and increasing frequency of trips (28%).

Given that the destination island of a significant proportion of those traveling is KFC and the hub islands, it is likely that direct routes and reduced times refers to travel to these destinations. Including this consideration of time taken to reach to KFC in assessing the overall routes would be helpful since many respondents noted their preference to have direct routes to KFC.

This was especially so in KIs and FGDs in Shaviyani atoll, perhaps because this atoll is much more geographically spread out in relation to the other atolls in this region, and people seemed used to travelling to KFC for meeting their medical needs. Routes which take in more destinations are likely to be more circuitousness adding additional time, reflecting this concern in this atoll.

At the same time, it is only recently that Funadhoo Hospital has expanded their services, and this might result in some patients being satisfied to travel here than to KFC Regional Hospital.

FIGURE 13: SUGGESTIONS TO MAKE THE RTL NETWORK MORE IMPACTFUL



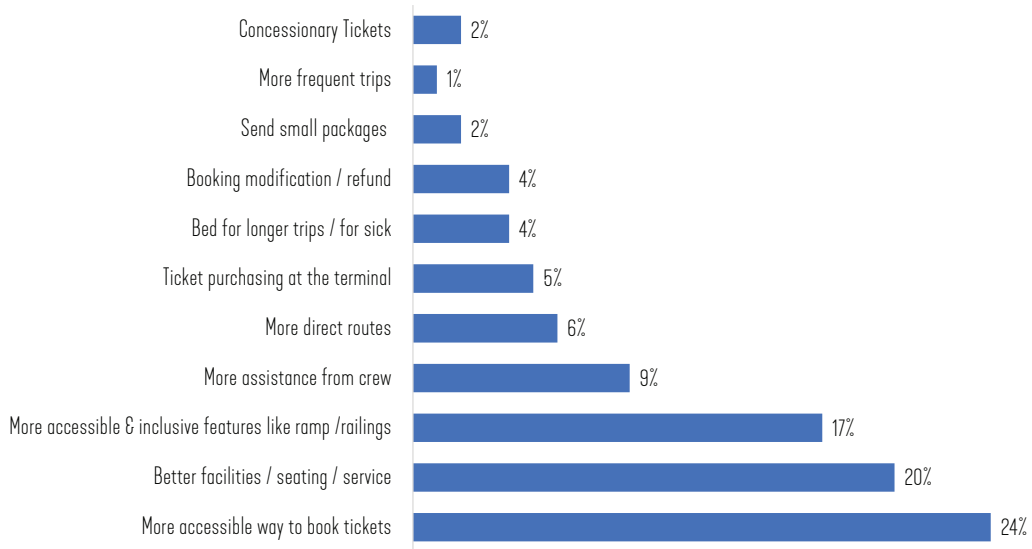
Nonetheless, discussions with representatives from MTCC and the Ministry indicate that routes are selected and finalized through a careful process, involving consultations with the councils and island populations, experimenting and trialling with routes to ensure optimal use for passengers and ferries, and keeping in mind issues of costs, duration of travel and timings for linking up with other ferries and services.

As such, it will not be possible to have routes that do not involve some level of inconvenience especially if the stated customer preference is for direct routes. Sharing more information with the public about the myriad of considerations in place when finalizing a route can be useful to manage public expectations.

In addition to the ways to make the RTL more impactful, some respondents also identified additional features that they believed would help improve the service. These are presented below.



FIGURE 14: ADDITIONAL FEATURES SUGGESTED BY RESPONDENTS

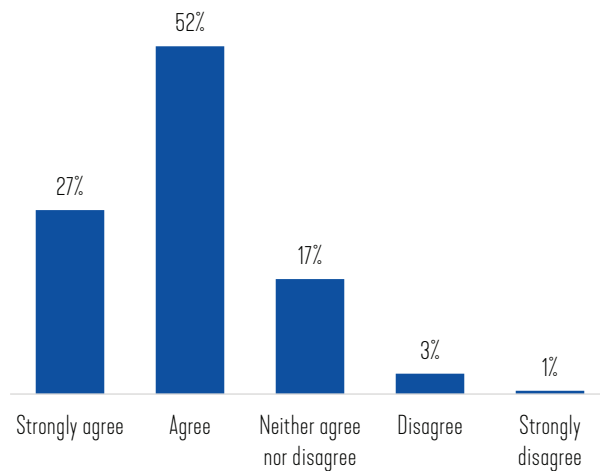


## 4.5. OVERALL IMPACTS OF RTL

### IMPROVED STANDARD OF LIVING FOR THE COMMUNITY

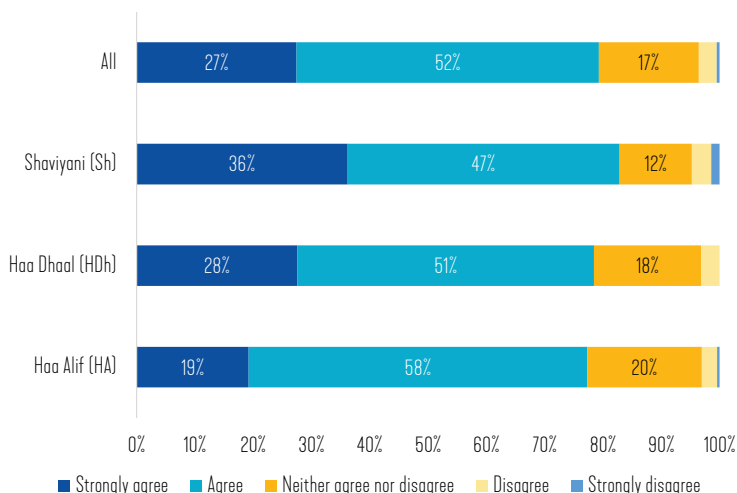
79% of those interviewed in the public survey (n=787) viewed that RTL has improved standard of living for the community – whilst 27% strongly agreed another 52% agreed to the same. Broadly these rates are similar across the three atolls in Zone 1, with most people either strongly agreeing or agreeing on this (83% in Sh., 79% in Hdh. and 77% in Ha.).

FIGURE 15: RTL HAS IMPROVED THE STANDARD OF LIVING FOR THE COMMUNITY



These high rates align with findings in the qualitative data, with most people pointing to the various ways in which RTL had improved their lives. The relatively high rates in Shaviyani atoll partly reflect the significant impact on the lives of those living here, especially in accessing healthcare at KFC Regional Hospital. As shared by FGD participants, this used to be a considerable expense because islands in Shaviyani atoll lay much further out from KFC.

**FIGURE 16: RTL HAS IMPROVED THE STANDARD OF LIVING FOR THE COMMUNITY (BY ATOLL)**



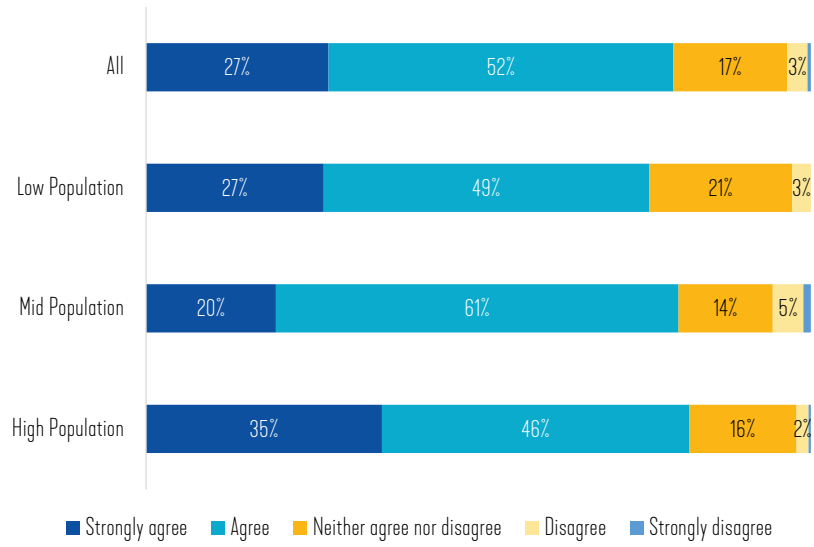
The overall impacts noted here are elaborated upon and examined in greater detail in the following chapters. To briefly summarize, notable impacts include impacts on access to healthcare, and social relations in the region, businesses in hub islands especially, and improving economic and educational opportunities. Moreover, RTL introduction to the region has made the provision of public services easier, especially in governance and administration of the region. It has also led to the expansion of public services, for instance larger OPDs and more consultations at the Regional and Atoll Hospitals, and the introduction of weekend courses at local universities and colleges with more face-to-face time for students.

Although RTL services have been warmly received by the population and there are high levels of satisfaction and strong agreement about positive impacts on people’s lives across the region, it should also be noted that impacts were not uniformly felt across the different atolls and islands. Hub islands (i.e. the capital islands) experienced greater number of visitors and expansion of public services, and had positive spill-over impacts on local businesses. Similarly, islands with smaller populations experienced relative differences in impacts compared to those with mid-populations or high-population islands. These are reflected in the differing rates of agreement about overall impacts of the RTL as can be seen in Figure 17.

For instance, people living in mid-population-sized islands were the least likely to strongly agree that RTL has improved standard of living for the community (20% compared to 35% in high population islands and 27% in low population islands). Islands with large populations are likely to have the benefit of many visitors coming in for services with spill-over impacts on businesses. Smaller islands appreciated the impacts of affordable public transport, especially since there were fewer speed-boat hire possibilities and fewer people with whom to share the costs of such hires.

During KIIs and FGDs mid-population-sized islands reported that the number of visitors has not increased enough to have a noticeable impact on businesses and economic activities. People may visit occasionally but a regular flow is required to have a noticeable economic impact.

FIGURE 17: RTL HAS IMPROVED THE STANDARD OF LIVING FOR THE COMMUNITY (BY POPULATION SIZE)





## 5. IMPACT ON BUSINESS ACTIVITIES AND OPPORTUNITIES

### 5.1. USE AND PURPOSE OF RTL TRAVEL FOR BUSINESS

#### TRAVEL ON RTL FOR BUSINESS

Most businesspeople have not travelled on RTL for business purposes; only 19% reported having done so. The most common business purposes for traveling on RTL are to meet suppliers and to source products and services from other islands, access banking facilities and airport transfers for business-related travel.

FIGURE 18: WHETHER BUSINESSES TRAVELLED ON RTL FOR BUSINESS PURPOSE

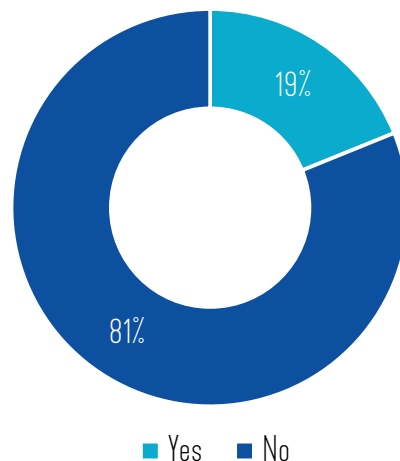
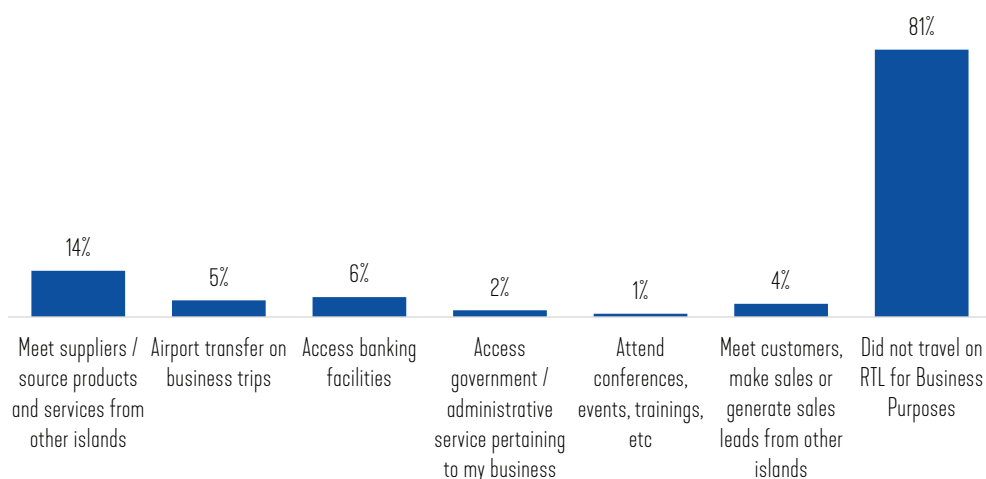


FIGURE 19: BUSINESS PURPOSES OF TRAVEL ON RTL

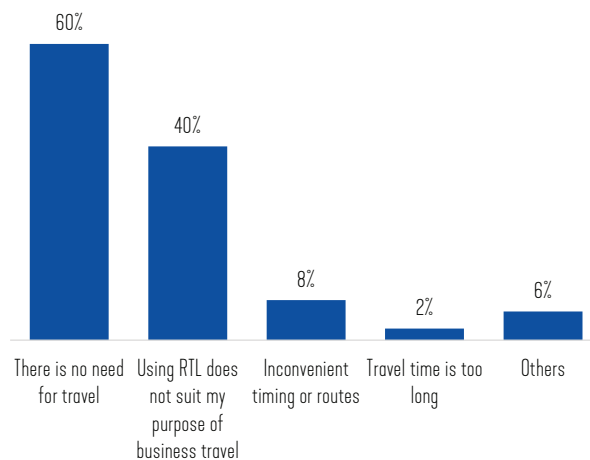


### 5.2. PREFERRED MODES OF TRAVEL FOR BUSINESS

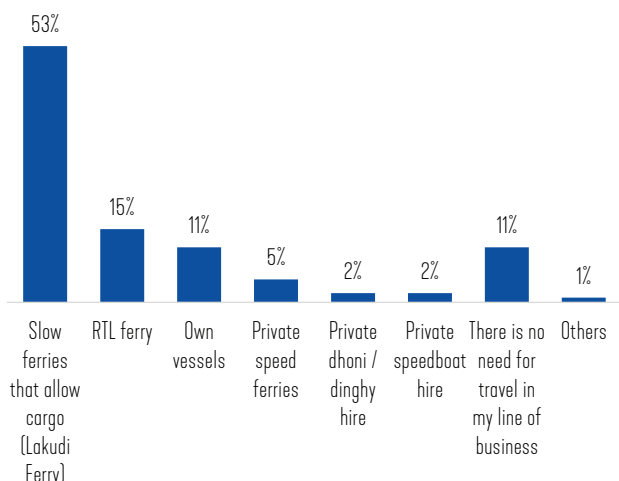
#### PREFERRED MODES OF TRAVEL AND REASONS FOR NOT USING RTL FOR BUSINESS TRAVEL

Most businesspeople do not travel on the RTL for business purposes because there is no need for inter-island travel related to their business. It is useful to keep in mind that the majority of these businesses are micro-businesses, especially in the non-hub islands. As such, they may be concentrating their services at island level. They may also need additional help to be able to explore how regional links and transport opportunities can improve and expand their businesses. 10% of respondents noted that they do not use the RTL because timings are inconvenient, whether the travel time or the ferry schedule. 40% did travel but did not use RTL because it did not suit their business purpose of travel. As Figure 21 indicates, most businesspeople preferred to use the *lakudi* ferries because they allow cargo (53%) and only 15% prefer the RTL ferry.

FIGURE 20: REASONS FOR NOT USING RTL FOR BUSINESS TRAVEL



**FIGURE 21: PREFERRED MODES OF TRAVEL FOR BUSINESS PURPOSES**



### 5.3. IMPACT OF RTL ON BUSINESS

#### IMPACTS ON BUSINESS AS A RESULT OF RTL

Despite not often utilising RTL for business travel, businesses in hub islands rated the impact of RTL very positively for their business compared to non-hub islands (70% vs 16%). In contrast, majority (52%) of businesses in non-hub islands reported a neutral impact on their business. According to KIIs and FGDs, this was primarily because routes & schedules are optimised for non-hub residents to travel to hub islands, not surprising given that the service is implemented primarily to meet the essential needs of the population.

It is also the case that in the trialling period, there was two-way travel tried out with ferry routes allowing for people to travel away from the hub islands and return the same day. There was however not enough demand to justify these routes at the time, and they were dropped in the final conceptualization of route-planning.

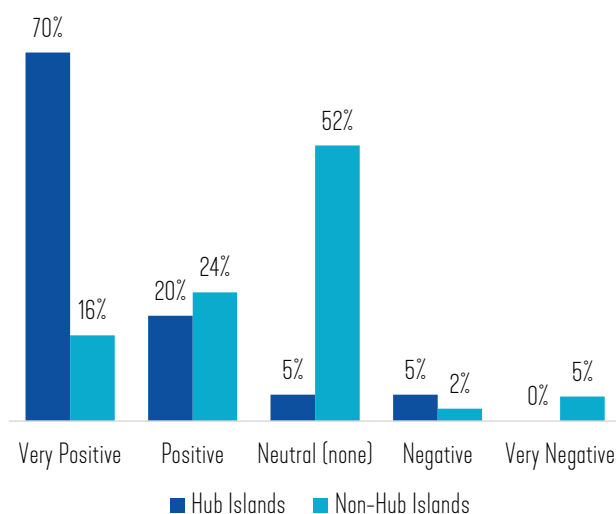
Therefore, at present most ferries begin from their base stations on the outer islands travelling inwards on the route towards designated hub islands and return to the base stations in the evening. Hence those living on the hub islands do not travel often or in quite the same regular way that those on non-hub islands do. There is a disproportionate balance in the flow of people’s movements. From an economic perspective, this means that businesses on non-hub islands experience comparatively lower rates of footfall and visits to the island and consequently do not benefit in the same way.

Nonetheless, with regular daytrips and other holiday activities, there is still a notable increase in tourists and visitors to the non-hub islands. This has the potential to contribute in some measure to island incomes. It may be necessary to concurrently develop a plan of activities to draw crowds out in a systematic manner away from hub islands to non-hub islands to more evenly spread the flow of economic benefits.

These may involve discussions between atoll and island councils, schools and guesthouses, and people working in a range of activities. Island markets and fairs on specialist products, music festivals, themed events that develop a credible reputation for quality and innovation, educational tours on history and environment, etc. may all be means of providing a draw to outside crowds.

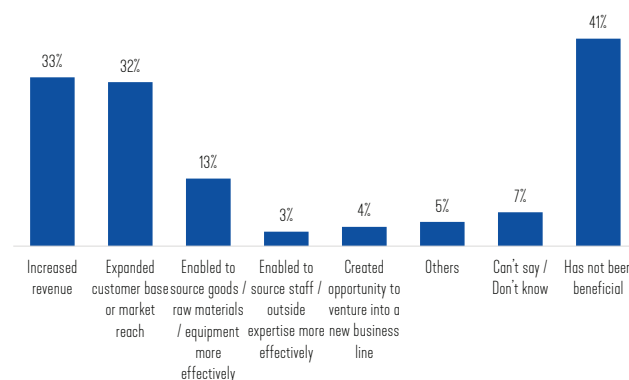
These are strategies that have been successfully utilised in other contexts to attract footfall to rural areas, increase use of rail or ferry services and make travel a part of people’s everyday lives. Some of these regional development strategies will be explored in greater depth in Chapter 12.

**FIGURE 22: OVERALL IMPACT ON OWN BUSINESS AS A RESULT OF RTL**



With regards to impact of RTL on own businesses, 41% of businesspersons felt there had not been any specific benefits for their business. However, those who did note benefits highlighted increased revenue (33%), greater customer base (32%), and improved ability to source goods and equipment (13%).

**FIGURE 23: BENEFITS FOR OWN BUSINESS AS A RESULT OF RTL**



## 5.4. IMPORTANCE OF LAKUDI/CARGO FERRIES

For economic activity, movement of goods is equally important to movement of skilled labour. As such, a similarly rigorous and well-conceptualized *lakudi* ferry system is also needed to complement passenger transport systems such as the RTL.

MTCC operates wooden ferries or *Lakudi* ferries throughout the Maldives under their Comprehensive Transport Network (CTN). These ferries were the only public ferry available and utilised by residents for inter-island/inter-atoll travel, prior to RTL. Cargo ferries are also important for small-scale farmers to transport goods to KFC Saturday market. In one island when the regular weekly private ferry was cancelled, many of the small-scale farmers lost business. Farmers rely heavily on the *lakudi* ferries to transport their goods, but respondents noted that these ferries are unreliable. There are scheduled dates during the week for ferries to come and transport the goods; but ferry captains have not so infrequently cancelled the trip. This may be because of weather conditions, as noted elsewhere seas can be rough in the north. However, the impact is that businesspeople cannot rely on this system to transport their goods.

Respondents noted that the quality of service has eroded over time; guidelines are unclear on what can be transported, how, and what would be restricted. Moreover, some ferries no longer take responsibility for care of the goods transported in their boat and therefore this makes transporting goods very risky.

## 5.5. ECONOMIC IMPLICATIONS FOR BUSINESSES

**INCREASED SPENDING POWER HAVE MEANT THAT PRIVATE BUSINESSES HAVE HAD MORE CUSTOMERS AND CLIENTS, LEADING TO STRONGER BUSINESS PERFORMANCE:**

Private businesses especially on hub islands reported enjoying better business as there are increased visits (and hence footfall) leading to greater number of customers and clients and higher rates of sales. Amongst the businesses mentioned by key informants included general commerce and retail shops, private dental and other health-related clinics, taxis and vehicle hire, hardware shops, pharmacies, shops selling household items, hardware stores, bakeries, cafés, and restaurants.

While a large majority of passengers on RTL ferries travel for healthcare services, many combine these visits with shopping, household purchases and other activities. At the same time, people spent money at cafés and restaurants during their visits and purchased food items to take back with them. The competitive need to attract a wide range of clientele has also led to an improvement in the quality of services (for instance at cafés and restaurants).

**EASIER TRAVEL OPTIONS IN ZONE 1 AT AFFORDABLE PRICES FACILITATE LOCAL TOURISM AND OVERNIGHT STAYS, BENEFITING GUESTHOUSES AND ROOM RENTAL BUSINESSES:**

People are more likely to travel within the region and stay overnight at local guesthouses and other accommodation, according to key informants. Hence, guesthouses have been doing better business – with the sector expanding, albeit slowly, within the region. Although inward tourism was noted to be not as strong as in some other parts of the country, some key informants pointed to a notable increase in domestic tourism during the recent Eid holidays, attributing this to an easy-to-navigate ferry system making the region a more attractive option for domestic tourists and families.

In addition to domestic tourism, the demand for guesthouses and other accommodation is also driven by families undertaking leisure activities (weekend holidays, day-outs, fun-trips, visits to places of historical interest, etc.), businesspeople traveling for business purposes, and those staying overnight prior to undertaking longer journeys or catching a flight. A number of key informants from smaller and more remote islands noted a growing interest in establishing guesthouses at island level especially where these were not yet available, anticipating future local and international tourism. Frustration about slow pace of development and adoption of Land Use Plans was reported to the research team.

Reasons given by key informants for an anticipated rise in local tourism include the presence of unique places of interest (for instance having the northern-most point in the Maldives, having historical significance such as in Utheemu), the presence of airports with more flights into the region including night flights, and the draw of the RTL ferry services itself which makes traveling to and within the region more attractive for visitors to the region. For instance, it was noted that some guesthouses in hub islands and nearby islands re-opened following Covid-19 closures primarily due to the impacts of travel possibilities brought about by RTL ferry services. One of the key informants remarked that the near-full capacity of flight bookings to Ha. Hoarafushi Airport was attributed to the availability of RTL ferry services.

Additionally, young travellers from within the region and from elsewhere utilise the RTL to island-hop and stay at different guesthouses within the Zone 1. People from hub islands also travelled to other islands for weekend trips in groups or for family visits during holidays. Agricultural tourism as well as hobby related visits such as kite surfing were also noted as being reasons for travel, more so in the future. During such travels, many stayed at guesthouses since there was no daily return back to the hub islands. The demand for rental rooms and guesthouses is currently high, with rates constant at about MVR 500 per night. It is expected that the presence of RTL ferry services will continue to be a key factor in the growth of local hospitality and tourism sectors.

### **SMALL BUSINESSES AND SMALL-SCALE TRADERS ALSO FIND RTL FERRY SERVICES TO BE USEFUL, WITH SOME DRAWBACKS LINKED TO LUGGAGE AND GOODS RESTRICTIONS:**

It was reported that small businesses have had the opportunity to benefit from use of the RTL ferry services although this opinion differed amongst a few key informants. For the most part, there was recognition of the potential for small scale traders, cottage industry, and other micro- and small businesses to grow their business as a result of the available travel possibilities.

This was perhaps most evident in some of the case examples shared in the interviews. For instance, it was noted that RTL is used sometimes to transport goods by small scale traders and entrepreneurs (e.g. 30 bottles of *rihaakuru* in a box, made-to-order cakes and baked goods being delivered to nearby islands). Customers can also seek services from small businesses from nearby islands (for instance, a tailoring business was able to attract customers through friends and word-of-mouth.) Helping small businesses to implement targeted marketing that appeals across islands may be a useful business strategy. This involves working together with the Business Centre Corporation to put together a package of services designed to help businesses make use of the new travel opportunities to expand their business.

Small business traders and entrepreneurs could travel more easily to identify and purchase resources and suppliers for their business activities. And while the direction of travel was heavily weighted towards hub islands from small ones, there has been nonetheless an increase in tourist and transit visitors to smaller islands. While guesthouses and restaurants provide accommodation and food for guests, small businesses also benefit from visitors coming to the island.

Some of the informants noted that the luggage limitations posed constraints for SME activities. Supplies (such as cloth rolls for sewing or other equipment and items) cannot be transported on RTL ferry services and restrictions on weight make it difficult to source large or weighty quantities. This would not be problematic for small businesses except for commonly expressed frustrations with the services of the *lakudi* ferry with regards to cargo movement. This was especially pronounced in Ha. Atoll.

### **ANTICIPATED FURTHER BUSINESS GROWTH IN THE REGION RESULTING FROM A RANGE OF FACTORS INCLUDING GREATER CONNECTIVITY, INBOUND TOURISM, PROPERTY AND REAL ESTATE DEVELOPMENT, AND AIRPORTS EXPANSION:**

Because people can more freely travel to the islands within the region, it is anticipated that in combination with other infrastructure development such as property development and airports expansion is very likely to lead to greater economic opportunities for the

region. The ongoing developments in the region – along with other contributory factors – have resulted in land value going significantly up. Construction has also increased in the region. For these reasons, many key informants pointed to the rising potential of the region.

Some key informants pointed to the delays in approving Land Use Plans for islands as a source of frustration. These plans help to determine tourism zones, agricultural land plots, commercial activities, and industrial areas such as airport expansion, boatyard areas and the promotion of small businesses. That ferry terminals were not fully functional in many islands was also noted as an obstacle both to convenience and to further income to the islands.

### **CONCERNS ABOUT REDUCTION IN NUMBER OF SPEEDBOAT OPERATORS ESPECIALLY IN SMALLER ISLANDS:**

Private speedboat operators have been negatively affected income wise by the introduction of the RTL ferry services. This has been particularly pronounced for operators in smaller islands and in Ha and Shaviyani atolls, and a number of speedboat operators have subsequently sold their vessels and exited the business. Despite this impact, it was almost unanimously agreed that the scale of benefits to the public and the common good of the current ferries system was worth the loss of business for speedboat operators. Speedboats for private hire continue to operate in hub islands as many people still utilise these for traveling to other islands for work and business purposes.

In HDh. Atoll and especially in hub islands, there is no particular group that has significantly suffered from the introduction of the ferry services; even small boat operators on smaller islands are still in operation as they get regular charters. Reductions in hires of private speedboat travel between Hanimaadhoo and KFC for airport transfers is possible; however, for reasons outlined in the previous chapters, institutions and businesses still found speedboat hires to be necessary for many other routes for their needs.

There is concern that the demise of speedboat operators in small islands make the population living there vulnerable in case of critical situations and emergencies where earlier there was the option for hiring one should it be needed. Some informants also expressed worries about the situation in the case that RTL ferry services could not be sustained in the region, as this would once again isolate populations, and the demise of speedboat hire options would make things even more complicated.



