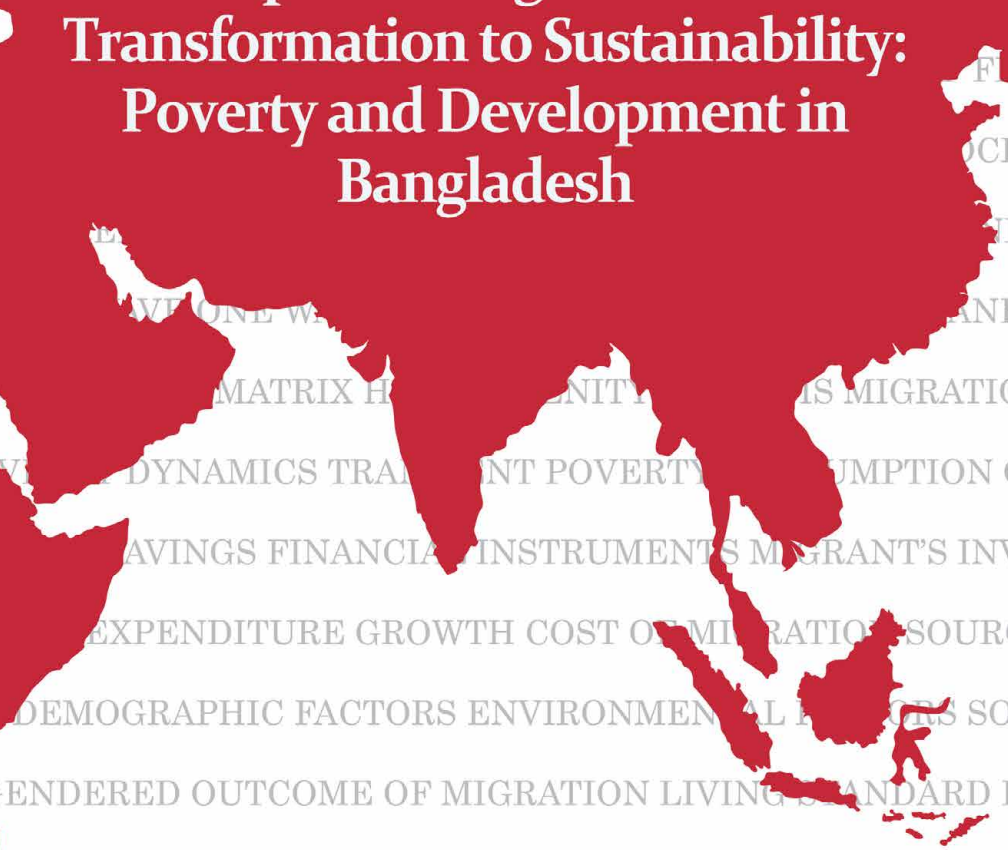
Impact of Migration on Transformation to Sustainability: Poverty and Development in Bangladesh



Edited by
Tasneem Siddiqui

About the book

This book contains the findings from the third wave of a migration focused panel survey in Bangladesh. It examines the interrelationships between labour migration, poverty, and development based on 6,100 interviews including international labour migrants, internal migrants and non-migrant households spanning 20 districts of Bangladesh. The first wave of survey (2014) found that among these three groups poverty level is much lower for international labour migrant households. The second wave (2017), demonstrated that between 2014 and 2017 poverty rates among all three household types reduced further. This book presents findings of the third wave of the panel survey (2020) which was fielded amidst the COVID-19 pandemic and multiple climate related disasters. It finds that sample households are remarkably resilient to these shocks and that the trend in poverty reduction continues across sample waves. Throughout the survey poverty rates have been the lowest among international migrant households. Nonetheless, the poverty rate declines most rapidly and consistently among internal migrant households. This finding has major policy ramifications. It asserts that migration - both internal and international - can be a core element of transformation to economic sustainability. These results show that it is imperative that policy makers to give just as much consideration to facilitating and supporting internal migration as is given to international migration. All three waves of the panel surveys have been supported by Switzerland.

Tasneem Siddiqui is Professor of Political Science, University of Dhaka and Founding Chair of the Refugee and Migratory Movements Research Unit (RMMRU). Her work on drivers and impact of internal and international labour migration, migration governance, climate change adaptation and migration and safe and sustainable cities inclusive of migrants have been published in various journals and edited volumes. She led the drafting of the National Strategy for Internal Displacement in Bangladesh, 2021, the Overseas Employment Policy 2006 and was a committee member that prepared the first draft of the Overseas Employment and Migrants Act of 2013. She is the Member Secretary of the government committee currently preparing the Action Plan to implement the National Strategy on Internal Displacement. She is in the Global Editorial Board of *Journal of Migration Studies*, Oxford University Press. Dr. Siddiqui is also serving as a Member in the Advisory Committee of the Platform on Disaster Displacement (PDD) and the Board of Trustees of the Bangladesh Chapter of Transparency International.

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RMMRU

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Refugee and Migratory Movements Research Unit
Sattar Bhaban (4th Floor)
179, Shahid Syed Nazrul Islam Sharani
Bijoynagor, Dhaka-1000
Tel: (88) 0258316524
E-mail: info@rmmru.org
Website: www.rmmru.org

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Contributors

Dr. C. Rashaad Shabab is an award winning Senior Lecturer in Economics at the University of Sussex in the U.K. He is an applied micro-economist with research specialisms in household inequality, income risk, lifecycle theory and migration. He holds a PhD in Economics from the University of Sussex. Before enrolling as a graduate student, he was a development professional working to analyse the challenges faced by Bangladesh in issues ranging from the business climate and economic governance to promoting democratic institutions.

Dr. Ananta Neelim works as a Senior Lecturer of Economics at the University of Tasmania, Australia. He is a behavioural and experimental economist with a focus on understanding the role of social and gender norms in shaping individual's choices in social and market interactions. Dr. Neelim takes a strong interest in development issues in Bangladesh and provides expert advice to policymakers. He has published many scholarly works in reputable international academic journals.

Mahmudol Hasan Rocky is working at RMMRU as a Research Coordinator. He holds an MBA from East West University. He is one of the co-authors of the book *'Accommodating migration as one of the adaptation tools'*. He is also a co-author of a chapter of the book *Deltas in the Anthropocene; Where People Live and Move in Deltas*; Palgrave Macmillan 2019 and of the journal article titled 'Human security of urban migrant populations affected by length of residence and environmental hazards' and "Urban sustainability and the subjective well-being of rural-urban migrants: the role of risks, place attachment and aspirations". His research interest includes climate change and migration.

Esther M. Bartl is a PhD student in Development Economics at the University of Sussex in the U.K. She focuses on labour markets and household resilience in low and middle-income countries. In the past couple of years, she has worked as an applied micro-economist at the World Bank where she has been involved in various projects and contributed to several policy reports on labour markets, migration, and education for countries in South Asia and Europe.

Rabab Ahmed works as a Research Associate at RMMRU. He is affiliated with the Skilling of Returnee Migrants through Skills and Enterprise

Development Programme. Ahmed has been involved in documenting and translating the case stories on the violence on returnee female. He was engaged in organising field work for the Impact of Migration on Poverty and Development (IMPD-3) project and on The Environmental and Labour Dimensions of Work in the Bangladeshi Brick Industry programme of RMMRU and Royal Holloway University of London.

Parvez Bhuiyan is working as a Research Assistant at RMMRU. He supervises field research during the data collection phase of various projects of RMMRU. He assists in analysing data by using SPSS. Additionally, he also takes part in data cleaning, data correction and training Field Research Assistants. He completed his undergraduate studies from Dhaka International University (DIU).

Abbreviations

BARD	Bangladesh Academy for Rural Development
BBS	Bangladesh Bureau of Statistics
BRAC	Bangladesh Rural Advancement Committee
BMET	Bureau of Manpower Employment and Training
DECCMA	DEltas, vulnerability and Climate Change: Migration and Adaptation
DPS	Deposit Pension Scheme
F	Female
FM	Female Migrant
HH	Household
HIES	Household Income and Expenditure Survey
HSC	Higher Secondary Certificate
IDMC	Internal Displacement Monitoring Centre
ILO	International Labour Organisation
IMPD	Impact of Migration on Poverty and Development
INSTRAW	International Research and Training Institute for the Advancement of Women
Int. Mig	Internal migrant
Intl. Mig	International migrant
IOM	International Organisation for Migration
KII	Key Informant Interview
Max	Maximum
Min	Minimum
M	Male
MM	Male Migrant
Mem Int Mig.	Member of Internal Migrant
Mem Intl. Mig.	Member of International Migrant
N	Number of Individuals
NGO	Non-Government Organisation

Non Mig	Non-migrant
Ret. Int	Returned Internal
Ret. Intl	Returned International
RMMRU	Refugee and Migratory Movements Research Unit
SDC	Swiss Agency for Development and Cooperation
Std. Dev.	Standard Deviation
T	Total
Taka	Currency of Bangladesh
TM	Total Migrant
UAE	United Arab Emirates
UK	United Kingdom
UP	Union Parishad
USA	United States of America
US$	US Dollar

Glossary of non-English terms

Bazar	Market
Bkash	A mobile phone-based money transaction system in Bangladesh
Burka	Is an enveloping outer garment which covers the body and the face that is worn by women in some Islamic societies.
Dhanmarai machine	Paddy processing machine
District Sadar	District headquarters
Eid	Muslim religious festival
Hajj	Muslim religious ritual
Haor	Is a wetland ecosystem in the north eastern part of Bangladesh
Hundi	An unconditional order in writing made by a person directing another to pay a certain sum of money to a person named in the order
Jainamaz	Prayer mat
Khas land	Government owned fallow land, where nobody has property rights
Korimon	Engine driven improved rickshaw
Katcha Road	Local mud roads
Madrasa	Religious educational institution
Mazar	Shrine
Mahinda	Heavy commercial vehicle
Maxi	Long loose dress
Mejbani	Local feast
Milad	Religious congregation

Nosimon	Engine driven improved rickshaw
Paanshupari	Betel leaf and nut
Paka Houses	Brick building
Puja	Religious festival of Hindu community
Shamiana	Tent
Tempu	A motorised vehicle used as means of transportation
Tasbih	Rosary
Tupi	Cap
Union Parishad	Smallest unit of the administration in local government in rural areas of Bangladesh
Upazila	Sub-district

Foreword

Promoting safer migration and economic inclusion of returnee migrant workers are key priorities of the Swiss cooperation programme. Switzerland is the first bilateral development partner in Bangladesh to integrate migration into the mainstream development agenda. Through our global and regional work, we are convinced that, internal and international migration plays an important role in transformation of the economies and societies. Readymade garments, along with other manufacturing industries, and migrants' remittances are the major foreign exchange earning sectors for Bangladesh. Remittances are almost the sole contribution of the international labour migrants who mostly work in the Gulf, other Arab and South East Asian countries. For Switzerland to support labour migration in Bangladesh, it was important to know how migration is impacting poverty, local development processes and if migration has been resulting in transformation of societies.

I commend RMMRU on publishing the third volume of the *Impact of Migration on Transformation to Sustainability: Poverty and Development in Bangladesh* study, with Swiss support.

Since 2012, Switzerland has been supporting RMMRU to conduct this longitudinal survey in 20 districts across Bangladesh, covering 6,100 households. The survey has been conducted three times, at three-year intervals. The findings of the first survey were published in 2015, which showed the poverty rates amongst international migrant households to be much lower compared to internal migrant and non-migrant households. The second survey, published in 2018, demonstrated that although the poverty level had reduced for all three groups, it was not static. The third survey was conducted during the COVID-19 pandemic and several natural calamities, such as, a cyclone and floods also took place during this time. Hence the research team was able to explore how these multiple stresses have affected the sustainability outcome of migration. This latest survey shows that poverty levels of all three types of households have reduced, despite these external influencing factors. All three publications have important findings on the gender dimensions associated with migration such as how remittances sent by women migrant workers are growing at a higher rate compared to that of men. Also, there appears to be a reducing trend in the cost of migration for women.

We hope that such interesting trends and analyses will assist to frame targeted interventions and facilitate evidence-based policy advocacy.

On behalf of the Embassy of Switzerland in Bangladesh, I thank RMMRU for conducting this longitudinal survey, despite the emerging challenges with the COVID-19 pandemic, and hope that all stakeholders benefit from using the survey findings to continue Bangladesh's efforts in promoting safer migration.

Suzanne Mueller
Head of Cooperation/Deputy Head of Mission
Embassy of Switzerland in Bangladesh

Preface

On behalf of Refugee and Migratory Movements Research Unit (RMMRU) it is my pleasure to share the major findings of the organisation's flagship research project. Since the mid-1990s, RMMRU has been working on migration, displacement, statelessness and refugee issues. The key role of RMMRU has been to generate evidence based knowledge, to engage in advocacy with policy makers, to initiate necessary policy reform, and to implement local and national level programmes to inform migrants and their families about these policy changes. In 2013, the organisation initiated a panel survey on labour migration with the aim of understanding the impact of migration on poverty, growth, and development. This book is the third publication which presents the findings of the three waves of survey conducted in 2014, 2017 and 2020.

The third wave of the data was generated from August 2020 to December 2020 by which time the COVID-19 pandemic had engulfed the world. Along with COVID-19, Bangladesh also faced multiple climate related stresses such as cyclone Amphan, five consecutive floods, flash floods and thunderstorms. Clearly conducting the necessary fieldwork in 20 districts of Bangladesh under such conditions was extremely challenging. In order to maintain the three year interval between survey waves the RMMRU team decided to innovatively conduct the fieldwork over the telephone, making use of the KoBo Toolbox software package. 35 enumerators went through the difficult task of convincing respondents to talk over phone for one and a half hours. Initially, we were skeptical as to whether it would not it would be possible to conduct interviews over the phone as respondents may have strong reservations. The enumerators painstakingly continued and completed more than half the total number of interviews over phone. Those who did not agree, were later interviewed face-to-face. I express my deep appreciation for the enumerators for rising to the challenge and making the interviews possible.

I express my sincere gratitude to 6,100 households who extended invaluable support to this research by providing their time and information over phone and in face-to-face interviews during in the strains of the ever unpredictable COVID-19 situation. In some districts they had to combat floods to do so.

The methodology of the research was developed with the guidance of four eminent economists: Dr. Hossain Zillur Rahman, former Advisor, Caretaker Government, 2007-08; Dr. Shamsul Alam, the then Senior Secretary and Member, Planning Commission; the late Dr. Mahbub Hossain, the then Executive Director, BRAC; and Dr. Zahid Hussain, the then chief economist of the World Bank, Dhaka. The research team is deeply indebted to all of them.

To secure input from policy makers, experts, and activists RMMRU organised a hybrid dissemination workshop on January 12, 2022. I express my deep appreciation to all those who provided important insights. The feedback and comments from the designated reviewers substantially improved the quality of the research. Professor Mustafizur Rahman, Distinguished Fellow, Centre for Policy Dialogue; Professor Selim Raihan, University of Dhaka; Professor Atonu Rabbani, of BRAC University; and Ms. Tapati Saha, UN Women provided their valuable comments on the sections on poverty, consumption growth, gender, etc. Mr. Shahidul Haque, former foreign secretary; Dr. Mohammad Habibur Rahman, Executive Director, Research, Bangladesh Bank; Mr. Mohammad Shahidul Alam, NDC, Director General, BMET; and Dr. Nashid Rizwana Monir, Deputy Secretary, Ministry of Expatriates' Welfare and Overseas Employment offered rich policy insignts on the research. My heartfelt thanks to all of them.

Finally, I express my deep appreciation to the Swiss Agency for Development and Cooperation (SDC) for extending its support to all three waves of the panel survey over a period of eight years. Ms. Suzanne Mueller, Director of Cooperation and Acting Head of Mission, Embassy of Switzerland took personal interest in following through with the research. Ms. Nazia Haider, Programme Manager - Safer Migration, SDC has been involved with the study at every step since its inception providing all kinds of support. I am grateful to them both.

I hope that this book will be a useful source of information for those who work on labour migration, poverty, and development as well as for the policy makers and planners.

RMMRU
Dhaka, February 2022

Dr. Tasneem Siddiqui

CHAPTER I

INTRODUCTION

Tasneem Siddiqui

The Sustainable Development Goals (SDGs) put a major emphasis on a complete transformation of the unsustainable political, economic, social and environmental ways of managing the world. They describe transformation to sustainability as an interaction of economic development, social cohesion and environmental preservation (Gavonel et al., 2021). Migration does bring a major transformation in the lives of those who move and on the members of households whom they leave behind. Instances are replete, where it also transforms local communities as well as regional and global economies and societies (Castle and Miller, 2009). Of course, transformation generated by migration could be both positive and negative depending on socio-economic, political, and environmental factors. In the migration and development discourse, positive outcomes on migrant households are generally measured in terms of material and subjective well-being. Negative outcomes, on the other hand, are expressed in terms of economic and social costs of movements. Where migration creates a positive outcome, a major question that follows is how sustainable are these transformations? Again, when the effects of migration are negative the question arises as to whether such outcomes are permanent or temporary, or indeed if the outcome would have been different if certain social, political or economic forces were operating differently. Interestingly, not very many studies are available which explore the potential contributions of migration towards transformation to sustainability. In this study, we plan to look at the relationship of migration with poverty and growth in Bangladesh through the transformation to sustainability framework.

This book is the third volume based on a complete panel survey of three waves starting in 2014 and completed in 2020. As stated earlier, the overarching aim of the research is to understand impact of migration on poverty and development. With the first wave data, we investigated the gendered impact of migration on poverty and local development in Bangladesh. The second wave of data allowed us to explore the depth of poverty among international, internal and non-migrant households

between two-time frames - 2014 and 2017. The third wave of survey that took place in 2020 provides us with an opportunity to empirically test the capacity of migration to drive transformative processes that may lead the migrants and their households towards sustainability. The Wave 3 survey has taken place at a time when the whole world has been going through a health pandemic, COVID-19. Further to the pandemic, Bangladesh has been going through multiple climate stresses. During 2020, the country has experienced 5 consecutive floods and some areas of the country have experienced flash floods, riverbank erosion, cyclone, Amphan, etc. The book explores the ways in which migration interacts with all these stresses and whether it produces or failed to produce sustainable outcomes.

During any crisis, migrants, whether internal or international, bear a disproportionate burden of the resulting hardships, compared to locals. COVID-19 has been no exception. International migrants are used as safety-valves by the policymakers of destination countries. A large number of international migrants have returned from different destination countries to Bangladesh in the aftermath of the outbreak of the pandemic. Those who remained in different destination countries have experienced job losses, wage losses and COVID-19 infections. The death rate among migrants is also significantly higher than in the local populations. The internal migrants of Bangladesh have also met with a similar fate. The country has witnessed reverse migration from urban to rural areas during different periods of the pandemic. A large number of them had to return to their places of rural origin during lockdown due to non-payment of wages, lack of jobs, etc. Migrants who are dependent on day-to-day income for sustenance had no means to survive in mega cities like Dhaka and Chattogram. In this book, one of the major research questions is, "How sustainable are the economic and social transformation paths that have been chartered through migration in the context of COVID-19 crisis?".

The other – and possibly more profound – crisis that Bangladesh is facing is the impact of global climate change. Since its independence, Bangladesh experienced significant social and economic growth. Global climate change poses a major threat that may compromise Bangladesh's hard earned economic and social gains. The evidence suggests that climate change related disasters have intensified over the years. The occurrence of floods, flash floods, cyclones, precipitation, droughts, etc., has increased in both frequency and severity. Internal Displacement Management Centre

(IDMC) estimates that one out of every 7 Bangladeshis will be displaced by 2050. In 2017, among 135 countries who experienced displacement, Bangladesh ranked 6th. A large number of Bangladeshis move internally from climate change affected areas. Nonetheless, a recent study shows that people from climate affected areas are also moving internationally. 32 percent of the migrants originating from 50 climate hotspots took up short term contract migration to the Gulf, other Arab and South East Asian countries (Siddiqui et al., 2018). Comparing data on migrants originating from climate affected areas with those originating from less climate change affected areas, migration transformation to sustainability trajectory can be understood.

1.1 Rational and objective of the research

Since the late 1990s various attempts have been made to understand the impact of international short-term migration (INSTRAW and IOM, 2000; Siddiqui, 2001; Siddiqui and Abrar, 2003; Siddiqui ed., 2005; Bangladesh Bank and IOM, 2009; BBS, 2014; Sharma and Zaman, 2009; World Bank, 2012; SDC and RMMRU, 2015). Each of these studies yielded important insights on the role of migration. BBS (2014), and Bangladesh Bank and IOM (2009) studies are based on large surveys, but all the other studies are small-scale empirical research. The World Bank reports are based on secondary surveys of BBS (household income and expenditure survey). Unfortunately, all these surveys are cross sectional in nature. None of them allow researchers to understand the impact of migration over time. A lack of time varying data hinders rigorous analysis of the impact on poverty or development. Only a true panel survey provides the opportunity to interview the same households at different periods of time to find out if the development outcomes experienced by the international migrant households have sustained over a longer period. In 2013, RMMRU with the support of SDC designed a panel survey to fill this major research gap. The aim of this initiative is to generate a set of panel data on the impact of migration on poverty and development over a period of seven years at three-year intervals. Wave 1 of the survey was fielded in 2014, Wave 2 in 2017 and Wave 3 in 2020.

1.2 Purpose of the study

The purpose of this research is to gather rigorous and quantitative evidence on the relationship between migration and poverty. The ultimate goal is

to help policymakers to integrate migration in development policies and actions. Some of these policies are Long-term Perspective Plan, successive Five Year Plans, Sustainable Development Goals Implementation Plan, Bangladesh Climate Change Action Plan, National Strategy and Action Plans on Displacement, Delta plan 2100, etc.

This book, which is based on a full panel survey, has four broad research objectives: (1) to understand the relationship between poverty and migration over a period of 7 years; (2) to understand the extent of sustainability of the economic and social gains derived through internal and international migration; (3) to understand how different crises interplay in shaping the sustainability outcome of migration; and (4) to highlight implications of observed relationship between migration and economic, social and environmental sustainability for policy planning.

1.3 Conceptual issues

Transformation to sustainability and migration

The Sustainable Development Goals (SDGs) agenda begins by demonstrating its conviction to transformation by stating that the overall aim of SDGs is to 'transform our world,' with fundamental changes. Theories of transformation explain how societies can shift away from current trajectories of unsustainability. Human well-being, environmental preservation, rights-based approaches, diversity, and inclusivity are conceptualised as the new processes that will lead towards a transformation to sustainability. In the mainstream transformation to sustainability literature migration is hardly discussed, whereas migration transition theories conceptualise migration as an intrinsic part of social transformation processes (Castles et al., 2014). In this book we follow a simple definition of migration. It is defined as movement of people from their primary place of residence. These movements can be both internal and international. Sustainability is defined as the interaction of economic development, social cohesion, and the maintenance of the integrity of environmental systems (Barbier, 1987).

Only recent studies are linking migration with transformation to sustainability issues. Gavonel et al. (2021) finds that 'migration has simultaneous offsetting effects on sustainability. Migration effects sustainability in all three dimensions – environmental, social and

economic. Migration contributes to sustainability if it increases well-being and reduces inequality and the environmental burden. When policies for sustainable development incorporate migration, they yield significant synergistic benefits. Gavonel et al. argue that there is an apparent migration-sustainability paradox: as part of economic globalisation, migration contributes to unsustainability. At the same time, it represents a transformative phenomenon and potential force for sustainable development. When migration increases aggregate well-being and reduces inequality, it leads to diverse social benefits and environmental sustainability.

COVID-19 and migration-sustainability paradox

The integration of global labour markets created scope for marginalised people to benefit from globalisation by accessing employment in their own countries, as well as overseas. Globalisation has significantly contributed towards increasing the level of international migration in terms of its volume, diversity and geographic scope (Haas et. al, 2019). Multiple goals and targets of the SDGs[1] have highlighted that regular migration has the potential to support sustainable development. However, the links between migration, globalisation and sustainability are complex. Under the current form of globalisation, migrants earn significantly less than nationals working in the same occupation (ILO, 2020)[2]. The majority of migrants are excluded from various social protection entitlements (ILO, 2020), depending on their level of skills, migration status and type of employment. During a crisis the violation of decent work conditions and other rights is exacerbated to such an extent that a number of migrants are exposed to different types of harms and even life-threatening situations. Many migrants experience non or partial payment of wage, some again fully or partially lose their jobs, while others are forced to return without having an opportunity to reap returns on the investments they made to migrate in the first place (ILO, 2021). There are ample examples in history that migrants bear the brunt of any crisis more than the local populations. The great depression of 1930s, the 1973 oil crisis, the Asian financial crises of 1997 and 1999, and the global financial crisis of 2009-

1 Paragraphs 14, 27, 29 and targets, 8.8, 10.7,10c 5.4.

2 ILO (2020) Protection of Migrant Workers During COVID-19 Pandemic: Recommendations for Policy Makers and Constituents, ILO Policy Brief, April 2020

10 all demonstrate that migrants are used as a safety valve to reduce the negative outcomes of crises on native populations (Castle and Vezzoli, 2018).

Since early 2020, the world has been facing the largest health crisis of recent times. By March, the World Health Organization declared a pandemic. The spread of COVID-19 has again demonstrated the other face of globalisation with respect to labour migration, both internal and international (Siddiqui ed., 2021). Return to the country of origin, a drastic reduction in immigration, pressure on migrants to leave their countries of destination without completing their contracts, reduced flows of remittances, and increased hostility towards migrants have surfaced in many of the destination areas. Banulescu-Bogdan et al. (2020) show that COVID-19 has provided an opportunity for certain quarters to engage in anti-migrant narratives and call for stricter migration regimes. The unique characteristics of COVID-19 compared to previous crises have created an even greater risk to health.