**POOR SERVICE WITH LAKUDI FERRIES IN SOME ATOLLS AND ON SOME ROUTES MEANS THAT PEOPLE CANNOT RELY ON THE CARGO SERVICE FOR BUSINESS-RELATED MOVEMENT OF GOODS, THEREBY HINDERING THE POTENTIAL FOR REGIONAL ECONOMIC GROWTH:**

The RTL ferry services is primarily a passenger ferry and is not designed to be used for movement of cargo or trade purposes. Businesses usually organise their cargo to be transported on the *lakudi* ferries, as do entrepreneurs and small businesspeople, who may have agricultural produce and other goods that cannot be easily or reliably transported on the RTL ferries. As such, wholesalers and retailers who plan to take only cargo are more likely to travel on *lakudi* ferries etc.

Ideally, designated crew would process the cargo and take responsibility for its delivery. At present, however, the crew members do not take responsibility for the cargo and as a result it poses difficulties for businesses. On more than one occasion, goods have been lost causing loss and great difficulty for the business owners. Cancellations can also be common. This makes people reluctant to use the slow ferries, and they have shared their hope that the RTL ferry services will prove to be more accommodating and flexible with regards to a certain amount of luggage and goods. This is however not always appreciated by other passengers – they like the cleanliness and order on RTL ferries at present. The alternative would be strengthening the *lakudi* ferries in order to ensure reliable and accessible system for the movement of cargo and goods.

## 5.6. CONCLUSIONS

Most businesspeople do not use RTL for business travel. This is because many businesses report not having the need to travel in relation to their business. Others preferred the *lakudi* ferries because it allowed them to carry cargo. Majority of the businesses were micro-businesses especially those in non-hub islands. Many of them may not be seeking to grow or may not yet be aware of how to do so, and in which ways travel opportunities can help expand their businesses. Nonetheless, 19% of businesses have used the RTL for business purposes and 15% prefer RTL.

Despite not often utilising RTL for business travel there are high levels of recognition that businesses are positively impacted by RTL. This is disproportionately so in hub islands because of the high inflow of people into hub islands. Businesses have more customers with higher spending power (from reductions in household transport costs), and therefore more sales. More opportunities have been noted with increased local tourism and overnight stays, and expansion of the customer base.

There is anticipation of further growth in the region resulting from a confluence of factors including greater connectivity (brought about by RTL), inbound tourism, property and real estate development, and airports expansion. To improve business impacts in the region, however it is necessary to improve *lakudi* ferry services in conjunction with showing businesses how to leverage increased travel opportunities into increased business ones. Targeted planning to facilitate the uptake of transport and travel opportunities may be required to help the region operationalise and achieve the anticipated growth.



## 6. ECONOMIC IMPACTS OF RTL FERRY SERVICES

This section outlines the findings in relation to the economic impacts of RTL ferry services. Data from the surveys, FGDS and KIs indicate that trade and business has improved in the region overall. The flow of people, goods and services are more evident, and this is facilitated by the increased spending power at family and household level. At the same time, as businesses also prosper and expand, they too contribute to generating more economic activity within that region.

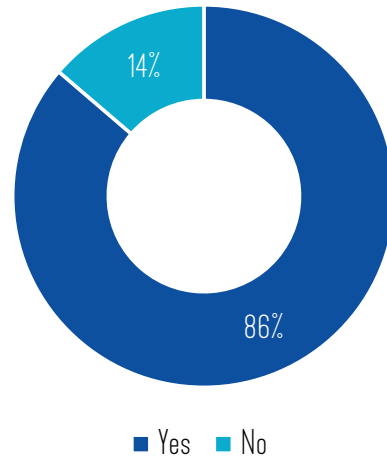
It was also noted that cost savings at council and other institutions were utilised to carry out activities or services that further benefitted the economy of the region either directly or indirectly.

### 6.1. SAVINGS AND BENEFITS RESULTING FROM RTL

#### REDUCTION OF HOUSEHOLD EXPENDITURE

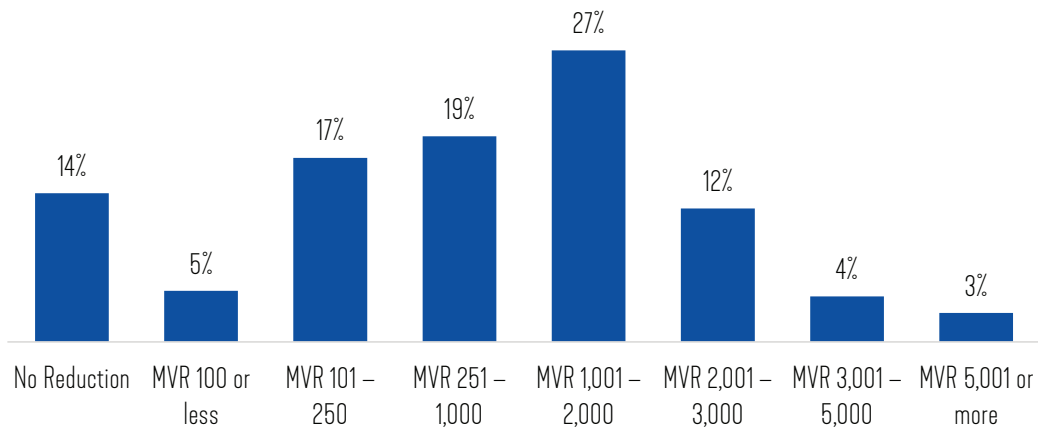
Most households have experienced a reduction in household expenditure as a result of RTL and agreed to this statement in the survey (86% vs 14%).

FIGURE 24: RTL HELPED REDUCE HOUSEHOLD'S EXPENDITURE



Reduction in household expenditure from the reduced travel costs translate into consequent household savings. This improves their economic situation and increases life possibilities for families and households. Key informants also pointed to the increase in disposable income for families and households resulting from affordable travel.

FIGURE 25: ESTIMATED AVERAGE AMOUNT OF HOUSEHOLD SAVING ON TRAVEL DUE TO RTL



27% of those who have experienced a reduction in expenses saved on average MVR 1,001-2,000 per month, while 19% saved more than that on average. The weighted median household saving per month is MVR 800, leading to savings of MVR 9,600 per year per household, or a total of some MVR 100 million per year for all the households in Zone 1.

Greater spending power has led to improvements for families in several ways; people reported in the interviews that they were consuming more goods – both special and everyday household and other items – and other services across the region. Many families are also exploring the opportunity for leisure activities, picnics, shopping trips, day-outs, regional travel, and domestic tourism. In the longer term, such savings may also lead to additional economic activities such as investment into business or professional development.

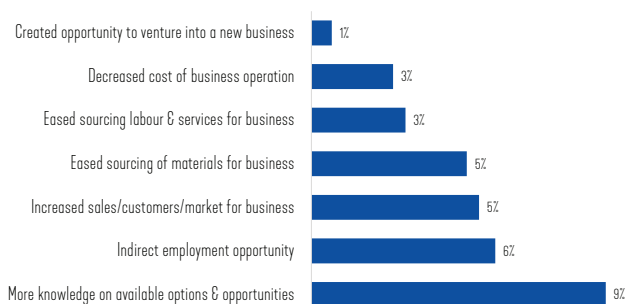
## 6.2. OTHER ECONOMIC BENEFITS RESULTING FROM RTL

Respondents also stated additional benefits from RTL that went beyond income savings resulting from reasonably priced travel. These benefits are presented below. Figure 26 shows that 6% had found indirect employment opportunity. RTL ferries directly employ staff across the region in Zone 1 for all its routes, services and management, with the exception of Engineers. Whilst engineers were sought from the region, there were no candidates who applied and therefore, engineers were recruited from Male'. 91 people are employed by RTL in Zone 1.

Most of the other benefits listed below refer to impacts of RTL on own business via knock-on effects such as increased sales, easier sourcing of labour and raw materials and decreased operational cost for own business.

Within the past year, 1% of respondents also reported RTL as having created opportunity to venture into a new business. This points to the potential of RTL to expand economic opportunities in the region. As noted in the previous chapter, during FGDs a few of the businesses detailed the ways in which their business opportunities have expanded – for instance, delivering cakes to nearby islands and attracting customers from nearby islands. Such benefits are also reported to have been experienced from survey respondents.

**FIGURE 26: OTHER BENEFITS OF RTL ON HOUSEHOLD INCOME/EXPENDITURE (APART FROM SAVINGS)**



Whilst not the case across the region and not wholly convenient for daily travel for employment in all islands, one key informant reported of a person who commute daily for work on RTL from a nearby island; this was reported in Ha. Dhidhdho. Others who have migrated within the region reported being able to visit family at weekends – which they would not have been able to do without RTL services. Furthermore, key representatives from the regional airport stated that they noticed an increase in job applications from people living in islands nearby.

It is notable that 9% of respondents in the survey mentioned that they have more knowledge and awareness about jobs and economic

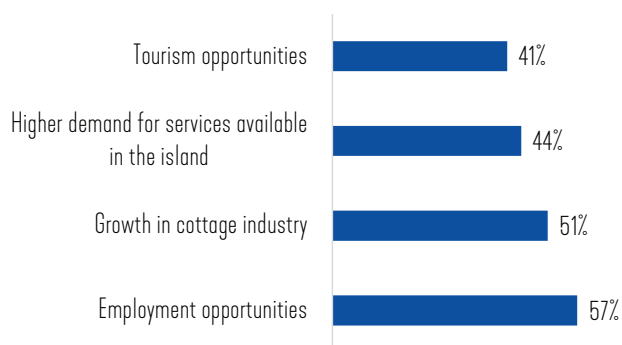
opportunities in the region. This further enables movement of people in search of jobs within the region, which is closely linked to increased life opportunities and is also one way by which better transport systems lead to regional development.

## 6.3. DIRECT AND INDIRECT EMPLOYMENT OPPORTUNITIES

The ferry systems expand means of livelihood for people. Apart from direct employment from the RTL ferry service, it is expected that indirect and ancillary services will expand employment opportunities over time.

In addition to identifying economic benefits that they had experienced because of RTL, respondents also noted new economic opportunities that they believed existed as a result of the introduction of RTL services, although they may not have utilised these opportunities nor benefitted from them. 57% of respondents noted that employment opportunities increased in their own islands since the introduction of RTL service.

**FIGURE 27: NEW ECONOMIC OPPORTUNITIES WITNESSED SINCE THE INTRODUCTION OF RTL SERVICE**



It was also noted RTL services make this option of commuting or migrating for work more widely acceptable to young people and their families. The possibility of regular visitations or daily travel means that those who had earlier felt unwilling to migrate or commute for work now find the option more attractive, due to the availability of affordable regular travel services.

## 6.4. OTHER ECONOMIC OPPORTUNITIES

In addition to the increased employment opportunities, respondents also pointed to other economic opportunities which they believed are now available to them as a result of RTL. This includes growth in the home-based cottage industry (51%) and higher demand for services in the region (44%). Moreover, 41% of respondents also noted that the introduction of RTL services also increases tourism opportunities in the region. These responses highlight three areas in which there are

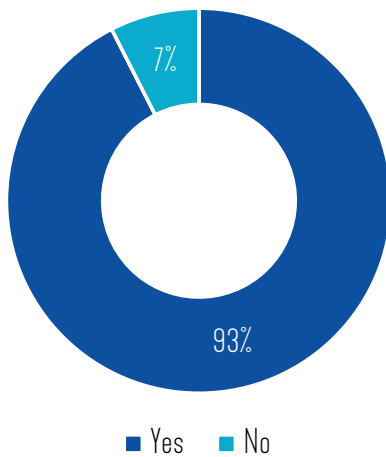
new economic opportunities resulting from the introduction of RTL services, as identified by respondents in the survey.

However, it is noted that the simple existence of these opportunities does not guarantee their utilisation for members of the population. Whilst respondents are aware of these new possibilities, it is nonetheless likely that additional targeted policies and interventions may be needed to help members of the public to utilise and leverage these opportunities.

### 6.5. FARE AFFORDABILITY

Finally, as shown below, 93% of respondents believed that ferry fares were affordable and accessible. This means that the ferries are priced equitably for the majority of respondents.

FIGURE 28: RTL FERRY FARES ARE AFFORDABLE AND ACCESSIBLE



### 6.6. CONCLUSIONS

Most households noted that RTL services had led to a reduction in their household expenditure, resulting from reduced travel costs. The weighted median household savings per month is MVR 800, leading to savings of MVR 9,600 per year per household. These translate into direct household savings and greater spending power for households. This is reportedly being utilised through consumption of more goods and services; including opportunities for shopping trips, leisure activities, picnics, day-outs, regional travel and domestic tourism.

Additional economic benefits resulting from RTL included direct and indirect employment opportunities, increased sales, easier sourcing of labour and raw materials. RTL services also had led to decreased operational cost for some businesses. A few respondents had ventured into new business opportunity. RTL had also opened up further migration and commuting possibilities. From enabling people to find out about opportunities in the region and enabling

frequent family visits, these ferry services have provided increased life opportunities at lower costs.

Respondent identified additional economic opportunities enabled by RTL services. These include growth for home-based businesses, increased demand for services and tourism opportunities.

It is recognised that additional targeted policies and interventions may be required to further help individuals, families, and businesses to take advantage of and leverage these new economic opportunities into realities.



## 7. IMPACT ON SOCIAL CONNECTIONS AND COMMUNITY RELATIONS

Connectivity in the form of inter-island and community events, regular visits and exchanges, trade and other commercial links contribute to better social connection and harmonious community relations between islands and atolls, leading to a stronger region.

In addition, there is a considerable amount of inter-marriage between people from different islands, and as such extended family members and networks across the region. RTL services allows for people to remain connected to their families and extended family members, leading to better wellbeing across the region.

### 7.1. RTL HELPS WITH MAINTAINING RELATIONSHIPS AND SOCIAL CONNECTIONS

#### PERSONAL RELATIONSHIPS WITH FAMILY AND FRIENDS

89% of respondents noted that they were now able to maintain closer ties with family members on other islands following introduction of RTL. 84% felt the same with regards to friends and acquaintances on other islands.

The rates were similarly high regardless of whether the respondent lived in a hub island or not, and it was also independent of population size of island. RTL has enabled the majority of people living in the region to cultivate stronger and closer ties with family and friends living on other islands.

FIGURE 29: PERSONAL RELATIONSHIPS WITH FAMILY AND FRIENDS

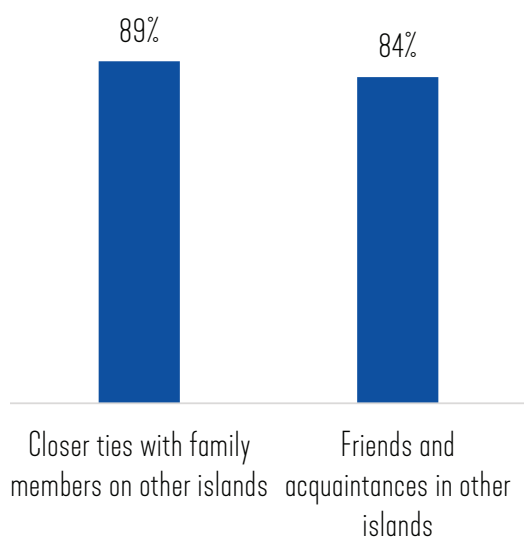
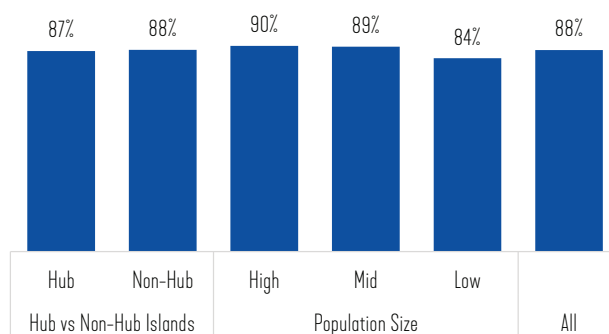


FIGURE 30: PERSONAL RELATIONSHIPS WITH FAMILY AND FRIENDS (HUB VS NON-HUB AND POPULATION SIZE)

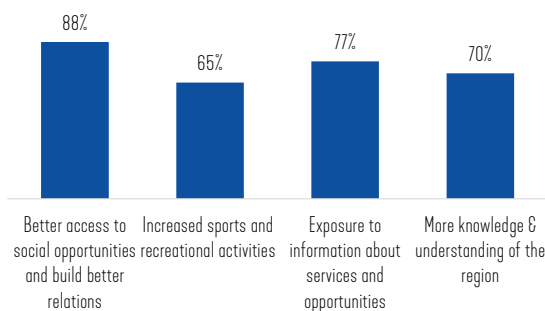
#### ABLE TO BUILDING AND MAINTAIN CLOSER RELATIONSHIPS WITH RELATIVES & FRIENDS LIVING ACROSS OTHER ISLANDS



#### COMMUNITY RELATIONS AND ACTIVITIES

When asked about the impact RTL introduction has had on community relations and activities, there was a significant positive response. 88% of respondents stated that access to social opportunities and building better relations across islands have improved. Many respondents also appreciated that they have come to know more about services-related information and opportunities. Finally, the majority of respondents also noted that they had developed more understanding and knowledge of the region.

FIGURE 31: COMMUNITY RELATIONS AND ACTIVITIES



Increased community relations and understanding of the region has several positive impacts. In addition to improving social harmony and unity, it is also likely to bring people in contact with new ideas and potential opportunities. This enriches people's experiences and perspectives of the world and allows them to seek new life possibilities and initiatives. Inspiration and innovation are often associated with increased social interactions, it allows people to find like-minded others to begin new ventures with and allows people to seek advice and support when needed.

## 7.2. STRENGTHENING OF FAMILY AND SOCIAL WELLBEING

### **AFFORDABLE TRAVEL WITHIN THE REGION HAS MADE IT POSSIBLE TO MAINTAIN AND STRENGTHEN FAMILY RELATIONSHIPS AND SOCIAL CONNECTIONS:**

When the slow and infrequent *lakudi* ferries were first established, it helped to improve and maintain family and social connections and relationships across the islands. The RTL ferry services have helped to make such trips even more accessible and affordable, and for people to be able to travel with greater comfort and luxury making these journeys more effortless and therefore more doable and regular.

Families and friends are also able to carry out joint outings – e.g. picnics, weekend trips, improving their bonds as well as spending relaxing and fun time together. This is not only incredibly important at the level of individual and family wellbeing but also for ensuring strong and stable relationships and a well-connected social network.

The maintenance of such close connections also becomes very important in situations of family conflict or crisis, such as divorce, domestic violence, illness, injury or death. One informant noted that it is easier for fathers to keep in contact with their young children following divorce and consequently to build a stronger bond with them. For instance, one father shared in an FGD how it used to cost him MVR 10,000 one-way trip to visit his child who lived in the adjoining atoll; now it costs him MVR 600 for return tickets. Equally, keeping in touch with one's natal family can also offer some protection for women and children who may experience domestic violence, where it is possible for their family members to intervene and offer some protection or resolution to the matter. It also makes it easier for people to seek help and support from their family members (who may be resident elsewhere) if they were struggling or had experienced misfortune or loss. These possibilities offer greater protection, resilience and safety for individuals, families and communities in the region.

### **YOUNG PEOPLE AND SPECIAL INTEREST GROUPS CAN ORGANISE OUTINGS AND OTHER TRIPS THAT PROVIDE ENRICHING AND EDUCATIONAL EXPERIENCES FOR THEMSELVES AND OTHERS:**

It has been reported that groups and associations are able to organise fun and bonding trips for young people or other special interest groups. For instance, kite surfers from Hanimaadhoo visited Sh. Funadhoo recently and stayed for a week. During this period of time, young people in the island also learnt to kite surf, generating active interest and enjoyment for this recreational activity. Similarly, a group of people from Hdh. Atoll islands interested in agriculture in Ha. Atoll travelled there to learn more about how farming and growing activities are done there.

This possibility for special interest groups and CSOs to meet up within the region, and to share information and knowledge enriches the social environment in the region and provides a more stimulating milieu for young people and those interested in working together on common interest issues.

### **FERRY SERVICES TO AND FROM AIRPORT ISLANDS MEAN THAT PEOPLE CAN FLY OUT AND INTO THE REGION MORE EASILY, MAKING DOMESTIC AIR TRAVEL MUCH EASIER:**

Many people reported the use of ferries for traveling to and from airport islands. Affordable and regular ferry journeys from airport islands help people from the region to travel more easily within the country, whether going to Malé' or to other regions. At the same time, others in the country are more likely to visit the atolls in Zone 1 because of easy island to island travel opportunities, making holidays and family trips more attractive. This is important in developing better inter-regional community relations as more people come to know and appreciate the region and vice versa. At the same time, this also contributes to the economic potential of the region.

## 7.3. FREQUENT INTER-ISLAND COMMUNITY EVENTS AND ACTIVITIES

### **TRAVEL COST SAVINGS AND EASIER TRAVEL OPPORTUNITIES MEAN IT IS EASIER TO ORGANISE INTER-ISLAND ACTIVITIES, EVENTS AND FESTIVALS:**

Councils have been able to save money from having to spend less on travel expenses. For instance, Shaviyani Atoll Council members travelling on the RTL ferry service (instead on hired private speedboats) for Atoll Council meetings led to savings of MVR 24,000 per month which they were then able to put to other services such as organising recreational activities for the islands.

Because travel is less costly and easier to manage in general, there are more inter-island activities and competitions. For instance, inter-island football, futsal, volleyball and handball sports tournaments, friendly matches between teams from different islands, and coaching camps are easier to organise and have therefore been somewhat more common in the year since RTL ferry services were established. Similarly, the logistics of organising other community activities such as Quran competitions and religious sermons are less complicated, leading to an increase in such events.

In the preceding Eid holidays, families travelled more frequently and visited other islands, participating in community events and festivals. Such inter-island activity and shared experiences go a long way in strengthening regional relationships, creating more opportunities for collaboration and innovation, and stimulating the social and economic environment of the region.



## **EDUCATIONAL AND RECREATIONAL TRIPS FOR SCHOOLCHILDREN, UNIVERSITY AND COLLEGE STUDENTS AND YOUNG PROFESSIONALS ARE ALSO MORE COMMON FOLLOWING THE ESTABLISHMENT OF THE RTL FERRY SERVICES:**

On some occasions schools and universities/colleges have been able to organise trips by booking tickets in advance as a group. This has enriched their learning experiences and created opportunities for educational insight and exchange activities. Furthermore, training programs and workshops are also easier to organise and for people to attend as needed. This has facilitated better capacity building and collaborative opportunities within the region, at lower cost and within the budget.

Because there are speedy inter-atoll connections between capital and hub islands, it is also possible to cultivate inter-atoll trips that can help students and young people (as well as the larger community in general) learn more about the specific sites of interest and from other learning resources. These trips may require additional expenses for overnight accommodation and field expenses; however, the overall travel logistics and costs are likely to be much more reasonable than before. In some cases, RTL has organised a separate ferry for school children when requested. However, this is not routine and is dependent on ferry availability, institutional relations, etc.

It has to be noted that while RTL has opened a new option for travel, use of RTL for group tours (recreational or educational) are relatively rare as groups find it more practical and not too uneconomical as a group to charter vessels for their needs.

## **7.4. CONCLUSIONS**

Majority of the respondents recognised that they are able to keep more connected to family and friends living in other islands within the region, as a result of RTL. The rates were similarly high across all surveyed islands in the region, regardless of being a hub island or not, and regardless of population size. This indicates that most people who do wish to visit family and friends are able to utilise RTL to do so.

It is noted that families who keep in contact with one another are able to better their families' wellbeing. In times of trouble or stress, they are able to offer comfort and support, and they may also be able to help out in various ways. Furthermore, it may go some way in offering interventions and protection to family members, in case of family crises or domestic violence.

Moreover, they also noted that they were able to develop better community relations with other islands and undertake joint activities. This is reported to have increased their knowledge and understanding of the region. Equally importantly, such interactions also have led

to sharing of knowledge and skills, including introduction of new hobbies and activities.

The inter-connectedness of the region has the potential to also attract people from outside the region, leading to better relationships and connections to those from elsewhere. This is also an important element of regional development.

RTL has further enabled atoll and island councils to invest costs savings from travel into educational and recreational activities for people living in the region. Such activities can lead to deeper social and economic ties between islands as well as increase knowledge and experience for individuals and communities.



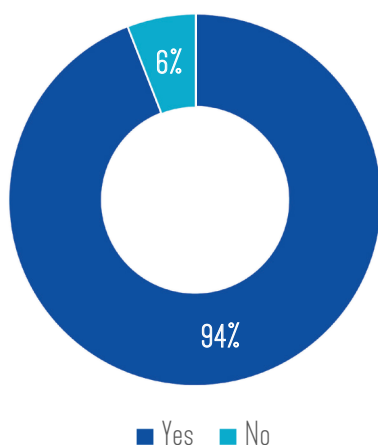
## 8. IMPACT ON ACCESS TO HEALTHCARE SERVICES

This chapter focuses on the impact of RTL services on access to healthcare services for the population living in this region.

### 8.1. ACCESS TO HEALTHCARE

Across almost all interviews, this study has reemphasized the significance of affordable public transport for access to timely appropriate healthcare services. Excluding residents of KFC, 94% of respondents agrees with the statement that RTL has helped them access healthcare services. Moreover, as seen earlier, the main purpose of travel as reported by respondents is medical needs. 68% of people stated their main purpose of travel are to seek healthcare including specialist consultations, general consultations and other medical services such as lab tests.

FIGURE 32: RTL IMPROVED ACCESS TO HEALTHCARE SERVICES\*



\*Excluding residents of KFC

### 8.2. BENEFITS FOR PATIENTS AND THEIR FAMILIES

#### INCREASE IN REGULAR TIMELY ACCESS TO SPECIALIST CONSULTATIONS AND LABORATORY TESTS FOR PEOPLE WITH SERIOUS AND CHRONIC ILLNESS:

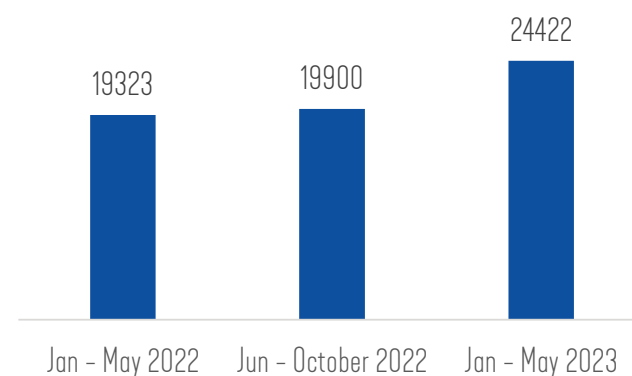
Prior to the establishment of the RTL ferry service, people bore huge travel expenses and therefore prioritized seeking healthcare services in cases of acute and serious suffering. If ill and in need of diagnostic service, specialist consultation or treatment, people had to hire a speedboat to take them to the Regional and Atoll Hospitals. According to data from KIIs and FGDs, transport costs were high, depending on the distance to the hub island where the Hospital was located, prices ranged from MVR 500 to about MVR 5,000-7,000. Hence, people tended to see if a hire could be made jointly and then

share the costs amongst the passengers. On average people living in the Atolls spend approximately MVR 3,000 per month per household on travel costs, of which was primarily medical-related travel<sup>14</sup>. Contrast these costing figures with RTL fares: minimum fare at MVR 35 per trip per passenger, a maximum cap of MVR 125 per passenger for inter-island journeys, and a maximum cap of MVR 150 per passenger for inter-atoll journeys.

People with chronic conditions need to have their health status monitored more regularly. With RTL, seeking inpatient treatment is also easier for patients with chronic illnesses. People in need of dialysis can travel regularly for care, as are those with thalassemia. This means fewer health problems arising from delayed and irregular care. People in need of dialysis are categorized as People with Disability (PWDs) and so can travel for free on ferries for healthcare. RTL has brought about big changes in how people are able to access the healthcare they need to manage and treat serious and chronic illnesses.

The following figure shows the total number of consultations by residents of other islands at Kulhuhuffushi Regional Hospital (KRH) over three periods of time; one 5-month period prior to the introduction of RTL, another just following the introduction of the RTL, and the third for the first 5 months of this year. There is a 26.4% increase in the number of patients at the Regional Hospital from Jan-May 2023 compared to the same period a year earlier before the introduction of RTL services. Data shows that, on average, an additional 1,019 patients per month are being seen for consultations at KFC Regional Hospital.