The spread of COVID-19 may compromise the sustainability outcome of migration, either temporarily or for a long period. Empirical research is now available which shows temporary reductions in the flow of remittances sent by the migrants, large-scale arbitrary return of migrants, and wage theft from both short-term contract migrants and internal migrants. A significant portion of the left-behind households have undergone major shocks due to unavailability of remittances. It is in such context that the SDC and RMMRU panel survey will be able to show if the COVID-19 pandemic has compromised the transformative outcome of internal and international migration towards sustainability as regards affected households.

Climate change related migration and sustainability

Climate change has been identified as the single greatest threat to achieving the Sustainable Development Goals 2030 (ILO, 2021). Large-scale migration is seen as a major risk, along side other consequences. In this book, we define climate induced migrants as those who have been displaced, who are on the verge of displacement and also those households who still retain their homesteads but have lost all types of livelihood options in the locality and decided to move to a different location outside the village. We also include those households who send one or a few members of the

households outside the village for employment and income as a result of climate change (Siddiqui et al., 2018a). The recent 6th IPCC report has formally recognised migration as one of the outcomes of climate change.

In the climate change literature, migration was treated as a threat during the early 1990s and early 2000s. Studies conducted during this period perceived climate change as an independent variable driving migration from ecologically vulnerable areas. People who moved from their own places to other destinations were termed as a new group of forced migrants or environmental refugees. However, subsequent studies underscored that migration is a complex and multi-causal phenomenon. Along with the influence of climate change, migratory behaviour is also shaped by other macro issues such as social, political, economic and demographic influences. Micro level realities like household characteristics, and meso level facilitating or intervening factors play a role in inducing or restricting the migrations of individuals, households, and/or communities (Foresight, 2011). Kniveton et. al (2009) demonstrate that the relationship between climate change and migration is not linear as it effects different groups in diverse ways. A particular environmental event may increase migration in one context while the same event in another context or at a different time may decrease migration.

In the early climate change literature, when migration was treated as a threat, policies mostly focused on programmes and funding for adaptation measures at the local level. If people continued to move from areas of origin, even after all kinds of interventions, the movements were recorded as a failure of local level adaptation programmes. When migration researchers began studying in climate related migration, they generated an alternative knowledge base. Black et. al (Foresight report, 2011) highlights that migration offers an additional adaptation pathway. For example, those who lose their homestead land due to climatic events, will have to migrate in any case if they want to survive. If they are not able to migrate, some of them would be trapped into a life threatening, or sub-standard, inhumane living conditions. Tacoli (2009) shows that remittances from migrant household members facilitate agricultural adaptation in vulnerable communities in Bolivia. Seminal work of Warner et al. (2014) investigates the complexities of the relationship between migration and adaptation. They show that depending on the household contexts, mobility and immobility can be both positive and negative forms

of adaptation. In the context of climate change, they divided migration experiences of households into four categories. In their view these four categories form a continuum ranging from resilience to vulnerability: adaptive migration, survival migration, last resort migration and trapped population. Adaptive migration is the most resilient category and trapped population is the most disempowered category. In climate change affected areas, whether migration would transform the life of migrants and their household members towards sustainability depends on their location in the migration continuum. If they can generate adaptive migration, then the prospects for a transformation to sustainability are good but if their migration experience is survival migration, then it is not. While designing the research in 2014, three climate change affected areas were purposively selected. Through comparing climate change affected areas with less climate change affected ones, the impact of climate change on sustainability of migration can be empirically analysed.

1.4 Terminology

Migration: is the process by which an individual, household, group and/or community leaves their usual place of residence for another location voluntarily or involuntarily in order to be nearer to opportunities, resources or people within or beyond national boundaries. Migration is triggered by a change in the relative attractiveness, be it real or perceived, of the usual place of residence with respect to the destination. Migrants may stay back permanently in the destination area or return after a period of time; circulate between locations; reside in two or more locations or keep moving in an itinerant manner (DECCMA, 2015).

Short-term contract international labour migrant: a person who is a member of a household and left for work to another country on a contractual basis for a stipulated period of time. This study only considers those who have been overseas for more than a year.

Internal labour migrant: a person who is a member of a household who left to work in another location within the country, and has been away from home, or intends to be away from home, for at least 3 months; or has been continuously moving between origin and destination for at least a year (Bilsborrow, Oberai, Standing 1984, p.146). The definition of internal migration allows the study to include seasonal migrants.

Current migrant: a member of a household who has migrated internally or internationally for work in the last 10 years. This includes each of the migration types (temporary, permanent, circular or seasonal).

Returned migrant: an individual who was away for the purpose of work but who has returned to his/her native village within the last 12 months (Carletto and de Brauw, 2008). This study therefore, only includes that section of seasonal migrants as returnee seasonal migrants who have stopped migrating seasonally for at least a year and do not have any plan to migrate in next year.

Migrants' remittance: the portion of migrants' income, which they usually send to their family, friends or community in their countries or areas of origin. Remittance can be both in cash and kind.

Households: In this study, we use the UN definition of household as: a) A one-person household, defined as an arrangement in which one person makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household or b) A multi-person household, defined as a group of two or more persons living together who make common provision for food or other essentials for living.

Migrant household: a domestic unit consisting of the members of a family who live together and eat their food from same cooking and one or more members of the household who work and stay in another area or abroad. When the migrant returns, he/she would eat with the left behind households.

Non-migrant household: a domestic unit consisting of the members of a family who live together and eat their food from same cooking. No member of non-migrant household works and stays in another area or abroad.

Climate change: a change of climate, which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to other natural climate variability that has been observed over comparable periods.

Adaptation: the process of adjusting in human systems to actual or expected climate change and its effects, seeking to moderate harm or

exploit beneficial opportunities.

Sustainability: sustainability refers to increased material well-being, reduced inequality in multiple special economic and health dimensions, enhanced diversity, political freedom, reduced insecurity and lower environmental burden.

Transformation: a marked change in the form of nature in order to improve the society. It is a process of shifting of societies away from current trajectories of unsustainability.

1.5 Research questions

The SDC and RMMRU Wave 1 survey aimed to answer the following questions: How does international migration impact upon the poverty situation of individual Households? Under what circumstances does migration help the poor to move out of poverty? Does international migration impact upon household poverty in a different way to internal migration? In other words, do different types of migration have differential impacts on poverty? Does the poverty outcome differ according to the gender of the migrant? Does the incidence of poverty in internal, international and non-migrant households vary according to geographical location?

In Wave 2, an important area of investigation has been to understand the rates of economic growth among sampled households. The key research question in this regard has been what are the rates of expenditure growth among the surveyed communities? Is expenditure growing uniformly on all subcomponents, or are some subcomponents experiencing faster growth than others?

Next set of questions are, has the economic growth that we observe in wave two panel been accompanied by reductions in poverty? What are the changes in sample poverty rates between the two waves of the survey? What are the rates of growth among the poor and the non-poor? Is the majority of poverty in the panel chronic/structural or is it transient/temporary? What proportion of the poor are poor in both periods, and what proportion are poor only in one period? What are the factors that drive poor households below the poverty line? Is migration associated with the incidence of poverty? Does migration affect the type of poverty households are affected by? That is, are non-migrant households more

likely to suffer from transient poverty or chronic poverty when compared with international migrant and internal migrant households?

In Wave 3 survey the most important questions to be pursued are as follows: do migrants identify climate change as one of the influencing factors behind their migration decisions? Why non-migrants of the climate change affected areas decided not to migrate? How has COVID-19 affected the migrant households? It is important to enquire in cases where migration has helped households to move out of poverty, how sustainable are such poverty reduction outcomes? Would the migrant households be able to maintain the uplifted economic status once the migration of the member is completed? Are migrant households better equipped to withstand a sudden outbreak of crisis? In other words, how sustainable are the economic transformations that some migrant households experience? What is the predicament of COVID-19 on the economic situation of the migrant households?

Climate change is a huge challenge for Bangladesh. While designing the survey we included three climate change affected districts. In this book, we also explore if migration-transformation trajectories are different between areas that are more or less intensively affected by climate change.

All three waves of SDC and RMMRU survey look at drivers, poverty, growth and local development issues from a gendered lens. They ask, what are the gender differences in selection into migration? Are the socioeconomic characteristics of male and female migrants different? Are there any gender differences in the costs, choice of occupation and destination across gender? Are there any gender differences in wages and/or in wage growth? Do economic, social and environmental sustainability vary on the basis of gender?

1.6 Research instruments

SDC and RMMRU panel survey utilised 6 research instruments to address the research questions. These were (1) literature review, (2) rapid screening survey, (3) household survey, (4) key informant interviews, (5) case studies, and (6) validation workshops.

Literature review: Design of any study requires a comprehensive review of the existing literature. A literature review allows researchers to benefit from existing knowledge and to identify research gaps. The literature

review for this study covered the (a) relationship between migration and poverty, (b) quantitative surveys and studies carried out in the Bangladeshi context, and (c) concepts and methods for understanding and evaluating drivers of migration, poverty dynamics, assessment of growth or decline in family income and expenditure, and gender. In the context of the COVID-19 pandemic, the Wave 3 survey adds a review of the literature on crisis situations, sustainability and transformation.

This study is based on the third wave of a panel survey. This means the study team has gone back to the same households three times. It, therefore, does not require any fresh sampling. A small team of researchers first identified the names and addresses of the previously surveyed households. This was done just before conducting the actual survey. Non-migrant households of the previous districts do not require rapid screening surveys as they are also the same households interviewed in the first round. However, rapid screening of non-migrant households was conducted for the newly included districts.

Household survey: Altogether, four questionnaires had to be developed for Wave 3 of the survey. The first set is for the panel survey of migrant households who had already been surveyed in the first round. The household survey questionnaire for repeat households would concentrate on understanding the changes that have taken place with respect to poverty, growth and gender in all types of households, international, internal and non-migrant between 2017 and 2020.

The questionnaire is organised under 7 broad headings: (i) contact information; (ii) household grid; (iii) information on current migrants, their migration history, drivers and costs of migration, remittance pattern, etc.; (iv) information on returned migrants, again covering their migration history, skill enhancement, return experience, remittance pattern, expectations of migration, etc.; (v) household income and expenditure; (vi) assets, investments and savings; and (vii) social and community impacts.

Key Informant Interview (KII): During the first wave of the survey, union, village and community level characteristics, as well as qualitative information about the study areas were captured through KIIs. These were also administered using a questionnaire that included both structured and open-ended components. The key informants selected for interview were individuals with rich knowledge about the locality. They included the

Upazila Chairman, *Upazila* Secretary, *Upazila* Members, school teachers, journalists, and others. The Wave 3 survey focused on two issues. These are the impact of COVID-19 on the study locations and climatic stresses faced by the locals, particularly during 2020. A similar discussion was held to secure their views on the type of changes (if any) that have taken place during the period from 2014 to 2020.

Dissemination workshop: To inform policymakers, once the report is finalised a dissemination workshop will be organised. Representatives from different ministries, members of the Planning Commission, civil society activists and academics are the target audience of the final workshop. The report will be finalised after incorporating the comments received during the dissemination workshop.

1.7 Data source

The empirical basis of the study is a detailed household survey carried out in 20 administrative districts of Bangladesh. These districts represent seven administrative divisions - Chattogram, Rajshahi, Khulna, Dhaka, Barishal, Rangpur and Sylhet. The survey is designed to further the social scientific understanding of the impact of international short-term migration on poverty and development. With this goal in mind the survey concentrates on locations from where international migration takes place. Thus the survey is not designed to be nationally representative. The selection of districts is therefore based on a combination of randomisation and purposive methods[3]. They were selected to satisfy the following criteria: (i) having high, medium and low intensities of international migration, and (ii) representation of pockets with high rates of female international migration. BMET has district-wise data on short-term contract migrants. 17 districts were selected during Wave 1 of the survey. Three new districts have been added in Wave 2. The 64 districts of Bangladesh have been divided into three sub-groups based on BMET data.

3 Initially the study has been designed to be nationally representative. However, during the validation workshop, Dr Binayak Sen, Dr Hossain Zillur Rahman advised as the aim of the research is to understand the impact of international migration on households, communities and local development, it should target the migration pockets. Upon their advise, three types of migration pockets have been selected based on BMET data of place of origin of the migrants. These are high migration areas, medium migration areas and low migration areas.

Group 1 constituted the high international migration districts, group 2 the medium international migration districts and group 3 the low international migration districts. Within these groups, sample districts were selected at random. The finally selected high migration districts are Brahmanbaria, Chattogram, Cumilla, Tangail, Munshiganj, Mymensingh, Manikganj, Lakshmipur, Dhaka, Gazipur and Narayanganj. The medium migration areas are Sunamganj, Barishal, Faridpur, Shariatpur and Kushtia. Finally, the low migration districts are Satkhira, Rangpur, Chapainawabganj and Khagrachari. The survey covered short-term international migrants, internal migrants and non-migrant households. The latter two groups served as control groups: the experience of international short-term migrant households is compared with those of internal migrant and non-migrant households.

Table 1.7.1: Geographic distribution of households in Wave 3 survey

Type	District	International	Internal	Non-migrant	Total number of households
High	Tangail	223	21	54	298
	Chattogram	147	23	133	303
	Gazipur	195	22	87	304
	Narayanganj	115	29	147	291
	B.Baria	194	62	39	295
	Cumilla	162	53	85	300
	Dohar	198	15	79	292
	Lakshmipur	163	46	76	285
	Manikganj	199	6	89	294
	Munshiganj	176	23	88	287
	Mymensingh	154	31	115	300
Medium	Shariatpur	178	57	55	290
	Sunamganj	183	27	95	305
	Faridpur	170	31	82	283
	Barishal	96	106	101	303
	Kushtia	89	81	127	297
Low	Chapainawabganj	19	218	72	309
	Satkhira	6	196	98	300
	Rangpur	43	128	130	301
	Khagrachari	1	122	176	299
Total		**2711**	**1297**	**1928**	**5936**

Source: SDC and RMMRU Panel Survey 2020

Figure 1.7.1: Location of the sample districts of SDC and RMMRU panel survey

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Following the district selection, *upazilas*, unions and villages were selected, based again on the BMET data. Migration data for the selected districts were then organised according to the high to low migration producing *upazilas*. The top-three migrant producing *upazilas* from each district was chosen purposively from which one was selected at random. The selected *upazilas* are Miressorai, Muradnagar, Nabinagar, Kalihati, Raipur, Sreenagar, Bhaluka, Singair, Dohar, Chatak, Gournadi, Naria, Kumarkhali, Gumostapur, Shyamnagar, Pirgacha, Charvadrashon, Sreepur, Rupganj and Panchori.

Within each selected *upazila*, one Union was selected again from the top four unions listed in the BMET data. Within each selected Union, 6 adjacent villages were chosen for survey, resulting in a total of 120 villages surveyed.

The Wave 3 survey interviewed a total of 5,936 households; 2,711 of which are international migrant households; 1,297 internal migrant households and 1,928 non-migrant households. By design, approximately 300 households were sampled in each district. In some areas, there are more international migrants and in a few others, there are more internal ones. For example, Manikganj and Dhaka were chosen as pocket areas for female migrants. In these areas, it was hard to secure internal migrants. The number of sampled international migrant households is double than that of internal and non-migrant households in these two districts. This was done purposively. Table 1.7.1 shows the distribution of the sample households across individual districts. It further highlights the *upazilas* from which the households were drawn.

1.8 Sampling technique

To identify the required number of migrant and non-migrant households in the rapid screening survey, the study team applied stratified and systematic random sampling techniques. It divided the households into international, internal, and non-migrant households. It also stratified the migrant households by gender. The final interviewee households were then selected at random from these two strata.

1.9 Use of KoBo Toolbox

Wave 3 survey was conducted at a time when the country was going through lockdowns for indefinite periods as precaution to control the spread of COVID-19. To minimise health and safety risks and to comply

with national policy the research team was required to conduct the survey over phone and tablet using KoBo Toolbox instead of face to face surveys using paper questionnaires. Accordingly, the questionnaire was programmed into the tablet. KoBo Toolbox is an open-source tool for collecting and managing data through mobile devices in challenging environments. It is widely used during humanitarian emergencies. It was envisaged that not all the respondents would be available over phone. In the case of non-response over the phone, the research team kept the provision for face-to-face field surveys of limited number of respondents.

1.10 Data analysis

The relevant tables have been prepared using the SPSS statistical programme and STATA. The data have then been cleaned, cross-checked, edited, and tested for any inconsistencies. The statistical tools used to analyse the data included frequencies, cross-tabulation and reports. Much of the analysis here has used a type of cross-tabulation that is suited to panel data, namely the transition matrix.

Transition matrices allow researchers to visually represent changes in household characteristics between two different time periods, in a simple, coherent framework. This study has used transition matrices to understand the dynamics of household migration experiences. The data analysis was preceded by the preparation of a detailed set of tables covering all issues of interest to the survey. Comparison across group averages (for example across gender), used T-tests to test for significant differences. Regression analysis has been used to examine results within a multivariate framework to establish correlations across variables. Details of Ordinary Least Squares specifications are presented when they are utilised.

Throughout the book, comparisons are made on three groups of respondents: international, internal and non-migrant households. These are further organised into three sub-headings. As with any panel survey, the majority of households are interviewed during all three waves. However, if the team is unable to contact a particular household sampled in the first wave during any of the subsequent waves, then that household is replaced by another household within the same strata in the same village. Thus, there are some households in the sample who were not interviewed in all sample periods, either because they left the panel, or because they were included to replace households who had done so.

1.11 Organisation of the book

This book is divided into 12 chapters. Chapter I presents the objective of the research, explains its purpose, reviews the primary literature on migration sustainability. It also documents the research methodology used in generating field data. Chapter II outlines the trend of international labour migration from Bangladesh in the aftermath of COVID-19. Chapter III represents the socio-demographic profile and makes a comparison of living standards of international, internal and non-migrant households between three waves. Chapter IV details the migration experience of households and chapter V identifies why some households have participated in migration and some others have not. Chapter VI looks into increase and decrease of costs of migration since 1980s till present and their sources of financing. Chapter VII analyses the income based on transition status of different households from current migrant to returned migrant, returned migrant to current migrant and also from non-migrant to current migrant status. Chapter VIII discusses the expenditure growth between three waves of surveys and analyses sustainability of expenditure growth. Chapter IX examines the relationship between migration and poverty during the entire period covered by the three waves utilising the dynamic notion of poverty. Chapter X compares changes in investment pattern among different panels in the backdrop of COVID-19. Chapter XI makes a gendered analysis of migration outcome again between Wave 1, Wave 2 and Wave 3 surveys. The final chapter summarises the major findings of the study, explores migration - sustainability linkage and their implications for future research and policy making.

CHAPTER II

INTERNATIONAL LABOUR MIGRATION FROM BANGLADESH

Tasneem Siddiqui

This chapter highlights the recent trends of short-term contract labour migration from Bangladesh amidst the COVID-19. Bangladesh has been participating in the short-term international labour market as one of the major sending countries since the early 1970s. It is only from 1976 that the record keeping of those who have been migrating overseas for work began. This chapter studies the impact of the COVID-19 on migrant flows, and looks for evidence of differential impacts on female migration flows. The chapter also catalogues the major destinations for recent Bangladeshi migrants, the specific areas of Bangladesh from which migration takes place and the flow of remittances during COVID-19.

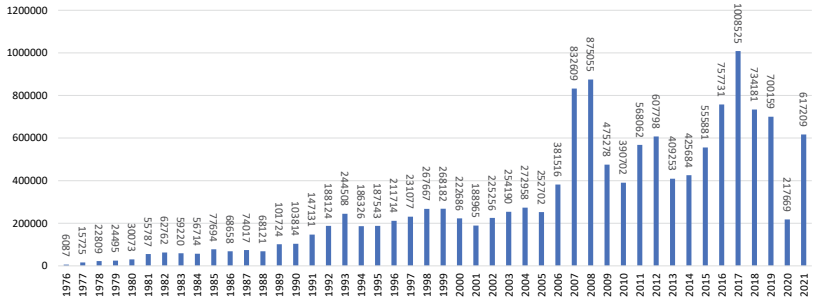
2.1 The context and recent migration flows

During the late 1960s and early 1970s, oil prices increased dramatically. Oil producing countries of the Gulf and other Arab countries experienced rapid economic growth. These countries invested the petrodollar windfall in large-scale infrastructure projects. However, their domestic labour markets lacked workers with the skill sets. As a result, these countries had to rely on foreign workers at both the professional and low-skilled levels to implement the infrastructure development projects. Since the late 1960s, Pakistan and India had been participating in this market. The opportunity for Bangladeshis to participate arose after the country's independence. It began with the migration of professional and skilled workers like doctors, engineers, nurses, etc. By 1976 migration to the Gulf from Bangladesh had become so established that formal registration of foreign workers was made mandatory by the Government of Bangladesh. The Bureau of Manpower, Employment and Training (BMET), the line agency of the then Ministry of Labour started recording migration flows and developed regulatory mechanisms to govern migration of migrant workers from Bangladesh. Graph 2.1.1 illustrates that in 1976, fewer than 10,000 workers migrated for jobs overseas[4]. By the end of almost one and

4 Also see Annex 1

a half decade, the annual labour flows reached 100,000 workers in 1989. In 2008, labour migration from Bangladesh reached a peak. However, the highest recorded flow occurred a decade later in 2017 with 10,008,525 migrating abroad that year. In 2018 and in 2019 migration declined by over 27 percent in comparison to 2017.

Figure 2.1.1: Labour migration from Bangladesh from 1976 to 2021



Source: Prepared from BMET data

Since March 2020, the world has been going through an unprecedented health crisis, COVID-19. All sectors of society and the economy in almost every country has been affected. The pandemic has also caused major disruption to international migration flows. Movement of people across national borders slowed significantly. In 2020, only 217,699 Bangladeshi workers migrated overseas for work. Among them 181,218 workers migrated during the period from January to March 2020[5]. Due to lockdown measures migration from Bangladesh came to a virtual standstill from April to June 2020. From July to December 2020, only 36,413[6] individuals could migrate for employment overseas. In 2020 as a whole, the flow of migration decreased by 69 percent in comparison to the previous year as a result of COVID-19. But if the migration trend of the first three months of 2020 had continued, migration in that year would have increased by 4 percent over the previous year. Approximately 100,000 new workers who had completed all procedures to migrate prior to the COVID-19 outbreak could not migrate due to the pandemic.

In 2021, a total of 617,209 Bangladeshi workers migrated to different

5 BMET Website (http://www.old.bmet.gov.bd/BMET/stattisticalDataAction)
6 BMET Website (http://www.old.bmet.gov.bd/BMET/stattisticalDataAction)

countries of the world. In comparison to the previous year (2020) in 2021 migration increased by 184 percent. If one compares 2021 flows with those of a pre-COVID-19 year (2019) in which 700,159 workers migrated abroad the figure for 2021 is still 12 percent lower.

BMET records also show that from 1976 to 2021 a total of 13,634,161 workers have migrated abroad from Bangladesh. This constitutes the total stock of migrants. However, it does not imply that Bangladesh has as many migrants currently working abroad. As per the contractual obligations of short-term labour migration, migrants return to Bangladesh after a stipulated period of time. Many migrants do try to stay back for as long as possible but in the vast majority of cases, ultimately, they have to return.

The COVID-19 pandemic has resulted in a shift of focus from the number of migrants going abroad to the number of migrants returning. Until the pandemic no data was maintained on returnee migrants by BMET. However, as health restrictions were imposed after the outbreak of the pandemic the government started maintaining records of return migrants from April 2020. Data from BMET's Welfare Desk at the airport shows that a total of 408,000 migrants had returned to the country during the pandemic in 2020[7]. This suggests that the rate of job loss has increased greatly during the pandemic. In 2020, the rate of return of migrants was 8 times higher than any previous year. Data is not yet available for the number of returned migrants for 2021. It is understood that it should also be significant.

2.2 Female migration

Up to 2003 migration of unskilled female workers from Bangladesh was either restricted, or outright banned. Therefore, female migrants constituted less than one percent of the total flow of migrants. The rate of female migration has increased significantly since the ban was lifted. By 2016, female workers constituted 16 percent of the total labour flow from Bangladesh. Between 2016 and 2019, more than 100,000 female workers migrated for work from Bangladesh.

In 2021, a total of 80,143 female workers migrated abroad for work.

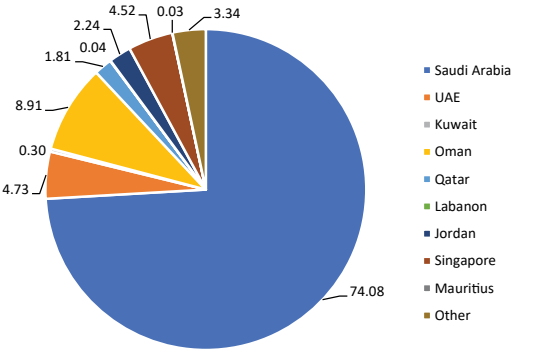
7 Statistics of returning migrants from 1st April to 31 December 2020, Welfare Desk, Hazrat Shahjalal International Airport

This figure is 4 times higher than that of 2020 when only 21,934 females migrated for work. However, comparison with a regular year such as 2019 reveals a drop in female migration of 23.5 percent (104,786 in 2019).