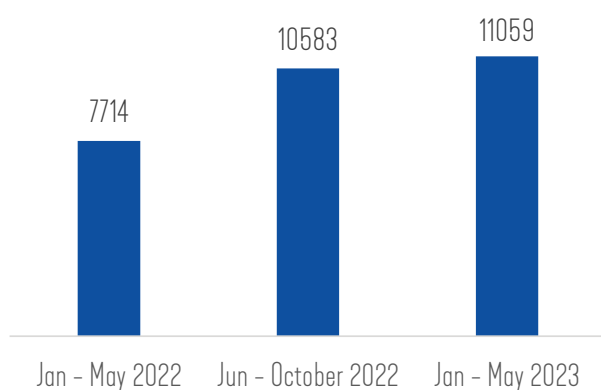
FIGURE 33: NUMBER OF CONSULTATIONS PRIOR TO AND AFTER INTRODUCTION OF RTL.



Even at Atoll Hospital levels, the number of consultations has significantly increased following the introduction of RTL services. For instance, data from Shaviyani Atoll Hospital show an increase of 43.4% in the number of consultations in Jan-May 2023 compared to the same period prior to RTL. On average, an additional 669 patients are being seen each month at the Atoll Hospital.

14 National Bureau of Statistics. (2019). *Household Expenditure: Household Income and Expenditure Survey 2019*.

**FIGURE 34: NUMBER OF CONSULTATIONS AT SH. ATOLL HOSPITAL**



These figures show the significant impact on access to higher order healthcare services seen in the region following the introduction of RTL. Service amendments also help most patients have one-day consultations that cover most aspects of their diagnosis and post-result consultations where possible. One-day consultations are less costly time and money wise than multi-day stays as required earlier for many patients and their family members.

As such people are now able to avoid more serious complications that can occur from having unsupervised and untreated chronic disease, leading to better health outcomes for the individual and thereby help improve the quality of life for them and their families.

#### **INCREASE IN USE OF HEALTHCARE AND DENTAL SERVICES EARLIER AT STATE AND PRIVATE CLINICS TO TREAT ILLNESS BEFORE SITUATIONS BECOME MORE SERIOUS:**

People have quicker access to healthcare and seek interventions before situations become more serious. For instance, people visit doctors for viral and bacterial infections that may have had more threatening consequences had they not sought help in time.

Pregnant people can travel in comfort for scheduled caesareans when needed and to seek help earlier in the pregnancy for any identified complications. This makes the delivery process smoother and fewer deliveries are less likely to result in emergency care. People with physiotherapy needs are also able to seek help on a more regular basis at less cost, especially for those requiring pain management following surgeries such as knee replacements. There has been a notable increase of physiotherapy session at KRH, with 50+ patients daily compared to 30-40 sessions prior to availability of RTL ferry services.

Similarly, people also seek dental care when required, mostly from private clinics as dental care services are more widely available through private clinics. In addition, they also see specialists at private

clinics when they are unable to get appointments from the hospital. Private clinics are available at KFC for paediatric care and internal medicine, for example.

Seeking timely care for health needs – whether through public or private institutions – mean that the population is less likely to experience complications and serious complications that result from delayed treatment for common ailments and health-related situations, leading to better health outcomes in the long term.

#### **FERRY SCHEDULES ALLOW FOR A QUICK TURNAROUND OF CONSULTATION, TESTING AND POST-TEST CONSULTATIONS WITH REPORTS THE SAME DAY FOR LARGE MAJORITY OF PATIENTS:**

Many patients have a relatively quick one-day turnaround with laboratory testing, getting their reports and post-test consultations within the same day before departure. Reportedly, as much as 90% of the OPD patients at KRH and atoll hospitals were likely to be able to complete their required services that day and would not have needed a next-day consultation for the same issues.

In some hospitals, it was reported that same day testing and consultations were not always possible, because of shortages in consultation rooms. If there was urgent need, these were coordinated between doctors from the health centre and hospital. Otherwise, people travel the next day to have test results and follow-up consultations as needed.

#### **EASIER SOURCING OF MEDICINES AND PHARMACEUTICAL ITEMS AS NEEDED ACROSS THE REGIONS FOR HOUSEHOLDS, HEALTH CENTRES AND HOSPITALS:**

Several key informants at hospitals and health centres noted that it is easier to source medicines and other items with the establishment of the RTL ferry services. There was less anxiety at island level about medicines running out at the pharmacy. Families could also purchase medicines more easily at other available islands, when needed, for instance where people needed regular prescriptions or everyday health related needs.

When small medical, laboratory or pharmaceutical items were required for health centres, these could be sourced relatively easier than before. Urgent items could be delivered to health centres or to hospitals via the RTL Ferry service with minimal coordination between the institution and captain of the ferry service. Vaccines and test-related substances can be sent to health centres via the RTL ferries on a more regular basis (or as needed). This means that hospitals and health centres experienced fewer disruptions and delays when providing treatment, and therefore contributing to better healthcare services and health outcomes in the region.

However, this transport arrangement appears to be an informal mechanism, set up on ad hoc basis, based on existing relationships and goodwill. There is no such formal mechanism that enables hospitals and/or health centres to transfer or share resources based on need.

### **REFERRALS FOR SPECIALISTS OR FURTHER TESTING ARE EASIER AND CAN BE COORDINATED BETWEEN HEALTH CENTRES AND HOSPITALS:**

The Island health centres continue to see similar numbers of patients as before the establishment of the RTL ferry services. This is to be expected as health centres are the first place of contact for health issues. As health centres are upgraded with more staff and services, there is an expected increase in patients who first consult at island level, followed by referrals to specialists, lab services and other diagnostic procedures as needed. Referrals are done primarily when a service is not available at the island health centre or in cases of suspected health complications. Sometimes specialists from the Atoll Hospitals refer patients for further consultations at the Regional Hospital.

These were trickier for those who came from further away islands in other atolls. While they may be able to reach the Regional Hospital in the same day, there was little layover time for one-day turnaround. For instance, people in Sh. Maroshi noted that if they arrived at the Regional Hospital after 10:00hrs, clinician's referral memos get cancelled; they also need to leave KFC at 14:15hrs in order to be able catch the return ferry from Sh. Funadhoo back to their island. This is very little turn-around time to complete the needed medical and diagnostic tasks. As such, they may need to make several trips or choose to stay overnight, with additional expenses. In some cases, while formal referrals may not be done, there could be the suggestion for more follow-up from a specialist. In all these cases of referrals, patients are now in a much better position to be able to obtain the desired services either by returning the next day or by staying overnight and traveling back after the consultation – because of RTL ferry services.

Key informants from health centres noted that families often preferred them to do referrals for family members at the same time (as needed) so that the family could travel together, even with the RTL ferry services. They sometimes also helped with coordinating the consultation and testing services at the hospitals to ensure a quick turnaround for the patients. If hospital appointments are full, and if there is a need for an urgent follow-up, doctors are empowered to communicate with one another and ensure a patient is seen as quickly as possible. They also noted that more people can follow up on referrals and do so earlier than before, as there is less planning and expenditure involved. For this reason, RTL ferry services allow people to have their health needs attended to and resolved swiftly.

### **EXPANSION OF HEALTHCARE SERVICES AT HOSPITALS TO SUPPORT THE INCREASE IN PATIENT LOAD FOLLOWING THE ESTABLISHMENT OF RTL:**

Ministry of Health and KFC Regional Hospital representatives noted in the stakeholder consultations that the introduction of RTL has brought demand at the KFC Regional Hospital into the category 3 of tertiary services, and as such is currently being upgraded. Similarly, hospital representatives noted that Atoll Hospitals are also currently working at capacity, and there is need to expand the services. This includes having more specialist staff appointed and increasing the number of OPD consultation rooms. For example, at the Regional Hospital, there are now 2 doctors for all specialties – which was a recent change brought about to manage the increase in patient load and request for consultations following the establishment of the RTL. Cancellations by specialists (even when sick) caused great difficulty for patients as they could not change the booking for their tickets. Having two doctors for each specialization has been a helpful way of handling the situation at KRH.

As mentioned previously, OPD consultation rooms are being expanded and additional facilities and services added across the region. KRH added 24 rooms to the OPD services as well as a treatment room and a procedure room in January of this year to cope with demands and to reduce the waiting list<sup>15</sup>. Similarly, Haa Alif and Shaviyani Atoll Hospitals started new OPD services such as ophthalmology and orthopaedics as well as other diagnostic services. This has meant greater stability in the number of patients being seen at the Regional Hospital, whilst both Atoll Hospitals noted an increase in patient numbers.

For places such as the Regional Hospital, people come from nearby atolls and islands as it has the most established services in the region. As such, service can be slow and waiting times long unless the process and situation is carefully managed. The distribution of services across the region has been helpful in this regard. However, it was also pointed out by one of the key informants that a greater spread of services may not always serve the interests of the population or ensure cost-effectiveness. Specialists on islands with fewer populations or on less accessible routes may see only a few patients a day and not be fully occupied during their working times. Due to public demand for resident specialists, the Regional Hospital posted a gynaecologist on a rotational basis for some islands; there were less than 5 patients each day. Hence, widespread establishment of specialist services would be a poor and expensive use of the specialist's time and leads to demotivated and deskilled staff and high turnover.

Equally it was not always cost-effective to spread diagnostic services too thinly, as it meant that some re-agents and other consumables may not be fully utilised at that scale leading to wastage of resources.

<sup>15</sup> Public Service Media News. (2023). "OPD building in Kulhudhuffushi hospital to begin service."

Finally, it was also noted that were healthcare services spread out and not concentrated at hubs, this could also lead to lower rates of RTL ferry use.

The question of balance between a concentration of healthcare services in one place and ensuring easy access across the region is worth further consideration and it requires joint-up thinking and resolution across several stakeholders. At the same time, the expansion of healthcare services and facilities to meet growing demand brought about by the greater accessibility of health services (due to RTL ferry services) will contribute to better health outcomes for people in the region.

### 8.3. ADDITIONAL SUPPORT AND SERVICES FOR HOSPITALS AND HEALTH CENTRES

#### **RTL TRI-PARTITE AGREEMENT BETWEEN THE REGIONAL HOSPITAL, MTCC AND ISLAND HEALTH CENTRES) ALLOWS SMOOTH OPERATION OF MOBILE LABORATORY SERVICES AND REDUCES HOSPITAL COSTS IN HDH. ATOLL:**

This agreement between these institutions has brought about substantial cost savings to both people and hospital, as revealed in the survey and by key informants. Prior to RTL, the annual cost of vessel hire for KRH for urgent mobile laboratory services was about MVR 1 million. Since laboratory consumables was stated to be the second highest expenditure after staff salaries, the economies of scale in conducting centralized laboratory testing helps reduce costs per test. The mobile laboratory services cover sample collection from those islands under the hospital's oversight that do not have the relevant testing facilities and have these transferred to the Regional Hospital. This used to be done via private speedboat hire when urgent, adding to the hospital costs. Island health centres reported that sending samples under this agreement was relatively rare since these were only for those tests which could not be carried out on the island or if the lab technician was on leave or sick when needed.

According to key informants, this arrangement has also been hugely convenient for patients. They are required to give in the samples half an hour earlier on the morning of the ferry departure but will not have to use up a whole day in order to provide a sample for lab testing. If the tests indicate something for follow-up, they could be treated via the General Physician on the island or they may require specialist follow-up. 12% of those traveling from islands noted laboratory testing was one of the purposes of travel. This number would likely to be higher if the mobile service was not available. As noted in the FGDs, the convenience of this service was very much appreciated by participants since it enabled them to seek healthcare as soon as possible and saved them time, effort and money.

However, it has not been possible for the Atoll Hospitals to set up similar arrangements, where RTL could be used to support delivery of vaccines and emergency stock items or establishment of mobile laboratory services as done by KRH. A standard process across the region would be helpful and would lead to greater cost-savings and better health care in a more consistent manner with the appropriate oversight. Furthermore, a storage facility for samples at the key ferry terminals would be useful to ensure safe and secure transport.

#### **RTL ENABLES A BETTER DISTRIBUTION OF PATIENT LOAD OVER THE WEEK HELPING TO PROVIDE A BETTER HOSPITAL SERVICE:**

Prior to RTL, the weekend was very busy at KRH as it was a peak day for consultations. Similarly, atoll ferries from Shaviyani and Haa Alif on Mondays and Wednesdays respectively meant these were peak working days as well. However, with the RTL ferry services, it has been possible to find a more even distribution of the outpatient load across the week, as people can travel daily and more frequently at their convenience. This makes it easier to arrange appointments, and there is less pressure even if patients had to wait a few more days for an appointment with a particular doctor.

#### **HOSPITAL ADMINISTRATIONS HAVE ENSURED THERE IS SUFFICIENT ALIGNMENT BETWEEN HEALTHCARE SERVICE AVAILABILITY AND FERRY SCHEDULES:**

In order to enable the quick turn-around noted above, hospitals have strengthened their clinical schedules, appointment scheduling process and referral systems to align with ferry routes and schedules. Over the course of the year, several adjustments and processes have been established to help ensure that patients coming from elsewhere would have sufficient time to meet their needs. This includes adjustments in consultation hours, ensuring a useful period of time for advance bookings, and setting up appropriate call centre support.

Such adjustments on the part of the institutions to meet growing demand (resulting from the RTL ferries making services more accessible) are extremely helpful to ensure that there is a coordinated response that helps these services (from the institution and those of the ferries) are optimally used. Given that both are heavily subsidized services, optimal functioning and utilisation of these services are highly desirable and will serve to ensure the services remain sustainable.

#### **HEALTHCARE STAFF REGULARLY USE RTL FOR ROTATION DUTIES, ATTENDING COURSES AND WORKSHOPS, CONDUCTING PUBLIC HEALTH PROGRAMS, AND WEEKEND FAMILY VISITS:**

Staff at hospitals and health centres across the region use the ferry service for duty-related and for private purposes. Laboratory technicians are rotated within the Atolls, and they use the ferry

services to move when required. Official trips and formal events are rare but if staff are required to attend these, they are likely to use the RTL. Ferries are also used to send replacement or additional doctors and lab technicians to other islands as requested, though this can be limited due to nonavailability of consulting rooms.

Staff from the Public Health Unit at hospitals have been able to conduct many more trips to islands this year, despite minimal budget for public health campaigns. Utilising RTL, Shaviyani Atoll Hospital has conducted 4 trips this year for public health and prevention programs because of low-cost transport.

Staff working at hospital or health centres who come from other islands visit family and friends for a (very) short weekend; they travel on Thursday evening and return on Saturday morning utilising the RTL service. As discussed more extensively in the following chapter, staff (especially nurses) use the weekend ferry services to attend courses, training and workshops.

#### **LIMITATIONS IN RTL EXPERIENCED BY HOSPITALS AND HEALTH CENTRES:**

The lack of ability to do one-day outward trips from hub islands limited the extent to which hospitals could conduct outreach programs. Outreach and monitoring visits are intended to oversee the work carried out at health centres and to check on patients who are bed-ridden and/or with a disability. Since doctors cannot be released for overnight stays (staffing is tight at Atoll and Regional Hospitals) and accommodation for the whole team would also be expensive, hospitals tend to continue with private speedboat hires for outreach programs. Another reason is because hospitals are uncertain of who would be assigned to constitute the team until the day of departure. As such it was difficult to purchase RTL tickets without a particular person assigned to the task.

## **8.4. CONCLUSIONS**

Excluding residents of KFC, 94% of respondents agreed with the statement that RTL has helped them to access better healthcare services. In addition, 68% of respondents stated that their main purpose of travel was to seek healthcare including general consultations, specialist consultations, medical treatments and diagnostic services.

The introduction of RTL has significantly brought down costs of seeking healthcare. Households used to spend an average of approximately MVR 3,000 per month on travel costs, the primary purpose of which was noted to be medical-related especially in the Atolls. However, with RTL the maximum cost for an inter-atoll trip is capped at MVR 125 per passenger and that for inter-atoll trip is MVR 150 per passenger.

People are now more likely to be able to access healthcare regularly

and effectively and can seek the services they need, as and when it is needed. Chronic care patients as well as people experiencing common ailments can seek regular and timely healthcare. This is expected to lead to better health outcomes over time. Hospital consultations increased significantly in all three hospitals in the region, with the introduction of RTL. This resulted in greater demand exceeding the capacity of the available health services and prompting the government to expand health care facilities and services in the region.

Agreements and discussions between RTL and the hospitals have led to amendments of schedules – both on the part of RTL and on the part of the hospital – to ensure that patients are able to have a quick turnaround of consultation, testing, and post-test consultations on the same day and within the time-frame available for most patients. While not always achievable, co-adjustments on the part of ferries and hospitals have meant that most patients are able to seek efficient services within their day of travel.

Other arrangements have also been put in place on a formal basis. A tripartite agreement between KFC Regional Hospital, health centres and MTCC has meant that a mobile laboratory service could be operationalised in Hdh. Atoll. This service has not been established in Ha. or Sh. Atoll as yet. Island health centres continue to refer patients on a need basis to hospitals, and they help ensure referred patients are able to seek the required help in a timely manner on the day of consultations.

Healthcare staff has also benefitted from RTL. They can attend courses and workshops, visit families on weekends and carry out rotation duties and public health programs due to RTL.





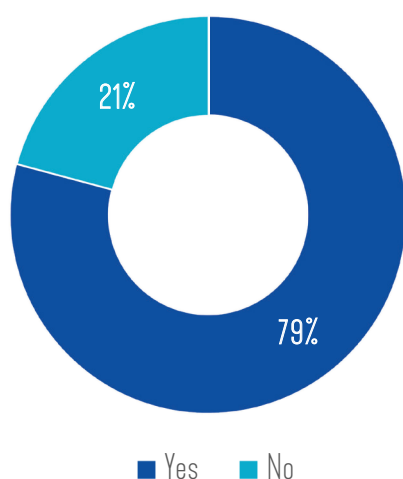
## 9. IMPACT ON ACCESS TO EDUCATIONAL OPPORTUNITIES

This chapter explores the impact of RTL on higher education and educational opportunities in the region, stemming from travel possibilities enabled by the service. The study notes the importance of RTL for the institutional continuation and growth.

### 9.1. ACCESS TO EDUCATION AND EDUCATIONAL OPPORTUNITIES

79% of respondents in the study (n=787) agreed that the RTL has enabled better access to education and educational opportunities for their family.

FIGURE 35: ACCESS TO EDUCATION AND EDUCATIONAL OPPORTUNITIES



### 9.2. HIGHER EDUCATION

Respondents in KIs and FGDs emphasized the impact of RTL on the ability of students, young people, early-career professionals and working people to pursue higher education. Nonetheless, it is noted this does not translate into high absolute numbers (see Figure 7). To summarize the reasons elaborated upon previously, a comparatively smaller subset of the population undertakes higher education in the Atolls compared to Male'. Furthermore, a large proportion of courses are online only, further reducing the need for travel. Even those that are in the popular blended mode of study<sup>16</sup> (including weekend/block mode of study) have a set schedule for in-person sessions and does not comprise every weekend. Only those courses that have a compulsory practical component (e.g. nursing, teaching & welding

for instance) are weekend courses. Hence those who use RTL to access higher education are expected to be a tiny proportion of the population in Zone 1.

These estimates are borne out by data obtained from Census 2022. Online only courses in higher education are the norm in islands outside of Male' (i.e., 69%). The data shows that 17% of students undertake physical only courses which would mostly require them to reside in the island of study, and only 14.2% do blended mode of study that would require use of RTL to access these courses. See Table 6. The course curriculum shows that of the 46 courses offered by MNU in KFC, 7 are of the weekend block mode.

Table 7 shows the application of these percentages to the sample populations in the selected islands for this study and for Zone 1. KFC has been excluded as students undertaking courses will not need to use RTL to attend courses. According to the data, only 68 students are expected to be undertaking weekend/block mode of studying made popular by MNU and MI College in the region. Approximately 11% of this small population was captured in the study sample, represented in the 1% those interviewed (n=787).

TABLE 6: BREAKDOWN OF HIGHER EDUCATION BY MODE OF STUDY FOR ZONE 1 AND SAMPLE POPULATIONS

		Grades of Study				Total in
		Diploma	Bachelor's	Masters	PhD	Higher education
No. of people in higher education	Zone 1	318	834	281	2	1435
	Sample islands	214	497	149	1	861
	Sample islands excl. KFC	118	283	80	0	481
% breakdown of Mode of Study in atolls (excl. Male')	Physical only	23.5%	14.9%	15.8%	15.8%	17.1%
	Online only	65.3%	70.4%	68.7%	39.5%	68.7%
	Physical & Online	11.2%	14.7%	15.5%	44.7%	14.2%

Source: Census, 2022. Maldives Bureau of Statistics<sup>17</sup>, adapted from Excel sheets ED18 & ED8

<sup>16</sup> Weekend/block mode of study refers to courses that require students to undertake in-class sessions regularly either during the weekends and/or in a set schedule to complete practical components of study that cannot be satisfactorily implemented via online classes only. These are courses that have physical and online components.

<sup>17</sup> Maldives Bureau of Statistics. (2023c). *Census Results Summary Tables - Education 2022*.

**TABLE 7: APPLICATION OF MODE OF STUDY PERCENTAGES TO ZONE 1 AND SAMPLE POPULATIONS**

	Total in	% from mode of studying applied to sample		
		Higher education	Physical only	Online only
Zone 1	1435	245	986	204
Sample islands	861	147	592	122
Sample islands excl. KFC	481	82	330	68

Source: Census, 2022. Maldives Bureau of Statistics<sup>18</sup>, adapted from Excel sheets ED18 & ED8

It is essential to contextualize access to higher education given these very particular constraints in this region. RTL enables a group interested in obtaining qualifications in important fields of nursing, teaching and similar courses. This means that people from within this region can access higher education qualifications that they would normally not be able to obtain via online only means. They would need to migrate to seek this qualification. Even if a small group, it represents a significant element of life opportunity and contribution to economic growth and regional development.

### **INCREASE IN DEMAND FOR WEEKEND/BLOCK MODE STUDIES AT MNU AND OTHER COLLEGES:**

According to KIIs conducted with representatives from MNU and MI College, RTL has enabled youth and early-career professionals to extend their education by facilitating access to educational opportunities via the popular weekend/ block mode of study offered by universities and colleges in the region. Students and working people (e.g., teachers and nurses) from islands in the vicinity go to MNU and MI College in KFC for the weekend to complete in-class components of their blended study programs<sup>19</sup> to further their education and skills.

Since the introduction of RTL, there has been a decline in demand for the Outreach Centre conducted in Ha. Dhidhdhoo by MNU. This was independently verified in KIIs from Ha. Dhidhdhoo as well as from MNU. Most students opt instead to travel to KFC campus itself for classes with the increased convenience and affordability made possible by RTL.

### **POSSIBILITY OF STUDYING IN COURSES THAT REQUIRE PRACTICAL EXPERIENCE AND LICENSING:**

RTL has opened up the possibility for students from other islands to undertake courses that have a practical experience component as part of their licensing requirements (such as teaching and nursing). One key informant noted that ‘without the travel possibilities offered by RTL, it would be impossible for students in nursing and teaching to take up these courses.’ Because the classes are held in KFC, nursing students are able to undertake their practical components at the KFC Regional Hospital. Fortunately, there is sufficient capacity – and a diverse patient profile – at the Regional Hospital to provide meaningful practical experience for nursing students as needed.

Skilled labour in nursing and teaching are essential for further developing healthcare and educational services in the region. Moreover, these subjects of study and fields of work are highly gendered with regards to student population and labour participation rates, with greater numbers of women taking up education and employment in nursing and teaching. They offer strong career development opportunities, and as such, the possibility to pursue higher education in these fields is a significant opportunity for increasing women’s labour force participation rates and improving women’s financial empowerment at an individual and group level. The availability of RTL – and its noted safety and security – are essential for women’s use of these services for educational purposes. It was reported that women students have no reservations in travelling via ferry to class as needed.

In addition, the combination of ferry services and weekend classes have allowed working people to take up higher education courses for further professional development and qualification. In addition to currently working nurses and teachers, other groups of working and employed people such as engineers, civil service employees, self-employed and entrepreneurial people have also taken up higher education courses available at weekends. Those graduating from business administration for example find work relatively easily and so this is also another popular course.

In some cases, such as in Shaviyani Atoll, the Atoll Council has negotiated an agreement with educational institutions for the provision of Level 3 courses and Masters’ programs on Sh. Funadho, and the costs of transport of staff and students for some of these courses and programs are borne by the island council, since RTL is seen as a viable and affordable travel option.

<sup>18</sup> Maldives Bureau of Statistics. (2023c). *Census Results Summary Tables – Education 2022*.

<sup>19</sup> Blended study programs are full-time courses that have regular online segments interspersed with set schedules for in-class components. The in-class components are offered variably depending on the course: they can be on weekends, evenings or during the weekday.

## **ALIGNMENT BETWEEN COURSE AND FERRY SCHEDULES FACILITATE ACCESS TO HIGHER EDUCATION:**

To facilitate access amidst high levels of interest in pursuing studies through this mode of study, MNU and MI College both noted that their class and exam schedules have been adjusted in order to align with the RTL Ferry schedules.

This alignment allows students to attend class conveniently and ensures that students can take advantage of the educational opportunities available at these educational institutes. The alignment is also a constructive adjustment for the institutions as it allows them to attract broader range of students to attend their courses.

Increase in number of students from different islands attending university/college courses contribute to institutional growth and sustainability:

Key informants reported that students from Shaviyani and Haa Alif atolls have notably increased for weekly classes because of RTL ferry services, with the current student distribution showing highest number of students to be from Shaviyani Atoll, then Haa Dhaal and finally Haa Alif. It was shared that only 20% of current students come from Kulhudhuffushi City itself (as many of the young people from there have already graduated from the campus). In these circumstances of dwindling numbers of local students, attracting students from other islands is important for the universities/colleges and the availability of transport services that enable participation is institutionally important.

MNU Dhanaalu at KFC – a student accommodation facility – previously provided a limited number of students from nearby atolls and islands the opportunity to reside in KFC and attend courses at MNU KFC campus. However, RTL ferry services has expanded the opportunity exponentially. Students from nearby islands now can attend classes; some do so even daily and others take the popular block mode of study, as discussed earlier.

To give an indication of the expanded possibilities for higher education enabled by RTL ferry services, it was reported that there was a 75% increase of students from Shaviyani atoll with the introduction of RTL. Earlier it was primarily students from Sh. Feydhoo who attended classes at MI College, for instance. Costs for private speedboat hire from Shaviyani Atoll to KFC could be as much as MVR 5,000-6,000 per trip, so even if a group of students chartered a trip the cost per head was still too expensive. With the establishment of the RTL, it is now practical and affordable for students from more islands in Shaviyani Atoll to travel to KFC on scheduled weekends for higher education.

One key informant shared their perspective that the number of students at higher education institutions were maintained in recent

times only because of the combined possibilities of block mode teaching options and the availability of transport facilities such as the RTL. He noted that the demand for different courses and fields of study vary over time – for instance, teacher and early childhood education qualifications used to be more popular but is in low demand now. The introduction of new courses at these educational institutions was an important enabler of institutional growth and sustainability. Equally, continued institutional growth also allowed for facility expansion, as in the case of MI College which is considering a third campus location within the region. The possibility to attract students from further afield and with different interests allows the institution to remain relevant and popular and to function optimally.

## **LOWER COSTS OF TRAVEL LEAD TO AFFORDABLE, HIGHER-QUALITY AND A MORE SUSTAINABLE EDUCATIONAL EXPERIENCE FOR STUDENTS IN HIGHER EDUCATION:**

Students in weekend/block mode of study spend around MVR 70-100 per weekend of required travel for class in comparison to the MVR 1,500 per travel weekend that was required prior to the availability of the RTL ferry service. This has made education more affordable for a wider range of students across the region and have ensured that more students and working people pursue higher education.

Equally importantly, the decrease in costs have also enabled universities/colleges to increase the number of face-to-face interactions for students from other islands without courses becoming prohibitively expensive or burdensome for students. Both at MNU KFC campus and at MI College, more in-class sessions feature in blended study programs than earlier. Earlier, there were about 3-4 in-class sessions per semester, and this was seen as difficult and costly for most students. Such sessions have now been increased to as much as 8 per semester or to every weekend in some cases. This change is now welcomed by students who appreciate the additional opportunity for face-to-face interactions and practical experience. Greater face-to-face components and practical experience enhance the quality of education offered and improve educational outcomes and student performance.

Furthermore, it was reported that dropouts have decreased because students who fail a course component readily switch courses or re-sit modules rather than leave the institution. Previously, students who failed a course (after having invested highly in terms of money, time and effort for the courses) were disheartened and tended to drop higher education or join an online-only course at another institution. Course completion rates were noted to have improved. Retention in higher education is not only meaningful for the sustainability of the educational institutions but also lead to higher educational outcomes for students in a wider range of useful and productive fields.