2.3 Countries of destination

Annex 1 shows the distribution of Bangladeshi migrant workers by country of destination from 2001 to 2021. Although the BMET database lists more than 100 destination countries the vast majority of workers are accounted for by a handful of countries. These are Saudi Arabia, Oman, Singapore, Qatar, Malaysia and Bahrain. Between 2001 and 2002, approximately 73 percent of migrants went to Saudi Arabia. Since then the proportion of migrants going Saudi Arabia started to decline. In 2010 only two percent of migrants from Bangladesh went to Saudi Arabia. From 2010 to 2016 there was a ban on the migration of Bangladeshi workers to Saudi Arabia. This ban was lifted in 2016. From 2016 migration to Saudi Arabia again started increasing. During the COVID-19 pandemic Saudi Arabia received the largest number of both male and female migrants followed by Oman. 83 percent (512,236 workers) of the total number of migrants went to these two countries. Other receiving countries include the UAE (29,202 workers, 5 percent, 3rd largest) Singapore (27,875 workers, 5 percent, 4th largest), Jordan (13,816 workers, 2 percent, 5th largest), and Qatar (11,158 workers, 2 percent, 6th largest). Interestingly, Malaysia is also an important destination for Bangladeshi migrants. However, in 2020 and 2021 hardly any migration took place to this destination. In December 2021 intergovernmental negotiations to restart migration took place between Bangladesh and Malaysia. As a result in 2022, Malaysia is expected to again become a major destination country for Bangladeshi workers. If the Saudi market had not been in operation during the pandemic the Bangladeshi market for migrant workers would have encountered a major setback.

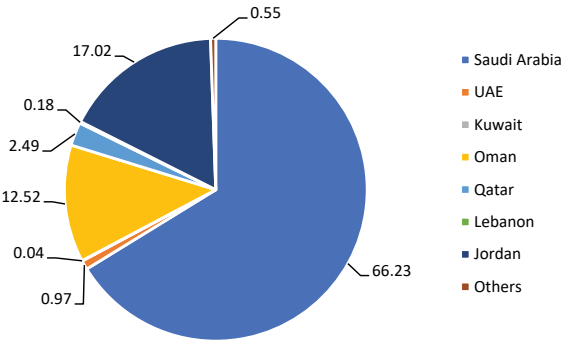
Figure 2.3.1: Destination countries of Bangladeshi migrant workers in 2021



Source: Prepared from BMET data

A small number of countries account for the majority of female migration. 68 percent (53,082 workers) of female workers migrated to Saudi Arabia. This has been true over the last several years. The 2nd largest flow is to Jordan at 17 percent (13,643 workers), the 3rd largest to Oman at 11 percent (10,035), the 4th largest to Qatar at 3 percent (1,997) and finally the 5th largest to the UAE at 1 percent (777 workers). At one point in time, the UAE used to be a major destination for female labour migrants from Bangladesh but its share has decreased significantly in recent years.

Figure 2.3.2: Destination countries of female Bangladeshi migrant workers in 2021

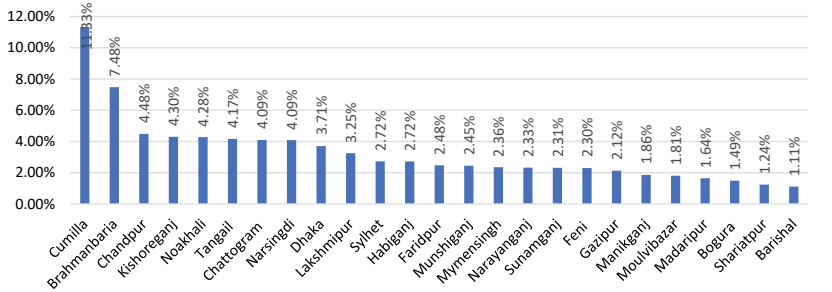


Source: Prepared from BMET data

2.4 Source area

In Bangladesh there are a few pockets from where the majority of migrants seeking overseas employment originate. Of the 64 districts in Bangladesh, 51 percent of overseas migrants originate from just 10 districts. These are Cumilla, Brahmanbaria, Chandpur, Tangail, Narsingdi, Kishoreganj, Noakhali, Dhaka, Chattogram and Lakshmipur. In 2021, the highest number of international migrant outflow took place from the Cumilla district. It accounted for 12 percent, a slight increase over the last year's 11 percent. 8 percent of international migrants originated from Brahmanbaria. With 5 percent of migrants, Chandpur is the third largest migration origin district. Around 4 percent of the total migrated from each of Kishoreganj, Noakhali, Narsingdi, and Chattogram. In 2021 Chattogram was only the 9th largest international migrant producing district wheras in 2020, just a year prior, it was the 3rd sending 5 percent of the total. Sylhet, Faridpur and Munshiganj had migrant outflows of around 2 percent each.

Figure 2.4.1: Source areas of Bangladeshi migrant workers in 2021

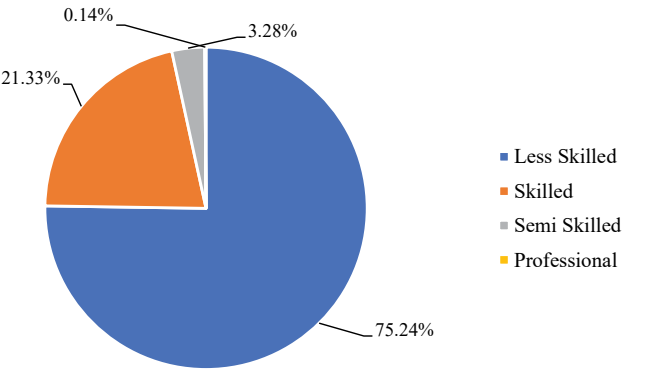


Source: Prepared from BMET data

2.5 Skill composition

There are currently 64 Technical Training Centres (TTCs) in operation under BMET, providing training facilities to develop skilled workers. TTCs offer training programmes in 55 trades. BMET classifies migrant workers into 4 categories: these are professionals, skilled, semi-skilled, and less-skilled. There has been a steady drop in migration of professionals from Bangladesh. In 2020, only 1 percent of workers belonged to the professional category. In 2021 the figure dropped to 0.1 percent.

Figure 2.5.1: Skill composition of Bangladeshi migrant workers in 2021



Source: Prepared from BMET data

In 2021, 21 percent of workers migrated as skilled labour as compared to 44 percent (252,862 workers) in 2019. The percentage of semi-skilled workers also follows a downward trend of 3.3 percent in 2021 as against 14 percent (27,007 workers) in 2019. The percentage of less-skilled workers has increased dramatically from 41 percent (377,102 workers) in 2019 to 75 percent in 2021 (Annex 2). A large proportion of the work permits of less-skilled workers are collected by individuals or relatives working in different countries of destination. These are commonly called "free visas" and those who avail them have little legal protection. The prevalence of this kind of visa indicates that recruiting agencies have a limited role in securing visas even for low skilled workers in 2021. Reduction of migration of skilled workers indicates that Bangladesh has not been able to tap the niche that has been created by the pandemic.

2.6 Remittance flow

Bangladesh Bank keeps records of inward remittance flows to Bangladesh. Data on remittance flows is available from 1976. That year Bangladesh received US$23.7 million as remittances. In 1993, remittances reached the US$ 1 billion mark and by 2009 the figure reached US$10 billion. Table 2.6.1 shows the percentage increase and decrease in the flow of remittances to Bangladesh. Over the last twenty years Bangladesh experienced negative year on year growth in remittances in only 2013,

2016, and 2017. Otherwise remittance flows have registered an upward trend. During 2018, 2019 and 2020, growth of remittance flows continued. In 2018 Bangladesh secured US$ 15 billion demonstrating 15 percent year on year growth. In 2019 it received US$18 billion i.e. another 18 percent growth. Importantly, the table suggests that changes in the flow of migrants does not directly translate to changes in remittance flows. Table 2.6.1 shows that in 2005, migration reduced by 7 percent but remittances increased by 19 percent. Again in 2009, migration reduced by 46 percent yet in that year remittances increased by 19 percent. The table also indicates that it is only after the flow of migration reduces for successive years then the effect is reflected in remittance flows.

The World Bank predicted that in 2020 remittance flow to Bangladesh would reduce by 25 percent due to the pandemic[8]. However, this prediction failed to materialise as remittance flows were further augmented in 2020 compared to the previous two years. Bangladeshi migrants remitted US$ 21.8 billion in 2020[9]. This indicates an 19 percent increase over the previous year's flow (Table 2.6.1).

In 2021, Bangladesh received US$ 22.0 billion in remittances, i.e. a growth of 1 percent. As in previous years, the largest share of remittances came from Saudi Arabia. Bangladesh received US$ 5.0 billion from that country in that year. This constitutes 23 percent of the total flow. United States ranks 2nd, with a 16 percent share (US$3.5 billion), then the United Arab Emirates with 9 percent (US$1.8 billion), the United Kingdom with 9 percent (US$1.8 billion), followed by Oman with 5 percent (US$1.1 billion).

As seen earlier, migration to the UAE has reduced drastically over last 5 years, but the flow of remittances is still quite high. Again, in 2020 Saudi Arabia received more than 76 percent of the flow of total migrants, but only generated 23 percent of remittance receipts. This reinforces the point that the flow of remittances is not determined just by migration flows in a particular year but by the total stock of migrants in the concerned country of destination. In the UAE a substantial pool of migrants were residing from before so they continued to remit despite recent decline in migration flows.

8 https://www.prothomalo.com/business, করোনার কোপে কমবে ২৫% প্রবাসীর আয়, published on 27 June 2020

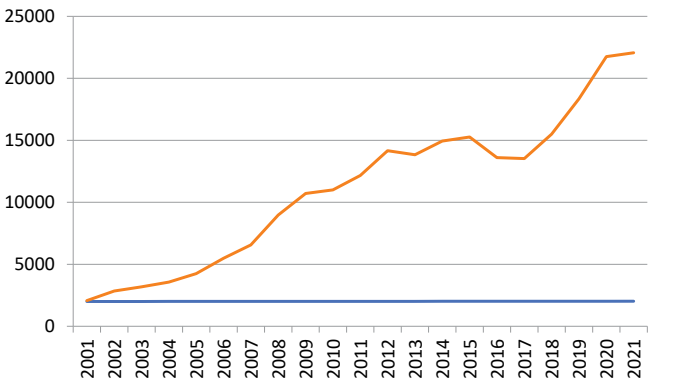
9 https://www.bb.org.bd/econdata/wageremitance.php

Table 2.6.1: Percentage increase/decrease in number of migrant workers and remittances over the previous year (2001-2021)

Year	Number of Migrants	Increase/ decrease %	Remittance (US $ Million)	Increase/ decrease %
2001	189060		2071.0	
2002	225256	19.2	2847.8	37.5
2003	254190	12.8	3177.6	11.6
2004	272958	7.4	3565.3	12.2
2005	252702	-7.4	4249.9	19.2
2006	381516	51.0	5484.1	29.0
2007	832609	118.2	6562.7	19.7
2008	875055	5.1	8979	36.8
2009	475278	-45.7	10717.7	19.4
2010	390702	-17.8	11004.7	2.7
2011	568062	45.4	12168.1	10.6
2012	607798	7.0	14164.0	16.4
2013	409253	-32.7	13832.1	-2.3
2014	425684	4.0	14942.6	8.0
2015	555881	30.6	15,271.0	2.2
2016	757731	36.3	13609.8	-10.9
2017	1008525	33.1	13526.8	-0.6
2018	734181	-27.2	15497.7	14.6
2019	700159	-4.6	18354.9	18.4
2020	217669	-68.9	21752.3	18.5
2021	617209	183.6	22,063.8	1.4

Source: RMMRU 2022

Figure 2.6.1: Remittance flow from 2001-2021



Source: RMMRU 2022

Table 2.6.2: Remittance flow by country of employment in 2021

Country	In US $ (Million)	%
Bahrain	541.0	2.5
Kuwait	1,787.4	8.1
Oman	1,146.7	5.2
Qatar	1,460.8	6.6
Saudi Arabia	5,087.7	23.1
UAE	1,882.2	8.5
Italy	886.7	4.0
Malaysia	1377.2	6.2
Singapore	481.1	2.2
UK	1,884.1	8.5
USA	3507.4	15.9
Others	2021.8	9.2
Totals	**22,063.8**	**100.0**

Source: Prepared from Bangladesh Bank data

Studies (Siddiqui ed., 2021, Rahman, 2021) have speculated various reasons behind the increase in remittance flows in 2020 and 2021. The government has offered a 2 percent incentive to encourage the migrants to send remittances through formal channels, that is migrants receive an additional sum of Taka 2 per Taka 100 remitted. The Government of Bangladesh allocated Taka 3,060 crores for this purpose in the budget for the 2019-2020 fiscal year. This incentive was retained in the 2020-2021 budget. Some banks are also offering an additional 1 percent on top of government incentives.

Siddiqui ed. (2021) highlights the issue of demand for *hundi* money for the purchase of work visas. In an ideal world, work permits of labour migrants would be free of charge. In reality however, work visas are sold by a section of employers to recruitment agencies at very high cost. A 2020 BBS study shows that in that year migrants were paying around US$ 5,000 for a visa to migrate abroad[10]. Siddiqui ed. (2021) observed that in 2020 recruiting agencies did not incur the costs of purchasing visas from the foreign employers since destination countries were not taking new migrant workers. The study estimated that at an average visa costs of US$ 3,000 then in 2020, US$1,446,993,000 was not required from the *hundi*

10 https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-dhaka/documents/publication/wcms_766198.pdf

operators (informal money traders) to purchase visas by the recruiting agencies. The lack of demand for dollars in the *hundi* channel diverted remittances to the formal channel. Besides, many migrants have returned because of COVID-19. In all likelihood, they brought back whatever resources they had accumulated in the destination countries. Moreover, there is a substantial stock of migrants in those countries. Even though annual flows of migrants have been drastically reduced, the migrant stock who remained in those countries continued to send remittances. Siddiqui ed. (2021) cautioned that when the *hundi* channel becomes active with the resumption of economic activities, the flow of remittance through the formal channel would decline. As economic activities have begun to gain pace in 2021, destination countries have resumed recruiting workers, albeit on a limited scale. Even so, the consequent demand for informal transaction through *hundi* has meant that formal remittances have experienced much slower growth compared to 2020.

Chapter conclusions

Every year, 600,000 to 700,000 workers from Bangladesh take up foreign employment. Labour migration from Bangladesh has been adversely affected by the COVID-19 pandemic. In 2020 only 217,699 workers could migrate. This is 69 percent lower than the previous year. Despite migration in 2021 rising to 617,209 it was still 12 percent less than in 2019. Saudi Arabia is the single most important destination country attracting 74 percent of workers in 2021. In 2020, the flow of remittances increased dramatically due to a combination of many factors. Important among these was a lack of demand for resources in the *hundi* market, the large-scale return of workers, a 2 percent incentive on formal remittances by the government, large preexisting stock of Bangladeshi migrants in different destination countries, etc. Experts had suggested that this growth could not be sustained. In 2021 remittance flows only grew by 1 percent. In the following chapters we will demonstrate how these national trends are reflected at the household level.

CHAPTER III

SOCIO-DEMOGRAPHIC AND LIVING STANDARD PROFILE OF THE HOUSEHOLDS

Rabab Ahmed and Parvez Bhuiyan

This chapter provides the socio-demographic and living standard profiles of the internal, international and non-migrant households. The chapter is divided into two sections: 3.1 and 3.2. Section 3.1 describes the socio-demographic profile of sample households including family size, age, level of education, employment, occupation and religion of household members. Section 3.2 reports the living standard profiles including ownership status and size of the homestead, access to water supply and sanitation, and sources of power and cooking fuel. The chapter conducts comparative analyses across different survey waves to identify trends and changes in the socio-demographic and living standard profiles across the sample.

3.1 Socio-demographic profile

Male-female distribution: Table 3.1.1 shows that altogether 5,936 households were interviewed in Wave 3. This is 3 percent lower than the number of households sampled in Wave 2. There are two reasons behind this decrease in the number of households. Firstly, a number of households could not be traced because all members have left the village. Shariatpur, known for river erosion, is where major attrition has taken place. Secondly, the number of members decreased as some previously sampled members have established separate households.

The table 3.1.1 also shows the distribution of international, internal and non-migrant households across males and females in Wave 3 of the survey. 52 percent of international migrant household members are male and 48 percent are female. The percentage of male migrants has increased between Wave 2 and Wave 3. Overall, international migrant households have seen a 2 percent increase in male members. In the case of internal migrant households, the percentage seems to be similar, maintaining the same trend as before. In the case of non-migrant households during Wave

3, male members constituted 51 percent and female members 49 percent. Previously, during Wave 2 internal migrants were distributed almost evenly across the sexes.

Table: 3.1.1: Percentage of male and female members by migration type and gender

Wave 3					
International (%)		Internal (%)		Non-migrant (%)	
M	F	M	F	M	F
52.3	47.7	52.1	47.9	50.7	49.3
Wave 2					
51.4	48.6	51.7	48.3	49.8	50.2

Source: SDC and RMMRU Panel Survey 2017 and 2020

Family size

The family size of households includes all members who stay under the same roof and eat from the same kitchen. Both nuclear and extended family household arrangements are represented in the sample. Domestic workers and other extended family members are counted as household members if they stay in the same house and eat from the same kitchen. Therefore, this does not necessarily mean that all household members are related. In Wave 3, the average size of both internal and international migrant households is larger than non-migrant households.

During Wave 3 international and internal migrant households have an average of 5 members whereas non-migrant households have an average of 4 members. During Wave 2 of the survey, the number of internal migrants was the same whereas it was higher in the case of international migrants. These households had an average of 6 members. Split in the original households and establishment of separate households by a few members can explain this reduction in average number of family members. The average household size can also be analysed from the perspective of the sex of the migrant. The international female migrant households have a smaller number of members (5) compared to male migrant households (5). In the case of internal migrants, female migrant households have a slightly higher number of members (4 for male and 5 female).

Table 3.1.2.: Family size by migration type and gender

Family Size	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
1-3	17.1	22.6	17.8	21.8	30.2	22.5	36.9
4-5	49.6	47.1	49.3	49.5	50.0	49.5	47.1
6-7	21.1	21.2	21.1	20.5	12.5	19.9	12.8
8-10	9.6	8.1	9.4	6.7	7.3	6.7	2.9
10+	2.5	1.1	2.3	1.5	0.0	1.4	0.4
Mean	5.2	4.9	5.1	4.9	4.3	4.8	4.1
Total no. of cases	**2351**	**359**	**2710**	**1200**	**96**	**1296**	**1928**
	Wave 2						
1-3	11.5	21.4	13.3	15.4	10.9	14.8	28.7
4-5	46.6	43.9	46.1	49.0	51.0	49.3	50.1
6-7	25.2	23.2	24.8	24.0	28.1	24.6	16.9
8-10	12.3	10.6	11.9	9.1	8.3	9.0	4.0
10+	4.5	.9	3.9	2.5	1.6	2.4	.3
Mean	5.7	5.1	5.6	5.2	5.3	5.2	4.4
Total no. of cases	**2408**	**547**	**2955**	**1233**	**192**	**1425**	**1726**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Marital status

Table 3.1.3 shows the marital status of household members for each category of migrant. The five types of marital status include: single, married, divorced, separated, widow/widower and underage members. Married individuals are defined as those who are currently married. In the case of women, individuals above the age of 18 and unmarried are considered as single, and in case of males those who are more than 21 years of age but have not married yet are considered as single. The separated category include those who are separated from their spouses but have not gone through a formal divorce. Divorced are those whose marriages are legally dissolved. Widows/widowers are those whose spouses have passed away. Any female under the age of 18 and any male under the age of 21 are considered underage and so not categorised as single. However, if a member is underage and still married, they are placed under the category of married. Across internal, international and non-migrant households, approximately half of the household members are married. Around 32-35 percent of the members are underage and 7-9 percent of members across these three categories are single. 6-7 percent of all three migration category of household members are widowed, separated or divorced. The

rate of widows is much higher in comparison to widowers. In case of both internal and international migrant households 8 percent of the female are widowed and in case non-migrants the figure stands at 10 percent.

Table 3.1.3: Marital status by migration type and gender

Marital status of household members	Wave 3								
	International (%)			Internal (%)			Non-migrant (%)		
	M	F	T	M	F	T	M	F	T
Single	13.5	4.4	9.2	11.0	4.7	8.0	8.4	5.1	6.7
Married	50.1	54.7	52.3	52.1	55.7	53.8	51.5	52.2	51.8
Separated	.1	1.0	.5	.3	.9	.5	.2	1.1	.6
Divorced	.4	1.4	.8	.3	1.5	.9	.2	.8	.5
Widow/Widower	.9	8.3	4.4	.9	8.1	4.3	1.1	10.4	5.7
Under-aged (if female < 18; male < 21)	35.0	30.1	32.7	35.4	29.2	32.4	38.6	30.5	34.6
Total no. of cases	**7342**	**6694**	**14036**	**3160**	**2902**	**6062**	**3939**	**3828**	**7767**
	Wave 2								
Single	12.9	4.0	8.6	13.1	5.9	9.6	7.1	4.3	5.7
Married	50.1	54.8	52.4	49.2	55.6	52.2	48.4	50.5	49.4
Separated	.2	1.1	.6	.0	.6	.3	.2	.6	.4
Divorced	.3	1.4	.8	.2	1.2	.7	.3	.7	.5
Widow/Widower	.8	8.2	4.4	.8	7.2	3.9	1.1	8.7	4.8
Under-aged (if female < 18; male < 21)	35.8	30.5	33.2	36.7	29.5	33.3	43.0	35.4	39.2
Total no. of cases	**8611**	**7940**	**16551**	**3951**	**3578**	**7529**	**3893**	**3853**	**7746**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Segregating the data on the basis of gender reveals that in all three categories the number of married female members is higher than married male members. The number of single men is much higher compared to number of single female members across all three migration category of household. Comparing the data on marital status of Wave 3 is with Wave 2 does not reveal any major change. Around half of the members are married. A little less than 10 percent are single and around 5 percent are under aged.

Age group

Table 3.1.4 divides all household members across 7 age-groups. Around 27 percent of the household members are below 15 years of age in the Wave 3 data for internal and international migrants. In the case of non-migrant households the proportion under the age of 15 it is a little

higher at 29 percent. More than 50 percent of the household members are between 16-50 years of age. In the case of internal and international migrants, it is 56 percent, but for non-migrant households it is 52 percent. Compared to Wave 2, during Wave 3, all migrant households have seen an increase in the percentage of members between the age of 31-40 years. Non-migrant households on the other hand have seen a decrease in the percentage of members in this category by 1 percent. There is not much of a difference between male and female migrant household members with respect to age group. During Wave 3 around 28 percent of all types of migrant household were under the age of 16. Previously during Wave 2 this was around 30 percent. All migrant households have experienced a decrease in the proportion of members aged between 16 and 25 in Wave 3. The number of household members of international migrant households within this age bracket is now 2 percent lower. The number for internal migrant households is 2 percent lower and non-migrant household is 2 percent lower.

Table 3.1.4: Age group by migration type and gender

Age group	Wave 3								
	International (%)			Internal (%)			Non-migrant (%)		
	M	F	T	M	F	T	M	F	T
0-15	26.6	27.9	27.2	26.4	27.6	27.0	29.6	27.6	28.6
16-25	19.0	21.6	20.2	22.6	23.3	23.0	18.4	19.6	19.0
26-30	9.7	9.4	9.6	10.5	8.6	9.6	7.5	7.9	7.7
31-40	17.4	14.4	15.9	13.6	12.4	13.1	13.6	14.6	14.1
41-50	10.7	10.7	10.7	9.0	12.2	10.5	11.1	11.8	11.4
51-60	8.2	8.7	8.4	9.1	8.4	8.8	8.9	9.4	9.1
60+	8.3	7.5	7.9	8.8	7.3	8.1	10.9	9.2	10.1
Total no. of cases	**7346**	**6691**	**14037**	**3159**	**2902**	**6061**	**3940**	**3831**	**7771**
	Wave 2								
0-15	27.8	27.5	27.6	26.1	27.0	26.5	32.0	30.4	31.2
16-25	18.4	25.0	21.6	24.5	26.3	25.4	18.6	22.5	20.5
26-30	11.9	10.6	11.2	10.8	7.9	9.4	7.5	9.4	8.5
31-40	16.6	12.7	14.7	12.4	13.2	12.8	14.6	15.2	14.9
41-50	9.9	9.9	9.9	9.4	11.7	10.5	12.0	10.4	11.2
51-60	7.0	7.9	7.4	7.7	7.4	7.6	7.8	5.9	6.8
60+	8.5	6.4	7.5	9.1	6.5	7.8	7.6	6.2	6.9
Total no. of cases	**8855**	**8374**	**17229**	**4105**	**3828**	**7933**	**4184**	**4221**	**8405**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Level of education

There is some evidence that the general level of education in the three types of household has improved from Wave 2 to Wave 3. In every group the percentage of people who have no education has reduced. In the case of international migrants, the percentage of those who are not literate has reduced by 3 percent. A similar trend is present among internal migrant households who see a drop of 2 percent and non-migrant household by 1 percent.

Table 3.1.5: Education level by migration type and gender

Level of education	Wave 3								
	International (%)			Internal (%)			Non-migrant (%)		
	M	F	T	M	F	T	M	F	T
No education	16.4	22.3	19.2	19.6	25.7	22.5	21.7	28.9	25.3
Up to 5th level	27.1	24.0	25.6	29.8	25.6	27.8	28.3	25.6	27.0
6th to 10th level	29.2	30.0	29.6	23.3	26.6	24.9	23.5	25.3	24.4
SSC/equivalent	9.0	7.8	8.4	6.1	6.2	6.1	6.7	6.2	6.5
HSC/equivalent	6.0	4.8	5.4	6.3	4.5	5.5	5.4	3.5	4.4
Bachelors/equivalent	2.1	1.3	1.7	3.5	1.6	2.6	3.3	1.7	2.5
Masters/equivalent	.9	.4	.7	1.4	.5	.9	1.5	.4	1.0
Diploma	.4	.1	.3	.5	.1	.3	.4	.1	.2
Others	1.0	.4	.7	1.0	.2	.6	.8	.4	.6
Not applicable	7.9	8.8	8.3	8.5	9.0	8.7	8.4	8.0	8.2
Total no. of cases	**7334**	**6688**	**14022**	**3160**	**2902**	**6062**	**3937**	**3828**	**7765**
	Wave 2								
No education	18.8	26.3	22.4	21.2	28.2	24.5	24.1	29.0	26.6
Up to 5th level	29.1	25.4	27.3	28.2	25.0	26.7	30.7	27.9	29.3
6th to 10th level	29.1	28.4	28.8	26.1	27.7	26.8	22.4	26.8	24.6
SSC/equivalent	7.9	6.9	7.4	7.7	6.1	7.0	5.9	5.0	5.5
HSC/equivalent	4.8	3.7	4.3	5.8	3.4	4.7	4.9	2.7	3.8
Bachelors/equivalent	1.4	.8	1.1	2.3	.9	1.6	1.7	.8	1.2
Masters/equivalent	.5	.3	.4	.9	.4	.7	.8	.2	.5
Diploma	.1	.1	.1	.2	.1	.2	.3	.1	.2
Others	.4	.1	.3	.2	.0	.1	.5	.2	.4
Not applicable	7.8	8.1	8.0	7.4	8.0	7.7	8.6	7.3	8.0
Total no. of cases	**8605**	**7901**	**16506**	**3947**	**3540**	**7487**	**3852**	**3793**	**7645**

Source: SDC and RMMRU Panel Survey 2017 and 2020

In the case of internal migrants, the number of members studying up to 5th level has increased by 1 percent. International migrants have seen an increase in members studying in classes 6-10 by 1 percent. In the case of female members, this figure is even higher (2 percent). The percentage of

female international migrants taking part in secondary school education increased during Wave 3 by 1 percent. The data show that although the overall percentage of people who study to the SSC level has dropped from Wave 2 to Wave 3. For internal migrant households, females see a percentage increase in SSC level education of 0.1 percent. In the case of females from non-migrant households, a 1 percent increase is recorded in the number of members with an SSC level of education.

Overall, the proportion of people studying to the HSC level has increased. Furthermore, there is a 1 percent increase in the number of females enrolled at the HSC level of education. All three types of household have seen an improvement in the level of education. However, a relatively small proportion of the sample studied beyond the undergraduate level or above.

Employment and occupation

Table 3.1.6 presents the main occupation of all three types of migrant household. During Wave 3, around 6 percent of international and internal migrants households, and 7 percent of non-migrant households' main occupation was farm and non-farm agriculture. There has been a drop in the percentage of these households in the agricultural sector when compared with Wave 2 of the survey. For international migrant households the drop is 2 percent, for internal migrant households it is 5 percent and for non-migrant households it is 6 percent. Thus, over time members of each category of household appear to have been able to divert to other avenues of income generation. The participation of female members in agriculture in very limited among international migrant households. Around 52 percent of females from international households are housewives. It is 53 percent in the case of the internal migrant households and 51 percent in the case of non-migrant households.

There are a number of clear differences between male and female members in relation to occupation type. Male members of international migrant households tend to be active mostly in the service sectors (transport operator, sales worker, waiter, gardener, watchman and vendor). Around 15 percent of the male members of international migrant households are occupied in these trades. A 6 percent drop in the percentage of male members is visible when compared to the Wave 2 data. Around 6 percent of male international migrants work as caretakers, guards, and gardeners in private homes. 6-8 percent of male members of all types of household are engaged in business.

Table 3.1.6: Main occupations by migration type and gender

Occupation	Wave 3								
	International (%)			Internal (%)			Non-migrant (%)		
	M	F	T	M	F	T	M	F	T
Agriculture/fisheries/ poultry farm	9.9	.7	5.5	10.1	1.7	6.1	12.8	1.3	7.1
Business	6.8	.2	3.7	6.1	.2	3.3	8.7	.3	4.6
Service	13.5	.8	7.4	14.0	1.2	7.9	11.6	1.0	6.4
Construction worker	9.0	.1	4.7	7.1	.1	3.7	3.8	.0	2.0
Manufacturing	8.0	1.1	4.7	12.9	2.4	7.9	6.8	1.9	4.4
Domestic worker	6.3	3.1	4.8	5.9	.9	3.5	6.3	1.8	4.1
Managerial / administrative	.1	0.0	.0	.1	0.0	.0	0.0	.1	.0
Professional	.5	.3	.4	2.3	.5	1.4	1.9	.7	1.3
Housewife	.0	52.1	24.8	.0	52.5	25.1	.0	50.5	24.8
Retired	4.9	6.4	5.6	4.2	6.2	5.2	5.4	6.5	5.9
Student	8.0	6.8	7.5	7.5	6.0	6.8	9.8	7.4	8.6
Unemployed	8.5	2.3	5.6	5.2	2.8	4.2	5.4	3.2	4.4
ID is under the age of 15	24.3	26.0	25.1	24.3	25.7	25.0	27.4	25.4	26.4
Total no. of cases	**7329**	**6674**	**14003**	**3156**	**2908**	**6064**	**3928**	**3811**	**7739**
	Wave 2								
Agriculture/fisheries/ poultry farm	14.3	.5	7.7	19.6	1.7	11.2	23.2	2.3	12.8
Business	8.6	.4	4.7	7.7	.7	4.4	10.0	.7	5.4
Service	12.0	2.7	7.5	9.9	.5	5.5	8.3	.6	4.5
Construction work	8.6	.2	4.6	7.1	.1	3.8	2.6	.0	1.3
Manufacturing	4.3	.7	2.6	7.2	4.0	5.7	1.9	.4	1.2
Domestic worker	1.4	2.5	1.9	.1	.4	.2	.1	.4	.3
Managerial/ administrative	.5	.0	.3	.5	.0	.3	.2	.0	.1
Professional	1.5	.5	1.0	3.8	.8	2.4	1.9	.7	1.3
Housewife	.0	52.8	25.3	.0	52.6	24.9	.0	48.9	24.3
Retired	4.5	4.9	4.7	3.6	4.0	3.8	3.7	4.6	4.2
Student	7.7	6.7	7.2	8.2	6.9	7.6	10.8	8.4	9.6
Unemployed	7.1	2.3	4.7	3.9	2.3	3.1	4.1	3.2	3.6
Others	3.9	.3	2.2	4.9	.7	2.9	3.8	.6	2.2
ID is under the age of 15	25.4	25.6	25.6	23.3	25.4	24.3	29.4	29.1	29.3
Total no. of cases	**8599**	**7896**	**16495**	**3945**	**3530**	**7475**	**3851**	**3786**	**7637**

Source: SDC and RMMRU Panel Survey 2017 and 2020

The percentage of male members involved in business has also dropped during Wave 3. Male members involved in business of international migrant households have dropped by 2 percent, internal migrant household by 2 percent and non-migrant household by 1 percent. Around 1 percent of

internal female migrant household members and 2 percent of male migrant household members are occupied in garments and other manufacturing sectors. There is a negligible percentage of migrant household members working in these sectors from the other two household groups.

Not surprisingly the unemployment rate has increased during Wave 3 which was fielded during the COVID-19 pandemic. International migrants faced an increase in unemployment of 1 percent, internal migrant household of 1 percent and non-migrants of 1 percent. The retirement rate across all types of migrant households has increased during Wave 3 of the survey. The number of retired individuals has gone up by 1 percent for international migrants, 1 percent for internal migrant household members and 2 percent for non-migrant household members. The occupation choice data above demonstrates that a shift from agriculture to other trades is an overarching trend.

3.2 Living standards

This section studies the living standard of households across migration groups. Indicators of living standards are ownership of homestead, quality of housing, sources of drinking water, cooking fuel, power, and type of toilet used.

Ownership of homestead

89 percent of international migrant households sampled in Wave 3 possess homestead land. For internal and non-migrant households the figure falls to 86 percent (Table 3.2.1). Around 10 percent of international migrants have other living arrangements. These include living on rented land and in government *khaas* land etc. Around 1 percent live on other people's land. The ownership pattern of land varies significantly district wise. In traditional migration pockets like Chattogram, Dohar, Cumilla, Munshiganj, Sunamganj, Tangail, Narayanganj and Barishal 90 to 97 percent of households own their homestead land whereas in areas such as Chapainawabganj, Shariatpur, Lakshmipur, Faridpur and Kushtia, 15 to 20 percent do not (Annex 3)[11]. There are significant gender differences with respect to ownership of homestead. In the case of international migrants, 90 percent of male migrant households owned their homestead.

11 All tables from Annex 3 to Annex 9 are available in the online version of this book.

Ownership of the homestead is 11 percentage points lower in the case of female international migrants. In the case of internal migrants however, female migrant households enjoy greater ownership of homestead land than those of male migrants. 85 percent of male internal migrant households own their homestead whereas 90 percent of female migrants households do. This further consolidates the findings from Wave 2 that international female migrants originate from poorer economic status than internal female migrants.

Table 3.2.1: Ownership of dwellings by migration type and gender

Nature of ownership	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Owner of the Homestead	90.3	78.6	88.7	85.4	89.6	85.7	86.3
Rented	1.0	5.3	1.6	1.2	0.0	1.1	1.3
Not owner but without rent	8.7	16.2	9.7	13.4	10.4	13.2	12.3
Others	0.0	0.0	0.0	0.0	0.0	0.0	.1
Total no. of cases	**2352**	**359**	**2710**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Owner of the Homestead	96.6	80.4	93.6	92.8	90.6	92.5	90.
Rented	.6	7.1	1.8	1.4	1.6	1.4	1.3
Not owner but without rent	2.8	12.4	4.6	5.7	7.3	5.9	7.7
Others	0.0	0.0	0.0	.2	.5	.2	.1
Total no. of cases	**2406**	**547**	**2953**	**1230**	**192**	**1422**	**1733**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Quality of housing

There are four types of possible housing structure, namely *paka,* semi-*paka,* semi-*katcha* and *katcha*. *Paka* houses are concrete houses which have walls and roofs made of materials such as sand, cement and brick. Semi-*paka* houses are those which have concrete walls but roofs made with other materials such as corrugated iron sheets/*tin*. Semi-*katcha* houses are those which are made of tin as the primary material for roof and walls. When the tin houses have concrete floors or concrete borders they are also classified as semi-*katcha*. *Katcha* houses are made of bamboo, mud, grass, reed, thatch, straw, leaves and un-burnt bricks. These are less durable structures.

22 percent of international migrant households, 10 percent of the internal migrant households and 9 percent of the non-migrant households live

Table 3.2.2: Type of homestead by migration type and gender

Nature of Construction	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Katcha	6.9	16.4	8.2	18.0	30.2	18.9	18.7
Semi-*katcha*	44.0	58.1	46.9	54.7	52.1	54.8	58.1
Semi-*paka*	25.2	16.0	23.0	16.7	11.4	16.0	13.3
Paka	23.5	9.5	21.6	10.4	6.3	10.1	9.1
Others	.4	0.0	.4	.2	0.0	.2	.8
Total no. of cases	**2352**	**359**	**2710**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Katcha	9.1	19.2	11.0	29.3	33.9	30.0	27.5
Semi-*katcha*	46.6	56.5	48.5	48.5	54.2	49.3	54.2
Semi-*paka*	23.4	14.8	21.8	15.7	10.4	15.0	12.3
Paka	20.8	9.5	18.7	6.4	1.6	5.8	6.0
Total no. of cases	**2406**	**547**	**2953**	**1230**	**192**	**1422**	**1733**

Source: SDC and RMMRU Panel Survey 2017 and 2020

in concrete houses (Table 3.2.2). 23 percent of international migrant households reside in semi-*paka* houses. 16 percent of the internal migrant households and 13 percent of the non-migrant households reside in semi-*paka* houses. Around 55 percent of the internal migrant households and 58 percent of the non-migrant households live in semi-*katcha* houses. The percentage of international migrant households living in semi-*katcha* houses is much lower. Only 8 percent of the international migrants, 19 percent of the internal and non-migrant households live in *katcha* houses.

Turning to the effect of climate change, the data are segregated on the basis of less climate affected and major climate affected areas. Cumilla, Tangail, Chattogram and Dohar are less affected by climate change. There are no *katcha* houses in Cumilla and Dohar. This is true for households of all migration status. The percentage of *katcha* houses is less than the sample average in Tangail and Chattogram. In the case of Tangail it is 5 percent and in case of Chattogram it is 8 percent (Annex 4). Satkhira is one of the major climate affected districts. In Satkhira 33 percent of the international migrant, 23 percent of the internal migrant and 35 percent of the non-migrant households live in *katcha* houses. Interestingly, Chapainawabganj is another climate affected district. Only 5 percent of international migrant households live in *katcha* houses but 29 percent of the internal migrant and 28 percent of the non-migrant households live

in *katcha* houses. Although Shariatpur is a climate affected area, none of the international or non-migrant households live in *katcha* houses. Only 2 percent of internal migrants live in *katcha* house. Khagrachari represents the hill districts of the country where different ethnic communities reside. The cultural pattern of the homestead is different in this district. In Khagrachari, as much as 38 percent of homesteads are *katcha* (Annex 3).

Compared to Wave 2, during Wave 3 the number of international migrant households living in semi-*paka* houses has increased by 22 percent. This may indicate a significant increase in the living standards of migrant households. The same upward trend follows in case of the two other migrant household types. All three types of household, international, internal and non-migrant, have experienced an increase in living in fully concrete housing (3-5 percent).

During Wave 2 of the survey 11 percent of international migrant households and 30 percent of internal migrant households have been living in *katcha* houses. In Wave 3 this deceased to 8 percent and 19 percent respectively. This means a 3 percent decrease in the number of international migrant households living in *katcha* homesteads between waves 2 and 3 and an 11 percent decrease for internal migrants. This indicates that these groups have been able to improve their standard of living. The same upward trend was noted for non-migrant households.

Ownership of agricultural land

Ownership of agricultural land has reduced for all three groups of household by migration status (3.2.3). In Wave 2, 42 percent of the international migrant households and 33 percent of the internal migrants owned agricultural land. During Wave 3, this reduced by 3 percentage points for both groups. In case of non-migrant households, it dropped by 5 percent. Interestingly the decrease in percentage share in ownership has taken place only in case of male migrant households. This is true for both internal and international migrant households. The percentage of female migrant households on the other hand has increased a little. This is consistent with the data on occupation. The incidence of farming as an occupation has reduced over the years and more and more people are now employed in the service sector. There are two probable explanations for this decrease in the percentage of land ownership across all three types of household. Firstly, agriculture is becoming less economically

beneficial so that small owners are selling their lands and using the money as capital for businesses, sending family members abroad or to finance the higher education of their children. Another possible explanation is that rich people or corporations who want to use the land for commercial purposes are buying these lands. Another reason is that during COVID-19 some distress sales have taken place, for example to finance consumption despite income shortfalls.

Table 3.2.3: Ownership of agricultural land by migration type and gender

Ownership of agricultural land	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Owned	42.5	18.7	39.4	29.3	34.4	29.6	29.1
Total no. of cases	**2338**	**358**	**2696**	**1200**	**96**	**1296**	**1924**
	Wave 2						
Owned	48.0	17.4	42.3	33.1	33.9	33.2	34.0
Total no. of cases	**2401**	**546**	**2947**	**1230**	**192**	**1422**	**1728**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Sources of drinking water

The primary source of drinking water for the household has been tube wells or deep-tube wells. 84 percent of international and internal migrant households use tube wells as their source of drinking water. In case of non-migrant households, it is 80 percent (Table 3.2.4). The other sources are piped water, surface water and rainwater. Piped water includes government WASA line and extraction of groundwater through motorised pumps. 16 percent of international migrants, 8 percent of internal migrants and 14 percent of non-migrant houses use piped water. 5 percent of the internal migrant and 2 percent of the non-migrant households still use rivers or ponds as their source of drinking water.

Although international migrants do not use rainwater much, almost 10 percent of internal migrants and 4 percent of the non-migrant households use rainwater. Pond, river and rainwater are mainly used in Satkhira district which is highly vulnerable to climate change. As many as 17 percent of international migrant, 29 percent of the internal migrant and 31 percent of non-migrant households of Satkhira use rainwater as a primary source of drinking water (Annex 5). This is due to the supply

of water purifying tablets by local NGOs. Chapainawabganj is another climate affected area. In the past, people of this district used to suffer from drinking water shortage. Over the last 10 years the extraction of ground water has increased manifold. Now 92 percent of the population of this area use deep-tube wells as a source of water, and 7 percent use piped water which they extract through motorised pumps. Rainwater harvesting or use of river/pond water as a source of drinking water is non-existent in case of international migrant households of this area.

Table 3.2.4: Sources of drinking water by migration type and gender

Sources	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Pipe or Wasa waterline	13.4	29.5	15.5	7.5	7.3	7.5	14.4
Tube well/deep-tube well	86.1	70.2	84.0	77.9	84.4	78.4	79.6
Pond/River/Lake	.1	.3	.1	4.7	1.0	4.5	1.9
Rain water/Fountain water	.2	0.0	.1	9.7	7.3	9.5	3.6
Others	.2	0.0	.2	.2	0.0	.2	.6
Total no. of cases	**2352**	**359**	**2710**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Pipe or Wasa waterline	6.4	13.0	7.6	4.1	2.1	3.8	9.3
Tube well/deep-tube well	92.0	82.4	90.2	83.1	88.5	83.8	80.4
Pond/River/Lake	.5	0.0	.4	6.7	3.6	6.3	2.9
Rain water/Fountain water	.2	.4	.3	5.4	4.2	5.3	2.8
Others	.9	4.	1.5	.7	1.6	.8	4.6
Total no. of cases	**2406**	**547**	**2953**	**1230**	**192**	**1422**	**1733**

Source: SDC and RMMRU Panel Survey 2017 and 2020

By comparing the Wave 3 data with Wave 2, one finds that the use of piped water by international migrant households has increased by 8 percent. This means that these households use motorised pumps and taps in their bathrooms. Consequently, there is a decrease in the percentage of tube well users. However, in terms of internal migrants, a 4 percent increase in the use of rainwater/fountain water is observed. The percentage of internal and non-migrant households who still use tube wells as a source of water has not changed.

Sources of power

During Wave 3 of the survey, 99 percent of the international migrants, 94 percent of the internal migrants and 92 percent of the non-migrant

households use electricity as their primary source of power (Table 3.2.5). 1 percent of the international migrants, 4 percent of internal migrants, and 6 percent of non-migrants use solar power. An insignificant number of people (ranging from 0.3 percent to 1.7 percent) use kerosene and other sources of power. Gendered differences are only visible in the case of internal migrants with respect to the use of solar panels. 4 percent of male internal migrant households use solar panels as 7 percent of internal female migrant households use solar panels.

Table 3.2.5: Use of electricity as source of power by migration type and gender

Sources	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Electricity	98.6	97.8	98.5	94.0	88.5	93.6	92.1
Solar panels	1.2	1.1	1.2	4.0	7.3	4.2	6.1
Kerosene	.2	1.1	.3	1.9	3.1	2.0	1.7
Others	0.0	0.0	0.0	.1	1.0	.2	.2
Total no. of cases	**2352**	**359**	**2710**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Electricity	89.8	78.2	87.6	71.3	63.5	70.2	72.5
Solar panels	8.7	13.0	9.5	19.2	17.2	18.9	15.3
Kerosene	1.4	8.4	2.7	8.9	18.8	10.2	11.7
Others	.1	.4	.2	.7	.5	.6	.5
Total no. of cases	**2406**	**547**	**2953**	**1229**	**192**	**1421**	**1733**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Consistent with the results from earlier survey waves, the upward trend of the use of electricity as a source of power has continued during the Wave 3. Almost 98 percent of international migrant households have access to electricity as a primary power source (previously 87 percent). The same trend continued for the other two types of households, internal, and non-migrant. The former has seen a 24 percent increase and the latter has seen a 19 percent increase in the use of electricity by the time of the Wave 3 survey.

Wave 3 also shows that due to the increase in the use of electricity, all types of households now exhibit a decline in the use of other methods of power such as solar panels, kerosene, etc. The use of solar panels by international migrant households has fallen from 10 percent during Wave 2 to 1 percent during Wave 3. The same downward trend continued for the other two household types indicating an increase in their standard

of living as more and more households use electricity as their primary source of power.

The upward trend in electricity usage is less visible in the case of Satkhira which is severely climate change affected. 83 percent of international migrant, 86 percent of the internal migrant households, and 81 percent of the non-migrant households use electricity as their primary source of power. 17 percent of international migrants, 12 percent of internal migrants and 15 percent of non-migrant households use solar power (Annex 6).

Type of toilet

During Wave 3, 57 percent of international migrant households, 31 percent of the internal migrant households and 33 percent of non-migrant households have been using sanitary water and sealed latrines (Table 3.2.6). 40 percent of international migrant, 59 percent of the internal migrants and 53 percent of non-migrant households have been using slab latrines without water seals. The use of *katcha* toilets is much less prevalent in the case of international migrants. Only 3 percent use *katcha* latrines. 9 percent of the internal and 13 percent of the non-migrant households still use *katcha* latrines.

Table 3.2.6: Types of toilets by migration type and gender

Type of toilets	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Sanitary (With water seal)	60.5	35.1	57.2	31.9	22.9	31.2	33.3
Sanitary (Slab or ring toilet/ without water seal)	36.7	57.7	39.5	58.9	61.5	59.1	53.1
Not sanitary (Katcha toilet)	2.4	7.0	3.0	8.9	15.6	9.4	12.7
Open area/no toilet	.3	0.0	.2	.3	0.0	.3	.8
Others	.0	.3	.1	0.0	0.0	0.0	.2
Total no. of cases	**2352**	**359**	**2710**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Sanitary (With water seal)	53.0	30.9	48.9	24.6	8.9	22.5	22.6
Sanitary (Slab or ring toilet/ without water seal)	44.8	60.3	47.7	63.0	72.4	64.3	63.2
Not sanitary (Katcha toilet)	2.1	7.9	3.2	11.3	16.1	12.0	13.2
Open area/no toilet	.1	.7	.2	1.1	2.6	1.3	1.0
Others	0.0	.2	.0	0.0	0.0	0.0	0.0
Total no. of cases	**2406**	**547**	**2953**	**1230**	**192**	**1422**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

In Chapainawabganj 74 percent of the international migrant households use sanitary latrines with water seals (Annex 7). As against this 21 percent and 24 percent of the internal and non-migrant households respectively use slab latrines without water seal. The number of people still using *katcha* latrines is also high in this district. 20 percent of the internal migrants and 24 percent of the non-migrants use *katcha* latrines. In Satkhira district, the first two types of toilets are mostly used. These are *paka* latrines with water seals and slab latrines without water seals. None of the international migrant households use *katcha* latrines. 8 percent of internal and 12 percent of non-migrant households still use *katcha* latrines. In Khagrachari, the use of the first two types of toilets is much less compared to other areas under the study. 8 percent use *paka* latrines with slab, 51 percent use slab latrine without water seal, 39 percent use *katcha* latrine, and 2 percent use open area for defecation.

Since Wave 2 of the survey the percentage of international migrant households using sanitary toilets has now increased by 8 percentage points resulting in a decrease in the use of other types of toilet. In the case of internal migrant households during Wave 3, the use of *paka* toilets with water seals has increased by 10 percentage points. The use of slab latrines has decreased by 6 percentage points. The use of sanitary toilets among non-migrant households has increased by 10 percentage points.

Source of cooking fuel

Table 3.2.7 shows the type of cooking fuel used by these three groups of household. 53 percent of international migrant households use firewood as a source of cooking fuel, 32 percent use gas and 15 percent use cow dung/straw. 58 percent of internal migrants use firewood, 23 percent use cow dung/leaves/straw and 19 percent use gas. 56 percent of non-migrant households use firewood, 24 percent use gas and 20 percent use cow dung, leaves straw etc. The use of kerosene or electric stove is non-existent as of the collection of Wave 3 of the data.

Compared to Wave 2, in Wave 3 of the survey we see an increase in the use of firewood as a source of cooking fuel for internal and non-migrant households. Internal migrant households have experienced an increase of 6 percentage points and non-migrant households an increase of 3 percentage points. In the case of internal and non-migrant households, the use of cow dung/leaf/straw has been replaced by firewood. International

migrant households on the other hand have seen a decline in the use of firewood of 9 percentage points and the use of cow dung by 6 percentage points. Increased number of international migrant households are using gas/Lp Gas (15 percent). This indicates that rural households are gradually moving towards the use of gas as a primary source of fuel.

Table 3.2.7: Sources of cooking fuel by migration type and gender

Sources	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Firewood	53.5	47.4	52.7	57.0	67.7	57.8	56.3
Cow Dung/Leaf/Straw	13.2	23.7	14.6	23.1	20.8	23.0	19.6
Gas/Lp Gas	32.8	28.4	32.3	19.4	11.5	18.8	23.8
Bio-Gas	.5	.3	.4	.3	0.0	.3	.3
Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	.1
Others	0.0	.3	.0	.1	0.0	.1	0.0
Total No. Of Cases	**2352**	**359**	**2710**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Firewood	62.0	58.1	61.3	52.8	45.8	51.9	53.8
Cow Dung/Leaf/Straw	20.1	23.6	20.8	39.8	52.6	41.5	34.5
Gas/Lp Gas	17.5	17.9	17.6	7.2	1.6	6.5	11.4
Bio-Gas	.3	.4	.3	.1	0.0	.1	.2
Kerosene	0.0	0.0	0.0	.1	0.0	.1	0.0
Others	.0	0.0	.0	0.0	0.0	0.0	.1
Total no. of cases	**2406**	**547**	**2953**	**1230**	**192**	**1422**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Chapter conclusions

During the Wave 3 of the survey, the size of the households of internal and international migrants dropped by a small margin and the size of non-migrant households remained the same. The marital status of household members shows that the percentage of separated, divorced and widowed members is much higher in the case of female members of the household. More than one-third if members of all three types of household are less than 18 years of age. The percentage of people without any education has been reducing gradually for all three groups of household over the three waves. Agriculture as a major sector of employment has reduced further for all three groups and the service sector is emerging as the major employment generating sector. The percentage of households living in *katcha* houses has also reduced. While *katcha* houses in some districts

have become rare, in Khagrachari and Satkhira more than 30 percent of households still live in such houses. The percentage of people using tap water for drinking has increased in Wave 3. This is because in recent years many households have installed motorised pumps to extract ground water. This has allowed households to construct their toilets within the homestead and the installation of taps. Wave 2 data show that households in areas that were not covered by electricity used solar power. In recent times countrywide coverage of grid electricity has increased. This perhaps has resulted in more than 92 percent of households having access to electricity. The need for the use of solar power has obviously reduced. In case of international migrants, the percentage of households using water-sealed latrines have increased the most. A gradual trend of moving towards gas/Lp gas is also visible among the three groups of household.