## **COMFORTABLE AND RELIABLE TRAVEL FACILITIES INCREASE THE QUALITY OF EDUCATIONAL EXPERIENCE FOR STUDENTS AT UNIVERSITIES/COLLEGES:**

Another notable feature is the impact of the comfortable facilities of the RTL ferry services on the educational experience for students. Key informants noted that students are able to start their studies on arrival, as the comfort and stability offered by the RTL ferries mean students feel fresh and not seasick, and therefore, do not need recovery or rest time in order to attend class and start their studies within half an hour of their arrival at KFC, if not immediately. Indeed, one of the key informants reported that students have also noted this aspect and often say ‘it does not feel like a trip on the sea anymore’.

Moreover, the ferries are generally regular and punctual, meaning classes start on-time with minimal adjustments and students are in a frame of mind and physical state where they can come directly to class and benefit from the experience, in comparison to before. Students book their tickets in advance in accordance with semester schedules. Cancellations and delays (even due to bad weather conditions) are minimal with RTL ferry services, unlike when students used to use the *lakudi* ferry or hired private speedboats for group travel to classes at university/college. Consequently, classes also do not have to rescheduled as much as before. The lack of travel (and expense) related strain and stress on students was seen as also contributing to regular attendance and to better student performance.

## **OPPORTUNITIES AND LIMITATIONS IN OUTWARD FIELD TRIPS FROM UNIVERSITIES/COLLEGES TO OTHER ISLANDS:**

RTL ferry services have also enabled the MNU KFC campus to save costs and time related to course marketing trips to surrounding islands. Previously these were done through private speedboat hire. With the ferry service, the campus can organise specific trips to a set of islands depending on the route.

However, it was noted that course-related field trips using the available ferry services have not yet been organised; it was noted that this has been partly because the type of courses currently offered have not required such a component. With hospitality related courses, for instance, resorts have internship and work experience opportunities for which transport is organised for the students by the respective resorts as needed. KFC itself offers sufficient internship and practical experience components in the city itself that students do not need to go elsewhere. It was also noted that field trips may be easier to organise were RTL to offer the possibility for chartered or semi-chartered travel options at subsidized rates. This would enable the university/college to conceptualize and more easily organise themed field trips and study tours for course students to a specific place or set of places.

A further as-yet untapped possibility for enriching university/college education is sourcing resource, guest, part-time or even full-time university/college lecturers from other islands to teach courses or give seminars at educational institutions. This was once considered at both MNU KFC campus and at MI College but was seen as too expensive at the time. However, key informants from both institutions noted that this is something that deserves further consideration, given the available RTL ferry services.

## **9.3. GENERAL EDUCATION**

The impacts of RTL on access to general education are less immediately notable compared to those noted for higher education above. However, there is scope for much stronger impact over time on the quality and nature of general education in the region.

### **MORE OPPORTUNITIES FOR TEACHER TRAINING AND PROFESSIONAL DEVELOPMENT AT LOWER COSTS:**

It was noted that participation in regional-level workshops and training programs are less costly for schools and teachers than earlier. For instance, it was likely to cost MVR 1,500-1,800 per trip to Ha Dhidhdoo for schools in Ha. Atoll with a private speedboat hire which could accommodate around 10 passengers. This meant much coordination and organisational effort at high costs. However, it is easier to currently participate in or organise teacher related training and workshops because of RTL.

Similarly, as mentioned earlier, many teachers are also motivated to pursue further educational qualifications even at own costs because travel is more affordable.

### **GREATER SAFETY AND WELLBEING, STRONGER FAMILY RELATIONS AND SUSTAINED CONNECTIONS FOR UNACCOMPANIED A' LEVEL STUDENTS WHO MIGRATE TO OTHER ISLANDS IN THE REGION:**

Many students who complete Grade 10 at island schools then migrate to another island with a school teaching up to Grade 12, to sit their A' Levels, either with a boarding facility or with extended family or friends living in that island. Previously, it would be difficult for the students and their families to see one another often because of travel expenses. There were reports of children missing home and family, having difficulty settling into their new settings and poorer-than-expected school performance. In some cases, children may also be mistreated whilst away from home.

Now however, A' Level students who move away return back home over the weekend, and parents or other family members can visit the students when desired. This is likely to offer greater safety for and protect the wellbeing of A' Level students living unaccompanied away from their immediate families, maintain strong family relations

and sustain their connections over the period of their studies. Key informants reported that they expect to see a greater percentage of children performing better in schools and improving educational outcomes as a result.

#### **POTENTIAL FOR SCHOOL FIELD TRIPS, EXCHANGE PROGRAMS AND STUDY EXPERIENCES RECOGNISED BUT CURRENTLY UNDER-UTILISED:**

Key informants noted that schools were interested in the potential of travel possibilities via RTL ferry services for school field trips, exchange programs and various study experiences (e.g. visiting Utheemu etc.). Indeed, some schools had taken advantage of this possibility and organised travel and experience tours as well as study camps for students and teachers on available routes.

However, it was also noted that there were a number of challenges to such organisation. On busy routes it was not always possible and sometimes very difficult to obtain tickets or seats in the required number (e.g. 30 or more) on the ferry. In a few cases, it was reported that RTL had offered to schedule another ferry on the same route for the public when schools purchased a lot of seats for upcoming events. However, this was not always feasible and is not routinely an offer. Additionally, for some routes it was not possible to arrange one-day trips to the sites the schools wanted the students and teachers to visit. In these cases, it was not always possible to use RTL.

Whether schools could take advantage of the possibilities for field trips and other initiatives through RTL depended on the island location, routes and schedules. This limited the nature and extent of school-related inter-island activities to multi-day events or ones where accommodation was available. Nonetheless, even within these constraints, schools, students and teachers are keen to travel within the region for educational and extra-curricular activities. Key informants reported a high level of interest in this potential and planned to continue working on it together with RTL.

#### **SCHOOLS AND TEACHERS ARE ABLE TO MORE EASILY SOURCE AND PICK UP MATERIALS, EQUIPMENT AND OTHER RESOURCES FOR USE IN SCHOOL:**

It was notably easier to source and purchase things for the school as needed via RTL ferry services, according to a number of key informants. They stated that school administrators and teachers could search for and acquire helpful materials, equipment and other resources (including textbooks) in larger islands and bring these into the school. However, this was limited to someone or more than one person traveling to and returning with these items as needed (and in some cases, there would be restrictions on the number and nature of items allowed.) Some key informants expressed interest in the possibility

of facilitating the delivery of urgent resource materials via the RTL ferry service, as it was not possible to have these items picked up and transported under current arrangements and conditions.

#### **CHALLENGES OF NOT HAVING WELL-ALIGNED ROUTES AND SCHEDULES FOR SCHOOL-RELATED RESPONSIBILITIES AND ADMINISTRATIVE OPERATIONS:**

Island schools have a number of expatriate teachers whose travel to and from the airport is mandated as the responsibility of schools within set guidelines. It was noted that there were long layovers and waiting times at the airport or at connecting islands, sometimes resulting in the need for additional accommodation expenses.

Teachers pursuing further education in weekend/block mode would find it necessary to cancel Thursday sessions to attend classes at university/college. This has the potential to disrupt education for the students in the short-term unless additional efforts are made to cover the syllabus where needed. However, as noted in the next item, in the longer term having better educated teachers are likely to improve the quality of teaching.

#### **ANTICIPATED LONGER-TERM IMPACTS ON QUALITY OF EDUCATION SERVICES IN THE REGION:**

There is interest and ambition amongst educators and teachers to continue to develop professionally and to acquire appropriate higher education qualifications indicate the potential for long-term positive impacts on the quality of education if these teachers can be retained in employment in the region. It was noted that early childhood education and teaching courses were some of the most popular and were close to saturation. Over time, as courses are completed and students acquire graduate and post-graduate qualifications, the general calibre of the teaching cadre in the region can be expected to improve.

Moreover, since students congregate to campus and mix in larger numbers with greater regularity over the course of their studies, this is likely to improve community linkages across islands amongst professional colleagues. Over time as they continue to perform their duties in their respective schools, it is likely to become easier and more attractive to establish inter-school collaborations and activities in the future.

As can be seen in this chapter, the establishment of the RTL ferry service has therefore become a key means for students, young people and working professionals in the region to gain higher education, skills and qualifications and to enrich their educational experience. As will be noted later on in the section on employment, this opportunity helps the population move more easily into gainful and productive employment and is likely to contribute to stronger regional development and growth.

## 9.4. CONCLUSIONS

79% of respondents agreed that RTL has enabled better access to education and educational opportunities in the region. Whilst students can now complete up to Grade 10 in most islands, it is in the realm of higher education and other educational activities that RTL impacts are evident.

Only a smaller subset of the population pursues higher education, and this is even more pronounced in settings outside of Male'. Data show that the majority of students in higher education outside of Male' are undertaking online only courses. This reduces the need for travel in order to access higher education.

However, whilst online only courses are valuable as a qualification, it does not allow for those courses which require a practical component. Because of RTL, MNU and other colleges are now able to offer a wide range of courses in blended mode for qualifications such as teaching, nursing and other high-demand employment options. This has proved popular and intriguing for practitioners in the region as a means of furthering their careers and professions. As such, RTL has widened the educational opportunities available to the region, even if the absolute numbers remain small.

Universities and colleges in the region have worked together with RTL to align their schedules, thereby allowing students to optimise their time in in-person mode. More face-to-face time has been enabled by use of RTL because of its lower costs, and the time spent in-person in class is more productive because of the comfort of RTL travel, according to students.

RTL has meant that the higher educational institutes are able to attract a wider group of students, some of whom move from other islands and others who travel as needed for studies. Many of these students may not have considered courses at MNU (which does not have online only options), although the quality of education is comparatively high.

Moreover, RTL offers the possibilities for educational trips and activities to both higher education and general education institutions. These are reportedly difficult to organise, but it is being done increasingly within the region.

Teachers in general education are able to undertake more training and professional development, improving their quality of teaching and contributing to educational outcomes in the long-term.



## 10. IMPACT ON GOVERNANCE, ADMINISTRATION AND PUBLIC SERVICES IN THE REGION

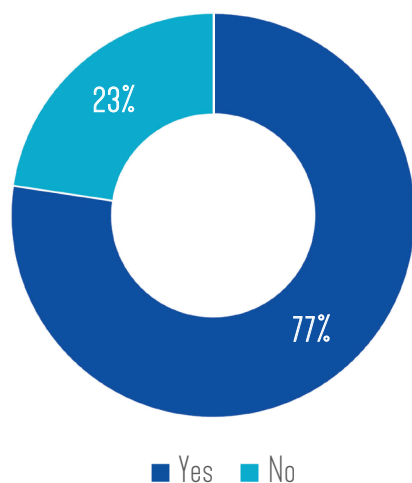
This section describes how the establishment of the RTL ferry services have helped with improving aspects of governance, administration and public services in the region.

### 10.1. ACCESS TO GOVERNMENT ADMINISTRATIVE SERVICES

77% of respondents in this study (n=787) agreed with the statement that RTL has enabled better access to government administrative services. With RTL, they are now able to visit the Atoll Council office to pick up passports, IDs and other documentation or attend to any other business. They are also able to access banking and other public services.

The ease of accessing government administrative services is an important aspect of freeing up people's time and effort, hence enabling people to focus on moving forward constructively and productively in their lives.

FIGURE 36: RTL IMPROVED ACCESS TO GOVERNMENT ADMINISTRATIVE SERVICES



### 10.2. IMPROVEMENTS IN GOVERNANCE AND ADMINISTRATION

#### REGULAR AND AFFORDABLE TRAVEL OPPORTUNITIES HAVE MADE IT EASIER FOR ATOLL COUNCILS AND OTHER INSTITUTIONAL BODIES TO PROVIDE OVERSIGHT, COORDINATION AND SUPPORT TO ISLAND COUNCILS AND OTHER SERVICES IN THE REGION:

Across all key informant interviews, it was reported that the cost of conducting Atoll Council meetings have reduced significantly in all atolls in Zone 1 where RTL ferry services have been established. As such, it is now possible to hold regular meetings with less effort; council members reported that the ease and comfort of traveling on RTL ferries meant that they were able to start meetings on time, were able to better engage in the meeting as they did not need time to recover and could save time without having to change clothes into more suitable office attire. This meant that the quality of council meetings are likely to have improved through regularity, punctuality and better participation and contribution from council members. At the same time, as mentioned before the cost-savings achieved by traveling to council meetings via RTL ferry and not private speedboat could be invested into other community events and activities.

Moreover, councils are able to have more training programs for members, staff and other services as required. This has meant more capacity building and can lead to an improvement in the quality of service from those who undertake these programs. Council members and other administrative experts who travel to the region can reach different islands more easily and provide hands-on support and advisory services as needed. This also extends to monitoring visits to island councils from the Atoll Council to ensure regulatory and procedural compliance and aid administrative set-ups, thereby strengthening good governance in the region.

Similarly, atoll councils and other oversight bodies, such as the BCC who works with SDFC in assisting small businesses and monitoring loan clients for example, are able to ensure regular checks on development projects, conduct inspections and support people better by intervening and improving where needed. They can also identify areas for further training.

#### RTL ALLOWS FOR THE BROADENING OF THE RECRUITMENT POOL, ENABLE RESOURCE-SHARING AND HELP ADDRESS STAFFING ISSUES:

As reported elsewhere, workers including employees of the state and those elected to office utilise RTL ferry services to commute to work. For instance, one staff member travels daily to Dhidhdhoo for work



and another travel on weekends to an island in the adjoining atoll to visit family. The ability to stay in touch with family means that more people from a wider range of groups may be willing to migrate for work or to consider jobs outside of the resident island if they can commute daily. Staying in touch with family improves quality of life and can be conducive to provision of better services. Furthermore, a broader pool of potential recruits can also lead to increased competitiveness and quality of workforce.

Additionally, it was also reported that councils could request and get support from IT service personnel usually resident in capital or hub islands. This meant that island councils could acquire services from those elsewhere in the region for specialist support and maintenance as required. Finally, one of the key informants noted that short-term staffing issues could be addressed by bringing in staff from nearby islands when needed. This was done in the health centres as seen earlier but this arrangement was also used to address emergency staffing issues in the airport, for example. Earlier to fill a particular category of staff in urgent situations emergencies could cause the airport company as much as MVR 6000, but this is made cheaper through RTL ferry services.

However, layover times in ferry scheduling are more complicated for those working in governance, administration and public service. They cannot return to the office or to the island (if resident in the hub or capital island) on the same day because return ferries were always the next day. This meant that offices and services in the hub or capital islands tended to rely on speedboat hires and other contracted transport methods as well as RTL ferry services. This is not necessarily problematic as it helps to retain private speedboats in business and allows for choice in matters of organisation and logistics.

### **EASIER ACCESS TO AND DISTRIBUTION OF IMPORTANT OFFICIAL DOCUMENTS AND PROCEDURES NEEDED BY PEOPLE IN THEIR DAILY LIVES:**

RTL Ferry services have made it easier for people to make applications for important official documents and to have them picked up or sent over, as needed, once the process is complete. Although there is no current formal arrangement to utilise the RTL ferry system for a postal or 'diplomatic bag' like arrangement to receive and distribute important documents, there is precedent for entrusting such documents to a trusted person for delivery. The RTL ferry services make this process more regular and frequent, and cut down on waiting times for the occasional hired speedboat, as was the case earlier.

People are also more likely to make the trip themselves, making the process simpler, more straightforward, and less costly. The types of documents mentioned by key informants included ID cards, marriage and divorce certificates, driving licenses, and passports. Since driving

tests and licenses are issued by the Atoll Council, it is also easier for people to sit their exams as needed. Driving licenses can be very useful as a means of livelihood, creating working opportunities or making it easier to get to work, and cuts down on travel time within the island for people. Making the process to obtain these documents easier makes life easier for people in the region and helps to contribute to their economic potential and quality of life.

### **THE INCREASED RECOGNITION OF POTENTIAL FOR REGIONAL DEVELOPMENT HAS CONTRIBUTED TO AMBITIOUS LAND USE PLANS AND MOTIVATION FOR FURTHER BUSINESS IN THE REGION:**

There was much reference to Land Use Plans – their development, delays in approval, and their implementation – during the key informant interviews. They referred to how the plans integrated elements in anticipation for increased business and economic activities, such as guesthouses and restaurants in anticipation of more visitors to the islands. Indeed most islands noted an increase in visitors, although this effect varied significantly.

Some smaller islands expected more visitors because they offered particular historical significance, particularly attractive recreational features (such as special beaches or surf-spots) or was culturally connected (e.g. longstanding relations with a nearby island, etc.). However, this was not the case for all islands. It has been noted elsewhere that it is important to explore how to attract people to non-hub islands through the development and operationalization of targeted policies and planning.

These islands may be required to come up with different strategies to attract people and draw their attention. This could include hosting special training facilities, organising themed festivals, holding sporting or music events, etc. Other strategies could include ensuring better lakudi ferries or facilitating other movement of cargo (for islands with strong production potential in agriculture or related items). In some cases, it may be worth pursuing additional ferry services for afternoon returns to hub or capital islands – through discussion with RTL or setting up other services.

It was the case that the establishment of RTL ferry services did not always disrupt other transport services. In some medium-population islands, other transport services continued to function to meet the specific needs of the population. For instance, in Sh. Feevah, people continued to engage private boats and dinghies to other islands, including by dinghy at MVR 600.00 to Milandhoo (to which people had travelled often even before the establishment of the RTL services). Others still engaged private hires to Funadhoo or to Kulhudhuffushi as needed since the cost was around MVR 1,200–2,000 but the journey was much shorter. As such, for some islands RTL represented a – much needed and more affordable – transportation option in addition to the others that existed before RTL ferry services.

### **GREATER ACCESSIBILITY TO THE CAPITAL ISLAND HAS ALLOWED THE ATOLL COUNCIL TO SET UP CERTIFIED COURSES AND PROGRAMS IN A RANGE OF SUBJECTS THAT WOULD HELP BUILD CAPACITIES IN KEY AREAS RELATED TO GOVERNANCE, ADMINISTRATION AND EMPOWERMENT:**

Sh. Funadhoo has been able to establish courses in agreement with colleges on a range of topics that would be useful for the region, including pharmaceutical studies, business admin, sports and religious education, youth empowerment programs, swimming instructor courses, and importantly public finance. These are subsidised courses. Capacity building initiatives such as these can go a long way in developing skills in the region and aiding regional development in the long term. According to key informants, the programs have been very successful and have continued to attract participants in greater numbers over the past year.

### **10.3. PUBLIC SERVICE DELIVERY – POLICING, BANKING, BUSINESS SERVICES, AIRPORTS, INFRASTRUCTURE MAINTENANCE**

#### **RTL FERRY SERVICES HAVE MADE POLICING EASIER IN THE REGION AND CONTRIBUTE TO COST SAVINGS; HOWEVER GREATER MOBILITY ALSO CREATES ADDITIONAL POLICING CHALLENGES:**

Key informants from the policing and law enforcement service noted that the availability of RTL ferry services has made some procedures easier and cheaper to implement, as it was costly to run their own launches in serving all the islands under their jurisdiction. The public do not usually have to travel to the police station to report issues. Once an issue is reported to the police from an island, it is the police who travels to attend to it on-site. Sometimes, launch breakdowns also delayed services and a timely response.

RTL ferry services offer a cost- and time-effective alternative option for traveling and helps police officers to respond more efficiently as needed. Witnesses or defendants can be brought over by ferry for case investigations. For police officers, as for other institutions based in hub and capital islands, not having a same day return option posed limitations, as use of the ferry service meant staff members may need to be posted out overnight.

At the same time, investigations can be made easier, as camera surveillance on the ferries and ticket scanning help with checks on travellers, if a crime is committed. This is however complicated when current checks are not carried out on board on ID verification, for instance. Implementation of such checks place additional burdens on ferry crew and can strain customer relationship. There is also insufficient time and place for such checks, especially since ferry terminals are not yet always operational.

Nonetheless, greater public mobility in the region also has its own challenges. Whilst the ferry system has been hugely beneficial for the public and for the region, it has enabled greater mobility for criminals as well. Drug distribution is easier in the region, with drug prices now stabilizing across the region and indicating wider reach. More people may be co-opted into drug distribution networking, including young people and those who work within the ferry system. Suspects and those who have committed crimes find it easier to evade the police and to leave the island or the region altogether. In some cases, adolescents (aged below 18+) have travelled without parents' permission or to hide from home. This makes it imperative for policing to be upskilled with regards to these new challenges and opportunities.

#### **INCREASED ACCESS TO BANKING AND BUSINESS SERVICES FOR PEOPLE IN THE REGION:**

While much of banking has been moved online and can be done via the banking apps, there are a few instances where people do need to travel physically to a bank – this includes for setting up initial account and for bigger loan applications. With the RTL ferry service, people find it easier to access ATMs and bank branches for money and financial services. They are able to travel to KFC also to finalize bank agreements, which must be signed at the court office. This has made seeking setting up accounts and seeking loans, including for business growth, much more accessible in the region.

#### **IMPROVED SERVICE DELIVERY WITH REGARDS TO BANKING AND FINANCING:**

BML KFC has found it easier and more cost-effective to ensure a better service across the region due to the availability of RTL ferry services. For instance, it is now possible to refill ATMs and carry out repairs as needed, at less cost, time, and logistical preparation. Savings in this regard are considerable; previously a repair or refill trip to the Makunudhoo ATM would cost upwards of MVR 9,000 to the bank.

As before the RTL ferry service commencement, the bank *dhoani* still carries out its visits though the frequency is now once every two months. Visits are made to a pre-determined list of islands, on request. The main reason why they do not use the RTL ferry service for this purpose is because it is not possible to return the same day.

Key informants from the bank noted that the increased potential for business in the region, as a result of RTL ferry services. However, the bank branch has not seen more applications for business following the establishment of the RTL ferry service. They noted that people tend to work with what they have in establishing a business and not always ready to involve financing services for this purpose. It takes time for people to build the confidence to involve the bank in growing their business. It was also noted that further SME development is needed

to support small businesses and help them transition into viable regional entities. As at present, entrepreneurship is not fully developed in the region. According to them, it may take a few more years before the full regional potential unleashed by the commencement of ferry services is realised.

### **SME BUSINESS DEVELOPMENT SERVICES DELIVERED BY BCC ARE BOOSTED BY USE OF RTL FERRY SERVICES:**

Business Centre Corporation (BCC) based in KFC has found it easier to access islands within this region due to the availability of the RTL ferry service. Marketing and awareness campaigns, training programs and inspections for SDFC are less costly or time-intensive. While there is not much visitation to the BCC at the moment because it is not a loan issuing or disbursement period, people have visited the centre in seek of services. Few people however come directly or solely in search of services from the centre. Rather, they combine this with other tasks once they come to know of BCC and are interested in its services.

It was reported that, in order to boost business development services in the region, it is necessary to travel to the different islands and help small businesses gain understanding of business development and to demonstrate how business services support can help them with establishing and growing their business. At present, there is little understanding and knowledge about these aspects and hence demand for business development services is not high. People have also been jaded by typical business trainings conducted in the region, which were not always contextualized or particularly applicable for participants in the region. With the growth in higher education and certificate-based training, there is more interest in business and business development services.

According to the key informants, this also explains why there have not yet been a large increase in the number and type of business development initiatives in the region following the introduction of the RTL ferry services. While people do see the potential and are interested in it, there is not yet enough drive and knowledge to kickstart such initiatives. One year since the establishment of the RTL ferry services is not yet adequate time for a change in mindset and to realise entrepreneurial vision. However, over time, it is likely that business growth will take off in the region.

### **AIRPORT FLIGHT SCHEDULES ARE ALIGNED WITH RTL FERRY SERVICES FOLLOWING TALKS WITH MALDIVIAN, LEADING TO A MORE JOINED UP TRAVEL SERVICE ACROSS THE REGION:**

In order to ensure the smoothest travel service for people using the RTL ferry services and Maldivian flight schedules, it was necessary for the two institutions to align their services and match schedules as much as possible. For instance, RTL ferries from all islands in the atoll would have arrived at Sh. Funadhoo Airport by 8.30am. Thus,

through discussion with the airline check-in time is set to start at 8.20am and flight departures scheduled accordingly. It may be similarly important to talk with other flight operators as and when necessary to ensure that people's travel experience on flight and ferry is well-aligned, saving time and stress for all concerned. This may be especially useful for times when there may be an increase in passengers, such as during holidays, or in the future if international and domestic tourism takes off in the region, as expected. Optimism and expectations are also raised in anticipation of the upcoming airport developments in Hanimaadhoo, and Bilehffahi.

### **BOOSTING INWARD REGIONAL TOURISM REQUIRES OVERALL REGIONAL SERVICE AND INFRASTRUCTURE DEVELOPMENT:**

It was noted that demand for tourism in the region is inhibited by a number of factors including the quality of service at the airports, few number of resorts and low provision of suitable guesthouses. For the resorts that do exist, air-taxis are the preferred mode of travel as they go directly to the resort.

Additionally, there are not enough people skilled in the tourism and hospitality industry – this would help boost the quality of service across the board from airports to guesthouses and ancillary services. Similarly, poor infrastructure was also identified as a contributory factor in keeping demand low for tourism in the region. Water supply is poor in the region and waste management is as yet not fully developed. Some key informants noted that these factors meant the region is not ready for intense tourism.

Nonetheless, there is notable difference between the atolls with regards to these factors. It appears that HA and HDh Atoll may have experienced much higher rates of increase in tourism than Sh Atoll. According to the observations put forward by key informants, this may well be because of the differing states of infrastructure development across the region and the differing numbers with regards to guesthouse establishment, and states of other infrastructure.

### **INCREASE IN TOURISM TO THE AREA (BOOSTED BY THE ESTABLISHMENT OF THE RTL FERRY SERVICES) APPEAR TO BE BENEFICIAL FOR NON-RTL TRANSPORT COMPANIES AS WELL:**

It was also noted that there is stronger demand for non-RTL travel services as well arising from increased tourism to the region. In Hoarafushi for instance, it was reported that taxis, private speedboats, and nearby guesthouses have all seen an increase in business in the previous year due to increase in visitor numbers. Those accompanying flight passengers to the airport island tend to stay and use other services in the island. The competition with RTL ferry services for passengers have also meant that speedboat hires have to become more reasonable in price to attract customers. This can also lead to more hires for speedboats, as they are no longer as expensive.

The establishment of night flights can help boost the guesthouse industry as well as business for all travel services.

### **IMPROVED QUALITY OF INFRASTRUCTURE AND INFRASTRUCTURE RELATED SERVICES ENABLED BY AVAILABILITY OF RTL FERRY SERVICES:**

Key informants from Fenaka noted that RTL ferry services have helped them to provide a faster and better quality of service to the region. They can troubleshoot issues more easily on different islands by traveling there in person to attend to problems. They can send small equipment and spare parts when needed (in keeping with RTL restrictions) entrusted to someone known and responsible who is traveling. They can pick up items and equipment for repair as needed from islands. However, most spare parts and equipment are transported via *lakudi* ferries or speedboat hires, depending on the urgency of the situation. Nonetheless, there is significant cost-savings as a result of the RTL ferry services and a speedier and more reliable support service for infrastructure related issues.

Fenaka also uses RTL ferry services for training in the region, either to conduct these programs or to attend them as needed.

## **10.4. CONCLUSIONS**

77% of respondents in this study agreed with the statement that RTL has enabled them better access to government administrative services. Acquiring official documents such as IDs, driving licences and passports have been made easier for the public as they can now travel to the Atoll Councils with relative ease.

Moreover, it has also enabled the government administration to improve the delivery of its services. Atoll councils and other institutional bodies used the RTL to frequently check in with island councils and other services in the region, thereby improving oversight, coordination and support to these services.

RTL allows the government administration to reach out to a broader group of people to staff its offices. Anticipated regional development stemming from the introduction of RTL pushes forward ambitious land use planning and broadens the scope of what is seen as possible and achievable in the region. Courses and workshops have been established for government employees (and for other groups) and are more accessible and affordable, leading to more skilled staff.

Service delivery has also been made easier because programs and other activities can be conducted at less cost, leading to more visits to islands by healthcare staff, police officers, BCC employees, banking personnel and Fenaka staff.