Given the COVID-19 pandemic and multiple disasters, it may sound surprising to see positive changes with respect to increased use of gas as cooking fuel, the replacement of unhygienic defecation through with hygienic latrines, and a shift from *katcha* and semi-*katcha* houses to *paka* and semi-*paka* houses. However, the data generated provides information about the change in status of these households over the last three years starting from 2018 to 2020 and so it is possible that the changes that the Wave 3 survey recorded may have occurred before the outbreak of COVID-19 pandemic.

CHAPTER IV

HOUSEHOLD EXPERIENCES OF MIGRATION

Mahmudol Hasan Rocky

This chapter examines the migration experience of the internal and international migrant households. It explores migration status, the socio-demographic profiles of migrants, the duration of their migration, the cost of financing migration, the country of destination of the migrant, and the nature of employment at the destination. It mainly draws from Wave 3 of the SDC and RMMRU panel survey and identifies the differences with that of the Wave 2 survey.

4.1 Migration status

Table 4.1.1 presents the distribution of current and returnee migrants in across both internal and international migration streams. During the survey, 64 percent of international migrants have been working abroad and 36 percent have returned, either after finishing their contract or abruptly due to the COVID-19 pandemic. 66 percent of internal migrants were working outside their villages and 34 percent had returned. In this study, current international migrants have been defined as those who are staying abroad for more than 1 year and returnee international migrants are those who have returned to Bangladesh voluntarily or involuntarily and remained in the country for more than 1 year. In case of internal migration, the time frames are analogously defined but reduced to 6 months. Among current internal migrants, 6 percent are female, and 94 percent are male. Again, among the internal returnee migrants, 10 percent are female and 90 percent are male.

During Wave 2, among male international migrants, 22 percent were returnee migrants. Among the internal, 16 percent were returnee migrants. One can see, the percentage of return migrants in Wave 3 is significantly higher in comparison to Wave 2. This increase in the percentage of returnee migrants matches the national trend of large-scale return during COVID-19.

Table 4.1.1: Status of migration by type and gender

Migration Status	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Current Migrants	65.0	57.2	64.0	66.6	55.1	65.8
Returned Migrants	35.0	42.8	36.0	33.4	44.9	34.2
Total no. of cases	**2959**	**414**	**3373**	**1547**	**118**	**1665**
	Wave 2					
Current Migrants	78.1	73.9	77.4	84.2	80.1	83.7
Returned Migrants	21.9	26.1	22.6	15.8	19.9	16.3
Total no. of cases	**3105**	**635**	**3740**	**1731**	**241**	**1972**

Source: SDC and RMMRU Panel Survey 2017 and 2020

4.2 Level of education

The average education level of each type of migrants is quite low. 16 percent of international migrants and 18 percent of internal migrants have no education. 26 percent of international and 29 percent of the internal migrants have up to class 5 education. 38 percent of international and 30 percent of the internal migrants studied from class 6 to 10. Only 12 percent of international migrants and 7 percent of the internal migrants have SSC or equivalent degree. Another 7 percent of international and 8 percent of internal migrants have HSC or equivalent degree. Although the percentage of migrants who had undergraduate degrees is very low, the percentage of internal migrants with undergraduate degrees is little higher than that of international migrants. 7 percent of the internal migrants either have undergraduate or Master's degrees, only 2 percent of the international migrants possess such educational qualifications. The percentage of migrants with vocational degrees is also extremely low for both internal and international migrants.

With respect to educational attainment, major differences are found on the basis of gender. In the case of both internal and international migrants, 32 percent of female international migrants are unable to read or write. Only 14 percent of the male international migrants belong to this category. 23 percent of the female internal migrants cannot read or write. The corresponding percentage of male internal migrants is 17 percent. 20 percent of male international migrants possess SSC or HSC degrees. Only 4 percent of the female international migrants possess such an educational qualification. Interestingly, the percentage of female internal

migrants possessing SSC and HSC degrees are higher than that of their male counterparts. 18 percent of the female internal migrants have SSC or HSC degrees. Only 13 percent of male internal migrants have such degrees.

Table 4.2.1: Level of education by migration type and gender

Level of education	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
No education	14.0	31.6	16.2	17.4	22.5	17.8
Up to 5th level	24.5	32.5	25.5	29.2	20.0	28.5
6th to 10th level	38.8	31.3	37.8	29.9	29.2	29.9
SSC/Equivalent	13.1	2.6	11.8	7.5	5.0	7.3
HSC/Equivalent	7.3	1.2	6.5	8.0	11.7	8.3
Bachelors/Equivalent	1.4	.5	1.3	4.8	6.7	5.0
Masters/Equivalent	.4	0.0	.4	2.1	2.5	2.2
Diploma	.2	0.0	.2	.6	1.7	.7
Others	.2	0.0	.2	.3	.8	.3
Not applicable	.1	.2	.1	.1	0.0	.1
Total no. of cases	**2948**	**418**	**3366**	**1547**	**120**	**1667**
	Wave2					
No education	15.3	36.7	19.0	17.2	22.0	17.8
Up to 5th level	26.1	34.0	27.5	27.0	29.5	27.3
6th to 10th level	39.7	25.5	37.3	31.8	28.6	31.4
SSC/Equivalent	11.1	2.2	9.6	10.2	8.3	10.0
HSC/Equivalent	5.9	.8	5.0	7.3	6.6	7.3
Bachelors/Equivalent	1.3	.3	1.2	3.9	4.1	4.0
Masters/Equivalent	.3	.2	.3	2.0	.4	1.8
Diploma	.1	0.0	.1	.3	0.0	.3
Others	.1	0.0	.1	.1	0.0	.1
Not applicable	.0	.3	.1	.1	.4	.1
Total no. of cases	**3102**	**635**	**3737**	**1729**	**241**	**1970**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Compared to Wave 2, in Wave 3 the number of people with no education has reduced by 3 percentage points for international migrants. For internal migrants, it remained the same. The number of international migrants with SSC and HSC degrees also increased by 2 percentage points. Among internal migrants, the number with SSC and HSC degrees have reduced. However, this is offset by an increase in the percentage of migrants with undergraduate degrees.

4.3 Marital status

Table 4.3.1 presents the marital status of the internal and international migrants. 18 percent of both types of migrants are single. 74 percent of the international and 70 percent of the internal migrants are married. 3 percent of international migrants and 2 percent of the internal migrants are either separated or divorced. 2 percent of the international migrants and 1 percent of the internal migrants are widowed. 3 percent of the international migrants and 10 percent of internal migrants are underaged. The Bangladesh government has fixed the minimum age for marriage. For females it is 18 years and above and for males it is 21 years and above.

Table 4.3.1: Marital status by migration type and gender

Marital Status	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Single	18.8	10.3	17.7	16.5	30.8	17.5
Married	77.2	54.3	74.4	72.5	32.5	69.6
Separated	.3	9.6	1.4	.2	5.8	.6
Divorced	.6	13.9	2.2	.6	15.8	1.7
Widow/Widower	.2	10.5	1.5	.1	11.7	1.0
Under-aged (if female < 18; males < 21)	3.0	1.4	2.8	10.1	3.3	9.6
Total no. of cases	**2951**	**418**	**3369**	**1547**	**120**	**1667**
	Wave 2					
Single	18.5	12.0	17.4	22.9	26.6	23.4
Married	77.5	57.2	74.1	64.0	45.2	61.7
Separated	.1	8.2	1.5	.1	5.0	.7
Divorced	.6	11.2	2.4	.3	9.1	1.4
Widow/Widower	.2	7.6	1.4	0.0	5.0	.6
Under-aged (if female < 18; males < 21)	3.0	3.9	3.2	12.7	9.1	12.3
Total no. of cases	**3102**	**635**	**3737**	**1729**	**241**	**1970**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Interesting differences surface when the data are analysed through a gendered lens. In the case of international migrants, 77 percent of male migrants are married, whereas 54 percent of female migrants are married. Less than 1 percent of the male migrants are either separated or divorced, whereas 24 percent of the international female migrants are either separated or divorced. Widowers are almost non-existent among the international male migrants but 11 percent of the female migrants are widows. A similar result is visible in the case of internal migrants:

altogether 33 percent of the female internal migrants are separated, divorced or widowed. The participation of underaged boys in both the internal and international labour markets is higher compared to underaged girls. For internal migrants, 10 percent of the male workers are underaged whereas, for female internal migrants the proportion of underaged workers is 3 percent. In the case of international migrants, the share of underaged male workers is 3 percent and that of females is 1 percent.

Compared to Wave 2, the percentage of married persons has increased from 70 to 73 percent in Wave 3. The percentage of unmarried migrants reduced by 2 percentage points.

4.4 Number of migration experience

The majority of migrants have a single migration experience. 75 percent of male international migrants and 63 percent of female international migrants took up overseas employment for the first time. 19 percent of male migrants and 30 percent of female migrants have two migration experiences. 7 percent of the international female migrants have three migration experiences. 2 percent of the male international migrants have migrated more than five times. The majority of internal migrants also

Table 4.4.1: Number of migration experience by type and gender

No. of migration experience	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
1	74.7	62.7	73.4	64.3	69.4	64.6
2	19.0	30.3	20.3	14.7	17.7	14.8
3	3.3	7.0	3.7	4.9	3.2	4.8
4	.9	0.0	.8	2.3	0.0	2.2
5	.3	0.0	.3	2.0	6.5	2.3
5+	1.7	0.0	1.5	11.9	3.2	11.4
Total no. of cases	**1860**	**228**	**2088**	**1002**	**62**	**1064**
	Wave 2					
1	86.7	74.0	84.7	79.7	93.1	81.3
2	10.6	21.3	12.3	9.9	3.4	9.1
3	1.6	3.5	1.9	3.3	1.1	3.1
4	.2	.9	.3	2.3	1.7	2.2
5	.3	0.0	.2	1.6	0.0	1.4
5+	.6	0.2	.5	3.2	0.6	2.9
Total no. of cases	**2242**	**431**	**2673**	**1284**	**175**	**1459**

Source: SDC and RMMRU Panel Survey 2017 and 2020

migrated for the first time. 64 percent of the male migrants and 69 percent of female migrants migrated for work only once. 12 percent of male internal migrants and 3.2 percent female internal migrants migrated more than five times.

85 percent of the international migrants during the Wave 2 were first time migrants whereas in Wave 3 this decreased to 73 percent. This indicates that the percentage of first time migrants reduced by 11 percentage points. During Wave 2, 81 percent of the internal migrants were first time migrants. In Wave 3 it reduced to 65 percent. Between the two waves, the percentage of first time migrants reduced by 17 percentage points.

4.5 Duration of migration

The total average duration of migration for both internal and international migrants is quite high. It is 8 years for both internal and international migrants. Compared to females, the average migration years for male

Table 4.5.1: Duration of migration by type and gender

Duration of Migration (in year)	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Below 1	3.3	2.5	3.2	5.4	3.0	5.3
1-2	11.9	18.2	12.6	16.0	25.8	16.6
3-5	27.6	37.7	28.7	23.0	39.4	24.1
6-10	27.1	26.3	27.0	29.6	22.7	29.2
11-15	17.3	10.6	16.6	13.7	6.1	13.2
16-25	11.2	4.7	10.5	10.0	3.0	9.5
25+	1.7	0.0	1.5	2.4	0.0	2.2
Average	8.4	5.9	8.1	7.9	5.3	7.8
Total no. of cases	**1931**	**236**	**2167**	**884**	**66**	**950**
	Wave 2					
Below 1	5.9	11.3	6.7	5.0	8.0	5.4
1-2	15.9	31.0	18.3	16.6	33.1	18.8
3-5	17.2	25.7	18.6	22.9	22.9	22.9
6-10	33.5	21.4	31.6	30.0	24.0	29.2
11-15	15.6	6.4	14.2	13.6	9.1	13.0
16-25	10.8	3.9	9.7	8.9	2.9	8.1
25+	1.0	0.2	0.9	3.0	0.0	2.6
Average	8.1	4.8	7.5	7.9	4.8	7.5
Total no. of cases	**2339**	**435**	**2774**	**1163**	**175**	**1338**

Source: SDC and RMMRU Panel Survey 2017 and 2020

4.6 Destination

This section highlights the destination of internal and international migrants from the 20 origin districts surveyed. Table 4.6.1 demonstrates that the highest percentage of international migrants went to Saudi Arabia (33 percent). The second largest destination is the United Arab Emirates (17 percent). 9 percent migrated to Malaysia and around 8 percent migrated to Oman. Not much of a difference is observed with respect to destination choice between male and female migrants except for Malaysia and Jordan. Malaysia is the third largest destination for male migrants but very few females migrated to that country. Jordan is the

Table 4.6.1: Country of destination for international migrants by gender

Country	Wave 3 (%)			Wave 2 (%)		
	M	F	T	M	F	T
Saudi Arabia	32.0	39.3	32.8	26.5	23.7	26.0
UAE	16.1	23.6	17.0	17.3	18.4	17.5
Kuwait	5.0	2.9	4.8	4.7	3.0	4.5
Oman	8.6	6.6	8.4	9.7	7.1	9.2
Qatar	6.4	2.1	5.9	5.3	3.0	4.9
Bahrain	4.1	2.5	3.9	5.3	1.1	4.6
Lebanon	1.3	5.8	1.8	1.9	17.7	4.5
India	.2	.4	.2	.1	1.1	.3
South Africa	1.3	0.0	1.1	.9	.5	.9
Jordan	.2	13.6	1.7	.1	20.7	3.5
Libya	.2	0.0	.2	.5	0.0	.4
Malaysia	9.5	1.7	8.7	10.0	1.4	8.6
Singapore	3.2	0.0	2.9	4.6	0.0	3.9
S. Korea	.2	0.0	.1	.2	0.0	.1
Italy	6.6	.4	5.9	8.4	.7	7.1
Egypt	.2	0.0	.1	.2	0.0	.1
Brunei	.5	0.0	.5	.4	0.0	.3
Mauritius	.5	0.0	.5	.6	.9	.7
Iraq	.4	0.0	.4	.4	0.0	.4
Maldives	.7	0.0	.7	.8	.2	.7
Others	2.8	1.2	2.5	2.0	.5	1.7
Total no. of cases	**1885**	**242**	**2127**	**2237**	**435**	**2672**

Source: SDC and RMMRU Panel Survey 2017 and 2020

third largest destination of female migrants. For male migrants it is not a significant destination. 63 percent of female migrants migrated to two countries, these are, Saudi Arabia and the UAE. These are followed by

Oman and Lebanon. Saudi Arabia and the UAE also account for almost 50 percent of male migrants. Malaysia being the third, Italy the fourth and Qatar the fifth[12]. The table also shows that 72 percent of migrants are working in only in five countries.

In comparison to Wave 2 of the survey, the percentage of people migrating to Saudi Arabia increased by 6 percent in Wave 3. The Saudi Arabian labour market was closed for the Bangladeshis for quite a few years. Migration to that country is gradually increasing since the market reopened. The proportion of migrants going to UAE, Oman, and Malaysia remained constant in both waves 2 and 3. Such a scenario demonstrates that in the case of international migrants not much of a variation has occurred with respect to destination.

The destinations of internal migrants include almost all the districts of Bangladesh. However, the majority of them moved to either Dhaka or Chattogram. 61 percent moved to Dhaka for employment and 11 percent moved to Chattogram. Gazipur is the third largest destination where 3 percent of the migrants have moved. The remaining 24 percent of the internal migrants have migrated to the other 61 districts.

Table 4.6.2: District of destination for internal migrants by gender

District Name	Wave 3 (%)			Wave 2 (%)		
	M	F	T	M	F	T
Bagerhat	.1	0.0	.1	.5	0.0	.4
Bandarban	.2	0.0	.2	.2	0.0	.1
Barguna	0.0	0.0	0.0	.1	.5	.1
Barishal	1.6	1.4	1.6	1.5	1.1	1.5
Bhola	.1	0.0	.1	.2	0.0	.1
Bogura	0.0	0.0	0.0	.5	.5	.5
Brahmanbaria	.4	0.0	.4	.5	0.0	.4
Chandpur	.1	0.0	.1	.5	0.0	.4
Chattogram	10.1	28.6	11.3	14.3	17.4	14.7
Chuadanga	0.0	0.0	0.0	.1	0.0	.1
Cumilla	1.4	0.0	1.3	1.3	1.1	1.3
Cox's Bazar	.4	0.0	.4	.2	.5	.3
Dhaka	61.8	51.4	61.1	61.0	64.1	61.4
Dinajpur	0.0	0.0	0.0	.2	0.0	.1
Faridpur	1.0	1.4	1.0	.5	0.0	.4

12 Destination countries in the West were avoided in the research. However, in Shariatpur most of the internal migrant households had other migrant members who went to Italy.

Feni	.7	1.4	.7	.6	0.0	.5
Gaibandha	.1	0.0	.1	0.0	0.0	0.0
Gazipur	3.5	0.0	3.3	2.5	7.6	3.1
Gopalganj	1.1	1.4	1.1	.8	0.0	.7
Habiganj	.1	0.0	.1	.1	0.0	.1
Jamalpur	0.0	0.0	0.0	.2	0.0	.1
Jashore	1.2	0.0	1.1	.5	0.0	.4
Jhalakathi	.1	1.4	.2	0.0	0.0	0.0
Jhenaidah	.2	0.0	.2	.2	0.0	.1
Joypurhat	.1	0.0	.1	.4	0.0	.3
Khagrachari	1.6	0.0	1.5	1.3	0.0	1.1
Khulna	0.0	0.0	0.0	1.6	1.6	1.6
Kishoreganj	1.7	1.4	1.7	.1	0.0	.1
Kushtia	.1	0.0	.1	.5	.5	.5
Lakshmipur	.1	0.0	.1	.2	0.0	.2
Madaripur	.5	0.0	.5	.5	0.0	.4
Magura	1.0	0.0	.9	.1	0.0	.1
Manikganj	.3	0.0	.3	.2	0.0	.1
Moulvibazar	0.0	0.0	0.0	.1	0.0	.1
Meherpur	.1	0.0	.1	.1	0.0	.1
Munshiganj	.3	0.0	.3	.2	0.0	.2
Mymensingh	1.1	0.0	1.0	1.5	2.2	1.5
Naogaon	.1	0.0	.1	.1	0.0	.1
Narayanganj	1.7	2.9	1.8	.8	0.0	.7
Narsingdi	.9	1.4	.9	.4	0.0	.3
Natore	0.0	1.4	.1	.1	.5	.1
Chapainawabganj	.1	0.0	.1	.3	0.0	.3
Nilphamari	0.0	0.0	0.0	.1	0.0	.1
Noakhali	1.2	0.0	1.1	.7	0.0	.6
Pabna	0.0	0.0	0.0	.1	0.0	.1
Patuakhali	.1	1.4	.2	.2	0.0	.2
Rajbari	.3	0.0	.3	.1	0.0	.1
Rajshahi	.7	0.0	.7	.2	0.0	.2
Rangamati	.4	0.0	.4	.2	0.0	.2
Rangpur	.3	1.4	.4	.3	0.0	.3
Satkhira	.2	0.0	.2	.8	.5	.8
Shariatpur	.5	0.0	.5	.4	0.0	.3
Sirajganj	.2	0.0	.2	.1	0.0	.1
Sylhet	1.9	2.9	2.0	2.1	1.6	2.0
Tangail	.3	0.0	.3	.3	0.0	.3
Thakurgaon	.1	0.0	.1	.1	0.0	.1
Total no. of cases	**1003**	**70**	**1073**	**1309**	**184**	**1493**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Destinations of internal migrants in Waves 3 and 2 are very similar. Only in the case of Chattogram do we observes a reduction of 4 percentage points. During Wave 2, 15 percent have migrated to Chattogram and in Wave 3 this has reduced to 11 percent.

4.7 Occupation

Table 4.7.1 shows the occupation patterns of the internal and international migrants in different destinations. Male international migrants are employed mainly in 5 broad areas. These are service, construction, manufacturing, business and agriculture. The service sector employs the highest proportion of male workers (33 percent) and includes cook, caterer, street vendor, gardener, petrol station attendant, packaging, salesman, company security guard, store keeper, sweeper, cleaner, day-labourer, agro-labourer, laundry worker, messenger and waiter. The construction sector employs the second highest number of male workers (19 percent). Construction work includes mason, painter, plumber, steel fittings worker, tiler, electrician, and welder. In construction, both skilled and less-skilled workers are included. 14 percent of the male workers are employed in the manufacturing sector. This sector includes garments and other manufacturing factory workers. In this case, along with general workers skilled positions are also included. For example, machine operator, supervisor, and foreman. 11 percent of male migrants are employed in different types of agricultural activities. These include palm tree plantation worker, fisheries, poultry farmer, date palm maintenance and shepherd. 8 percent of male international migrants were unemployed at the time of interview. Around 12 percent of the male international migrants are employed in individual homes as cooks, gardeners, guards, caretakers, caregivers to the elderly, etc.

The overwhelming majority of female migrants are employed as domestic workers (69 percent). 11 percent of them are involved in the service sector. Those who work as cleaners are included in the service sector. 7 percent of women are working in different manufacturing industries. This includes garments, fish processing and packaging. There are hardly any international migrants in the professional category. Although a large number of male workers remain unemployed, in the case of female workers unemployment is not very common. Nonetheless, in the extraordinary situation of COVID-19, 7 percent of female migrants became unemployed. These female workers include those who are working as cleaners and domestic workers who do not live with their

employers. They stay in hostels and are employed by more than one household on hourly basis. In comparison to males, the sectors in which female migrants are employed are less diversified.

Table 4.7.1: Main occupations of current migrants by gender

Current migrant's main occupation	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Agriculture/fisheries/poultry farm/shepherd	11.3	1.0	10.1	8.3	6.6	8.2
Business	9.1	1.4	8.2	8.7	1.7	8.2
Service	33.0	10.6	27.3	31.4	8.3	28.4
Construction	19.1	.7	16.8	13.6	.8	12.7
Manufacturing	13.6	6.7	12.7	25.5	40.5	26.6
Domestic worker	4.0	69.0	15.1	1.9	24.0	3.5
Managerial / administrative	.1	0.0	.1	.3	0.0	.2
Professional	.2	.2	.2	4.0	4.1	4.0
Retired	.8	2.4	1.0	.8	1.7	.8
Student	.2	.5	.3	.5	1.7	.5
Unemployed	8.4	7.0	8.2	4.6	10.7	5.0
Others	.1	.5	.1	.5	0.0	.4
Total no. of cases	**2956**	**416**	**3372**	**1546**	**121**	**1667**
	Wave 2					
Agriculture/fisheries/poultry farm/shepherd	16.3	1.4	13.7	15.8	6.2	14.7
Business	12.2	1.9	10.5	12.4	1.7	11.1
Service	23.7	30.1	24.8	17.3	4.1	15.7
Construction	19.3	.8	16.1	15.4	0.0	13.6
Manufacturing	8.5	6.9	8.2	16.4	58.5	21.5
Domestic worker	3.9	50.9	11.9	.3	16.1	2.2
Managerial / administrative	1.2	.2	1.0	1.0	.4	.9
Professional	1.6	1.4	1.6	8.3	3.3	7.7
Retired	.4	.6	.4	.3	.8	.4
Student	.3	.2	.2	1.5	2.1	1.6
Unemployed	4.2	2.7	3.9	2.1	3.7	2.3
Others	8.4	3.0	7.4	9.2	2.9	8.5
Total no. of cases	**3099**	**635**	**3734**	**1729**	**241**	**1970**

Source: SDC and RMMRU Panel Survey 2017 and 2020

The male internal migrants are involved in services (31 percent), manufacturing (26 percent), construction (14 percent), business (9 percent) and agriculture (8 percent). 5 percent were unemployed. 4 percent of the internal migrants are professional workers. 41 percent of the female internal migrants are working in different types of manufacturing, 24 percent are employed as domestic work, 8.3 percent are involved in the

service sector and 7 percent work in the agricultural sector including rice mills, agro-labourer, poultry, animal husbandry, etc. 11 percent of females were unemployed during the time of interview. Like international female migrants, sectors of employment for internal female migrants are also less diversified compared to males.

4.8 Remittances sent by the migrants

Remittances are defined in this book as a portion of international and internal migrants' earnings either in cash or kind that are sent from the country or the area of employment to the area of origin. Remittances are channeled through formal and informal means and are also hand carried. Chapter 3 shows that international remittance to Bangladesh have been increasing constantly over the years. Even during COVID-19 remittance flows had not only held steady but in fact showed an upward trend. In 2020, Bangladesh received US$21.8 billion as remittances. Studies however have shown that a higher level of national flow of remittances does not mean that these benefit all groups of migrant households equally. Due to the spread of COVID-19, the migrants of some households may have experienced job loss, non-payment of wage, abrupt return, partial payment, etc. Therefore, the flow of remittances to households may vary with the situation of migrants at the destination.

Wave 3 of the survey shows that during 2020, 72 percent of the international migrants could remit while the other 28 percent could not remit. International male migrant households on average received Taka 172,577 as remittances and female migrant households received Taka 140,202. The most obvious finding of the research is that compared to Wave 2, remittances of male international migrants have reduced even in nominal terms in Wave 3. Remittances sent by female migrants however have increased from Taka 121,144 to Taka 140,202. Only 12 percent (313 households) of migrant households received remittance in kind. Taking the monetary value of the materials/goods that have been received by households yields Taka 29,529 for male international migrant households and Taka 38,409 for female international migrant households. The households of Satkhira received the lowest average amount of remittances, at Taka 47,500.

During Wave 2 of the survey 92 percent of migrants could send remittances in cash annually. It has already been observed that in Wave

3 only 72 percent of migrant households received remittances. Thus in comparison to Wave 2 remittance recipients have reduced by 20 percentage points. During Wave 2 of the survey 24 percent of households received remittances in kind while during Wave 3 only 12 percent did so. During Wave 2 male migrant households received Taka 186,752 as cash remittance and female migrant households received Taka 121,144. Not only has the percentage of recipients during Wave 3 but the amount of remittance per household has also reduced by 8 percent. Assuming a 5 percent annual rate of inflation yields the result that remittances have reduced by 23 percent.

Table 4.8.1: Average remittance by migration type and gender

Remittance received in last 12 months	Wave 3			
	International		Internal	
	Average	Number of Migrant	Average	Number of Migrant
Male	172577	1741	75124	936
Female	140202	211	40071	56
Total	**169077**	**1952**	**73146**	**992**
	Wave 2			
Male	186752.2	2303	64347.0	1348
Female	121144.6	432	32202.6	156
Total average	**176389.3**	**2735**	**61012.9**	**1504**

Source: SDC and RMMRU Panel Survey 2017 and 2020

76 percent of internal migrants also have remitted to their areas of origin. During the year preceding the Wave 3 surveys male internal migrants remitted Taka 75,124 and female internal migrants remitted Taka 40,071. 21 percent of the households also received remittances in kind during Wave 3. However, during Wave 2 the percentage of households who received remittances in kind was much higher at 37 percent. A comparison of the Wave 3 and Wave 2 findings reveals that all the internal migrant households received remittances in the year preceding Wave 2, but as seen earlier, only 76 percent of these households received remittances in the year preceding Wave 3. The effects of COVID-19 on remittance flows are clear.

4.9 Type of goods received as remittances in kind

'Remittances in kind' include a wide range of goods received by migrant households. Different types of materials, clothes, food, cosmetics, and hygiene products dominate the goods (Table 4.9.1). Compared to

international migrants during Wave 3, a greater incidence of internal migrant households reported receiving food and clothes more. As high as 75 percent of those who received remittances in kind received clothes

Table 4.9.1: Remittances received in the form of goods by migration type and gender

Type of goods and services	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Food	38.8	25.9	37.9	70.2	51.9	68.4
Clothes	35.5	51.9	36.7	73.1	92.6	75.0
Burka	7.6	7.4	7.6	4.1	3.7	4.0
Jewelry	13.5	25.9	14.4	.4	0.0	.4
Cosmetics	49.2	18.5	46.9	33.9	29.6	33.5
Soap/Shampoo	54.7	44.4	54.0	37.6	33.3	37.1
Female hygiene products	20.2	11.1	19.5	7.3	11.1	7.7
Medicines	2.8	0.0	2.5	10.2	0.0	9.2
School items and toys	10.4	7.4	10.2	11.4	11.1	11.4
Computers, accessories	1.2	3.7	1.4	.4	0.0	.4
Other electronic appliances	12.5	14.8	12.7	11.4	22.2	12.5
Agricultural inputs and equipment's	.3	0.0	.3	0.0	0.0	0.0
Items for other business	.6	0.0	.6	0.0	0.0	0.0
Mobile Phone	43.1	55.6	44.1	4.5	0.0	4.0
Others	8.3	3.7	7.9	2.9	3.7	2.9
Total no. of cases	**327**	**27**	**354**	**245**	**27**	**272**
	Wave 2					
Food	23.2	14.1	22.1	74.8	63.4	73.2
Clothes	33.3	38.8	33.9	61.8	90.1	65.7
Burka	3.2	4.7	3.4	.7	1.4	.8
Jewelry	9.4	17.6	10.4	.4	0.0	.4
Cosmetics	26.9	12.9	25.2	3.5	8.5	4.2
Soap/ shampoo	31.4	23.5	30.4	2.4	0.0	2.1
Female hygiene products	2.4	4.7	2.7	1.3	0.0	1.1
Medicines	.3	0.0	.3	.9	0.0	.8
School items and toys	2.9	8.2	3.5	1.5	0.0	1.3
Computers, accessories	.6	0.0	.6	0.0	0.0	0.0
Other electronic appliances	18.7	23.5	19.3	1.1	1.4	1.1
Agricultural inputs and equipment's	0.0	0.0	0.0	0.0	0.0	0.0
Items for other business	.5	0.0	.4	.2	0.0	.2
Mobile Phone	30.4	17.6	28.9	3.1	1.4	2.8
Others	15.2	35.3	17.6	2.2	1.4	2.1
Total no. of cases	**625**	**85**	**710**	**456**	**71**	**527**

Source: SDC and RMMRU Panel Survey 2017 and 2020
Note: Each cell represents of total number of responses

and 68 percent received food. Although both groups report receiving cosmetics and hygiene products the percentage of international migrants receiving these goods is greater. A significant difference between internal and international migrant households is that only 4 percent of internal migrants received mobile phones whereas 44 percent of the international migrant households who received remittances in kind got mobile phones.

Chapter conclusions

This chapter outlined the profiles of internal and international migrants, their migration trajectories and the flow of remittances. Compared to Wave 2, during Wave 3 the percentage of return migrants is very high. 36 percent of the international migrants and 34 percent of the internal migrants are returnees. Compared to Wave 2, in Wave 3 the percentage of migrants with no education reduced. Female migrants on average receive less education than their male counterparts. There have not been any new destination areas for internal migrants or countries for international migrants. Saudi Arabia is still the dominant destination of international migrants and while Dhaka and Chattogram are the dominant destinations for internal migrants. The service sector has emerged as the major employer of the international migrants. Some diversification has taken place in relation to the sectors of employment of international female migrants. Of course, they are still predominantly employed as domestic workers. However, they are also increasingly being employed in the service sector alongside the garments and other manufacturing sectors. The percentage of female internal migrants employed in the garment sector and other manufacturing factories have increased significantly.

Female migrants still have to pay for migrating internationally. In 2020, male migrants paid on average Taka 375,600 while female migrants paid Taka 86,450. Compared to 2017 after adjusting for inflation, the real cost of migration has decreased for both male and female international migrants. For females, it reduced by 18 percent and for males, by 7 percent. Compared to Wave 2, the percentage of people sending remittances has reduced by 20 percent. Remittances sent in the form of goods have also reduced in Wave 3 compared to Wave 2. The COVID-19 crisis is directly linked with such decline.

CHAPTER V

DYNAMICS OF MIGRATION DECISION

Tasneem Siddiqui

This chapter aims to develop a new understanding of the dynamic interplay between different factors that shape migration decisions (Black et al., 2011; Giorguli-Saucedo et al., 2016, Veronis et al., 2018). It attempts to examine how internal and international migrant households arrive at decisions to send one or more members of their family outside their localities for work. It also analyses why non-migrant households in the same localities facing similar social, economic and political realities decide not to take part in migration. Section 5.1 analyses recent advances in the theoretical understanding of migration decisions. Section 5.2 presents the factors that contribute to the migration decisions of internal and international migrant households. Section 5.3 identifies factors that are associated with decisions of non-migrant households to remain in their communities of origin.

5.1 Theoretical understanding

Traditionally, the neo-classical macroeconomic theory of push and pull, microeconomic models of human capital, historical-structuralist theories, social capital theory and cumulative causation theory are some of the major conceptual frameworks that explain why people decide to, or not to migrate. Push-pull theory showed that during the colonial period, migration was triggered by a change in relative attractiveness, whether real or perceived, of the usual place of residence with respect to destination. Over the last decade social scientists have established that the drivers of migration and conditions under which migration decisions take place are themselves in a state of flux. Migration decisions are shaped to accommodate the needs of changing circumstances along with other factors. The literature on the drivers of migration now look at the role of desire, hope and imagination, biased perceptions of risk, the type of agency that migrants develop, and the interplay between motivation, opportunity and ability to migrate within social, political, economic and structural constraints (Koikkalainen and Kyle, 2016; Belloni, 2016, Erdal and Oeppen, 2017, Triandafyllidou, 2019).

These scholars have taken a more interactive approach to identifying the drivers of migration. This exercise can be bracketed as part of the overall process of theory building beyond push-pull factors of migration. This group of studies analysed the causes behind migration flows despite high costs, extreme hardship and fraudulence. Although the above literature highlights the mixed motivation of migrant decision-making, it overlooks the role of environmental factors and how such factors interact with economic and political drivers of migration.

The Foresight Report's framework shows that migration decisions are influenced by macro, social, political, economic, demographic and environmental factors. The same report also highlights that micro level realities such as household characteristics, as well as the desire or motivation of individuals and meso level facilitating or intervening factors play a role in inducing or restricting the migration of individuals, households, and/or communities (Foresight, 2011). The report created a socio-ecological systems framework that pays special attention to environmental conditions and climate stressors that may alter local and regional systems of production thus affecting the migration decision. Black et al. (2011) show how environmental factors influence migration not as push or pull on their own, but in combination with other socio-economic and political processes. They look at migration decisions as one of the methods of adaptation to environmental change. However, they also caution that often, those who are most affected by the combination of social, political and environmental influences do not have the means to migrate and thus get trapped in their areas of origin.

Schmidt (2016) shows how climate stressors aggravate socio-economic inequalities. Zickgraf (2018) and Gioli and Milan (2018) demonstrate that the decision of moving or staying is highly gendered and also determined by age and the composition of household members. In the following section five macro level influencing factors at the household and individual level and micro factors at the meso level alongside information and network factors are explored in explaining the migration decisions of the households in the SDC and RMMRU sample.

5.2 Why migrate?

Table 5.2.1 reports on the perceptions of those who are left in-charge of migrant households and returned migrants on the issue of why their

families have participated in migration. The most dominant perception relates to economic factors. The next most important factor is the degree of access households have to different social-networks that either provides them with migration information or with access to the migration processing network.

Table 5.2.1: Influencing factors of migration decision by migration type and gender

Factors	International (%)			Internal (%)		
	M	F	T	M	F	T
Environmental	9.8	6.4	9.4	23.5	14.9	22.9
Demographic	22.5	29.3	23.4	29.7	34.0	30.0
Social	67.9	62.1	67.1	70.1	68.1	70.0
Political	1.7	0.0	1.5	1.5	0.0	1.4
Economic	96.6	96.7	96.6	93.9	90.3	93.7
Access to social-network	52.2	52.1	52.2	47.1	45.7	47.0
Total no. of cases	**2323**	**357**	**2680**	**1182**	**94**	**1276**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

Influences of economic factors: Migrants or left behind household members usually articulate their family's participation in migration as a source of earning income for the maintenance of the household. Therefore, in any research, the overwhelming majority of migrant households primarily identify economic reasons for migration. In their analysis, macroeconomic realities and microeconomic experiences can hardly be separated. In Wave 3 of the survey 97 percent of international migrant households and 94 percent of internal migrant household identified economic considerations as the major determining factor for the migration decision. However, there are different types of economic determinant including a lack of work in local areas, access to better jobs with higher income opportunities at destination areas, improved asset holdings (Homestead, Land etc.), the alleviation of poverty, the accumulation of capital to start a business, etc. 79 percent of the international and 75 percent of internal migrant households chose the second option i.e. better jobs and higher income earning possibilities in the destination. This is followed by the desire to alleviate poverty. 53 percent of international migrants also thought that work was not available locally. 27 percent on international migrant households sent their family members abroad to accumulate resources to start a business. For internal

migrants the accumulation of resources or asset accumulations were not that important. This may indicate that a large number of internal migrant households participate in migration to earn a living but a large number of international migrants take part in migration with a view to facilitating upward economic mobility. Table (5.2.2) also highlights gendered nuances. 85 percent of female international migrants and 80 percent of female internal migrants identified poverty alleviation as their major target. The percentage of male migrants in both groups is lower compared to females in this regard.

Table 5.2.2: Economic factors influencing migration decision by type of migration and gender

Economic	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Did not have enough work in the local area	53.8	47.6	53.0	60.6	40.5	59.2
To get better job/higher income	82.2	58.2	79.0	76.1	66.7	75.4
to improve asset holdings like home/land	56.5	55.3	56.4	32.1	19.0	31.2
To alleviate poverty	76.3	85.0	77.5	74.3	79.8	74.7
To accumulate capital to start business	27.8	19.6	26.7	17.3	4.8	16.4
Others	.4	2.3	.6	2.4	1.2	2.3
Total no. of cases	**2257**	**347**	**2604 (97%)**	**1115**	**84**	**1199 (94%)**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

There is variation between districts as well. Satkhira and Chapainawabganj are two areas where there were substantial climate change effects. There are clear differences between these two districts and others which were less affected by climate change. In these two districts, 85-90 percent identified a lack of work in the locality as the major economic driver, whereas for other districts the rate was much lower.

Social factors: Along with economic determinants, migration decisions are also underpinned by social factors. 68 percent of international migrant households and 70 percent of internal migrant households identified different social factors that contributed to their or their household members' migration decisions. Social circumstances include changes in marital status, family responsibility, obsession with going abroad or living in cities, the desire to stay away from socially unacceptable behaviour (drugs, unwanted sexual relationships), ensuring security, improving social

status, improving image, etc. Both groups identified family responsibility as a major social driver (internal 92 percent and international 90 percent). Members who earned relatively little in comparison to other family members often decide to migrate as it may also be a path of earning respect or social status. In many rural areas, there is an obsession with going to different countries or going to urban areas to experience city life. 30 percent the sampled heads of household of the male international migrants thought that their sons were obsessed with the idea of migration. They stated that it was as strong as an addiction to drugs. Interestingly, relatively low numbers of female migrant households, both internal and international, felt the same way. Another gendered difference with respect to the social determinants of migration decisions is that the percentage of female migrants who migrated due to marriage is higher than that of male migrants. With respect to the social factors of migration, there is hardly any difference between migrants from climate change affected areas and less climate change affected areas. In both cases family responsibility is the most important social reason.

Political factors: Migration decisions take place in a dynamic context. The political environment is part of that dynamism. Migrant households however, have hardly linked the dynamics of local or national politics with their migration decisions. Only 2 percent of the international migrant and 1 percent of the internal migrant households linked their family members' migration decision with politics. The political reasons which households identify are getting entangled in local political problems, participation in local conflicts and to escape police harassment.

Influence of climate change and disaster: The SDC and RMMRU Wave 3 survey placed a particular emphasis on understanding if climate change and disaster related events contribute to the migration decisions of a section of households. 10 percent of international migrant households and 23 percent of internal migrant households identified climate change and disasters as a factor that influenced their migration decision. Floods, flash floods, riverbank erosion, cyclone, drought, etc. have been identified as climatic events which contributed to the loss of income or made agriculture unviable, ultimately pushing households or individual migrants to decide to look for work outside the village.

Table 5.2.3: Social factors influencing migration decision by type of migration and gender

Social	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
For marriage or broken marriage	4.1	19.3	5.9	5.7	12.5	6.1
To increase social respect	41.1	28.7	39.6	34.8	28.1	34.3
For family responsibility	90.1	87.9	89.8	92.5	84.4	92.0
Obsession for going abroad or living in city	29.6	12.1	27.4	16.5	10.9	16.1
For security	11.9	22.9	13.3	10.2	21.9	11.1
To stay away from social behaviour (drugs, sexual relationships)	45.0	0.0	45.0	50.0	0.0	50.0
Others	.8	1.3	.9	1.0	3.1	1.1
Total no. of cases	**1580**	**223**	**1803 (67%)**	**831**	**64**	**895 (70%)**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

Table 5.2.4: Political factors influencing migration decision by type of migration and gender

Political	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Entangled in local political problems	55.0	0.0	55.0	38.9	0.0	38.9
Local riots	17.5	0.0	17.5	22.2	0.0	22.2
To escape police harassment	20.0	0.0	20.0	11.1	0.0	11.1
Others	5.0	0.0	5.0	16.7	0.0	16.7
Total no. of cases	**40**	**0**	**40 (2%)**	**18**	**0**	**18 (1.4%)**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

A section of the migrants also had to move as they lost their homestead in riverbank erosion and floods/flash floods. Compared to international migrant households, those of internal migrants identified different environmental and climatic stresses more. A comparison of male and female migrant households reveals that environmental influences are concentrated among male migrant households. Climate related challenges are different in different districts. Of those who have identified climate change and disaster as a factor, 76 percent are from six districts. These are Chapainawabganj, Satkhira, Sunamganj, Faridpur, Shariatpur, and Brahmanbaria.

Table 5.2.5: Environmental factors influencing migration decision by type of migration and gender

Environmental	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Natural disasters (flood, riverbank erosion etc.) leading to difficulties to conduct agriculture	58.5	30.4	56.0	57.7	57.1	57.7
Natural disasters (flood, riverbank erosion etc.) leading to loss in income in village	73.4	78.3	73.8	79.6	92.9	80.2
Natural disasters (flood, riverbank erosion etc.) destroying homestead	15.3	34.8	17.1	14.7	7.1	14.3
Natural disasters (flood, riverbank erosion etc.) leading to loss in agricultural land	10.9	13.0	11.1	7.5	0.0	7.2
Others	1.7	8.7	2.4	6.5	0.0	6.1
Total no. of cases	**229**	**23**	**252 (9%)**	**279**	**14**	**293 (23%)**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

It was seen in chapter 3 that Satkhira suffers from cyclone, flooding, and salinisation. Chapainawabganj is a typical example of slow onset climate change processes. It experiences seasonal drought. The ground water level of Chapainawabganj has been reducing continuously over the last fifteen to twenty years. Due to river siltation Chapainawabganj also experiences floods in the monsoon season. Shariatpur and Faridpur are prone to riverbank erosion. Major displacement is experienced by the respondents of these two areas. Sunamganj belongs to the *Haor* affected area of Bangladesh. For around six months of the year certain areas of Sunamganj remain submerged under water. Furthermore, the loss of crops due to flash floods is an important phenomenon in Sunamganj. Nabinagar of Brahmanbaria is located by the side of the Meghna River. People living in this area experience floods and river bank erosion. 79 percent of respondents in these six districts experienced income losses due to some form of disaster. 51 percent of the migrant households of these areas have stated that agricultural production has become problematic due to disasters. As many as 19 percent of migrant households in these 6 districts lost their homestead land due to natural disaster. Some also lost non-homestead land. 10 percent of migrant households from these 6 districts lost agricultural land due to climatic hazards. It can be said that the overall percentage of migrant households who identified climate

change as a factor contributing to migration decisions is low. However, significant numbers of migrant households from a few climate change affected districts identified climate change as a factor influencing their migration decision.

Demographic

It was seen earlier in table 5.2.1 that 23 percent of the international migrants and 30 percent of the internal migrants highlighted the influence of demographic factors in their migration decisions. 65 percent of international migrant households and 64 percent of the internal migrant households felt that increases in the number of household members over time made migration necessary. 53 percent of the international migrant households and 38 percent of internal migrant households stated that better educational opportunities for their children was one of the important factors. A few mentioned that they migrated as they did not want to continue with their studies. Around 2 percent of migrants moved with parents, while some moved to a close relative's place.

Table 5.2.6: Demographic factors influencing migration decision by type of migration and gender

Demographic	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Household members increased over time	67.1	61.8	65.0	70.7	54.6	64.3
Lack of pace after getting married	2.3	3.7	2.9	5.2	3.9	4.7
For children's education	50.7	56.9	53.1	30.6	48.7	37.8
Have to come in father/brother/ sister's family	3.4	.8	2.4	3.4	2.6	3.1
Father, Mother, life partner migrated	1.6	3.3	2.2	15.5	6.6	12.0
Other	2.9	2.4	2.7	10.8	5.3	8.6
Total no. of cases	**383**	**246**	**629 (23%)**	**232**	**152**	**384 (30%)**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

Social-network

Both internal and international migrants emphasize the role of social-networks in their migration decisions. 52 percent of the international migrant households and 47 percent of internal migrant households

identified contribution of social-network to their migration experience. The type of social-network mentioned by the migrants include, the presence of close relatives at destination, information on the benefits to migration from others at the destination, encouragement from middlemen to migrate, following footsteps of friends and inspired by social media (facebook, imo). The presence of close relatives at the migration destination is important for both internal and international migrants. 54 percent of the international migrants had close relatives at the destination and 41 percent of the internal migrants had the same. 35 percent of the international and 49 percent of the internal migrants heard about the advantages of that particular location from known persons before they migrated. 41 percent of international migrants stated that they were lured by sub-agents.

Table 5.2.7: Access to social-network influencing migration decision by type of migration and gender

Social-network	Wave 3					
	International (%)			Internal (%)		
	M	F	T	M	F	T
Had close relative at destination	56.4	36.0	53.7	40.9	34.9	40.5
Heard about the benefits at destination from others	35.4	34.9	35.3	48.1	58.1	48.8
Was encouraged by middlemen to migrate	38.4	56.5	40.8	25.7	9.3	24.5
Followed example set by friends	13.4	4.3	12.2	28.2	41.9	29.2
Social media (facebook, imo)	2.2	.5	2.0	7.9	30.2	9.5
Other	.9	2.2	1.1	1.8	2.3	1.8
Total no. of cases	**1212**	**186**	**1398 (52.2%)**	**557**	**43**	**600 (47%)**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

The role of sub-agents are more prominent in the case of international migrants. Surprisingly, 24 percent of internal migrants were approached by contractors. Migration of friends inspired 29 percent of internal migrants whereas 12 percent of international migrants were inspired by their friends. Social media still plays a very small role in the migration decisions of international migrants. Only 2 percent of international migrants have received information through social media. 10 percent of internal migrants received information about migration destinations through social media. Receiving information through social media is quite

high in the case of internal female migrants. 30 percent of female internal migrants used social media to learn about their migration destinations whereas only 1 percent of female international migrants got to know about migration opportunities from social media.

5.3 Factors for not migrating

In understanding why people migrate, it is important to explore why some households decide not to send any family members outside the village for work. Similar queries have been pursued with the non-migrant households to understand their decision of not taking part in migration. We attempted to explore demographic, social, economic and environmental influences in their non-migration decision. We also studied the effect of social networks. Table 5.3.1 shows that 72 percent of non-migrant households identified economic reasons, while 53 percent identified demographic reasons, and 40 percent highlighted social reasons for not taking part in migration. 14 percent identified a lack of social-networks that hindered their possibilities to migrate.

Table 5.3.1: Influencing factors of non-migrant households for not taking part in migration

Factors	Non-migrant (%)
Environmental	13.6
Demographic	52.6
Social	39.5
Economic	72.3
Social-network	44.1
Total no. of cases	**1913**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

Environmental influences: 86 percent of non-migrant households did not think that natural disasters have led to difficulties in their lives which would push them to send household members outside the village for work, while only the remaining 14 percent did. Breaking the responses down further shows that 55 percent of these respondents were not facing any difficulties in conducting agricultural production. 36 percent did not think that income loss in the locality had anything to do with natural disasters. 80 percent of non-migrant households did not face destruction of their homestead due to flood, river erosion, etc. Interesting differences

are observed when the household data are divided into high climate change and disaster affected districts, and less climate change and disaster affected districts. As many as 54 percent of non-migrant households of climate change and disaster affected areas experienced major income losses due to slow or rapid onset climatic events. However, even then due to other support structures, either they did not feel it necessary to consider migration, or they could send a member for migration due to a lack of information or networks to pursue the decision.

Table 5.3.2: Environmental reasons for not migrating

Environmental	Wave 3
	Non-migrant (%)
Natural disasters have not lead to difficulties in conducting agriculture	55.4
Natural disasters have not lead to losses of income in the village	36.5
Natural disasters have not destroyed agricultural land	44.2
Natural disasters have not destroyed homestead	80.4
Others	1.9
Total no. of cases	**260**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

Demographic: Demographic reasons seem more pronounced in the case of non-migrant households. In the context of Bangladesh, from some districts females migrate more, and from other districts male migrates more. In case of districts from where male migration takes place, 46 percent of non-migrant households did not have any adult male member who could take part in migration. 33 percent of the households belonging to the areas which have pockets of female migration did not have any adult female member to take part in migration. This indicates that even if a household is interested to send migrants but lack adult working age members of the sex for which migration is common in that locality, then they are not able to send a migrant. 47 percent of households are happy with the current arrangement of staying together as a family in the rural areas and so they are not interested in sending international or internal migrants from among their family members.

Economic: 72 percent of respondents explained some major economic reason for not sending family members outside the village for work. These responses included both negative and positive situations. Positive situations include families which have reasonable holdings of land, a good

homestead, or a business in the locality. Such households do not have the economic compulsion to migrate. On the other hand some did not possess the large sums of money needed to pay migration costs. Therefore, they could not migrate. The first scenario demonstrates power and the second scenario demonstrates vulnerability. 62 percent of respondents explained that it takes a very substantial sum of money, which they did not have, to migrate overseas. This indicates that more than half of the non-migrant households may have the desire to participate in international migration if they had the resources to bear migration costs. In other words, only 38 percent of households did not participate in migration as they were not interested to migrate.