## 11. PROBLEM AREAS AND SUGGESTIONS FOR IMPROVEMENT: RESPONDENT PERSPECTIVES

As noted elsewhere in this report, respondents across surveys, KIs and FGDs showed high levels of satisfaction with RTL. Nonetheless, in response to questions about concerns and difficulties, a number of ongoing issues were brought up. It is important to keep these in perspective because the predominant sentiment expressed by respondents is that RTL has brought significant benefits to their lives and has impacted positively on most aspects.

### 11.1. RESOLVING TICKETING ISSUES

#### REVISING CANCELLATION AND REFUND POLICIES:

The issue most consistently raised across all respondents in KIs and FGDs was that of cancellation and refund policies and practices.

Two categories of cancellation were discussed by respondents in the study. Firstly, cancellations by RTL in the event of bad weather or a technical issue. These were noted to be very rare, and in these cases, RTL organised another alternative arrangement to ensure passenger were safely brought to their preferred destination as soon as possible. However, for those passengers who were unprepared and did not know what to expect, it has been cause for great stress and unexpected additional expenses. The second category of cancellations were those necessitated by circumstances on the part of passengers. Cancellations of either type are an unavoidable feature of travel, and it is important to prepare for these and have a clear policy and practice surrounding this aspect of travel.

*Cancellation by RTL:* As mentioned, these are relatively rare incidents. However, people appear uninformed about what to expect in terms of assistance and action, and they are consequently ill-prepared for when it does happen. It would be helpful to have clearly displayed information at terminals on what to do in the event of a sudden cancellation. Participants in one FGD noted one incident of being – and feeling stranded – mid-way on the return along one route. They did not feel they had adequate information about whether they should book new tickets, and whether they would be refunded and how. On busy routes, it may not be easy to find new tickets at short notice given that most bookings happen well in advance.

It also would be helpful to set up some mechanism of assistance, that can be activated on demand in situations of cancellation, for stranded passengers on each island along the various routes. For instance, as extreme weather events are predicted to be more likely; if one such event were to occur where large numbers of passengers are stranded in one of the hub islands due to bad weather, it would

again be useful to have a clearly communicated plan in hand, detailing what passengers could expect in the way of shelter, food and care for these passengers. Having a clear refund policy on tickets, distribution of accommodation vouchers or reimbursement of additional expenses may be necessary.

*Circumstance-related cancellation or deferment option required by passengers:* One of more common reasons why passengers would cancel or defer their tickets at short notice is because of the cancellation of their specialist doctor's appointments at the Atoll or Regional Hospital. Another related reason is if when diagnostic and consultative procedures are taking longer than expected and people would prefer to stay overnight and return the following day after completing their consultations. At present, however in these circumstances, there is no means by which people can cancel their current ticket or modify their booking to choose another date, etc. There is also no refund related to this situation. Some people noted that they would be willing to have a cancellation fee charged rather than losing the whole ticket cost.

Discussions with MTCC suggest that this issue is currently being resolved and will be included in an imminent version of the app.

*Experiences of slow – seemingly absent – refund process:* Even in situations where people have been assured of being refunded their money, those who sought refunds reported that they have not been refunded many months into the request. Several respondents in key informant interviews and in FGDs noted that they had contacted MTCC but have not yet heard back regarding the status of their refunds. In addition to the situations outlined earlier with regard to cancellations, refunds have also not been processed when there have been payment errors on the booking app. For instance, one FGD participant noted that payment was deducted but ticket was not issued. Despite having contacted the relevant authorities and being assured of a refund, he has not yet received a refund 7 months later.

It appears that there is no clearly communicated process on refunds, how to make a request and how to follow up in case of refund issues. While the standard and quality of RTL service is generally applauded and appreciated across the region, the difficulties in getting refunds for services that people have paid for is problematic, especially where there are technical glitches on the app or if ferries are cancelled by RTL. This leads us to the next two issues raised by respondents in the study – issues related to the booking app in particular and the booking process in general.

## BOOKING APP ISSUES:

Three key issues were identified with regards to the booking app. The primary issue is that seats get blocked off and appear as unavailable afterwards even if there was a payment error and the tickets not yet issued. This is problematic because it means people cannot restart the process and then choose the seats that they initially preferred as these are shown as unavailable.

It is also unclear whether these seats are eventually released and if so, when, and if subsequent customers are able to purchase tickets to these seats. If these seats do not become available to later potential customers, then these seats are not being utilised. It gives the impression there are a higher number of no-shows than is actually the case (because tickets appeared to be booked out on the app but there are often empty seats at time of travel.)

Secondly, there is a technical oversight that means those who purchase a ticket to a non-hub island on another route within the same rate from a hub-island would pay for a cheaper ticket but still be able to get off at the hub destination. One FGD participant in Hirimaradhoo noted that it was possible to purchase a ticket to Kurinbi, pay the cheaper price and still terminate the journey in Kulhudhuffushi, thereby paying less than one would for a direct ticket to Kulhudhuffushi. The research team also experienced this issue first hand on another ferry route.

It is worth delving deeper into this issue because it means that some people may not be paying fairly for their ticket and also that there would be a distortion on numbers regarding demand for certain destinations. This would make planning difficult, but also can pose issues around identifying passengers in case of an emergency incident on the seas.

The final key concern with regards to the booking app was the lack of a 'manage my booking' feature – this would enable people to follow up on their booking. Furthermore, it was noted that this feature could be used to introduce changing ticket bookings, transferring tickets to someone else, or requesting a refund. One participant also expressed concern with regards to the level of security on the app, given that people provide ID card details and other personal information.

Discussions with MTCC suggest that many of these features are currently being included in the upcoming update to the app. Refunds can be automated and people would be allowed to change their bookings at a later date, if needed.

## BOOKING PROCESS AND ITS LIMITATIONS:

There were many references to the booking process, its limitations and related concerns that were not related to the app itself. Primary amongst these was that the only way to book a ticket was via online booking on the app or website. This limits their options and ability to discuss with a knowledgeable trained person on how to best manage or handle ticketing for some lengthier trips. It also assumes many people operate in a cashless manner.

A further issue is that because online booking is the only way, there is no authorized agent who can see the number of cancellations or no-shows on a particular route and make these available for purchase closer to the time of ferry departure from the terminal. This could be even up to 1 hour before departure. Given that tickets are not transferable and only available online, this means that people are not able to travel even if there is an urgent situation, such as the death or critical illness of a family member, or a child needing help who resides in another island etc.

The lack of an in-person ticketing option is also problematic, as it means there is no one who can handle particular requests, especially for people who are unfamiliar with online booking procedures or who may not have a smartphone. This includes older people, many of whom therefore rely on others to book their tickets for them. In other cases, those who wish to make a booking for a large group of people on a particular set of routes may benefit from personalized advice and assistance.

Related to this concern, key informants from many island councils noted that the council office would be willing to be involved. If staff from the council were trained by RTL on how to handle particular bookings online and how to navigate the system and provided authorized permission to handle online transfer tickets, sell cancelled or no-show tickets, booking modifications, or simply sell tickets to those who find the online system difficult or impossible to navigate, this would help to address this concern that was raised by several respondents.

Respondents in some FGDs highlighted a few cases where older people fell victim to ticket scams, as they ask other people to handle the booking for them. Some noted Older people are not always aware they need a smartphone to show online tickets when using the ferry or carry a print, and they do not always have smartphones. Additionally, 26% of respondents in the survey had an educational status of functional literacy and a further 17% had attained primary education; while able to effectively use a smartphone, people may still struggle with online booking processes. For these reasons, some respondents were keen to inquire about having an offline in-person means to book tickets on RTL.

Others felt it may be useful to provide older people with a card – such as a bus card, that can be used for travel when needed. The card can be used to purchase or check tickets if needed. Such cards may also be useful for those who travel frequently for medical treatment – such as for dialysis, thalassemia related blood transfusions or chemotherapy.

## 11.2. IMPROVING THE TRAVEL EXPERIENCE AND POSSIBILITIES

### IMPROVING FAMILY-FRIENDLY TRAVEL POLICIES FOR CHILDREN, PREGNANT AND BREASTFEEDING WOMEN, THE ELDERLY AND PEOPLE WITH DISABILITY:

Suggestions from FGDs and from key informants pointed to some policy changes and adjustments that would help with making the travel experience more family friendly.

*Food and eating on the boat:* While many agreed that it was considerate to avoid food with strong smells or that were messy to eat, it was also noted that having the possibility to eat some snacks on long journeys would be comfortable and in the case of children, even necessary. It may be useful to have some clear policies about kinds of acceptable food and drink for on-board consumption (e.g. sandwiches, cut-up fruit in containers, dried foods, drinks in a container that can be closed). Equally, having bins for disposing rubbish, having regular clean-up and entreating customers to show consideration and clean up after themselves would be helpful. People are appreciative of the service and wish to have a pleasant experience themselves. It would not be difficult to put these considerate practices in place whilst there is strong goodwill towards the service.

*Space and privacy for breastfeeding young infants:* For infants and toddlers who are breastfeeding, it is necessary that they feed at regular times for nutrition and comfort, especially if sick or feeling unwell. At present, there is no private or demarcated space for people to breastfeed their children as needed or on demand<sup>20</sup>. This area need not be a permanent space and it can be flexibly used.

People who use the seats can be informed that they may need to move if the seat is required (for example, an area that can be curtained off as needed around some of the seats). This issue was brought up in a number of FGDs. It was also noted that whilst the security camera helped maintain a sense of safety for the traveling public, women who breastfeed their children (even when trying to do so discreetly) are

aware of being recorded and still feel self-conscious about the camera.

*Adjoining seats for carers (of elderly and people with disabilities):* Some people in FGDs noted that, at present, it is not possible for carers to sit next to those in wheelchairs or on stretcher seats. However, it was also noted that ferry crews allow carers to sit next to the person they are assisting if there is an available seat. This is especially concerning when it is children with a disability but whose parent/carer cannot sit next to them.

It is also not possible to see whether stretcher seats or wheelchair space is already booked. In rare instances when the allocated seats are fully occupied, the ferry crews board those in order of queue. It would help to allay fears and anxiety if people were to know beforehand if a place is available or not.

*Recognising that people may feel seasick and claustrophobic in general and not only at times of bad weather:* While it was agreed by almost all respondents in the study that the staff of RTL were very kind and helpful, a few noted that they did not always recognise people feeling seasick in good weather, expecting people to feel unwell only during bad weather.

Also, some people may experience claustrophobia and may need to get some fresh air (opening windows, etc.). While there were few reported instances in this study, it is worth noting that it may be useful to include such points in their training on how to handle customer relations.

*Boarding and disembarking for people with mobility issues:* This is in general easy and comfortable for the majority of people because the ferry is large, sturdy and less shaky as a result, but for those with mobility issues and requiring help, there is difficulty in boarding and disembarking from the boat. The door is not wide enough to accommodate a helper. Similarly, depending on the tide and the angle of mooring, people with mobility issues can be further assisted with a device (such as a ramp) that reduces the boarding gap.

### SHORTER JOURNEY TIMES TO KFC:

Not surprisingly, travel to Kulhudhuffushi is of the greatest concern for most residents, because of the Regional Hospital and other higher order services available at KFC. Demand for services at KRH is increasing, and consequently, it is working towards becoming what would be categorized as a Tier 3 level hospital<sup>21</sup>. Because the journey takes nearly 3 hours from some islands (see Figure 37), the request

<sup>20</sup> Given the general need to support breastfeeding practices and ensure higher rates of breastfeeding for the health of the young child in line with WHO recommended guidelines, it is important to normalize, protect and support breastfeeding practices in society. Providing for such spaces in public facilities is important.

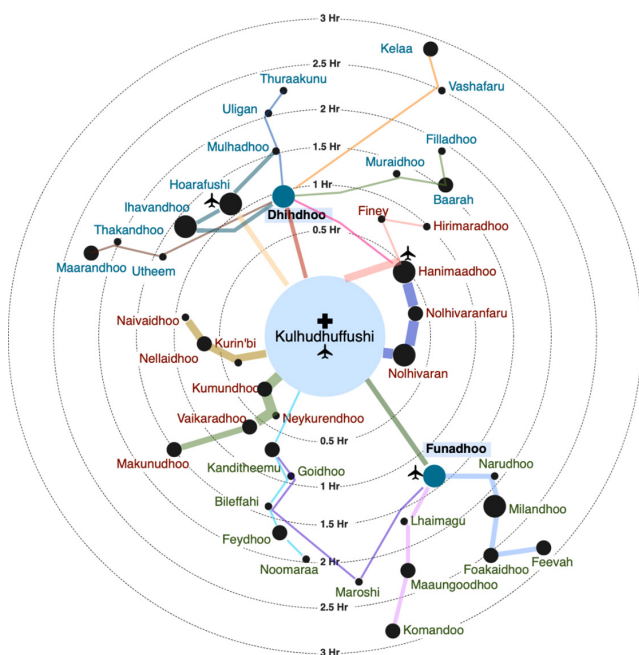
<sup>21</sup> KFC Regional Hospital has a more extensive range of services: in addition to more sophisticated laboratory services, it can run a number of diagnostic screening measures (MRI, CT, Mammogram). The hospital also offers chemotherapy. It also has a more treatment units and facilities – dialysis, ICU, NICU, and OT. KFC Regional currently has 32 consultants, including internal medicine, gynaecologist, oral & maxilla, orthopaedics, ophthalmologists, and dentists. The two Atoll Hospitals in Zone 1 are Tier 2 hospitals with comparatively limited services.



from these island residents of islands was for finding ways to shorten the duration of the travel.

On some of these islands, respondents noted that they would prefer an even earlier ferry as it would leave more time at KFC, especially with a view to completing all diagnostic procedures and having a post-test consultation, as well as for shopping and additional tasks which people wished to combine on their visit. At present they have very little time in KFC, as mentioned elsewhere.

FIGURE 37: JOURNEY TIMES TO KFC



### PAYING GREATER ATTENTION TO SAFETY PROTOCOLS:

While there is broad agreement that the RTL ferries are safe even in relatively bad weather, there were some suggestions with regards to improving safety protocols on the RTL ferry system. One key feature was that people wished to be informed of safety instructions prior to departure, for example when and how to use the life jackets, what would be the protocols in case of an emergency, etc. Also, it was noted that life jackets were not always enforced even during bad-weather conditions. People need to know when they would be expected to do so. Some noted that RTL staff began their journeys with the life jackets on but removed these during the journey. Many of those in the FGD groups reported that they would feel better if the *dhathuru dua* was played before departure.

### PSA ANNOUNCEMENTS AND REAL-TIME TRAVEL INFORMATION:

A further concern was with up-to-date information with regards to vessel tracking, estimated times of arrival, and information regarding

delays and cancellations or any ferry changes. For instance, the information provided in the app about which ferry number goes to which destination is not always accurate. This is especially important on the return journey when there are several ferries at the hub islands.

At present, there is a Viber group which provides this information, but people would need to be part of this group. People coming in from elsewhere or on short-term visits to the region may not always have signed up to the group. Also, not all travellers have wi-fi or a smartphone (e.g. elderly or older patients or those with not sufficient literacy). Respondents noted that a better system for keeping track of real-time information regarding the ferry would be very useful – either real-time tracking that is evident on public screens on the ferry or terminals, or an information/update messaging system integrated into the app.

Additionally, many respondents noted that the ferries could deliver Public Service Announcements during the ferry rather than only show ads about the RTL and MTCC. Information could be shared about various topics, e.g. about the trip schedule, estimated time of arrival, any expected delays or changes to the schedule, luggage allowance and conditions, eligibility for free tickets, accessibility features of the service, how to ask for assistance, etc.

### INFORMATION ON LUGGAGE AND ADDITIONAL ITEMS:

Luggage allowances and conditions was another area that created a lot of concern and difficulties for passengers, according to both key informants and FGD participants. It was apparent that luggage is not checked or weighed prior to departure, leading to disparities in the service across different routes. Approval of and permission to board the luggage appeared to be at the discretion of the crew. This raised questions of discrimination and irregularity.

Furthermore, there appeared to be different understandings about what is allowed or not with regards to luggage allowances. Passengers reported that on some sectors, crew stated it was 4 pieces of luggage per passenger whilst on next route, only 2 pieces of luggage per passenger were allowed. These confusions lead to great stress and inconvenience, at time of departure. Luggage is sometimes rejected; it can be difficult to organise alternative arrangements for luggage at the last minute at the time of departure. The guidelines seem to be arbitrarily enforced according to the perception of passengers. It is important to have a consistent policy and to enforce this in a consistent and standardized manner. Difficulties related to this may also be ameliorated once proper terminal systems are made functional and brought into operation. See more about this in the following section.

While luggage allocation is 20kg per person, this can be sometimes difficult to adhere to when travelling with many children, when on

holiday, or when returning from Male'. In these situations, there may be some excess luggage and there needs to be a way to accommodate these on the RTL ferry system. This may involve making an additional payment online for extra baggage (in the same way that airlines do), negotiating overall luggage capacity of the ferry whilst at the terminal and making adjustments, for this at that time. The same apply for booking in large items such as kiteboards or surfboards. A limited number per ferry may be considered if the request is made in advance for instance, and fees paid at time of booking. At the same time, people were cognizant of the fact that the ferries were a passenger carrying system, and so not all requests need to be accommodated, as the safety and comfort of passengers needed to be considered. Loading and unloading complicated or large consignments of luggage would unnecessarily delay the ferry and cause even longer stopovers enroute to destination.

Finally, there needed to be a proper system for loading and offloading luggage. According to FGD participants, baggage can get lost or be unloaded at the wrong destination. This may also mean that passengers need to tag baggage better, with proper information on journey destinations indicated on the luggage.

### 11.3. TERMINALS, SERVICES AT TERMINALS AND ACCESS ROUTES TO TERMINALS

#### RESPONDENTS NOTED DIFFICULTIES WITH FERRY TERMINALS NOT BEING FULLY OPERATIONAL:

Respondents from some islands noted that their ferry terminals were not yet fully operational. It was noted that people needed shelter from rain and sun, seating to wait, toilet facilities, and food, drinks and last-minute convenience items prior to departure, however these facilities are not yet all available for use.

According to some key informants, the space and facilities that are available for the terminal is not sufficient for the numbers of people in need of space and services. This was especially so at mid-level terminals.

While ferries themselves are kept very clean and functional to a high standard, respondents' suggestions in relation to the terminals suggested that these areas are not held to an equal standard. There were some reports about the terminals not being very clean, etc. There seems little ownership about the ferry terminals and less care dedicated to its functioning at the same high standards people associated with the ferries and the ferry crew members. It may be necessary to have a better understanding and arrangement for ownership and control over the ferry terminals.

Councils are keen to undertake responsibility for terminal management,

including offering ticketing services via the online app but with additional authorizations (either from the terminal or from the island council office). At the same time, councils may be able to benefit from operating or leasing commercial areas for shops and cafés within the terminal. It may also be possible to operate an SME area to showcase and sell local products and goods from the island.

#### RESPONDENTS IDENTIFIED A NUMBER OF FACILITIES AND SERVICES THAT COULD BE INTEGRATED INTO TERMINAL CONCEPT AND DESIGN:

Key facilities and services included: a luggage check-in area in order to weigh and approve luggage for the ferry; possibly, a *lakudi* ferry agent in case people needed to have some luggage pieces transported via this service – they could purchase *lakudi* ferry services and check extra luggage into this system; a ticket checking area with functional QR code reader. At present, these do not always work well on the boat, and at other times, tickets are checked at the entrance to the ferry making the boarding process lengthier; shops and cafés to purchase light snacks and drinks; toileting services and private space for changing babies and breastfeeding; trolley area to help people transport luggage; wheelchair access from terminal to the jetty to help with the process of changing ferries; an information counter and/or helpdesk for ticketing needs and in case of emergencies such as delays and cancellations.

It has been mentioned that there are three levels of ferry terminals; basic, hub and regional, with regional terminals equipped with the most facilities. Nonetheless, it may be useful to have luggage weighing capabilities at basic terminals as this would help ensure passengers do not experience different conclusions on luggage at different points through the journey.

#### VEHICULAR ACCESS TO TERMINALS, PARKING FACILITIES AND MOORING FOR LOCAL VESSELS:

It was also noted that the operation of terminals in the islands created knock-on needs in the surrounding area of the terminals. A key issue identified in the early stages of the project, according to one of the key informants, was that of vehicular access and traffic flow to and around the ferry terminal, including appropriate loading and unloading parking bays for vehicles. Without such facilities, congestion and disorder of vehicles at and around the ferry terminals have become inevitable. It is also necessary to have adequate parking facilities for taxis, motorbikes and other vehicles that need to wait for arrivals to carry out pick-ups and so on. This might also be useful for other passengers who accompany travellers, in some cases.

Busy ferry services on hub islands mean that there is inadequate space for local and arriving vessels to get mooring space. Maintaining

adequate mooring space and landing space for vessels other than RTL ferries will be an important part of ensuring a smooth operational set-up.

Finally, one key informant noted that there is now a need to establish an internal public transport within KFC. As many as 500 additional people come to the city daily for services. Unless a system is set-up for people to travel safely and conveniently across the island in order to access various services, it is likely that the island will fill up with taxis, cars and other private vehicles. This will lead to additional problems of traffic management, road congestion and inadequate taxi services in relation to demand. According to this key informant, this is the best time to set up the system as it would prevent future issues in the island.

## 11.4. CONCLUSIONS

Although a number of issues were identified in response to questions about concerns and difficulties, it should be kept in mind that there was in general a high level of satisfaction with services from RTL. Three distinct areas of improvement were discerned: ticketing issues, improving the travel experience, and better management of ferry terminals and its services.

Ticketing issues involved the lack of clarity around and processing of refunds for cancellations, and for the ability to manage one's booking. At present, there appears to be huge delays in refunding tickets. Equally, cancellation caused some consternation for those who were not aware about how to find information on alternative arrangements usually organised by RTL in response to a cancellation from their side.

Respondents also found it difficult that they could not reschedule their tickets even when cancellations had to occur because of unexpected circumstances (such as the specialist being ill on the day of travel to the consultation). A 'manage my booking' feature would be very much appreciated.

The booking app also had a few glitches that required addressing, relating to seat availability and to a loophole for getting cheaper tickets than the intended price. Online booking was also identified as being difficult for older people and there was keen interest in having an offline in-presence ticketing officer at each terminal.

A range of family-friendly policies were identified to assist people on their travels; allowing some level of snacking on board for all age groups, boarding and disembarking considerations for people with a disability, and allowing carers to sit with those they are accompanying.

From those residents in islands where the journey time was near 3 hours, there was deep interest in finding a way to have shorter journey times to Kulhudhuffushi City.

Information provision on a number of issues were identified: PSA announcements and real-time travel data and updates could be shared via screen during travel. Moreover, information about luggage allowances and restrictions was noted to be very helpful.

RTL has three levels of terminals with varying facilities and features. Regional terminals are the best equipped with restaurants, cafes and other facilities. Hub terminals are meant to be smaller in scope and the remaining terminals are intended as basic. However, it was noted that many of the ferry terminals were not fully operational.



## 12. SOCIO-ECONOMIC IMPACT AND THE DEVELOPMENT OF ZONE 1: THE POTENTIAL OF RTL

### 12.1. DEFINING SOCIO-ECONOMIC IMPACT

For this analysis, the term ‘socio-economic impact’ is understood to refer to the overall effects (of the implementation of RTL in Zone 1) on key social and economic factors that affect the population in question<sup>22</sup>. Social and economic factors are those known to:

- mediate the quality and length of people’s lives,
- shape the choices and opportunities available to them and
- affect their capabilities and access to resources.

These factors are commonly identified as income, education<sup>23</sup>, employment and livelihood options<sup>24</sup>, health and wellbeing<sup>25</sup>, safety and security,<sup>26</sup> and social support/connections<sup>27</sup>. Recently, governance and public administration are also included as key factors that affect people’s lives.<sup>28,29,30</sup> Similarly innovation and entrepreneurship have the potential to ease people’s lives through the development of knowledge, products and services that meet people’s needs. Each of these factors has strong social and economic dimensions to them; moreover, each of them strongly and mutually reinforces the others<sup>31</sup>.

Socio-economic impacts occur in the short-, medium- or long-term. For this study, it is recognised that there has not been sufficient time for sustained significant impacts to be realised and therefore long-term impacts may not be yet in evidence because the RTL services were introduced a year ago. For instance, people’s health or educational status may be in the process of change; for example, better management of a chronic illness because of regular consultations. The impacts of these changes will only be apparent when enough cases occur for data to indicate a significant and lasting change. Hence,

mainly short-term and medium impacts were considered in this study.

FIGURE 38: FACTORS CONSIDERED IN RELATION TO SOCIO-ECONOMIC IMPACTS OF RTL



Governance and public administration are taken here to refer broadly to the model of internal management of government structures and their delivery of mandated services. They have strong social and economic dimensions in their effects and their own actualization.

Education is linked to higher income, better employment options, improved health, greater life satisfaction and increased social support. It leads to a greater sense of control over one’s life, enhance one’s ability to navigate an increasingly complex world, and help people make choices that improve their own and others lives. Education leads to formally recognised skills and qualifications that enhances one’s employability and/or entrepreneurship capacities.

22 Bandeira Morais, M. (2021). “Socio-economic Impact Measurement and the World Business Council for Sustainable Development (WBCSD).” In: Leal Filho, W., Azul, A.M., Brandli, L., Lange Salvia, A., Wall, T. (eds) *Decent Work and Economic Growth. Encyclopaedia of the UN Sustainable Development Goals*. Springer, Cham.

23 Robert Wood Johnson Foundation. (2009). *Education Matters for Health*.

24 Robert Wood Johnson Foundation. (2013). *Stable Jobs = Healthier Lives Infographic*.

25 Schramme, T. (2023). “Health as Complete Well-Being: The WHO Definition and Beyond.” *Public Health Ethics, phad017*.

26 Robert Wood Johnson Foundation. (2011). *How Social Factors Shape Health: Violence, Social Disadvantage and Health*.

27 Kawachi, Ichiro, Kennedy, Bruce P., and Glass, Roberta. (1999). “Social Capital and Self-Rated Health: A Contextual Analysis.” *American Journal of Public Health*, Vol. 89, No. 8, pp. 1187-1193.

28 Arslan, M., and Roudaki, J. (2017). “Corporate Governance, Socio-Economic Factors and Economic Growth: Theoretical Analysis.” *International Journal of Accounting and Financial Reporting*, 7(1), 311.

29 Agustí I Hernández, C. (2022). “Promoting platforms for bottom-up participatory governance: a policy instrument approach through the facilitation of strategic smart city governance.” *Smart Cities Policies and Financing: Approaches and Solutions*, pp. 297-304.

30 Fagbemi, F., Nzeribe, G. E., Osinubi, T. T., and Asongu, S. (2021). “Interconnections between governance and socioeconomic conditions: Understanding the challenges in sub-Saharan Africa.” *Regional Sustainability*, 2(4), 337-348.

31 These different aspects are covered in the scope of this assignment (see Section 1.1). The social and economic factors included access to and utilisation of healthcare services, access to employment and livelihood opportunities, access to education and educational activities, social connections and activities, and aspects of public administration and governance.

Health and well being cover dimensions of physical, psychological and social functioning and refers to experience of being well. Good health and well-being significantly influence people's ability to exercise choice in the way they live and what they can do to experience and enjoy life.

Employment and livelihoods are often seen as means to derive income; however, they confer additional benefits based on how and where people work and what they do. Being employed gainfully enables one to learn and provides opportunities for advancement. Conversely, some jobs can impact negatively on people's well-being because of poor or unfair remuneration, stressful working conditions and pose to health risks.

Income proves financial resource that enable choices about location, accommodation, food, medical care, childcare, education and lifestyle. It protects against the stresses and frustrations from not being able to meet needs and aspirations.

Innovation and entrepreneurship are essential to the process of developing goods and services that meet peoples needs and aspirations. The process of innovation and entrepreneurship have social and economic dimensions. They can influence the quality of peoples lives and expand people's opportunities.

Safety and security refer to the experience of being free from harm, the absence of violence and injury or the threat of it. Harm and injury can result from abuse, neglect, harassment, exploitation, criminal activity, aggression and violence. It can also be the unintended consequence of discriminatory or exclusionary policies, programs and practices. The lack of safety and security – in a household, community or public space – tends to limit life opportunities and quality of life.

Social Connections and support stem from strong relationships with family, friend and others in the community. These connective relationships – of cooperation, goodwill, interpersonal trust, validation and enjoyment – help access to support and resources to meet peoples needs and enhance their well-being.

One of the ways these impacts were discerned is via looking at whether, how and to what extent RTL may have enabled access for more people and for different groups of people in the population. The focus was on access to and utilisation of those services; for instance, change in the number of consultations at Regional and Atoll hospitals.

In some cases, these aspects were determined by people's reported personal experience of it (for example, reduction of travel costs leading to household savings or how safe they felt on the ferry) and in others, they were determined by reportage on other people's experience from knowledgeable and informed stakeholders and key informants.

## 12.2. SUMMARISING SOCIO-ECONOMIC IMPACTS

This table provides an overview of the socio-economic impacts observed in this study.

**TABLE 8: SUMMARY OF IMPACTS IN RELATION TO SOCIO-ECONOMIC FACTORS CONSIDERED**

Income	<ul style="list-style-type: none"> <li>- 83% reported a reduction in travel costs.</li> <li>- Weighted median household saving per month of MVR 800 (approx. MVR 9,600 per year).</li> <li>- More household shopping, recreational activities, investments in education and business as result of household savings and disposable income.</li> </ul>
Employment & livelihoods	<ul style="list-style-type: none"> <li>- 95 direct employment opportunities (benefits 1% of households).</li> <li>- 6% indirect employment opportunities.</li> <li>- 9% reported more knowledge about jobs in the region.</li> <li>- Key informants noted increases in job applications from other islands.</li> <li>- Commuting and migrating in the region is more feasible because of RTL.</li> <li>- Improved conditions for those who reside elsewhere because they can visit home more often.</li> <li>- Finding out about jobs, putting in applications, attending interviews etc. is more affordable.</li> </ul>
Innovation & entrepreneurship	<ul style="list-style-type: none"> <li>- 19% of businesses interviewed used RTL for business purpose.</li> <li>- 70% of businesses in hub islands reported very positive impact on business; 52% of businesses in non-hub islands reported neutral impact.</li> <li>- Benefits to businesses include increased revenue (33%), larger customer base (32%), and improved sourcing of goods and materials (13%).</li> <li>- 1% of respondents reported venturing into a new business.</li> <li>- Examples of how RTL expanded micro-businesses on small islands.</li> <li>- Expected growth in the home-based cottage industry, higher service demands and increased tourism opportunities.</li> <li>- Other institutions also use RTL to market their services (MNU &amp; MI College, BCC, BML etc.).</li> </ul>
Education & educational activities	<ul style="list-style-type: none"> <li>- 79% agreed that RTL enabled better access to education and educational opportunities.</li> <li>- An estimated 68 students across the region utilise the RTL to do higher education courses in weekend/ block mode. Most are working people (teachers, nurses, etc) seeking to further careers; without RTL they would need to migrate from their place of work to do so.</li> <li>- 7 courses of MNU oriented towards weekend/block mode, targeting these groups of students and seeking to expand their student base.</li> <li>- Greater diversity of students noted in higher educational institutions. 75% increase in students from Sh. Atoll from different islands in MI College, compared to earlier.</li> <li>- Face-to-face time on weekend/block mode study doubles from 3-4 trips per semester to 8 trips. This is no longer unaffordable for students and has improved the quality of education.</li> <li>- More teachers are studying and training in the region, improving the supply of trained teachers.</li> <li>- Courses of interest have also been organised by councils in conjunction with colleges and universities and other professional bodies: swimming instructor, youth empowerment, pharmaceutical studies, sports and religious programmes, etc.</li> </ul>

<p><b>Health &amp; wellbeing</b></p>	<ul style="list-style-type: none"> <li>- 94% residing in islands other than KFC agree that RTL has increased access to healthcare services.</li> <li>- 68% have travelled to obtain medical services.</li> <li>- Travel costs for health-seeking behaviour reduced substantially.</li> <li>- Regular healthcare for people with chronic conditions and disabilities.</li> <li>- 26.4% increase in consultations at KFC Regional Hospital compared to same period prior to RTL; an additional 1019 consultations per month.</li> <li>- 43.4% increase in consultations at Sh. Atoll Hospital with additional 669 consultations per month.</li> <li>- 90% OPD patients able to complete services and return same day.</li> <li>- Increased access to meds.</li> <li>- Timely interventions into illnesses to prevent serious complications.</li> <li>- Expansion in regional health care to cope with increased demand and to reduce waiting lists: additional 24 OPD rooms, 2 doctors per speciality, additional procedure and treatment rooms, etc at KFC Regional Hospital. Expansions in service also happening in Atoll Hospitals.</li> <li>- Duty rotation and leave can be managed better across the region, with substitute staff able to take place of others in case of sick leave etc.</li> <li>- Public health programmes have recommenced using RTL following a break over Covid-19.</li> <li>- More training and oversight of staff in health centres.</li> </ul>
<p><b>Social connections and support</b></p>	<ul style="list-style-type: none"> <li>- 89% noted they were now able to maintain closer ties with family in other islands and 84% with friends in other islands.</li> <li>- 61% noted an increase in inter-island sports and recreational activities.</li> <li>- 77% reported exposure to information about services and opportunities in the region.</li> <li>- 70% noted an increase in their regional knowledge and understanding.</li> <li>- 88% noted increased access to social opportunities and building better relations across islands.</li> <li>- Families enjoy day-out trips.</li> <li>- Special interest groups and young people have organised educational trips: e.g. kite surfing, agriculture.</li> </ul>
<p><b>Governance and public administration</b></p>	<ul style="list-style-type: none"> <li>- 77% agreed on improved access to government administrative services.</li> <li>- Councils have regular meetings with much less cost and effort, and the quality of meetings have improved.</li> <li>- More training programmes are held for staff (e.g., public finance training for staff of island councils).</li> <li>- Increased access to important documents (passports, IDs, driving licences, marriage and divorce certificates, etc); councils send these via trusted persons and people travel to pick them up in a timely manner.</li> <li>- Banks reported regular upkeep of ATM machines and carrying out repairs to be cheaper and more regular.</li> <li>- Fenaka staff also use RTL to attend to repairs and maintenance of infrastructure.</li> <li>- Police use RTL to attend to investigations and respond to issues, at less cost and with greater efficiency.</li> <li>- Airline and ferry schedules are aligned to ensure optimal use.</li> </ul>
<p><b>Safety and security</b></p>	<ul style="list-style-type: none"> <li>- 86% feel safe using the RTL ferries. 60% have travelled alone and 72% have travelled with children and/or the elderly and report feeling safe doing so.</li> <li>- Policing is easier and more efficient in terms of responding to issues and undertaking investigations as they can travel within the region.</li> <li>- Challenges: drug distribution is easier; criminals use the system to evade the law.</li> </ul>

This summary shows the broad range of positive impacts on all the socio-economic factors considered. These impacts contribute to the improvement of the social and economic dimensions of the region, and consequently to the achievement of the project objectives and of the Sustainable Development Goals (SDG).



### 12.3. CONTRIBUTION TO PROJECT OBJECTIVES AND SDGS

The INPFN Project Objective is to facilitate inclusive regional development by connecting people and services, accelerate social and economic growth, improve efficiency in the delivery of public services, and improve mobility and accessibility for all citizens. Its specific objectives are to provide an efficient, affordable, convenient and sustainable passenger ferry service in all administrative islands of Maldives by end of 2024 to ensure all citizens are connected to the country’s economic infrastructure and social services. It was expected that the implementation of the project would result in improved access to services and opportunities, contributing to an overall improvement of quality of life especially for the physically and socially marginalised populations.

The expected benefits of the project was outlined as follows: accelerate achievement of SDGs; catalyse socio-economic growth; facilitate inclusive, regional development; improve inter-island connectivity and mobility of population; reduced socio-economic disparities by improving access to services; reduced cost of transportation and improve viability of small business; efficient delivery of public services and optimisation of resources; improved and wider scope of choices in terms of jobs and lifestyles with better spread of job opportunities and diverse, empowered settlements; and improved disaster preparedness and response.

As can be seen from Table 9, the implementation of RTL in Zone 1 has led towards the achievement of some of these expected benefits (to varying degrees) since its commencement in June 2022. RTL has improved the mobility of the population<sup>32</sup>, and reduced transportation costs. It has also contributed to inter-island connectivity and improved access to services for people living in non-hub islands, and consequently reduced socio-economic disparities that existed within the region. Efficiency in the delivery of public services has been improved on several aspects as described in this report. Moreover, it was possible to seek ways to optimise resources and services in the region through multiple alignments of ferry schedule with other existing services at various institutions – airport arrivals and departures, hospital consultation hours, and blended higher education courses. Equally, RTL has facilitated people in finding out about job opportunities, thereby improving and widening their scope of choices. RTL has also contributed to the achievement of a number of SDGs.

In its conceptualisation, the project was directly linked to SDG 11 (Sustainable Cities and Communities), and indirectly to SDGs 2, 3, 4, 5, 6, 8, 9, 10, 13, and 17. Through its broad range of socio-economic impacts, this study demonstrates how the RTL project contributes to the achievement of SDGs. The impacts indicate that RTL directly influences achievement of SDGs 1, 3, 4, 5, 8, 9, 10, 11, 16 and 17.

**TABLE 9: IMPACTS IN RELATION TO SDGS**

<p><b>SDG 1: No Poverty</b></p>	<p>The project contributes to poverty reduction and eradication, through cost reductions related to travel resulting in greater household savings and disposable income. It also enables people to seek basic services (healthcare, social protection, education, public admin, banking, etc.)</p> <p>In addition, through increased access to employment and educational opportunities, the project helps to indirectly reduce poverty and raise income levels at household level.</p>
<p><b>SDG 3: Good Health and Wellbeing</b></p>	<p>The project makes a substantial contribution to ensuring good health and wellbeing for all, by increasing access to healthcare services through the establishment of affordable, accessible, and reliable transport services. People reported seeking healthcare services to treat and manage chronic illness and diseases and for early intervention in a wider range of illnesses and health conditions.</p> <p>The subsequent demand for services has led to significant expansion of hospital healthcare services and laboratory services in the region. RTL helps the hospital to better manage staffing issues across the region.</p> <p>The RTL also enables medical and healthcare personnel to seek education and training. Nurses in health centres use RTL to attend courses at MNU on the weekend.</p>

<sup>32</sup> 39% of respondents have travelled more frequently since the introduction of RTL and 1 in 3 respondents (31%) have travelled once or more per month on RTL. 83% of respondents reported using the RTL in the past 3 months. 93% of respondents believed the ferry fares were both affordable and accessible.

<p><b>SDG 4: Quality Education</b></p>	<p>The project has increased access to education and educational opportunities in different ways and for different groups of people.</p> <p>People used the RTL to access higher education courses through the blended mode of study. This was particularly useful for the group of working professionals interested in furthering their qualifications and required to do a practical component for the licensing requirement (mostly nursing and teaching; qualified personnel in these two areas would both contribute further to the achievement of SDGs).</p> <p>There was a reported increase of students from a wider range of islands than prior to RTL, contributing to greater inclusivity.</p> <p>RTL made it feasible for councils to conduct a range of courses for young people and adults in the communities to acquire additional skills that increases their employability and helps them find work.</p>
<p><b>SDG 5: Gender Equality</b></p>	<p>RTL provides safe and secure transport services for women and girls (and others), enabling them to effectively participate in society and public life. Women feel safe using RTL ferries, both when travelling alone and when travelling with children and/or the elderly. A number of women also access higher education via RTL in order to seek professional qualifications, seeking to further their career and employability.</p>
<p><b>SDG 8: Decent Work and Economic Growth</b></p>	<p>RTL has increased access to jobs and employment options across the region. It contributed directly to promoting work in the region, through direct employment in RTL. It has also contributed indirectly to promoting employment, with people able to find more information about employment opportunities and a reported increase in those considering commuting or migrating for work within the region. Finding out about jobs, putting in applications, attending interviews etc. have become more affordable.</p> <p>Participation in higher education and other educational courses reduces the number of young people not in education, employment or training.</p>
<p><b>SDG 9: Industry, Innovation and Infrastructure</b></p>	<p>The project itself is directly and significantly related to SDG 9 by establishing quality, reliable and resilient infrastructure to support economic development and human wellbeing, with affordable and equitable access for all.</p> <p>Businesses benefitted from increased flow of people, reporting increased revenue, greater customer base and improved sourcing of goods and materials. There is emerging interest and action in new business opportunities and expanding current ones. They are also able to access banking and financing services, although there has as yet not been an increase in number of financing applications. A few small businesses also reported new opportunities to expand their business.</p>
<p><b>SDG 10: Reduced Inequalities</b></p>	<p>RTL has contributed to reducing inequalities in the region, with people from isolated communities able to access services, jobs, markets, educational services, health institutes, and other essential services via an affordable and accessible transport service. It also promotes income growth through enabling business activities and through reduced travel costs for households.</p> <p>People with disability (who may require a range of supportive interventions more regularly) are able to travel for free on the RTL.</p>
<p><b>SDG 11: Sustainable Cities and Communities</b></p>	<p>The establishment of the transport system is directly relevant to targets for SDG 11. RTL is oriented towards supporting movement from the periphery to the centres so that especially disadvantaged and isolated communities experience the intended benefits of the project.</p> <p>The regular service provided by RTL helps regulate transport and travel activities in Zone 1, thereby contributing to cleaner air. It helps families access natural public spaces for picnics and other day out activities.</p>
<p><b>SDG 16: Peace and Justice; Strong Institutions</b></p>	<p>Policing is more efficient, with the ability to respond to issues and conduct investigations more effectively. This can help to promote the rule of law as people experience better policing and engagement with the judiciary.</p> <p>Key public institutions are able to fulfil their supervisory roles more easily within the region, whether it is the Regional Hospital being able to check on the work of the health centres or the Atoll Council ensuring that project activities are undertaken in line with expected standards and timeline.</p> <p>Courses – such as public finance – was held for council staff, helping them to improve service-related skills, and helping them to become more effective, accountable and transparent.</p>
<p><b>SDG 17: Partnerships for the Goals</b></p>	<p>The project demonstrated close partnerships and collaborations at several points of implementation with key institutions in order to achieve the socio-economic impacts observed in this study, and that contributes to the achievement of the SDGs described above.</p>

Some anticipated impacts were not observed in the study, for instance, SDG 2 related to expected agricultural productivity and utilisation of markets. Whilst some market related activity was reported, people do not generally use the RTL to sell produce to other islands or to markets, and there is not yet indication that it has boosted local production. Similarly, SDGs 6 and 13 were not very apparent in relation to observed outcomes from the data.

While there was some indication of regional development and socio-economic growth, this bears further scrutiny.

## 12.4. RTL AND REGIONAL DEVELOPMENT

There is much discussion in the literature about the relationships between transportation, regional development and socio-economic growth<sup>33</sup>. Regional development describes a change process by which a region realises its economic, social and cultural goals – the process itself supported and facilitated by the organisations and institutions of that region<sup>34</sup>. The goal would be greater productivity in the use of space, capital and labour, leading to the creation of wealth in that region. Socio-economic growth refers to the extension of the socio-economic dimensions and requires data from two or more periods of time in order to assess extension. Regional development – especially in the economic sense – is likely to emerge from a dynamic synergistic process that has been catalysed by the establishment of the transport services.

With the establishment of the transport system and the establishment of a set of hubs (including a central hub with facilities and services), the highly accessible and comparatively resource-rich centre attracts people from the peripheries in search of services, goods and – increasingly – work opportunities. This creates a feedback loop, with resultant growth in businesses, industries and commercial centres within this area in turn attracting more people and allowing the centre to grow. In order to move towards a balanced development approach with benefits accruing to the peripheral islands, it is necessary to counter the effects of this attraction to the centre with targeted interventions in the peripheries and drive some traffic outwards as well.

In addition to ensuring there are some means and motivations for people from the hub to visit the outer islands. Respondents identified factors such as some islands having historical or geographical significance; nonetheless, this may not always be enough to draw people to these areas. Integrated targeted interventions may be necessary. These include:

- Having ferries on the weekends that move from hubs towards the outer islands with same day returns.

- Working together with key special interest groups to organise events that can draw different people to visit these islands. Themed events, festivals, competitions and activities could be used to make different islands attractive to people. For instance, a regular music festival that brings together artists and musicians from across the region. Or agricultural events – with local produce and artisan food items – teamed with special talks, tours, workshops and information-sharing for interested commercial and amateur farmers and growers.
- Grants and financial/technical assistance provided to groups, CSOs and island councils seeking to develop and organise credible reputed events over time.
- RTL could offer discounted group tickets for groups of 5 or more to the event (with a special online code), if the event meets pre-determined criteria and it is registered beforehand with RTL.
- Moreover, educational trips can be promoted through discussion with schools/institutes, suitable guesthouses and hostels, and an implementable plan of educational and inter-island relational activities – e.g., visits to local sites having geographical, historical, cultural and environmental features of significance, seeing people doing handicraft or how farms, work. A collaborative effort between schools/ educational institutes, MTCC/RTL, and local island councils/ guesthouse owners/ special interest groups could possibly result in some set destinations. Again, discounted trips or having an extra ferry service if needed may be useful means by which to attract people to travel on RTL.
- From a regional development point of view, it is also necessary to attract people from outside the region. These could be international and domestic tourism. Using a marketing approach to attract visitors to the region from elsewhere in the Maldives to Zone 1 would be useful.
- Similarly, it is important to recognise that businesses are reluctant to seek financing in order to expand their business. Carrying out entrepreneur development work in the Zone 1 may be useful. Several economic opportunities are recognised in the region (e.g. a courier service, personal delivery of items, selling to other islands, etc). However, since sound loan applications coming forth to BML for business and entrepreneurial activities in the region are rare, it may be time to be more strategic and targeted about what is needed to support regional development and facilitate socio-economic growth.

33 Pokharel, R., Bertolini, L., and te Brömmelstroet, M. (2023). "How does transportation facilitate regional economic development? A heuristic mapping of the literature." *Transportation Research Interdisciplinary Perspectives*, 19, 100817.

34 Nijkamp, P., and Abreu, M. (2009). "Regional Development Theory." *International Encyclopedia of Human Geography*, pp. 202-207.

Nonetheless, RTL has contributed and continues to contribute to the achievement of INPFN project outcomes. However, additional work needs to be done for a balanced work approach and become a well-connected country. It is also important to acknowledge that resident and visitor population in Zone 1 is unlikely to reach the critical mass necessary to achieve financial sustainability for RTL in the near future:

The resident population of Zone 1 is only 50,761 including foreigners (Census 2022) and is dispersed among a large number of administrative islands (41 islands) across a wide geographic area. Moreover, tourism development and uptake in the region is slow – the 3 atolls in Zone 1 combined make up only 1,587 or 2.8% of the total 56,835 tourist beds in resorts, hotels and guesthouses in the country at the end of December 2022 (Statistical Yearbook 2023)<sup>35</sup>.

Furthering the economic benefits from RTL in the region requires further transformational changes: more frequent island-to-island connections than once per day is necessary for it to meet the needs of business sector, which in turn requires greater commercial activities in the region to balance off the increased cost of a more frequent ferry service; operation of a convenient and reliable cargo/courier services in the region in addition to the passenger ferry service for an integrated transport solution; and greater entrepreneurship and tourism development undertaken in the region to expand and diversify commercial activities and visitor arrivals that is necessary to sustain such a well-connected and integrated transport network system.

## 12.5. CONCLUSIONS

In light of the comprehensive socio-economic impact study conducted on the RTL high speed public ferry network in Zone 1, it is evident that the RTL speed ferry service has garnered immense support and appreciation from the island communities, irrespective of their demographic characteristics, developmental status, or geographical disposition.

The study underscores the profound social benefits that the RTL ferry service brings to these island communities. Notably, it has vastly improved access to essential services, including healthcare, education, and government administrative services. This heightened accessibility and connectivity has strengthened familial and social bonds, engendering a heightened sense of community and interconnectedness. The frequent and dependable transport network has alleviated feelings of isolation and reinforced community ties.

On the economic front, the RTL ferry service has made a significant impact by reducing travel expenditure, which was previously a considerable financial burden for atoll residents. Travel expenditure was ranked the 2nd largest household expenditure in the atolls (HIES

2019). The introduction of an affordable and regular ferry system, combined with access to affordable healthcare and other social and commercial services and choices, has enhanced the financial resilience of these communities.

Furthermore, the improved connectivity expands the customer and supplier bases accessible to existing and potential businesses and entrepreneurs, creating new growth opportunities for MSMEs, ultimately leading to greater prosperity and economic development over the long term.

Importantly, the RTL ferry service aligns with the objectives of the INPFN project. Through its broad range of socio-economic impacts, it contributes to the achievement of Sustainable Development Goals (SDGs), directly influencing SDGs 1, 3, 4, 8, 9, 10, and 11 by improving access to basic services, healthcare, education, and markets while fostering inclusive regional development and reducing socio-economic disparities.

Furthermore, at the institutional level, the RTL ferry service has optimised resource allocation and enhanced the efficiency of public service delivery, especially in healthcare and public administration.

However, it is worth noting that the RTL ferry service heavily relies on government subsidies, as is the case with the provision of many other essential public services. Achieving financial sustainability for the service will require a substantial increase in demand, which may not be feasible in the near future due to the small and dispersed population and slow tourism development in the region.

Enhancing the economic benefits of the RTL ferry service further and gearing up for long-term sustainability of the service necessitates transformative changes, including the establishment of a reliable cargo and courier service for a more integrated transport solution, catalysation of entrepreneurial activities and tourism development in the region, and more frequent island-to-island connections to support and be supported by the increased commercial activities. While the current demand for travel may not be at its optimal level, it is crucial to boost this demand through increased social, commercial, and community activities, as well as any other developments in the area. The flexibility of ferry routes and frequencies should be modified to accommodate the potential demands that may arise from these developments.

<sup>35</sup> Maldives Bureau of Statistics. (2023d). *Statistical Yearbook of Maldives 2023*



## 13. MAIN CONCLUSIONS

The study found that there is tremendous support and appreciation for RTL speed ferry service by the island communities in Zone 1 irrespective of their size, status of development or geographic location. It has brought significant social and economic benefits to families, communities and businesses. The RTL offers much potential in further growing the region.

### USE AND SATISFACTION WITH RTL

RTL has become the most used mode of travel in the region since its introduction. 83% of respondents in this study had travelled on the RTL within the past 3 months. The main purpose of intra-zone travel was to meet medical needs (68%). The destination travelled on RTL by most people (73.3%) was Kulhudhuffushi City, where the Regional Hospital is located. KFC is reportedly receiving approximately 500 visitors per day since the introduction of RTL.

Many people also used RTL for airport transfers (21%) and to visit friends and relatives (18%). Various errands and other tasks are done during these trips; people shop, seek recreation, access government administrative or banking services whilst on the trip to KFC or another hub island.

1% of respondents used RTL to access higher education within the past 3 months. This seemingly low number is however an indication that those interested in seeking specific courses (namely, further education in nursing, teaching and other practical professions such as welding) are now able to access these courses whereas earlier they would not have been able to, as reported in KIIs and FGDs. The number of students enrolled in higher education in the region is comparatively low.

People have travelled more frequently since the introduction of RTL (39%) and 1 in 3 respondents have travelled once or more per month. People are comfortable traveling alone or with children and/or elderly. Most people (62%) did not experience any difficulties in accessing or using the RTL. For those who did experience difficulties, booking (24%) and refund related issues (17%) comprised the major issues.

79% of respondents agreed that RTL has improved standard of living in their community.

### RTL AND THE BUSINESS COMMUNITY

19% of businesses in this study have used RTL for business purposes and 15% prefer it. Most businesses (53%) preferred the *lakudi* ferries because it allowed them to carry cargo. Many businesses, the majority of which are micro-businesses, report not having the need for business

travel. They may not be seeking to grow through utilising transport or be unaware of how to do so.

Nevertheless, there are high levels of recognition that businesses are positively impacted by RTL, particularly, in hub islands. These impacts include more sales from customers with higher spending power, opportunities created by increased local tourism, need for overnight stays, and expansion of the customer base. Businesses also noted easier sourcing of labour and raw materials and decreased operational costs.

Further growth in the region is anticipated through greater connectivity (brought about by RTL), inbound tourism, property and real estate development, and airports expansion. However, to operationalise and achieve this, it is necessary to improve *lakudi* ferry services in conjunction with targeted planning to facilitate the uptake of transport and travel opportunities. RTL provides a growth avenue for MSMEs through greater connectivity and access to supplier chains and a greater customer base.

### ECONOMIC IMPACTS OF RTL ON FAMILIES AND HOUSEHOLDS

Most households (86%) agreed that RTL services have led to a significant reduction in household expenditure, which translated to a weighted median household savings of MVR 800 per month on travel costs. This means greater spending power and consumption of more goods and services, and improvements to life opportunities.

RTL also opened up migration and commuting possibilities and these ferry services have provided increased life opportunities at lower costs. Additional economic benefits resulting from RTL include opportunities for home-based businesses, tourism opportunities, increased demand for services, and direct and indirect employment opportunities.

Additional targeted policies and interventions may be required to further help individuals, families and businesses to take advantage of and leverage these new economic opportunities into realities.

### FAMILY RELATIONS, SOCIAL CONNECTIONS AND COMMUNITY LINKAGES

Majority of the respondents recognised that they are able to keep more connected to family and friends living in other islands within the region with most people being able to utilise RTL to visit family and friends. It is noted that families who keep in contact with one another are able to better family members' wellbeing, provide comfort, support, and even interventions and protection.

They also noted that they were able to develop better community relations with other islands and undertake joint activities, leading to

increased knowledge and understanding of the region, and sharing of knowledge and skills. This has the potential to lead to better relationships with and connections to other regions, an important element of regional development.

RTL has further enabled atoll and island councils to invest cost savings from travel into educational and recreational activities in the region. This can lead to deeper social and economic ties between islands.

## **IMPACTS OF RTL ON HEALTHCARE ACCESS**

94% of respondents living outside of KFC agreed with the statement that RTL has helped them to access healthcare services. 68% of respondents stated that their main purpose of travel was to seek healthcare.

The introduction of RTL has significantly reduced cost of seeking healthcare. People are now more likely to access healthcare regularly and when needed. Most patients are able to seek services within their day of travel.

Healthcare staff have also benefitted from RTL. With more affordable and regular transport, they can attend courses and workshops, visit families on weekends, and carry out rotation duties.

Hospital consultations increased significantly in all three hospitals in the region, prompting the government to expand health care facilities and services in the region.

## **ACCESS TO EDUCATION AND EDUCATIONAL OPPORTUNITIES**

79% of respondents agreed that RTL has enabled better access to education and educational opportunities in the region. Universities and colleges in the region have worked together with RTL to align their schedules, thereby allowing students to optimise their time in in-person mode. More face-to-face time has been enabled by use of RTL because of its lower costs, and the time spent in-person in class is more productive because of the comfort of RTL travel, according to students. Moreover, RTL offers the possibilities for educational trips and activities to both higher education and general education institutions. These are reportedly difficult to organise, but it is being done increasingly within the region.

Because of RTL, MNU and other colleges are now able to offer a wide range of courses in blended mode for qualifications such as teaching, nursing and other high-demand employment options. This has proved popular and intriguing for practitioners in the region as a means of furthering their careers and professions. As such, RTL has widened the educational opportunities available to the region, even if the absolute numbers remain small.

RTL has meant that the higher educational institutes are able to attract a wider group of students and shore up their own institutional sustainability, some of whom move from other islands and others who travel as needed for studies. Many of these students may not have considered courses at MNU (which does not have online only options), although the quality of education is comparatively high.

Finally, teachers in general education are able to undertake more training and professional development, improving their quality of teaching and contributing to educational outcomes in the long-term.

## **RTL AND GOVERNMENT ADMINISTRATION**

77% of respondents agreed with the statement that RTL has enabled better access to government administrative services. Acquiring official documents such as IDs, driving licences and passports have been made easier for the public as they can now travel to the Atoll Councils with relative ease.

Moreover, government administration service delivery has improved. Atoll councils and other agencies used RTL to frequently check in with island councils and other services in the region, thereby improving oversight, coordination and support to these services. RTL also allows choosing from a greater pool of people to staff government offices, while courses and workshops are more accessible and affordable, leading to more skilled staff. There were also more visits to islands by healthcare staff, police officers, BCC employees, banking personnel and Fenaka staff.

Anticipated regional development stemming from the introduction of RTL pushes forward ambitious land use planning and broadens the scope of what is seen as possible and achievable in the region.