Table 5.3.3: Demographic reasons for not migrating

Demographic	Wave 3
	Non-migrant (%)
There are no men in the family who can migrate	44.6
There are no woman in the family who can migrate	33.1
Have better educational facilities	9.1
Family members live together so do not want to leave them	47.3
Have better homestead so do not want to leave	21.1
Others	7.8
Total no. of cases	**1005**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

42 percent of the total households felt that employment was available in the local area and so there was no need for them to migrate for work. 25 percent again were quite satisfied in the village as they had a reasonably good homestead.

Table 5.3.4: Economic reasons for not migrating

Economic	Wave 3
	Non-migrant (%)
We have land, homestead and work so there are no reason to migrate	25.2
Family owns business, no need for migration	15.3
Local area has employment opportunities	42.2
It takes a lot of money to migrate overseas which we do not have	62.4
Others	1.7
Total no. of cases	**1384**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

There is hardly any difference between the non-migrant households of climate change and disaster affected areas and less climate change affected areas with respect to the economic determinants of their decision to not take part in migration. In both groups, more than 60 percent of households identified a lack of resources as the main reason for not sending family members abroad for work. A similar number of households (39 percent climate change and disaster affected areas, 42 percent less climate change and disaster affected areas) were satisfied with their income and employment opportunities in their places of origin. This indicates that the economic determinants of the decision to not migrate for climate change and disaster affected and unaffected areas are similar.

Social: The decision to not migrate is also determined by social realities. 61 percent of non-migrant households (762) mentioned social reasons for not participating in migration. Almost 70 percent of those who responded stated that if the adult male or female members of the household migrate then there will be no one in the village to take care of the family. 37 percent of the non-migrant households did not appreciate city life and so prefered staying in their rural homes. 22 percent thought that if the adult member migrates, children's education will be affected. 20 percent felt that women and girl children may face insecurity in the absence of the adult member who could have migrated. The presence or absence of climate change and disaster related stresses had very little correlation with migration decisions. A dislike for city life, however, is slightly more common among households from less climate change affected areas (41 percent) as compared to those who are more affected (26 percent).

Social-network: Lack of access to social-networks influences the migration decision outcome in a major way. 44 percent of non-migrant households discussed different dimensions of their lack of access to social-networks as having influenced their migration decision. 66 percent of non-migrant households who responded to this question perceived that the information required to process migration is not available to them. 51 percent stated that, they did not know anyone in the destination who could help them to initially settle. 34 percent stated that they had very little information on migration avenues as no recruiting agencies or agents were operational in their areas. A lack of information on the availability of migration processing services is also more pronounced among households from climate change affected areas.

Table 5.3.5: Social reasons for not migrating

Social	Wave 3
	Non-migrant (%)
Does not like city life	37.4
There is no one to take care of families	69.3
Children's studies will be affected if parents are not around	22.3
Woman and girls in the family may face insecurity in the absence of the migrant	19.8
Others	3.1
Total no. of cases	**752**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

When the data are segregated by more and less climate change affected areas, interesting differences emerge. The absence of recruiting agencies or their sub-agents was more important for people from climate affected areas compared to people from non-climate affected areas. 41 percent of non-migrant households from climate change and disaster affected areas identify this as a challenge, whereas only 6 percent of non-migrant households from less climate change affected areas perceive this as a problem.

Table 5.3.6: Access to social-network

Social-network	Wave 3
	Non-migrant (%)
The information required for migration is not available to us	65.7
No one we know lives in migration destinations	51.9
No recruitment agents in our area	34.3
No government offices in the locality that process recruitment	9.7
Others	2.6
Total no. of cases	**848**

Source: SDC and RMMRU Panel Survey 2020
Note: Each cell represents percentage of total number of responses

Chapter conclusions

From the discussion above it is apparent that economic, political, social and environmental factors interact with each other to influence the migration decisions of individual households or individual members of a household. Along with such influences, the desire, hope and imagination of individuals or households about life in the destination, accompanied

by motivation, opportunities, and financial ability produce migration decisions. However, not all the factors are equally important in migration decisions. In some cases, one or a few influencing factors may become more prominent than others. Most of the literature on migration decision making finds that migrants tend to highlight economic reasons over all other reasons. But a deeper analysis reveals that economic reasons are shaped by the operation of many other social, environmental and demographic factors. The chapter also demonstrates that choices of moving from a place and staying in a place are gendered. Thus migration decisions also depend on gender, age, ability and other aspects of household composition.

This chapter has also shown that climate change and disasters interact with economic and social drivers to influence the migration decision. The influence of climate change on migration decision-making also varies by location. Migrant households of those areas that are less affected by climate change hardly identified climate and disaster events as contributing factors, whereas a significant section of people from areas that are vulnerable to climatic events and disasters identified climate stressors as important influencing factors.

CHAPTER VI

MIGRATION COST AND FINANCING

Esther M. Bartl

In the migration literature, the cost of international migration is a major issue of concern. This chapter studies the costs and financing of internal and international migration from Bangladesh. International migration costs are usually comprised of visa fees, passport issuance charges, fees for recruitment agencies, air tickets and other transportation costs, BMET charges for registration, fingerprinting, and contributions to the Wage Earners Welfare Fund. These costs are often very high. High costs can reduce the gains from migration and may contribute to the heightened vulnerability of migrants. Internal migrants also incur certain costs such as transportation costs to move from one district to another. This analysis examines migration costs by gender and destination country, as well as the historical evolution of migration costs, the sources of financing, and the migrants' debt repayment status. The chapter is based on data generated during Wave 1 (2014), Wave 2 (2017), and Wave 3 (2020) of the SDC and RMMRU panel survey on migration.

According to the principles of the International Labour Organization (ILO), the costs of migration should not be borne by jobseekers or workers (ILO, 2019). That was the scenario in the 1970s in the case of migration to oil-rich countries of the Gulf. At that time recruiting agencies used to receive a commission from the employers and all necessary costs such as air-fare and visa processing fees were borne by the employers. Unhealthy competition among countries of origin vying for access to the Gulf labour market, and exploitative practices by some recruiting agencies from specific countries created conditions where employers could gradually shift the cost of migration to recruiting agencies who in turn shifted these costs onto migrants.

According to the existing literature, the cost of labour migration has been increasing continuously since the 1980s. As early as 2009, Rita Afsar's research based on 60 interviews of returnee workers shows that the average cost of male migration was US$1,980 and that of female migration was

US$857 (Afsar, 2009). The household remittance survey of 2009 by IOM indicates that migrants on average spend US$2,738 while migrating to Gulf and other Arab countries (IOM, 2009). The latest Cost of Migration Survey finds that the average migration cost from Bangladesh is approximately US$4,850 (Bangladesh Bureau of Statistics, 2020). Of course, the costs of migration vary by gender, country of destination, and the type of visa.

6.1. International and internal migration costs

In Bangladesh, it is common to pay migration costs upfront before the migration episode. Absence of an opaque hiring process and lack of information especially for international migrants contribute to substantially high migration costs. These costs tend to be a substantial barrier to migrating for the poorest who do not have access to the necessary level of funds.

Table 6.1.1 shows the average nominal cost of international migration reported in Wave 3. The average migration cost reported in the survey is Taka 337,812. The cost of international migration is, on average, about three times higher for men than for women. According to the information gathered in Wave 3 of the survey, a male international migrant on average spends Taka 366,346 to move abroad, compared to a female international migrant who, on average, spends Taka 105,500. Thus, the cost of international migration varies significantly across gender groups. It is also worth noting that 90 percent of all surveyed international migrants are male while only 10 percent are female.

Table 6.1.1 Nominal cost of international migration by gender (in Taka)

Migration cost reported in Wave 3			
	MM	**FM**	**TM**
Mean	366,346	105,500	337,812
Minimum	80	5,000	80
Maximum	1,800,000	500,000	1,800,000
Share	89%	11%	100%

Source: SDC and RMMRU Panel Survey 2020
Note: MM: Male Migrant; FM=Female Migrant; TM=Total Migrant; The chart displays the averages for all reported migration costs (uncorrected for inflation) across the whole set of years of departure

Table 6.1.2 shows the average nominal cost of internal migration reported in Wave 3. The average cost of internal migration, at Taka 7,328, is substantially lower than that of international migration. Wave 3 of the

survey reports that the cost of internal migration is, on average, Taka 7,282 for male internal migrants and Taka 6,642 for their female counterparts.

Table 6.1.2 Nominal cost of internal migration by gender (in Taka)

Migration cost reported in Wave 3			
	MM	**FM**	**TM**
Mean	7,328	6,642	7,282
Minimum	50	100	50
Maximum	1,200,000	350,000	1,200,000
Share	94%	6%	100%

Source: SDC and RMMRU Panel Survey 2020
Note: MM: Male Migrant; FM=Female Migrant; TM=Total Migrant; The chart displays the averages for all reported migration costs (uncorrected for inflation) across the whole set of years of departure

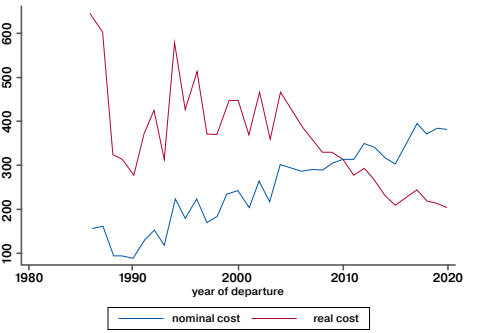
Tables 6.1.1 and 6.1.2 present the Wave 3 averages for nominal migration costs for international and internal migrants respectively. However, these figures do not suffice to reflect the actual historical evolution of migration costs as experienced by migrant households as they lump together migration costs across different departure years and are not corrected for inflation. To get a more accurate impression of the evolution of migration costs over time, Figure 6.1.1 disaggregates the costs by year of departure and corrects for inflation. To further analyse the evolution of migration costs this chapter will group migrants into cohorts of based on their respective years of departure: cohort 1 represents migrants who departed between 1986 and 2000, cohort 2 represents departures from 2001 to 2010, and cohort 3 represents departures from 2011 to 2020.

Figure 6.1.1 shows that the average nominal costs of international migration have increased whereas the real costs exhibit a downward trend over recent decades. On average, the nominal international migration cost for those who left Bangladesh in the 1980s was about one quarter that of those who left Bangladesh in the late 2010s. In comparison, the real cost of international migration remained roughly constant until the mid-2000s but since then has declined by about 50 percent in real terms.

The historical trends presented in table 6.1.3 should be interpreted with some caution. While interesting and informative, these trends do not show whether these migration costs were ‘affordable’ for migrant households. An alternative approach would be to express migration costs as a share of overall migrant income by departure year. However, the survey does not contain retrospective income data at the time of first migration. A

further complication arises for those individuals who left Bangladesh a long time ago who may have difficulty in accurately remembering the migration cost paid. Thus the empirical validity of such an exercise would be threatened by so-called "recall bias".

Figure 6.1.1 Migration cost by year of departure (in 1,000 of Taka)



Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

For international migrants from Bangladesh, real migration costs vary across destination countries and appear to have declined in recent decades. Table 6.1.3 presents the results of disaggregating migration cost by the top six destination countries. For Bangladeshi migrants, the highest average migration cost is to Italy at Taka 493,106 over the departure years 2011-2020.

Table 6.1.3 Migration cost (in real terms) in the top-6 destination countries (in Taka) and changes across departure of year cohorts (in percentages)

Destination	Cohort 1 (1986-2000)	Cohort 2 (2001-2010)	Cohort 3 (2011-2020)	Change 1-2 (%)	Change 2-3 (%)
Saudi Arabia	346,820	336,343	268,986	-3	-20
UAE	327,661	290,654	212,906	-11	-27
Oman	382,054	289,011	181,963	-24	-37
Malaysia	415,160	319,349	224,630	-23	-30
Singapore	475,541	425,417	357,699	-11	-16
Italy	992,358	976,345	493,106	-2	-49

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Note: Chart displays real average migration costs for the top six destination countries for the surveyed Bangladeshi migrants reported in waves 1, 2, and 3. Cohort 1 – years of departure 1986- 2000; Cohort 2 – years of departure 2001-2010; Cohort 3 – years of departure 2011-2020; The real international migration costs are calculated as following: real costs=(nominal costs/CPI)*100. The numbers for the CPI come from the World Bank's World Development Indicators. The base year is 2010

High-income Asian countries follow with migrants paying on average Taka 357,699 to migrate to Singapore and Taka 224,630 to go to Malaysia during the same period. International migration to the Gulf countries is expensive as well, with migrants paying on average, Taka 268,986 to migrate to Saudi Arabia, Taka 212,906 to migrate to the UAE, and Taka 181,963 to migrate to Oman. A comparison of the growth rates of international migration costs across the three cohorts exhibit a generalised downward trend since the 1980s.

6.2 Sources of financing of internal and international migration

High migration costs oblige poorer individuals to deplete their personal savings, to mortgage agricultural land, take out loans from informal sources such as family members or moneylenders or to take out formal loans from sources such as banks and NGOs. Relying on more than a single funding source is common practice for Bangladeshi migrants, especially for those who migrate abroad. While internal migrants mostly rely on their own funds and those of their immediate family, international migrants also rely on funds from extended family and take out loans from formal and informal financial institutions.

Table 6.2.1 shows that international migrants mobilise their funds from diverse sources. In cohort 3, about 22 percent of surveyed individuals fund a portion of their migration costs through loans from extended family. 18.6 percent use family savings, while 15.7 percent use savings from extended family. About 11 percent get loans from moneylenders. Those who left Bangladesh between 2001 and 2010 (cohort 2) rely more on loans from extended family (26.8 percent) and the sale of agricultural land (10.19 percent). Those who migrated before 2001 (cohort 1) relied more frequently on family savings (23 percent).

The use of own and family savings has remained important throughout sample migrations. However, the use of loans from moneylenders and banks has seen a disproportionate increase in more recent migrations. The reliance on loans from moneylenders almost four times higher for individuals in cohort 3 than for those in cohort 1. Similarly, the use of loans from banks increased from less than 2 percent for cohort 1 to about 4.6 percent for cohort 3. At the same time, financing migration through the sale of agricultural land has declined by more than 50 percent from cohort 1 to cohort 3.

Table 6.2.1 Source of financing of international migration (in percent)

Source of financing	Cohort 1	Cohort 2	Cohort 3
Loan from extended family	25.9	26.8	21.9
Family savings	22.9	17.9	18.6
Savings from extended family	14.6	14.6	15.7
Own savings	13.7	12.4	12.0
Sale of agricultural land or sale of homestead	10.8	10.2	4.8
Loan from moneylender	2.9	5.9	10.9
Mortgage of land	2.9	4.8	3.2
Bank loan	1.9	2.2	4.6
Others	4.3	5.4	8.3

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020
Note: In Wave 1 and 2 current and returned migrants are included; this differentiation does not exist for Wave 3. Cohort 1 – 1986-2000; Cohort 2 – years of departure 2001-2010; Cohort 3 – years of departure 2011-2020

Most international migrants continue to rely on immediate and extended family to finance their moves abroad. This is because families usually offer loans without interest, and in some cases, do not even expect the loan to be repaid. Besides, family members may have an incentive to facilitate international migration to create a social-network in the destination country. Rashid (2016) found that extended families contribute to the migration of relatives not only because of family obligation, but also with the hope that the migration of one member of the extended family will create an opportunity for future migration of the immediate family members of the contributor. At the same time, however, taking out family loans means that relatives may be left with less disposable income that they could have used to save, consume or invest.

The favourable terms of family loans also partly explain why the reliance on loans from moneylenders and banks is still relatively low. Moneylenders, for instance, usually require individuals to put up collateral and pay higher interest rates which may adversely affect the migrant household economy. Loans from banks and moneylenders usually provide worse or less favourable terms than those from family members. Such loans may be larger than those offered by migrant families. Families may simply lack sufficient funds to finance the migration.

The COVID-19 pandemic may have further accelerated the recent trend of relying more strongly on loans from moneylenders than previously. Table 6.2.2 shows that in 2018, 17.7 percent of migrations were financed with the help of money lenders, but that this dropped to 12.8 percent in 2019.

It is likely that during the COVID-19 pandemic even more individuals may seek out loans from moneylenders because their own families face financial hardship due to the worsening employment prospects during the pandemic.

Table 6.2.2 Source of financing of international migration (in percent), 2018 and 2019

Source of financing	2018	2019
Loan from extended family	25.1	23.1
Family savings	20.7	21.0
Loan from moneylender	17.7	12.8
Own savings	5.5	10.3
Savings from extended family	9.5	9.2
Bank loan	7.1	8.7
Others	14.4	14.9

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020
Note: In Wave 1 and 2 current and returned migrants are included; this differentiation does not exist for Wave 3. Cohort 1 – years of departure 1986-2000; Cohort 2 – years of departure 2001-2010; Cohort 3 – years of departure 2011-2020

Table 6.2.3 shows that internal migrants rely mostly on personal and family sources to cover migration costs. 46.5 percent of the internal migrants in cohort 3, i.e. those who departed between 2011 and 2020, rely on their own savings. This is followed by 43.6 percent who used family savings to cover migration costs. The reliance on their own and family savings remains roughly constant across cohorts 2 and 3. In comparison, 55.9 percent of internal migrants who departed between 1986 and 2000 (cohort 1) report that they relied on their own savings to cover costs while 35.9 percent of that cohort indicated that they used family savings. The reliance on financial support by extended family has remained insignificant since the 1980s.

Table 6.2.3 Source of financing of internal migration (in percent)

Source of financing	Cohort 1	Cohort 2	Cohort 3
Own savings	55.9	46.6	46.5
Family savings	35.9	42.3	43.7
Savings from extended family	2.8	3.6	2.1
Loan from extended family	2.8	3.2	1.8
Others	2.5	4.3	6.0

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020
Note: In Wave 1 and 2 current and returned migrants are included; this differentiation does not exist for Wave 3. Cohort 1 – years 1986-2000; Cohort 2 – years of departure 2001-2010; Cohort 3 – years of departure 2011-2020

As the cost of internal migration tends to be low compared to international migration, individuals do not usually need to borrow from banks or moneylenders. Nor do they need to sell or mortgage out their land and other assets.

6.3 Repayment status of migration-related debt

Although loans enable international migration, in the long run, they may burden the migrants and their left-behind households who need to repay those loans with high interest rates, sometimes within fairly short periods. It is not uncommon for international migrants to continue to have outstanding migration debt even after returning to Bangladesh.

Table 6.3.1 Repayment status of debt (in percent)

Repayment status	Cohort 1	Cohort 2	Cohort 3
Yes	84.0	83.1	52.6
No	0.4	0.4	1.1
Partially	3.0	6.7	38.4
N/A	12.6	9.8	7.9

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020
Note: In Wave 1 and 2 current and returned migrants are included; this differentiation does not exist for Wave 3. Cohort 1 – years of departure 1986-2000; Cohort 2 – years of departure 2001-2010; Cohort 3 – years of departure 2011-2020

Table 6.3.1 shows that some international migrants have not fully repaid the loans that they had taken out from moneylenders, extended family, or banks at the time of survey. About 53 percent of international migrants who departed between 2011 and 2020 (cohort 3) indicate that they have fully repaid their migration-related debt. About 38 percent indicate partial debt repayment, while about 1 percent has not repaid any migration debt. In comparison, more than 80 percent of individuals in cohort 1 and 2 say that they have fully repaid their migration debt. This may be explained by the fact that they departed many years ago and so have had more time to repay their debt than those who left Bangladesh more recently.

Chapter conclusions

This chapter shows that the average cost of international migration from Bangladesh is high. Migration costs are substantially higher for men than for women and vary across destination countries. The analysis highlights that the average nominal costs of international migration have increased over time whereas the real costs have declined in recent decades.

Aspiring international and internal migrants rely on a variety of different funding sources to finance their migration projects. International migrants use family funds but also external funding sources such as informal moneylenders. Access to formal sources of migration finance such as bank loans has increased for individuals who left Bangladesh after 2010 (cohort 3). In comparison, internal migrants rely almost exclusively on their own savings and on the savings of their family members to finance migration.

High migration costs may substantially reduce a migrant's disposable income while working abroad. As a consequence, migration costs may crowd out remittances or asset accumulation. An interesting question for future research would be to understand the extent to which migration costs impact international migration decisions. Paying high migration costs could be a worthwhile investment if these result in well-paid jobs overseas.

Migration costs seem to be a major determinant of whether an aspiring international migrant takes out a loan. Especially loans from informal sources such as moneylenders may substantially reduce the gains from international migration. If international migrants are not able to save enough during the migration episode, unpaid migration debt could force them to re-migrate upon return to Bangladesh and a possible duplication of migration costs. The subsequent chapters on poverty and consumption address some of these issues.

CHAPTER VII

TRANSITIONS IN MIGRATION STATUS AND ITS IMPACT ON INCOME

Ananta Neelim

Migration in Bangladesh is often transitionary. For example, in the SDC and RMMRU dataset, out of the 1840 and 2420 individuals who reported being international migrants in Waves 1 and 2 respectively, 33 percent returned to Bangladesh in the following wave. Similarly, across three waves of this survey, around 9 percent of the 61,521 adult population undertook new migration. One of the key motivations for one's choice to migrate is to improve one's economic circumstances. Therefore, a relevant question to interrogate *vis a vis* migration transitions is related to the impact of migration transitions on income. This chapter aims to capture changes in the incomes of individuals because of shifts in their migration status[13].

The analysis presented is based on the individual level observations of the SDC and RMMRU panel dataset. To maximise the number of observations, we include any individuals who appear in at least two consecutive waves of the survey. For example, an individual who was surveyed in Wave 1 and Wave 2 was included irrespective of whether s/he is surveyed in the third wave. Based on this criterion, a total of 80,163 observations are included in our analysis, of which 25,460 observations reported having an income. If we restrict attention to only adults (older than 17 at the time of survey), 44.7 percent of participants reported having an income.

7.1 Description of transitions in migration status in the sample

Table 7.1.1 documents transitions in migration status across Wave 1 and Wave 2 (Panel A), Wave 2 and Wave 3 (Panel B) and overall,

13 The analysis undertaken is at the individual level, specifically focused on income-earning individuals. We do not focus on expenditure/income at the household level as these variables which may be dependent on the migration choices made by different members of the households. Thus, attributing changes in these variables to one individual member's choices is not appropriate.

across three waves (Panel C). We first discuss Panel A. We identified 19,981 individuals between Wave 1 and Wave 2 of the surveys. Of these individuals, 1,268 (6.3 percent) were internal migrants, 1,839 (9.2 percent) were international migrants, 108 (0.5 percent) were internal returned migrants, 452 (2.3 percent) were international returned migrants, 3,709 (18.6 percent) were members of a household with at least one other internal migrant, 6,554 (32.8 percent) were members of a household with at least one other international migrant and 6,051 (30.3 percent) were non-migrants. The overall transition rates were 26.8 percent. Between Wave 2 and Wave 3 (Panel B), we identified 28,595 individuals. Of these individuals: 1,379 (4.8 percent), 2,416 (8.4 percent) were international migrants, 510 (1.8 percent) were internal returned migrants, 872 (3.0 percent) were international returned migrants, 4,131 (14.4 percent) were members of a household with at least one other internal migrant, 9,118 (32.1 percent) were members of a household with at least one other international migrant and 10,099 (35.3 percent) were non-migrants. The overall transition rate was 33.8 percent.

In Panel C, we pool data from Panel A and B. First, out of the 2,647 internal migrants identified in Wave 1 and Wave 2, 49.3 percent remained an internal migrant in the next survey period. In terms of transitions, 46.4 percent of internal migrants transitioned to being a returned internal migrant. A few others (around 4.2 percent) either migrated internally and some of them even migrated internationally and returned. In other words, around half the internal migrants transitioned their status across waves in our sample. Second, out of the 4,255 international migrants identified, 65.5 percent maintained the same status in the following wave of the survey. This was followed by returned international, which accounted for 33.4 percent of the international migrants identified in the previous wave. Therefore, the rate of transition for international migrants was lower than that of internal migrants.

Next, we turn to returned migrants. For both groups (internal and international) of returned migrants, the transition rate is low. In our sample, around 80 percent of returned migrants do not transition their status in the following wave. The remaining 20 percent transition to being migrants again.