## **AREAS FOR IMPROVEMENT IDENTIFIED BY RESPONDENTS**

Three distinct areas for improvement were discerned from responses to questions about concerns and difficulties: improving ticketing, improving travel experience, and improving management of ferry terminals and its services.

Ticketing issues involved the lack of clarity around refunds, cancellations, and managing bookings. Significant delays in refunding tickets, difficulties in rescheduling due to unexpected circumstances were noted, as well as limited awareness on finding information on alternative travel arrangements. A 'manage my booking' feature would alleviate some of these challenges. Online booking was also identified as being difficult for older people and there was keen interest in having an in-presence ticketing officer at each terminal.

Travel experience could be improved by introducing a range of family-friendly policies such as allowing snacking on board for all

age groups, boarding and disembarking considerations for people with disabilities, and allowing carers to sit with those they are accompanying. Information provision could also be improved: for example, while information about luggage allowances and restrictions was noted to be very helpful, announcements and real-time travel data and updates could be shared via screen during travel. From those residing in islands where the journey time was near 3 hours, there was keen interest in reducing journey times to Kulhudhuffushi City.

With regards to terminal management and services, it was noted that ferry terminals were not fully operational, especially with regards to toilet facilities. It was also identified that luggage weighing facilities and a QR code reader would be helpful even at the most basic terminals to ensure that they would be able to transfer luggage across terminals. The size of the regional terminals was also deemed insufficient for the number of people who intended to use it. For basic terminals, inside seating to shelter from the wind and rain would be useful.

### **SOCIO-ECONOMIC IMPACTS AND REGIONAL DEVELOPMENT**

RTL has achieved a wide range of socio-economic impacts across a broad range of factors. The project has contributed to achievement of the project objectives, outcomes and the expected benefits. It has also contributed to the achievement of the SDGs 1, 3, 4, 8, 9, 10, 11, 16 and 17. Regional development requires targeted interventions through institutional collaborations and availability of funding for key initiatives.





RTL112

 **RTL**  
FERRY

8899B-02

## 14. MAIN RECOMMENDATIONS

Based on the insights derived from the survey analysis and feedback from respondents and key stakeholders, the following recommendations are proposed to enhance the RTL ferry service and its contribution to socio-economic development of the region:

### 14.1. ENHANCING USER EXPERIENCE

#### RECOMMENDATION 1: IMPROVE AND ENHANCE RTL APP

Providing the best possible positive user experience is as important in delivering public services as it is important in private businesses. As for RTL, while the service is well received by the community, the most vexing issues for users are the limitations of the booking app. Therefore, to improve user satisfaction, it is imperative to address key issues within the RTL app.

The most important improvements needed right now to the app are implementing options to allow booking modifications and process refund requests through the app. Additional fixes are needed on the app to prevent unintentional seat blocking and point-to-point pricing issues that undermines actual seat utilisation rate on various routes. These fixes will improve seat availability for more travellers while improving the financial sustainability of the service for the operator.

Accessibility enhancements (as stated below) are also needed to the app to improve accessibility and inclusion for vulnerable groups and enhance user-friendliness.

#### RECOMMENDATION 2: OPERATIONALISE THE FERRY TERMINALS

Operationalising all constructed ferry terminals, and possibly appointing the operator of the tuck-shop in the terminal as a ticketing agents can provide a non-app-based alternative for purchasing tickets, further enhancing the overall passenger experience and providing an additional service greatly desired by the public.

### 14.2. IMPROVING ACCESSIBILITY

#### RECOMMENDATION 3: INTRODUCE A NON-APP BASED ALTERNATE BOOKING OPTION

Addressing the needs of users without access to smartphones or the internet is essential. Introducing a non-app-based booking option is crucial to make the ferry system accessible to a broader audience, as nearly half of all RTL users (and more among women and elderly) do not purchase tickets on their own as they are unfamiliar with or do not possess smart phones with an active internet connection.

#### RECOMMENDATION 4: IMPROVE ACCESSIBILITY FEATURES ON THE APP

To cater to a wider range of users, incorporating a Dhivehi language option, and use of graphics, larger fonts and an intuitive interface will enhance accessibility, especially for the elderly and visually impaired.

The ability to save favourite routes and traveller profiles for future use should also be integrated into the app, reducing booking time while enhancing accessibility and user friendliness.

### 14.3. ENHANCING SOCIAL VALUE OF RTL

#### RECOMMENDATION 5: OPTIMISE ROUTES TENDING KULHUDHUFFUSHI AS THE REGIONAL HUB

Optimising routes to ensure short travel times to Kulhudhuffushi, the regional hub, from all islands within the region is recommended. This will fulfil the desire of all islands to be well-connected to this vital hub.

#### RECOMMENDATION 6: FULLY UTILISE RTL FOR AN INTEGRATED & ECONOMICAL PUBLIC SERVICE DELIVERY

The lack of economies of scale is the single biggest challenge to the delivery of public services and the development of island communities. Leveraging the high public acceptance of RTL as part of an integrated transport solution can lead to more efficient delivery of high-investment public services, particularly in healthcare. Greater collaboration between public agencies and RTL will enable a more harmonised and efficient approach to service coverage in the region.

### 14.4. STIMULATING ISLAND ECONOMIES

#### RECOMMENDATION 7: INTRODUCE SAME DAY RETURN FERRY FOR HUB-ISLANDS ON WEEKENDS

RTL service is designed to allow those living in outer (non-hub) islands to travel to hub islands in the morning for various needs and return back to home island in the evening. There is no option for those living in hub-islands to travel out to remote islands and return back in any day of the week. With this arrangement, commercial benefits from increased visitors disproportionately flows into hub islands, while travel convenience and social benefits disproportionately accrues to non-hub islands.

To achieve a more balanced two-way flow of commercial and social benefits between hub and non-hub islands, it is advisable to introduce a same-day return option during weekends<sup>36</sup>, for those residing in hub islands to travel to other islands.

<sup>36</sup> At the launch of RTL service, ferries were scheduled to travel both ways and it was found that there was no adequate demand on most days for ferries travelling out from hub-islands to remote islands in the morning and returning in the evening, hence the practice was discontinued after trial.

## 14.5. MAXIMISING ECONOMIC BENEFITS THROUGH SERVICE INTEGRATION & HARMONISATION

### RECOMMENDATION 8: INTRODUCE SMALL PACKAGE COURIER SERVICE

The introduction of a courier service (in collaboration with a courier or postal service) for transport of small packages through RTL will enhance its public utility. This service will help hospitals and individuals obtaining prescription medicine and other urgent medical items, as well as other agencies in delivery of important documents and small items (such as ID card, passport, marriage certificates, bank cards, etc). It can also improve commerce and help small business and homebased workers in expanding their market reach for their products, and thereby contribute to financial feasibility of RTL service.

### RECOMMENDATION 9: IMPROVE CARGO FERRY (LAKUDI FERRY) SERVICE

Maintaining a reliable cargo ferry is vital for supporting commerce and small businesses in the region, particularly those involved in agriculture, fishery, and trade. Efforts should be made to address concerns regarding the reliability of the *Lakudi* ferry service. As envisaged in the INPFN project, RTL and *Lakudi* ferry should operate in tandem and complement each other as part of an integrated transport system. One of the main complaints (though not directly related to RTL ferry) is that the *Lakudi* ferry service has become less reliable upon the introduction of RTL ferry services.

## 14.6. ADOPTING A REGIONAL DEVELOPMENT STRATEGY

### RECOMMENDATION 10: PROMOTE LOCAL AND INBOUND TOURISM IN THE REGION

Promoting local and international tourism in the region is critical for overall development and the long-term viability of the integrated transport services. The operationalisation of Hanimadhoo International Airport can be a game changer for the development of tourism and commercial activities in the region. Simultaneously, a concerted effort with collaboration among local councils & other stakeholders for developing and promoting island destinations is important for development of local and international tourism in the region. This includes encouraging developing tourist facilities and amenities and tourist attractions and ancillary services in the islands to support tourism.

### RECOMMENDATION 11: FOSTERING ENTREPRENEURSHIP IN THE REGION

The development of business and commerce in the region requires more than having a convenient passenger transport system. It is essential to equip and advance small business by fostering greater entrepreneurship through trainings and skills development on entrepreneurship. At the same time, the connectivity provided through RTL and *Lakudi* ferry network will benefit businesses most when reliable courier and cargo services along with improvements to passenger transport services.

These recommendations, if implemented strategically, can further enhance the socio-economic benefits of the RTL ferry service and contribute substantively to the overall development of this region.



## REFERENCES

- Arslan, M., and Roudaki, J. (2017). "Corporate Governance, Socio-Economic Factors and Economic Growth: Theoretical Analysis." *International Journal of Accounting and Financial Reporting*, 7(1), 311. [Online]. Available at: [https://www.researchgate.net/publication/317563696\\_Corporate\\_Governance\\_Socio-Economic\\_Factors\\_and\\_Economic\\_Growth\\_Theoretical\\_Analysis](https://www.researchgate.net/publication/317563696_Corporate_Governance_Socio-Economic_Factors_and_Economic_Growth_Theoretical_Analysis) (Accessed: September 2023).
- Agustí | Hernández, C. (2022). "Promoting platforms for bottom-up participatory governance: a policy instrument approach through the facilitation of strategic smart city governance." *Smart Cities Policies and Financing: Approaches and Solutions*, pp. 297-304. [Online]. Available at: <https://doi.org/10.1016/B978-0-12-819130-9.00043-7> (Accessed: September 2023).
- Bandeira Morais, M. (2021). "Socio-economic Impact Measurement and the World Business Council for Sustainable Development (WBCSD)." In: Leal Filho, W., Azul, A.M., Brandli, L., Lange Salvia, A., Wall, T. (eds) *Decent Work and Economic Growth. Encyclopedia of the UN Sustainable Development Goals*. Springer, Cham. [https://doi.org/10.1007/978-3-319-95867-5\\_25](https://doi.org/10.1007/978-3-319-95867-5_25).
- Fagbemi, F., Nzeribe, G. E., Osinubi, T. T., and Asongu, S. (2021). "Interconnections between governance and socioeconomic conditions: Understanding the challenges in sub-Saharan Africa." *Regional Sustainability*, 2(4), 337-348. [Online]. Available at: <https://doi.org/10.1016/j.regsus.2022.01.004> (Accessed: September 2023).
- Kawachi, Ichiro, Kennedy, Bruce P., and Glass, Roberta. (1999). "Social Capital and Self-Rated Health: A Contextual Analysis." *American Journal of Public Health*, Vol. 89, No. 8, pp. 1187-1193. [Online]. Available at: <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.89.8.1187> (Accessed: September 2023).
- Maldives Bureau of Statistics. (2023a). *Island and Atoll Level Indicator Sheets* [Online]. Available at: <https://census.gov.mv/2022/island-atoll-level-indicator-sheets/> (Accessed: September 2023).
- Maldives Bureau of Statistics. (2023b). *Maldives Population and Housing Census Provisional Results and Summary* [Online]. Available at: <https://census.gov.mv/2022/provisional-results/> (Accessed: September 2023).
- Maldives Bureau of Statistics. (2023c). *Census Results Summary Tables – Education 2022*. [Online]. Available at: <https://census.gov.mv/2022/census-results-summary/> (Accessed: September 2023).
- Maldives Bureau of Statistics. (2023d). *Statistical Yearbook of Maldives 2023*. [Online]. Available at: <https://statisticsmaldives.gov.mv/yearbook/2023/> (Accessed: September 2023).
- Maldives National University. (2022). *Course Information Sheet 2023, Term 1* [Online]. Available at: <https://mnu.edu.mv/wp-content/uploads/2022/10/2023-Term-1-Course-Information-Sheet-Courses-Selected-based-on-First-come-first-serve.pdf> (Accessed: September 2023).
- Maldives National University. (2023). *Annual Report 2022* [Online]. Available at: <https://mnu.edu.mv/wp-content/uploads/2023/07/mnu-annual-rpt-2023-web.pdf> (Accessed: September 2023).
- Ministry of Higher Education. (2020). *Higher Education Statistics 2019* [Online]. Available at: <https://www.mohe.gov.mv/images/resources/resources/Higher%20Education%20Statistics%202019.pdf> (Accessed: September 2023).
- National Bureau of Statistics. (2019). *Household Expenditure: Household Income and Expenditure Survey 2019* [Online]. Available at: <https://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2021/05/HIES2019-Expenditure.pdf> (Accessed: September 2023).
- Nijkamp, P., and Abreu, M. (2009). "Regional Development Theory." *International Encyclopedia of Human Geography*, pp. 202-207. [Online]. Available at: <https://doi.org/10.1016/B978-008044910-4.00869-5> (Accessed September 2023).
- Pokharel, R., Bertolini, L., and te Brömmelstroet, M. (2023). "How does transportation facilitate regional economic development? A heuristic mapping of the literature." *Transportation Research Interdisciplinary Perspectives*, 19, 100817. [online]. Available at: <https://doi.org/10.1016/j.trip.2023.100817> (Accessed: September 2023).
- Public Service Media News. (2023). "OPD building in Kulhudhuffushi hospital to begin service." [Online]. Available at: <https://psmnews.mv/en/115511> (Accessed: September 2023).
- Robert Wood Johnson Foundation. (2009). *Education Matters for Health*. Available at: <http://www.commissiononhealth.org/PDF/c270deb3-ba42-4fbd-baeb-2cd65956f00e/Issue%20Brief%206%20Sept%2009%20-%20Education%20and%20Health.pdf> (Accessed: September 2023).
- Robert Wood Johnson Foundation. (2011). *How Social Factors Shape Health: Violence, Social Disadvantage and Health*. [Online]. Available at: [https://www.preventioninstitute.org/download/pi\\_publication/node-field\\_download\\_files-267-0](https://www.preventioninstitute.org/download/pi_publication/node-field_download_files-267-0) (Accessed: September 2023).

- Robert Wood Johnson Foundation. (2013). *Stable Jobs = Healthier Lives Infographic*. Available at: <https://www.rwjf.org/en/insights/our-research/infographics/infographic--stable-jobs---healthier-lives.html> (Accessed: September 2023).
- Rodrigue, J.-P. (2020). Chapter 3: Socioeconomic Benefits of Transportation. In *The Geography of Transport Systems*, 5th Edition. New York: Routledge. Available at: <https://transportgeography.org/contents/chapter3/transportation-and-economic-development/transportation-socio-economic-benefits/> (Accessed: September 2023).
- Schramme, T. (2023). "Health as Complete Well-Being: The WHO Definition and Beyond." *Public Health Ethics*, phad017. [Online]. Available at: <https://academic.oup.com/phe/advance-article/doi/10.1093/phe/phad017/7232444> (Accessed: September 2023).
- United Nations ESCAP. (2021). *Inequality of Opportunity: Who Are Those Left Behind? Maldives and Other Asia-Pacific SIDS* [Online]. Available at: [https://www.unescap.org/sites/default/files/2021-05/LNOB\\_in\\_Maldives.pdf](https://www.unescap.org/sites/default/files/2021-05/LNOB_in_Maldives.pdf) (Accessed: September 2023).

# ANNEXES

## ANNEX I: OVERVIEW OF STUDY SAMPLE

Data for this study was collected via field visits to 16 pre-selected islands in Zone 1, in August 2023, which is about one year after the commencement of RTL.

Four research activities were included in the study:

1. a public survey – with a sample of 787 respondents aged 18 and above.
2. a qualitative survey among businesses – 106 businesses interviewed.
3. stakeholder and key informant interviews – 47 stakeholder/key informant interviews held with 163 participants from selected institutions..
4. focus group discussions – 11 FGDs covering 84 participants.

A brief overview of the four different study samples is provided, looking at gender and geographical location as well as other relevant demographic information.

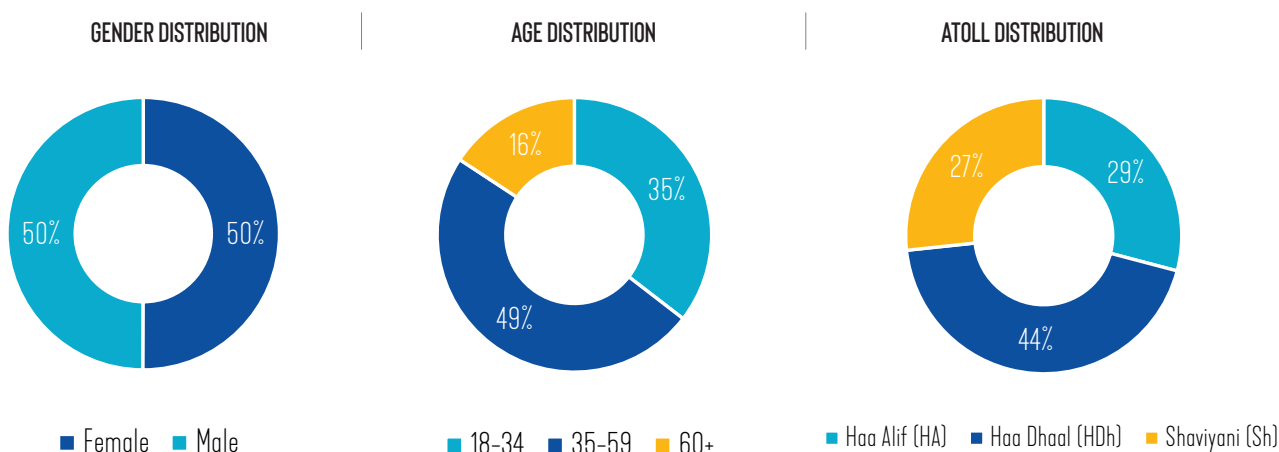
### PUBLIC SURVEY RESPONDENTS

A total of 787 respondents were interviewed from Zone 1 for the public survey.

### GENDER, AGE AND GEOGRAPHICAL DISTRIBUTION

The sample distribution was carefully designed to closely represent the population distribution in terms of gender, age and geography based on provisional data from Census 2022.

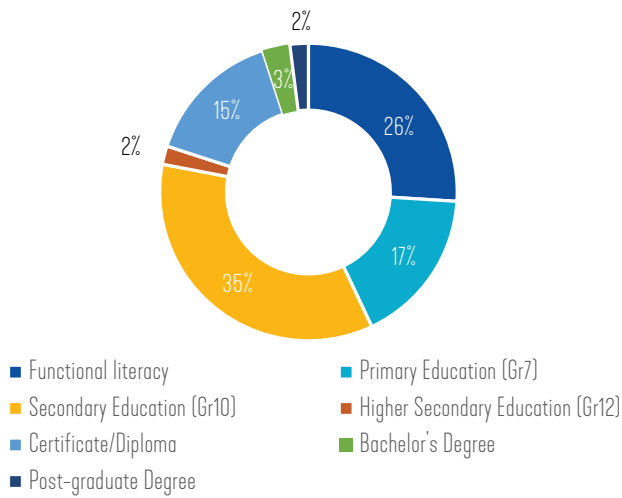
FIGURE 39: SAMPLE DISTRIBUTION FOR GENDER, AGE AND GEOGRAPHICAL LOCATION



## EDUCATIONAL ATTAINMENT

Educational attainment in the sample study are shown below.

FIGURE 40: DISTRIBUTION OF EDUCATIONAL ATTAINMENT

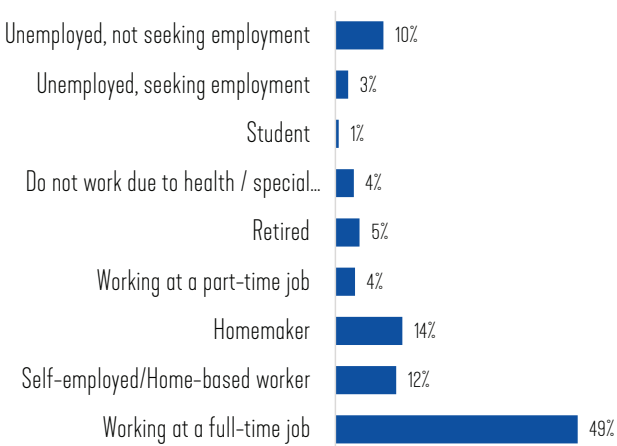


58% of respondents have attained secondary education or higher. A quarter of the population have not attained beyond functional literacy, whilst 20% have continued with further education.

## EMPLOYMENT STATUS

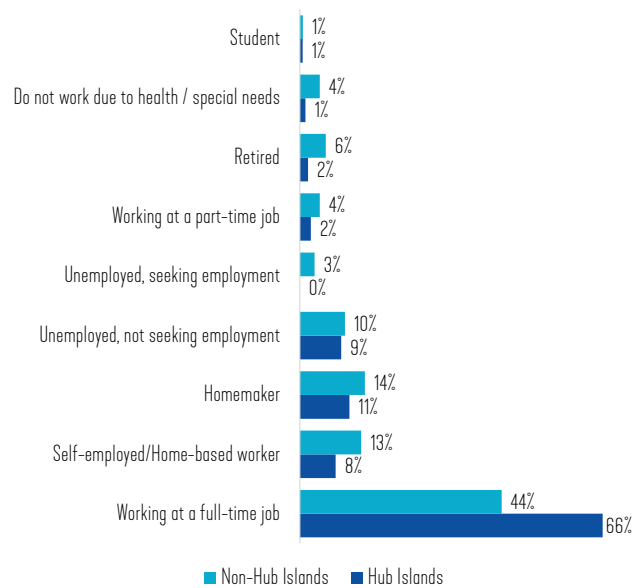
The figure below shows the status of employment in the population. As is seen below, nearly 50% are employed in full-time jobs. A further 12% are self-employed or are a home-based worker and 4% are in part-time employment.

FIGURE 41: EMPLOYMENT STATUS OF THE SURVEY RESPONDENTS



When employment status is examined more closely, it is possible to see differences between those in hub islands and those not in hub islands.

FIGURE 42: EMPLOYMENT STATUS (BY HUB AND NON-HUB ISLANDS)



Hub islands include the three capital islands in each atoll in Zone 1 – Dhidhdhoa, Kulhudhuffushi City and Funadhoo – where most services are located including Regional and Atoll Hospitals, and Atoll Council and other public services. In each atoll, the RTL ferry services are designed to move towards the hub during the day and return in the evening.

As shown in Figure 42, employment in full-time jobs is higher in hub islands (66% vs 46%) whilst self-employment is higher in the non-hub islands (14% vs 8%). None of those who are unemployed in hub islands are seeking employment and 3% of those unemployed in non-hub islands are seeking employment.

## HOUSEHOLD INCOME

Distribution of the average total monthly income of the household is shown below.

FIGURE 43: AVERAGE TOTAL MONTHLY INCOME OF THE HOUSEHOLD (MVR)

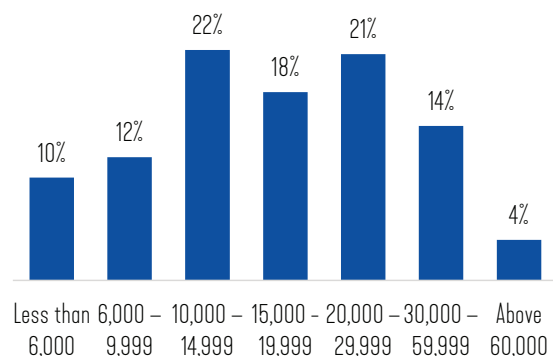
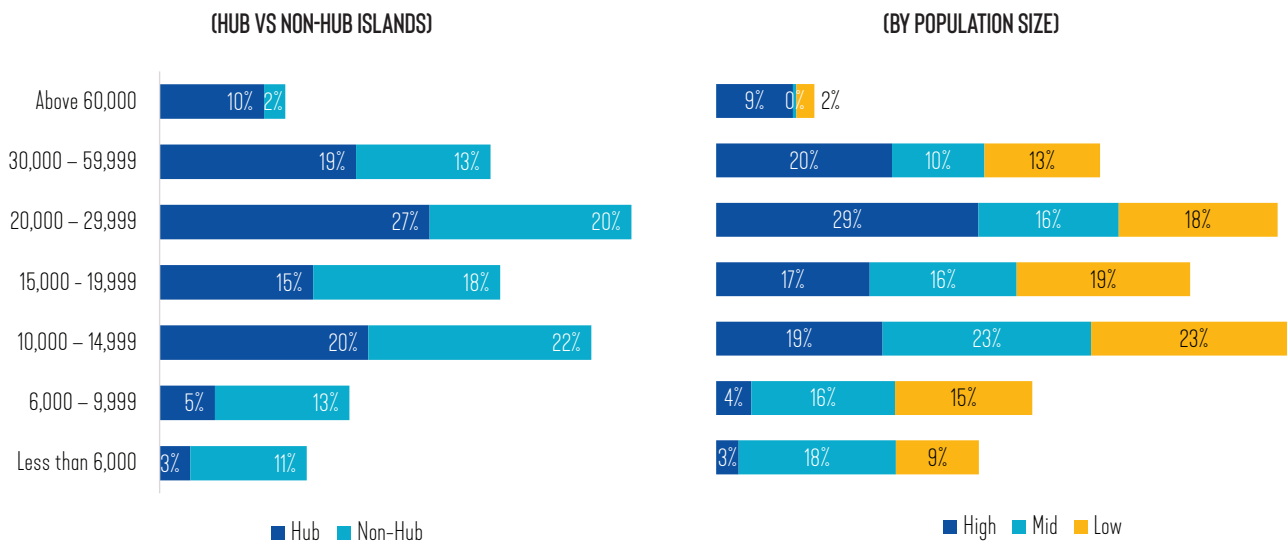




FIGURE 44: AVERAGE TOTAL MONTHLY INCOME OF THE HOUSEHOLD (MVR) (BY HUB VS NON-HUB AND BY POPULATION SIZE)



As shown in Figure 44, the median monthly household income for Zone 1 is between MVR 15,000 to 20,000; however, it is higher in hub islands (median MVR 20,000 – 30,000).

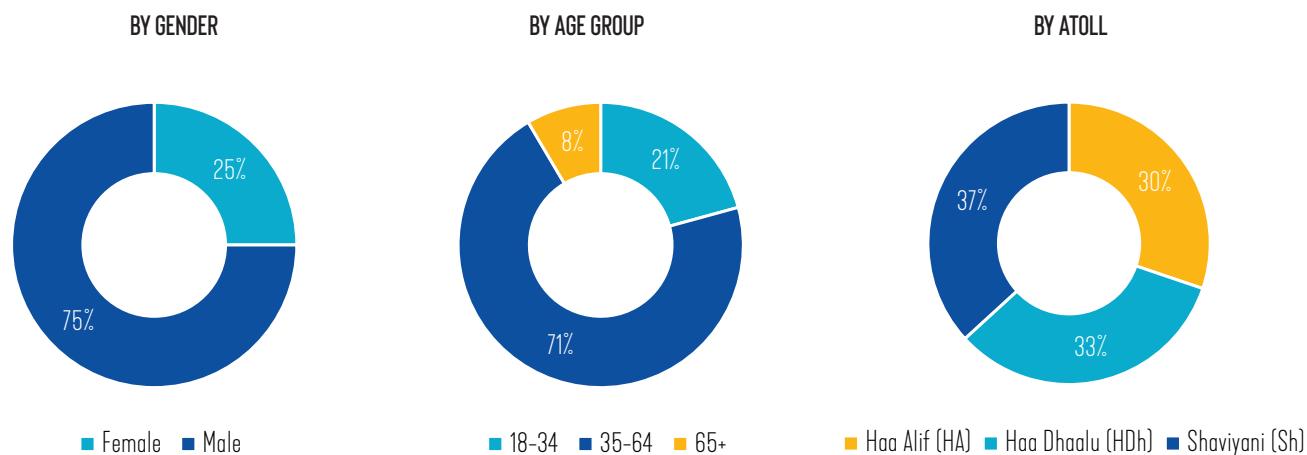
## BUSINESS SURVEY RESPONDENTS

106 businesses from Zone 1 were interviewed for the study.

### GENDER, AGE AND GEOGRAPHICAL LOCATION

Of those interviewed for the business study, a quarter of the sample were women and a fifth were young people between the ages of 18 and 34.

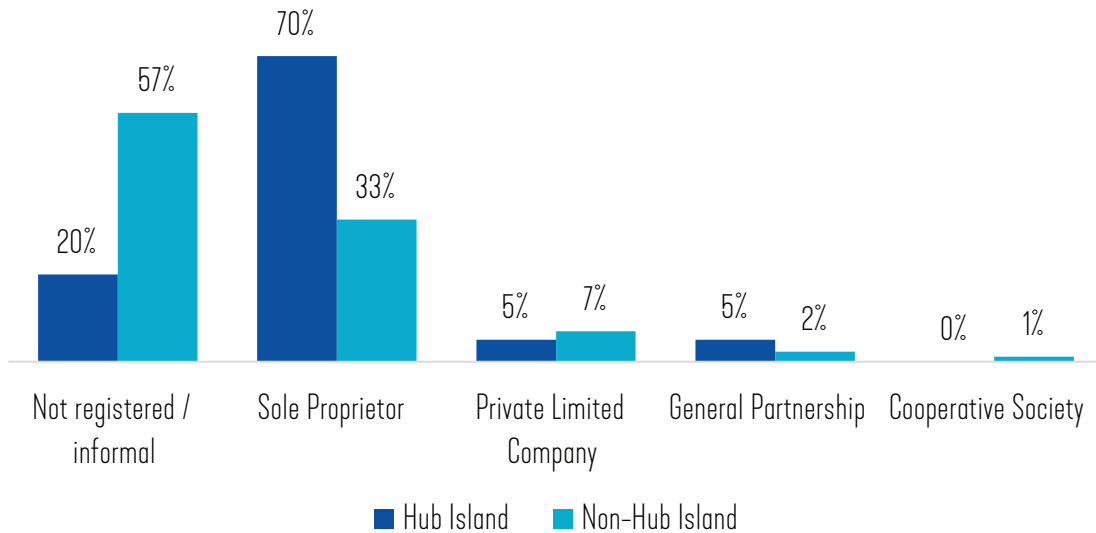
FIGURE 45: DISTRIBUTION OF GENDER, AGE AND GEOGRAPHICAL LOCATION IN THE BUSINESS SURVEY



## TYPE OF BUSINESS REGISTRATION

50% of businesses interviewed in Zone 1 are unregistered, 40% are sole proprietors and 7% of businesses are registered as companies. When analysed based on where they were located, a higher proportion of businesses in non-hub islands remained unregistered (57% vs 20%). Most businesses in hub islands were registered as sole proprietors (70%).

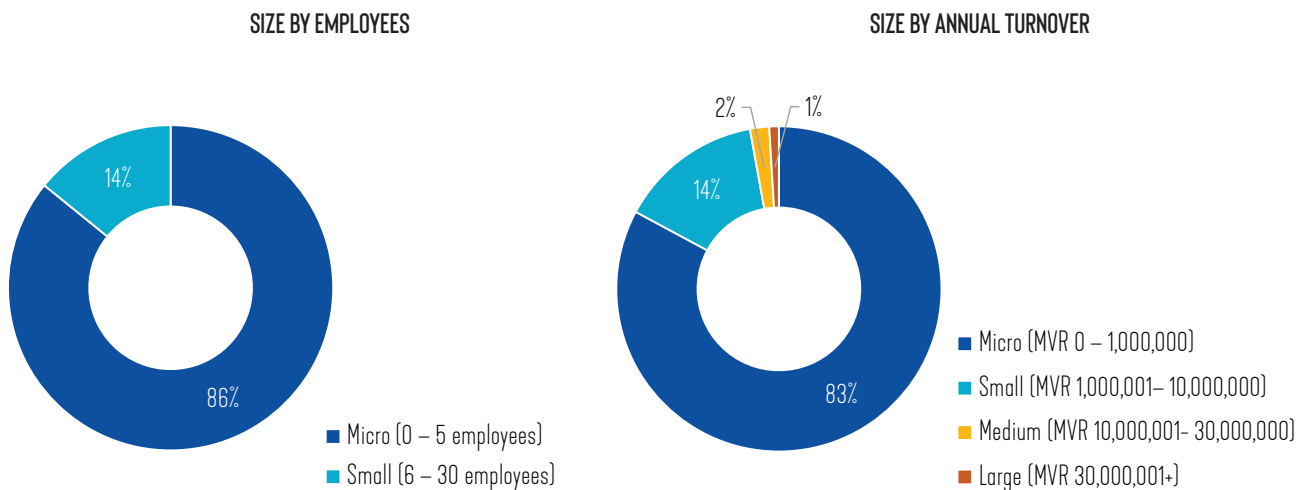
FIGURE 46: TYPE OF BUSINESS REGISTRATION BY HUB AND NON-HUB ISLANDS



## SIZE OF BUSINESS

The size of businesses in the sample was determined by number of employees and annual turnover. The majority of the businesses fall into the category of micro-businesses; 86% of businesses have 5 or less employees and have an annual turnover of MVR 1 million or less.

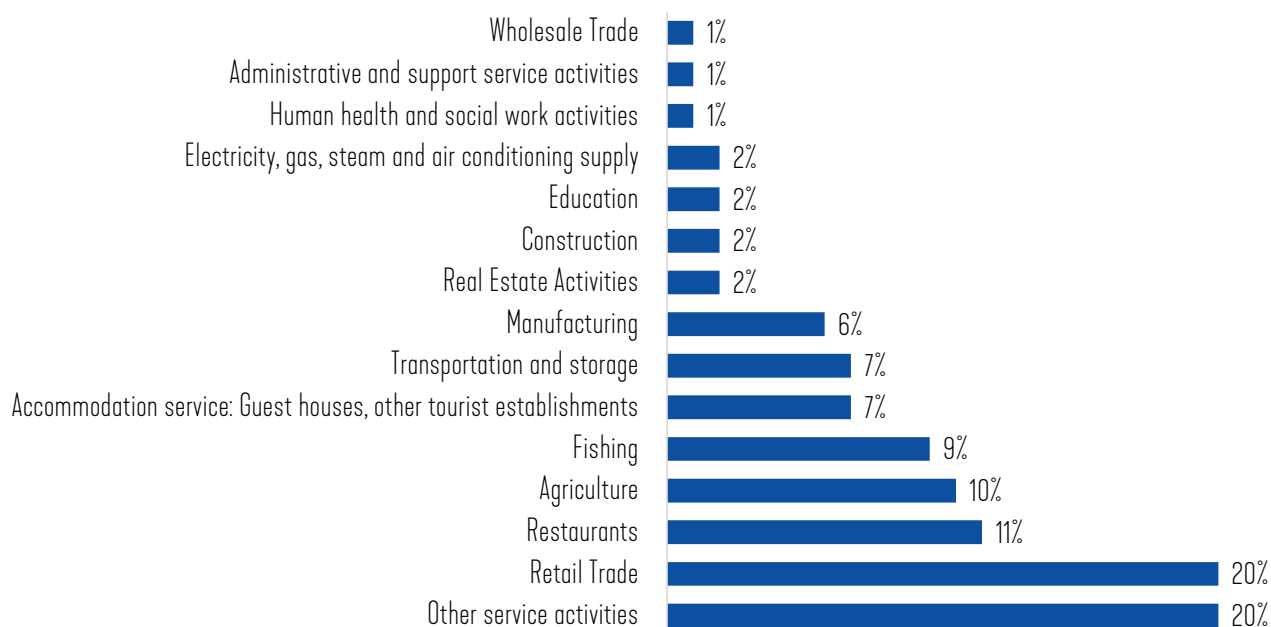
FIGURE 47: SIZE OF BUSINESSES BY EMPLOYEES AND BY ANNUAL TURNOVER



## TYPE OF INDUSTRY

A range of businesses were interviewed for the study. Of the total interviewed, the majority were retail trade (20%) and other service activities (20%). Other service activities include mostly those businesses that operate from home such as sewing and tailoring, selling food products such as short-eats, cakes, ice lollies and juice patties, room rentals, rope making and thatch-weaving.

FIGURE 48: TYPE OF INDUSTRY



## KEY INFORMANT INTERVIEWS

Key informant interviews with representatives from 47 key institutions in Zone 1 and Male' were conducted. These included atoll councils, regional and atoll hospitals, city/island councils, schools, universities/colleges, health centres, women's development committees, civil society organisations, business owners, airports, the police, the magistrate court, the bank, the business support centre, Fenaka (which oversees energy, water and sewage systems), and MTCC/RTL (which operates the ferry service). Interviews in Male' were held with representatives from national institutions such as the Ministry of Health, MTCC and Maldives Post.

A total of 151 representatives participated in the key informant interviews; of these 55 were women and 96 were men.

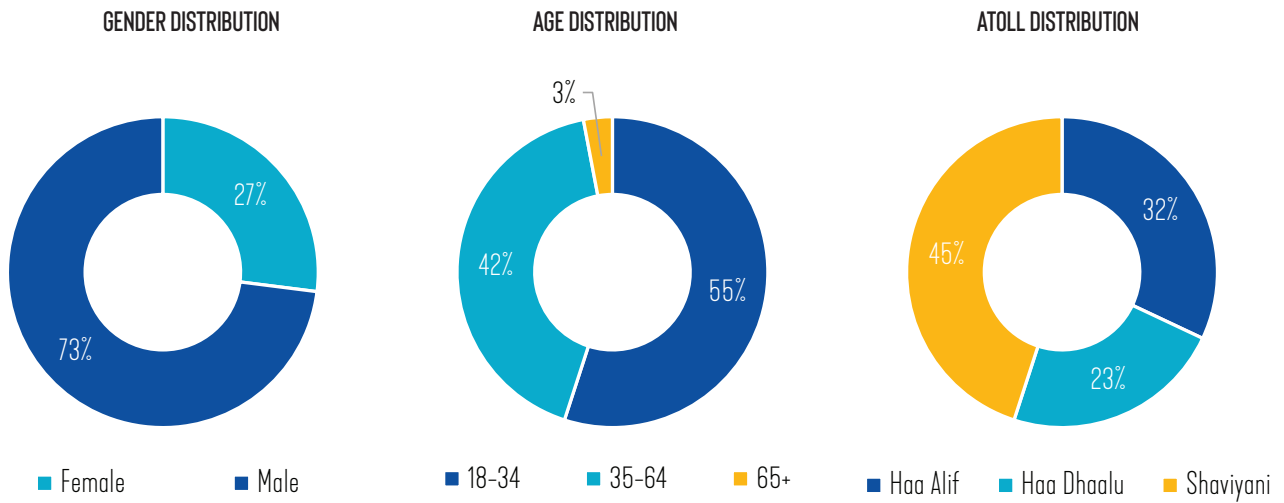
TABLE 10: BREAKDOWN OF GENDER AND GEOGRAPHICAL LOCATION FOR KII PARTICIPANTS

	Key Informant Interviews (KIIs)	Number of Participants in KIIs
Total	47	163
Ha. Atoll	13	58
Hdh. Atoll	14	37
Sh. Atoll	13	43
Male'	2	12
Male' (online)	5	13
Women		61
Men		102

## FGDS

A total of 11 FGDS were conducted in Zone 1, with 84 participants in all.

FIGURE 49: GENDER, AGE AND GEOGRAPHICAL LOCATION OF FGD PARTICIPANTS



Information about the planned FGDS was disseminated through the Island Councils to the public, and those interested in sharing their perspectives and experiences invited to the event. The team also shared information with residents as they conducted their research activities, so that there was wide-spread awareness. Additionally, the Council and residents helped to identify families and households with more frequent travel needs, for instance families with members who have a disability or who are getting treatment for a chronic or serious illness. This ensured that there would be a good cross-section of participants for the FGDS.

## ANNEX II: LIST OF PEOPLE MET

#	Date	Atoll	Island	Office/Organisation	Participant Name	Designation
1	6-Jul-23	Male'	Male'	MNPHI	Mohamed Imad	Chief Project Executive
		Male'	Male'	MNPHI	Aishath Saadh	Deputy Director General
		Male'	Male'	MNPHI	Aman Khaleel	Senior Planning Analyst
		Male'	Male'	MNPHI	Samaha Ali Mohamed	Senior Planning Analyst
		Male'	Male'	MNPHI	Fathimath Wafa	Planning Analyst
		Male'	Male'	MNPHI	Arif Rasheed	Financial Controller
		Male'	Male'	MNPHI	Fathimath Neeshan Fathuhullah	Project Officer
2	17-Jul-23	Male'	Online	MTCC	Ahmed Jinah	Senior Manager
		Male'	Online	MTCC	Abdulla Shimau	Transport Manager
		Male'	Online	MTCC	Mohamed Adam	Zone 1 Manager @ Kulhudhuffushi
3	18-Jul-23	Male'	Online	MoTCA	Hussain Nazeer	Director, Maritime Affairs
		Male'	Online	MoTCA	Aminath Jeehan	Certification Officer
4	20-Jul-23	Male'	Online	Ministry of Health	Mohamed Meezan	Deputy Director General, Regional Atoll Service Division
		Male'	Online	HA. Atoll Hospital	Adam Naseer	Manager
		Male'	Online	Kulhudhuffushi Regional Hospital	Ahmed Dawood	CEO
		Male'	Online	Sh. Atoll Hospital	Saniyya Mohamed	Director
		Male'	Online	HA. Atoll Hospital	Azneena Ali	Assistant Director
		Male'	Online	HA. Atoll Hospital	Mohamed Rasheed	
5	8-Aug-23	HDh.	Kulhudhuffushi	HDh. Atoll Council	Mohamed Siraj	"President ..
		HDh.	Kulhudhuffushi	HDh. Atoll Council	Ibrahim Umar	Secretary General
		HDh.	Kulhudhuffushi	HDh. Atoll Council	Abulla Assad	Director General
		HDh.	Kulhudhuffushi	HDh. Atoll Council	Ali Aboobakuru	Director
6	8-Aug-23	HDh.	Kulhudhuffushi	Kulhudhuffushi Regional Hospital	Ahmed Dawood	Chief Executive Officer
7	8-Aug-23	HDh.	Kulhudhuffushi	MNU Kulhudhuffushi Campus	Dr. Mohamed Umar	Asst. Professor/ Acting Manager of Campus
8	8-Aug-23	HDh.	Kulhudhuffushi	Upper North Police Division, KFC	Inspector Ahmed Fayaz	HDh Atoll Commander
		HDh.	Kulhudhuffushi	Upper North Police Division, KFC	Hassan Ahmed	Kulhudhuffushi Acting-City commander
9	8-Aug-23	HDh.	Kulhudhuffushi	MI College	Ahmed Faheem	MI College - Kulhudhuffushi Campus Manager
10	9-Aug-23	HDh.	Kulhudhuffushi	MTCC	Mohamed Jinah	Senior Manager
		HDh.	Kulhudhuffushi	MTCC	Mohamed Adam	Zone 1 Manager @Kulhudhuffushi
11	9-Aug-23	HDh.	Kulhudhuffushi	BC, Kulhudhuffushi	Shazeela Hassan	BD Officer
12	9-Aug-23	HDh.	Kulhudhuffushi	Bank of Maldives, KFC Branch	Mohamed Ismail	Manager
13	9-Aug-23	HDh.	Kulhudhuffushi	Kulhudhuffushi City Council	Mohamed Athif	Mayor
		HDh.	Kulhudhuffushi	Kulhudhuffushi City Council	Abdulla Adam	Secretary General
14	10-Aug-23	HA.	Hoarafushi	HA.Hoarafushi Council	Aminath Nashiha	Council Member
		HA.	Hoarafushi	HA.Hoarafushi Council	Ahmed Imdhaah	Vice President
		HA.	Hoarafushi	HA.Hoarafushi Council	Ahmed Raaf	Council Member
		HA.	Hoarafushi	HA.Hoarafushi Council	"Mohamed Shakir ..	Secretary General
		HA.	Hoarafushi	HA.Hoarafushi Council	Imthiyaz Hamdhy	Council Executive
		HA.	Hoarafushi	HA.Hoarafushi Council	Bunyaameen Shameem	Senior Council Officer

15	11-Aug-23	HA.	Hoarafushi	HA.Hoarafushi Airport	Ahmed Yasir	Senior Airfield Officer
		HA.	Hoarafushi	HA.Hoarafushi Airport	Ahmed Nizar	Admin and HR Officer
		HA.	Hoarafushi	HA.Hoarafushi Airport	Usaid Moosa	Senior Operations Officer
16	11-Aug-23	HA.	Thuraakunun	HA. Thuraakunu Council	Ali Abdul Latheef	President
		HA.	Thuraakunun	HA. Thuraakunu Council	Mariyam Farsha	Vice President
		HA.	Thuraakunun	HA. Thuraakunu Council	Ibrahim waheed	Secretary General
		HA.	Thuraakunun	HA. Thuraakunu Council	Ismail Shafeeg	Member
17	11-Aug-23	HA.	Thuraakunun	HA. Thuraakunu Council	Thoha Ali	Member
		HA.	Thuraakunun	HA. Thuraakunu Health centre	Mohamed Mustafa	Community health officer
		HA.	Uligan	HA. Uligan Council	Ahmed Muaz Mohamed	President
18	12-Aug-23	HA.	Uligan	HA. Uligan Council	Ahmed Aboobakuru	Council Member
		HA.	Uligan	HA. Uligan Council	Sudha Adnan	Council Member
		HA.	Uligan	HA. Uligan Council	Muhammad Shaafiu	Secretary General
19	12-Aug-23	HA.	Uligan	Fenaka Uligan Branch	Mohamed Irshad	Fenaka Station Manager
20	12-Aug-23	HA.	Uligan	HA. Uligan School	Saudhulla Idhreez	Principal
		HA.	Uligan	HA. Uligan School	Akram Adam	Administrator
21	13-Aug-23	HA.	Dhihdhoo	HA. Dhihdhoo Magistrate Court	Hassan Fayaz	Magistrate
		HA.	Dhihdhoo	HA. Dhihdhoo Magistrate Court	Ibrahim Shifaau	Legal Officer
		HA.	Dhihdhoo	HA. Dhihdhoo Magistrate Court	Mohamed Atheeg	Administrator
		HA.	Dhihdhoo	HA. Dhihdhoo Magistrate Court	Abdulla Saeed	IT Technician
		HA.	Dhihdhoo	HA. Dhihdhoo Magistrate Court	Mariyam Saeeda	Admin Officer
22	13-Aug-23	HA.	Dhihdhoo	HA. Atoll Council	Mohamed Aslam	Secretary General
		HA.	Dhihdhoo	HA. Atoll Council	Abdulla Shafeeq	Senior Council Executive
		HA.	Dhihdhoo	HA. Atoll Council	Mariyam Shafeega	Council Executive
		HA.	Dhihdhoo	HA. Atoll Council	Adam Saeed	Legal Officer
		HA.	Dhihdhoo	HA. Atoll Council	Asma Aboobakuru	Council Executive
		HA.	Dhihdhoo	HA. Atoll Council	Mazhar Sulaiman	Asst. Council Executive
		HA.	Dhihdhoo	HA. Atoll Council	Moosa Shafeeq	President
23	13-Aug-23	HA.	Dhihdhoo	HA. Atoll Hospital	Safaana Hassan	Community Health Officer
		HA.	Dhihdhoo	HA. Atoll Hospital	Azneena Ali	Assistant Director
		HA.	Dhihdhoo	HA. Atoll Hospital	Adam Naseer	Manager Health Service
		HA.	Dhihdhoo	HA. Atoll Hospital	Ibrahim Shafeeq	Manager Health Service
		HA.	Dhihdhoo	HA. Atoll Hospital	Ahmed Farhan	Senior Medical Laboratory Technician
		HA.	Dhihdhoo	HA. Atoll Hospital	Aminath Nashidha	Clinical Nurse
		HA.	Dhihdhoo	HA. Atoll Hospital	Ibrahim Amir	Store Keeper
		HA.	Dhihdhoo	HA. Atoll Hospital	Mohamed Ihusan	Customer Service Officer
		HA.	Dhihdhoo	HA. Atoll Hospital	Mohamed Hashim	IT Officer
		HA.	Dhihdhoo	HA. Atoll Hospital	Saabiga Ahmed	Account Officer
24	13-Aug-23	HA.	Maarandhoo	HA.Maarandhoo Council	Jailam Haaron	President
		HA.	Maarandhoo	HA.Maarandhoo Council	Ahmed Rameez	Vice President
		HA.	Maarandhoo	HA.Maarandhoo Council	Afeefa Khalid	Council Member
		HA.	Maarandhoo	HA.Maarandhoo Council	Aminath Zeeniya	Council Member
		HA.	Maarandhoo	HA.Maarandhoo Council	Mariyam Shifana	Asst Council Executive
		HA.	Maarandhoo	HA.Maarandhoo Council	Ibrahim Rameez	Asst Council Executive
		HA.	Maarandhoo	HA.Maarandhoo Council	Shiraany Abdulla	Council Officer
25	13-Aug-23	HA.	Maarandhoo	HA. Maarandhoo Health Center	Ahmed Ibarhim	In-Charge
		HA.	Maarandhoo	HA. Maarandhoo Health Center	Hussain Riyaz	Senior Community Health Officer

26	13-Aug-23	HA.	Maarandhoo	HA. Maarandhoo School	Aminath Moosa	Leading Teacher
		HA.	Maarandhoo	HA. Maarandhoo School	Moosa Shaheem	Administrator
		HA.	Maarandhoo	HA. Maarandhoo School	Maldha Abdulla	Leading Teacher
		HA.	Maarandhoo	HA. Maarandhoo School	Hafeeza Mohamed	Leading Teacher
		HA.	Maarandhoo	HA. Maarandhoo School	Shahidha Mohamed	Leading Teacher
27	15-Aug-23	HDh.	Hirimaradhoo	HDh. Hirimaradhoo Health Center	Ahmed Mohamed	In-charge
		HDh.	Hirimaradhoo	HDh. Hirimaradhoo Health Center	Moosa Jaleel	Admin Officer
28	15-Aug-23	HDh.	Hirimaradhoo	HDh. Hirimaradhoo Council	Ibrahim Ahmed	Admin Officer
		HDh.	Hirimaradhoo	HDh. Hirimaradhoo Council	Ahmed Shareef	Vice President
		HDh.	Hirimaradhoo	HDh. Hirimaradhoo Council	Aishath Juwairiya	Council Member
		HDh.	Hirimaradhoo	HDh. Hirimaradhoo Council	Aminath Nuha	Council Member
		HDh.	Hirimaradhoo	HDh. Hirimaradhoo Council	Mohamed Aruzul	Council Member
29	16-Aug-23	HDh.	Vaikaradhoo	HDh. Vaikaradhoo Council	Mohamed Nuham	Vice President
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo Council	Fathimath Shizna	Member
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo Council	Abudlla Shareef	Member
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo Council	Aishath Haneefa	Member
30	16-Aug-23	HDh.	Vaikaradhoo	HDh. Vaikaradhoo Council	Mohamed Rabeuu	Director
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo School	Mohamed Hilmy	Principal
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo School	Ibrahim Ashraf	Leading teacher
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo School	Hassan Zameer	Teacher
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo School	Aishath Suma	Leading Teacher
31	16-Aug-23	HDh.	Vaikaradhoo	HDh. Vaikaradhoo School	Aminath Rizna	Leading Teacher
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo WDC	Aishath Shahula	Member
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo WDC	Athifa Dawood	Member
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo WDC	Basheera Mohamed	Vice President
		HDh.	Vaikaradhoo	HDh. Vaikaradhoo WDC	Fathimath Zunaina	Member
32	17-Aug-23	HDh.	Vaikaradhoo	HDh. Vaikaradhoo WDC	Aishath Naashida	President
		Sh.	Feevah	Sh.Feevah Council	Ali Yasir	Assistant Council Executive
		Sh.	Feevah	Sh.Feevah Council	Aminath Waheed	Council Member
		Sh.	Feevah	Sh.Feevah Council	Mariyam Sheeneez	Council Officer
33	17-Aug-23	Sh.	Feevah	Sh.Feevah Council	Aminath Afnaan Abdul Hameed	Finance Officer
		Sh.	Feevah	Sh. Feevah WDC	Fathimath Shifna	Vice President
34	17-Aug-23	Sh.	Feevah	Sh. Feevah WDC	Amimath Sara	Member
		Sh.	Feevah	Sh.Feevah School	Abdul Rasheed	Principian
35	17-Aug-23	Sh.	Feevah	Sh.Feevah School	Shafeega Ali	Leading Teacher
		Sh.	Maroshi	Sh. Maroshi WDC	Maajidha Hussain	President
		Sh.	Maroshi	Sh. Maroshi WDC	Shaifana Adeel Zahir	Member
		Sh.	Maroshi	Sh. Maroshi WDC	Shaheeda Dhonthuthu	Member
		Sh.	Maroshi	Sh. Maroshi WDC	Zeeniya Abdulla	Member
		Sh.	Maroshi	Sh. Maroshi WDC	Fathimath Niuma Ahmed	Member

36	17-Aug-23	Sh.	Maroshi	Sh. Maroshi Council	Ali Mohamed	President
		Sh.	Maroshi	Sh. Maroshi Council	Amjad Yoosuf	Vice President
		Sh.	Maroshi	Sh. Maroshi Council	Samiyya Usman	Member
		Sh.	Maroshi	Sh. Maroshi Council	Nuha Ali Zahir	Member
37	17-Aug-23	Sh.	Maroshi	Sh. Maroshi Health Center	Ikram	Senior Administrative Officer
		Sh.	Maroshi	Sh. Maroshi Health Center	Ibrahim Falih	Assistant Customer Services Officer
38	17-Aug-23	Male	Online	Maldives Post Ltd	Ahmed Adhuham	Deputy Managing Director
39	19-Aug-23	Sh.	Funadhoo	Sh.Funadhoo CSO Representatives	Abdul Salman	President - Zuvaanunge Jamiyya
		Sh.	Funadhoo	Sh.Funadhoo CSO Representatives	Maazin Hassan	Secretary General, Hunga Jamiyya [Environment NGO]
		Sh.	Funadhoo	Sh.Funadhoo CSO Representatives	Adam Zifan	Member, YES Funadhoo [Youth Empowerment]
		Sh.	Funadhoo	Sh.Funadhoo CSO Representatives	Hussain Looth	Member, Hunga Jamiyya
		Sh.	Funadhoo	Sh.Funadhoo CSO Representatives	Baariu Naseem	Member, Hunga Jamiyya
40	19-Aug-23	Sh.	Funadhoo	Sh.Atoll Council	Ahmed Hameed	Director General
		Sh.	Funadhoo	Sh.Atoll Council	Abdul Jaleel	Director
		Sh.	Funadhoo	Sh.Atoll Council	Azeema Adeel	Assistant Director
41	19-Aug-23	Sh.	Funadhoo	Sh.Atoll Hospital	Hassan Ismail	Assistant Director, In-charge of hospital
		Sh.	Funadhoo	Sh.Atoll Hospital	Ahmed Zahid	Community Health Coordinator
		Sh.	Funadhoo	Sh.Atoll Hospital	Sameera Mohamed	Senior accounts officer
		Sh.	Funadhoo	Sh.Atoll Hospital	Maimoona Ali	Customer Service Officer
		Sh.	Funadhoo	Sh.Atoll Hospital	Aishath Silma	Registered Nurse
42	19-Aug-23	Sh.	Funadhoo	Sh.Atoll Hospital	Mohamed Ibrahim	Lab Technician
		Sh.	Funadhoo	Sh.Funadhoo Airport	Hassan Azim	Safety Officer/Airport In-charge
43	19-Aug-23	Sh.	Funadhoo	Sh.Funadhoo Airport	Abdul Ghani Ahmed	Maintenance Supervisor
		Sh.	Funadhoo	Sh.Funadhoo Council	Ahmed Ziyad	Council Officer
		Sh.	Funadhoo	Sh.Funadhoo Council	Ali Khalid	Vice President
44	19-Aug-23	Sh.	Funadhoo	Sh.Funadhoo Council	Zulfa Hamid	Council member
		Sh.	Funadhoo	Sh. Funadhoo WDC	Fathmath Yoosuf	Member
		Sh.	Funadhoo	Sh. Funadhoo WDC	Nasira Hassan	Vice President
		Sh.	Funadhoo	Sh. Funadhoo WDC	Farzana Adam	Member
45	19-Aug-23	Sh.	Funadhoo	Sh. Funadhoo WDC	Aminath Sofoora	Member
46	3-Sep-23	Male	Online	Ocean View Guest House	Mohamed Imthiyaz	Manager
47	14-Sep-23	Male	Male	MTCC	Ahmed Jinah	Senior Manager
		Male	Male	MNPHI	Mohamed Imad	Chief Project Executive
		Male	Male	MNPHI	Aishath Saadh	Deputy Director General
		Male	Male	MNPHI	Aman Khaleel	Senior Planning Analyst
		Male	Male	MNPHI	Samaha Ali Mohamed	Senior Planning Analyst
Male	Male	MNPHI	Fathimath Shazly	Senior Planning Analyst		







Ministry of National Planning,  
Housing & Infrastructure



9 789991 578248