Finally, we look at individuals who have not previously migrated. They can be classified into three categories: individuals (i) who have at least

Table 7.1.1: Transitions in migration status in our sample

Panel A: Wave 1	Wave 2							
	N	Int. Mig	Intl. Mig	Ret. Int	Ret. Intl	Mem Int Mig.	Mem Intl. Mig.	Non Mig
Int. Mig	1268	749	48	462	9	Transition: 5354 out of 19981 (26.8%)		
Intl. Mig	1839	7	1386	2	444			
Ret. Int	108	20	1	83	4			
Ret. Intl	452	18	89	3	342			
Mem Int Mig.	3709	128	22	28	6	2374	211	940
Mem Intl. Mig.	6554	56	166	1	15	109	5127	1080
Non Mig	6051	123	124	15	27	432	764	4566
Panel B: Wave 2	**Wave 3**							
	N	**Int. Mig**	**Intl. Mig**	**Ret. Int**	**Ret. Intl**	**Mem Int Mig.**	**Mem Intl. Mig.**	**Non Mig**
Int. Mig	1379	557	37	767	18	Transition: 9673 out of 28595 (33.8%)		
Intl. Mig	2416	31	1401	7	977			
Ret. Int	510	59	21	418	12			
Ret. Intl	872	17	127	7	721			
Mem Int Mig.	4131	115	20	59	15	2096	175	1651
Mem Intl. Mig.	9188	71	307	25	120	301	6083	2281
Non Mig	10099	160	174	159	107	813	1040	7646
Panel C: Previous Wave	**New Wave**							
	N	**Int. Mig**	**Intl. Mig**	**Ret. Int**	**Ret. Intl**	**Mem Int Mig.**	**Mem Intl. Mig.**	**Non Mig**
Int. Mig	2647	49.3%	3.2%	46.4%	1.0%	Transition = 30.9%		
Intl. Mig	4255	0.9%	65.5%	0.2%	33.4%			
Ret. Int	618	12.8%	3.6%	81.1%	2.6%			
Ret. Intl	1324	2.6%	16.3%	0.8%	80.3%			
Mem Int Mig.	7840	3.1%	0.5%	1.1%	0.3%	57.0%	4.9%	33.0%
Mem Intl. Mig.	15742	0.8%	3.0%	0.2%	0.9%	2.6%	71.2%	21.4%
Non Mig.	16150	1.8%	1.8%	1.1%	0.8%	7.7%	11.2%	75.6%

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020
Note: The abbreviations are provided in page xvi and xvii

one member in the household who is an internal migrant (ii) who have at least one member in the household who is an international migrant, and (iii) with no other member in the household who is a migrant. With group (i), 57 percent do not change their migration status across waves. This is much lower than the 71-76 percent observed groups (ii) and (iii). The most common transition for individuals in group (i) and (ii) was a consequence of the migrant member of the household returning. This occurred between

21.4-33 percent of the time. For individuals in group (iii), the most common transition was to have a new migrant member in household (18.9 percent). Less than five percent of the individuals in these three groups become directly associated with migration in the next wave in our survey.

7.2 Transitions of internal migrants and its impact on income

In this section, we analyse the association between income and transitions to and from internal migration. There are two things to consider here. The first one is with regards to selection, *i.e.* whether individuals who choose to transition are different from individuals who choose not to transition in terms of income. The second one relates to the consequence of the changes in migration status on income. In our analysis in the following sections, income refers to inflation adjusted income representing the value of Taka in 2014, when the first wave of the survey has been conducted.

Table 7.2.1: Income levels before and after transitions for internal migrants

Panel A: Disaggregated by wave.

Int Mig in previous wave	Wave 1 and 2				Wave 2 and 3			
	N	W1	W2	% change	N	W2	W3	% change
No transition	746	9289	10677	14.9	556	9561	10895	14.0
Transition to Intl Mig	48	14593	16097	10.3	36	9568	17826	86.3
Transition to Ret. Int	448	8581	3223	-62.4	741	8639	4047	-53.2
Transition to Ret. Intl	9	9388	4534	-51.7	18	12199	6001	-50.8

Panel B: Aggregated

Int Mig. in previous wave	Across Waves			
	N	Previous	Current	% change
No transition	1302	9405	10770	14.5
Transition to Intl Mig.	84	12439	16838	35.4
Transition to Ret. Int.	1189	8617	3736	-56.6
Transition to Ret. Intl.	27	11262	5512	-51.1

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

In Wave 1 of the survey, the average income of the 1,231 internal migrants was Taka 9,239. For these individuals, variations in income occurred depending on the transition path chosen. We first look at the selection side. An internal migrant in Wave 1 who chose to remain an internal migrant

in Wave 2 reported an income of Taka 9,289 (Table 6.2.1 Panel A) in Wave 1. This was higher than that of an internal migrant who transitioned to being a returned migrant in Wave 2 (Taka 8,581). A similar pattern is observed in Wave 2 migrants who transitioned to returned migrant in Wave 3. Their reported income in Wave 2 was lower (Taka 8,639) relative to migrants who did not transition in Wave 3 (Taka 9,561). On the other hand, internal migrants who transitioned to international migration had substantially higher income in Wave 1 of the survey. However, this pattern does not hold in Wave 3 of the survey. This discrepancy is possibly due to the relatively small number of transitions we observe from internal to international migration, which contributes to unreliable estimates.

Focusing on the impact of transitions on income, we find that internal migrants who chose not to change their migration status have seen an increase in their income by about 14.5 percent in the next wave (Table 7.2.1 Panel B). This is lower than that of internal migrants who transitioned to becoming international migrants. These individuals have seen an increase in income of 35.4 percent. On the other hand, individuals who have become internal returned migrants experienced a 56.6 percent decrease in income[14].

In summary, we find a significant relationship between income and transitional status of internal migrants. Individuals who transition to internal returned migrants earn less than individuals who choose to stay migrants (internal or international) and upon the transition lose significant income. This makes them worse off than individuals who do not transition away from being migrants.

7.3 Transitions of international migrants and its impact on income

In this section, we study the relationship between income and migration transitions across different waves of the survey for international migrants. In Wave 1 of the survey, the average income of the 1,832 international migrants was Taka 34,496. Again, variations in income in the next surveyed period are based on the transition path chosen by these migrants. An international migrant in Wave 1 who did not change his/her migration status in Wave 2

14 Given the small sample, we refrain from making any meaningful comment about internal migrants that transitioned to becoming international returnees.

had an income of Taka 35,728 (Table 7.3.1 Panel A). This was substantially higher than that of international migrants who transitioned to being a returned migrant in Wave 2 (Taka 30,910). A similar pattern is observed in Wave 2 migrants who transitioned (or not) to different migration status in Wave 3. However, the magnitude is less pronounced. The income of returned international migrants reported in previous period has been lower (Taka 23,122) relative to migrants who have not transitioned in Wave 3 (Taka 23,989).

Table 7.3.1 Income levels before and after transitions for international migrants

Panel A: Disaggregated by wave.

Intl Mig. in previous wave	Wave 1 and 2				Wave 2 and 3			
	N	W1	W2	% change	N	W2	W3	% change
Transition to Int Mig.	7	21428	14464	-32.5	31	20241	9060	-55.2
No transition	1386	35728	27395	-23.3	1398	23989	19936	-16.9
Transition to Ret. Int	2	10500	3541	-66.3	7	24404	8272	-66.1
Transition to Ret. Intl	437	30910	5786	-81.3	955	23122	3727	-83.9

Panel B: Aggregated

Intl Mig. in previous wave	Across Waves			
	N	Previous	Current	% change
Transition to Int Mig.	38	20460	10055	-50.8
No transition	2784	29833	23649	-20.7
Transition to Ret. Int	9	21314	7221	-66.1
Transition to Ret. Intl	1392	25567	4373	-82.9

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Turning to the impact of transitions on income, we find that the international migrants have seen a decrease of 20.7 percent in real income over waves if they did not change their migration status (Table 7.3.1 Panel B). However, the individuals who transitioned to being returned international migrants fared much worse. On average, returned international migrants have seen a massive 83 percent drop in real income across waves.

In summary, like in the case of internal migrants, we find that prior to changing their migration status, international migrants who transition to being returned migrants report earning less than individuals who choose to stay on as migrants. Upon completing the transition, the incomes of

international migrants drop significantly. More importantly, international migrants who choose not to change their migration status experience a 20.7 percent decrease in income. This apparent drop in real income may be an artefact of the way real income has been calculated for this analysis. Here the adjustment for inflation was conducted using figures in Bangladesh which are significantly higher than those in destination countries.

7.4 Transitions of returned migrants and its impact on income

In this section, we focus on returned migrants. First, we focus on returned internal migrants. For meaningful comparisons we pool data from all three waves. Table 7.4.1 observes that the average income of the 422 returned internal migrants was Taka 6,391. Of these returnees, those who have not experienced any change in their migration status report an income of Taka 6,815. On the other hand, returned migrants who have re-migrated experience a much lower income of Taka 4,950. Second, a similar pattern is also observed in the case of returned international migrants. In Table 7.4.1, returned international migrants who have chosen *not* to re-migrate report an income of Taka 9,186. This is higher than that of returned international migrants (Taka 5,964) who have chosen to re-migrate. These results imply that returned migrants who re-migrate may do so to improve the negative financial situation which has arisen due to their returned status (see section 7.2 and 7.3 for details).

A logical next question is whether the choice to re-migrate has any positive influence on income. From Table 7.4, we can see that re-migration can be financially rewarding. For example, internal returned migrants who choose not to re-migrate see a rise in real income of 10.8 percent. This is lower than the 74.4 percent increase that is achieved from re-migration. Similarly, returned international migrants, experience a 3 percent decrease in income if they choose not to re-migrate. On the other hand, returned migrants who re-migrate see an income increase of 217 percent. However, it must be noted that unlike internal migration, re-migrating internationally can be quite costly and therefore even the substantial gains in income may not be sufficient to recoup migration costs in the short run.

In summary, we find that returned migrants who choose to re-migrate have a higher financial need to do so. More importantly, they improve

their income at a significantly higher rate than those who choose to not re-migrate.

Table 7.4.1: Income levels before and after transitions for returned migrants

Ret Int. in previous wave	Across Waves			
	N	Previous	Current	% change
Transition to Int Mig.	79	4950	8626	74
Transition to Intl Mig.	21	6031	17208	185
No transition	306	6815	7551	11
Transition to Ret. Intl	16	5869	8152	39
Ret Intl. in previous wave	**Across Waves**			
	N	**Previous**	**Current**	**% change**
Transition to Int Mig.	34	5911	12128	105
Transition to Intl Mig.	213	5964	18897	217
Transition to Ret. Int	9	5740	15073	163
No transition	829	9186	8954	-3

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

7.5 Transitions of non-migrants and income effects

In this section, we focus on individuals in our sample who are not currently migrants. As mentioned in section 7.2, this group can be classified into three sub-groups based on the migration status of other members of their households. We start by looking at non-migrants who have at least one internal migrant member in the household (Table 7.5.1). In terms of selection amongst these non-migrants, those who have decided to make transition to be a migrant have lower incomes to start with, compared to those who choose not to migrate. One possible explanation for this is that the networks and resources that arise from having an internal migrant in the family allows less-productive (in terms of income generation) household members to undertake migration and improve their financial situation.

With regards to changes in income and its relationship with migration transitions, there are three important observations. First, if there is no change in their migration status, income grows at around 10 percent across waves. Second, if non-migrants can transition into migration, their income increases 3-10 fold. This persists even after these individuals choose to return from migration. For example, individuals in our sample who transitioned from being a non-migrant to a migrant and then to a

returned migrant have seen their income increase by around 60 percent across waves. This is markedly better than the 10 percent increase in income experienced by individuals who did not change their migration status. Finally, if a member in the household becomes an international migrant, there is an increase in income of non-migrant members. On the other hand, if the internal migrant in the household becomes an internal returned migrant there is no income growth.

Table 7.5.1: Income levels before and after transitions for non-migrants with at least one internal migrant in the household

Member of Int. Mig. Household in previous wave	Across Waves			
	N	Previous	Current	% change
Transition to Int Mig.	225	1894	8276	337
Transition to Intl Mig.	39	1831	19460	963
Transition to Ret. Int	73	3818	6089	59
Transition to Ret. Intl	17	4342	6648	53
No transition	1076	3542	3882	10
Transition to Mem. Intl Mig.	94	3216	4272	33
Transitioned to Non Mig.	672	4231	4217	0

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Table 7.5.2: Income levels before and after transitions for non-migrants with at least one international migrant in the household

Member of Intl Mig. Household in previous wave	Across Waves			
	n	Previous	Current	%change
Transition to Int Mig.	115	3404	8808	159
Transition to Intl Mig.	421	2551	19162	651
Transition to Ret. Int.	23	6444	6958	8
Transition to Ret. Intl.	100	6751	9042	34
Transition to Mem. Int Mig.	84	4883	3645	-25
No transition	2184	4780	5383	13
Transitioned to non-Mig	813	5747	5956	4

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Next, we focus on individuals who have an international migrant in their household. Table 7.5.2 again finds that individuals who chose to migrate from this category have relatively low income (Taka 2,551-3,404) compared to those who chose not to migrate (Taka 4,780). In terms of the impact of these transitions on income the table finds that the ability to migrate leads to improvements in income (159-651 percent), which persists even after the migrant chooses to return (8-34 percent). We also

have some suggestive evidence that when an international member of the household chooses to return, it has negative spillover effects. Members of international migrant households experience a 13 percent increase in income over waves, whereas, when the growth of income for the other household members of returned international migrants, is only 4 percent.

This section analyses non-migrants who have no other current migrants in their household. From Table 7.5.3, we observe that individuals who chose to migrate internally (and to some extent internationally) have lower incomes at the beginning relative to those who chose not to migrate. However, in percentage terms, this gap in initial earnings is a lot smaller than that in households with at least one current migrant. For example, Table 7.5.2 shows that the initial earnings ratio is $\frac{2551}{4780} = 53.4$ percent $\frac{2551}{4780} = 53.4$ percent when there is another international migrant in the household, i.e., the earnings gap is 46.6 percent. The earnings ratio increases to $\frac{5145}{5968} = 86.2\%$ $\frac{5145}{5968} = 86.2\%$ (earnings gap of 13.8 percent) when there is no member in the household who is currently engaged in migration. This result corroborates our earlier conclusions regarding the network and resource benefits international migrants bring to the household. These enable their households to improve the earnings of less-productive members through migration.

Table 7.5.3: Income levels before and after transitions for non-migrants with no migration experience in the household

Non Mig. in previous wave	Across Waves			
	n	Previous	Current	%change
Transition to Int Mig.	312	2959	7410	150
Transition to Intl Mig.	334	5145	18158	253
Transition to Ret. Int	292	5719	7630	33
Transition to Ret. Intl	182	7897	8300	5
Transition to Mem. Int Mig.	386	4943	4668	-6
Transition to Mem. Intl Mig.	416	6374	5355	-16
No transition	4574	5968	6295	5

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Turning to the impact on income, we find that the income of non-migrants who have not transitioned (and remain non-migrants) increased

by 5 percent. Not surprisingly, the incomes of those who transitioned into migration increased further. This increase is lower for individuals who transition to internal migrants (150 percent) relative to those who transition to international migrants (253 percent). Finally, non-migrating individuals who saw a member of their households migrate, reported a decrease in their real income. For example, the income of non-migrating individuals decreased by 16 percent if another member of the household decided to migrate internationally, whereas if another member migrated internally, income decreased by 6 percent.

To summarise the findings on non-migrant members, interesting patterns related to migration transitions have emerged. The analysis started with the selection side of the story. It finds that individuals who transition from being non-migrants to migrants have lower incomes to start with than those individuals who choose to remain as non-migrants. This difference is more pronounced when there is an existing migrant in the household. This observation is consistent with the explanation that the networks and resources that arise from having an internal migrant in the family allows less-productive (in terms of income generation) members to undertake migration and improve their financial situation. In terms of the impacts on income, the section found that transitioning into being a migrant significantly improves income. This effect is more pronounced for individuals who choose to migrate internationally. The increase in income persists even after these individuals return from migration.

Chapter conclusions

Out of the 48,576 individuals who were observed across the three waves of our survey, 31 percent chose to change their migration status. This rate of change was the highest amongst individuals who reported to being an internal migrant in the previous wave (around 50 percent). The corresponding figures for international migrants and returned migrants were 35 percent and 20 percent respectively.

The association between income and migration transitions highlights two important findings. First, income is an important determining factor of migration transitions. The analysis found that individuals with lower levels of income are more likely to transition their migration status (from non-migrant to migrant and returned to migrant). This result is more pronounced in households which have existing migrant members. This is

consistent with the explanation that the networks and resources that arise from having a migrant in the family allow less-productive members (in terms of income generation) to undertake migration and improve their financial situations. Second, changes in migration status have profound impacts on income. Transitioning into becoming a migrant (from non-migrant/returned migrant to migrant) has positive impacts on income. However, transitioning out of migration has negative impacts on migrant incomes. Nonetheless, the decrease in income is only transitory, i.e. the income levels of returned migrants stabilise gradually and may slightly improve even if no further migration transitions are made.

CHAPTER VIII

EXPENDITURE GROWTH AND MIGRATION EXPERIENCE

C. Rashaad Shabab

This chapter studies household expenditure growth in Bangladesh using the SDC and RMMRU panel survey. The survey was administered in the years 2014, 2017 and 2020. The 2020 survey was fielded in the aftermath of the COVID-19 pandemic. It is thus uniquely poised to examine effects of the COVID-19 pandemic on households in a rapidly industrialising, high-growth economy that is deeply embedded in global supply-chains.

Earlier work based on the 2014 and 2017 waves of the SDC and RMMRU panel documented evidence of strong expenditure growth among the sample households (Siddiqui et al., 2018). While aggregate expenditure grew by 23 percent over that period this was accompanied by interesting trends in different expenditure subcomponents. In particular, that study documented a shift in the relative composition of the consumption bundle away from food expenditure in favour of non-food non-durable expenditure (such as clothes, telephone bills, soap, shampoo, etc.). Such a shift is consistent with economic theory which predicts that necessities, such as food constitute a declining share of total expenditure as living standards rise[15]. The current chapter will document that this picture of Bangladesh, as a rapidly growing economy that is transitioning away from a predominance of food in the consumption bundle, is abruptly disrupted by the pandemic. Specifically, we find evidence of stagnation in expenditure growth between 2017 and 2020 that is accompanied by a resurgence of the relative importance of food in the expenditure bundle. We show that in an effort to protect food consumption during the pandemic, households have diverted expenditure away from non-food non-durables, health, education and ritual expenditure. Heterogeneity analysis by household experience with migration shows that these adverse expenditure effects are most severe among non-migrant households. The households of internal

15 as in Engle's (1821-1896) well known result (Chai & Moneta, 2010).

migrants display the greatest degree of resilience against the economic shocks associated with the pandemic while households of international migrants fare better than those of non-migrants but worse than of internal migrants.

Other studies have also investigated the expenditure dynamics among Bangladeshi households during the pandemic. PPRC & BRAC (2020) published real-time insights from high-frequency data gathered at different stages during the pandemic. Rahman et al. (2021) catalogue the methodological survey innovations that enabled such real-time data policy relevant research. While high-frequency data of this nature offers important insights, the SDC and RMMRU panel allows us to track households over a much longer period and so offers a broader horizon over which to study the dynamics of household expenditure. The Household Income and Expenditure Survey (Bangladesh Bureau of Statistics, 2016) is another long-running panel survey in Bangladesh. However, a post-coronavirus HIES has not yet been conducted. Furthermore, the HIES is designed to be nationally representative whereas the sampling frame of the SDC and RMMRU data are explicitly designed so as to enable a comparative analysis of international migrant, internal migrant and non-migrant households, a dimension that is outside the purview of other studies. A corollary of the purposive sampling strategy adopted here is that the results are not meant to be nationally representative. Rather, the trends and growth rates identified here allow for meaningful comparisons between international migrant, internal migrant and non-migrant households from similar communities.

The rest of the chapter is organised as follows. Section 8.1 documents the growth dynamics of the expenditure aggregate, section 8.2 presents the descriptive statistics of the expenditure subcomponents, section 8.3 decomposes expenditure growth by subcomponent, section 8.4 disaggregates expenditure growth by migration type, and section 8.5 concludes.

8.1 Growth in overall expenditure and the COVID-19 pandemic

This section studies the distribution of expenditure growth in sample households. We define growth as the percentage change in real expenditure between any two waves of the survey. As the dataset currently surveys households in three waves, we are able to identify two sets of growth

rates, i.e. between 2014 and 2017 and between 2017 and 2020. To ensure that we are making comparisons across a consistent set of households this chapter only conducts comparisons over the balanced panel of 3,323 households who are successfully tracked across all three survey waves. In the survey data, expenditure on food and expenditure on education are measured on a monthly basis whereas expenditure on non-food items, expenditure on healthcare and expenditure on rituals are measured on an annual basis. These annual components are divided by 12 to make them comparable with the monthly components. The resulting components are added together to arrive at an expenditure aggregate. Using Bangladesh Bank data, we account for inflation by deflating all expenditure figures to 2014 Taka using a deflator of 1.2 for 2017 and a deflator of 1.4 for 2020. The resulting expenditure figures are presented in Table 8.1.1.

Table 8.1.1: Real monthly aggregate expenditure

Year	Obs	Mean	Std. Dev.	Min	Max
2014	3,323	13136.2	10353.1	1470	162301.7
2017	3,323	16173.2	15510.8	901.4	325895.8
2020	3,323	15967.8	11001.8	362.3	152536.8

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Table 8.1.1 shows that despite a clear upward trend between the first two waves, expenditure growth appears to have stagnated between Wave 2 and Wave 3. In 2014 these households spent just over Taka 13,000 per month. At 2014 prices, by the year 2017 this had increased to just over Taka 16,000 per month, but in 2020 this dipped under Taka16,000 per month. Thus between the first two waves of the survey real household expenditure increased by approximately Taka 3,000, but between the last two waves if anything there was a slight decline in overall real expenditure. Table 8.1.2 now computes the growth rates in real expenditure between these waves.

Table 8.1.2: Growth in real aggregate expenditure

Interval	Real expenditure growth (%)
2014 - 2017	23.1
2017 – 2020	-1.3

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Table 8.1.2 clearly shows that there was very strong growth in overall expenditure between the first two waves. On average households in the balanced panel experienced rates of expenditure growth of 23.1 percent. In other words, real expenditure increased by almost a quarter over that period. However, the second row of Table 8.1.2 shows that growth in overall expenditure stagnated between the latter two waves with an average contraction of -1.3 percent.

The rapid onset of the COVID-19 pandemic in 2020 and economic activity foregone due to the accompanying lockdowns in Bangladesh are very likely to be a driving force behind this sluggish growth performance in the second half of the panel. Unfortunately, the limitation associated with the long-dated structure of the panel is that it does not allow us to directly observe the impact of the pandemic on growth rates as the interval between the final two waves includes two years without the effect of COVID-19 and one year with the effect. However, if one assumes the annual rate of growth between 2014 and 2017 persisted throughout 2018 and 2019 then in 2019 household expenditure would have been 14.9 percent higher than in 2017. This suggests that the pandemic resulted in a contraction of expenditure on the order of 15 percent. If one is prepared to assume that in the absence of the pandemic pre-2017 growth rates would have prevailed through to 2020 then one arrives at the conclusion that the pandemic has had cost Bangladesh almost 24 percent in foregone expenditure growth.

8.2 Disaggregating expenditure by subcomponents

We now turn to interrogating this issue further by disaggregating expenditure into its different subcomponents. Table 8.2.1 presents the descriptive statistics of each expenditure subcomponent across the three waves of the dataset for the 3,323 households that constitute the balanced panel. Expenditure on food increases for each successive wave of the survey. Interestingly, expenditure on non-food items increases markedly between waves 1 and 2 but then decreases between waves 2 and 3. Taken together, these results may suggest that households are reallocating resources from discretionary expenditure toward more basic needs.

Expenditure on health increased considerably between the first two waves of the survey, but then decreased. In 2014 average health expenditure per household was relatively small at around Taka 920 per month. This

increased by approximately Taka 400 by 2017, and but subsequently declined by Taka 200 by 2020. So even though the pandemic was an adverse health shock, it appears that households treat health expenditure as a discretionary component and in a time of economic distress they have diverted resources away from this expenditure category.

Household expenditure on education was largely stagnant during the first two waves at just over around Taka 450 per month but then fell sharply between the second two waves to just under Taka 350 per month. Expenditure on rituals has remained largely stagnant throughout the panel at approximately Taka 2,000 per month on average across all three waves. Between the first two waves expenditure on this sub-heading increased by a little under Taka 200 while between the latter two waves expenditure on rituals remained virtually unchanged.

Table 8.2.1: Real monthly expenditure by subcomponents

Expenditure subcomponents	Year	obs	Mean	Std. Dev.	Min	Max
Food	2014	3,323	7214.4	3407.0	1140	36250
Food	2017	3,321	7827.4	4435.1	720.8	96758.3
Food	2020	3,323	8847.8	4416.7	0	38840.6
Non-food	2014	3,323	2379.2	2834.5	75	86250
Non-food	2017	3,321	4076.9	7638.7	55.6	155111.1
Non-food	2020	3,323	3494.0	4502.7	0	127599.6
Health	2014	3,323	920.5	4620.9	0	150000
Health	2017	3,323	1314.4	4504.8	0	173611.1
Health	2020	3,323	1102.6	3804.1	0	78502.4
Education	2014	3,323	456.9	829.0	0	12100
Education	2017	3,323	473.9	878.2	0	10833.3
Education	2020	3,323	343.8	829.6	0	18115.9
Rituals	2014	3,322	1885.9	4626.3	0	113166.7
Rituals	2017	3,322	2182.1	5849.1	0	119444.4
Rituals	2020	3,322	2179.8	4730.5	0	91666.7

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

8.3 Observed expenditure growth by subcomponents

Table 8.3.1 presents growth in each expenditure subcomponent for the 3,322 households in the balanced panel of the IMPD surveys.

Studying the evolution of food expenditure in the overall expenditure bundle reveals an interesting result. Between the first two waves overall

expenditure growth was 23.1 percent but growth in food expenditure was only 8.5 percent. Thus, food expenditure comprised a decreasing share of overall expenditure during this period. This is consistent with established demand theory: as economies grow households devote a greater share of expenditure to discretionary items and after basic needs are met, the expenditure share devoted to necessities such as food decreases. However, over the latter half of the panel this pattern appears to have reversed, most likely due to the economic strain imposed by the pandemic. Overall expenditure contracted by only 1.3 percent but expenditure on food grew by 13 percent. In other words, as the economic situation worsened with the onset of the pandemic, households devoted a larger share of their overall expenditure to meeting basic needs such as food.

Table 8.3.1: Real expenditure growth by subcomponents

Expenditure subcomponents	Real growth between 2014 and 2017 (%)	Real growth between 2017 and 2020 (%)
Food	8.5	13.0
Non-food	71.4	-14.3
Health	42.8	-16.1
Education	3.7	-27.4
Rituals	15.6	-0.1

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

A corroborating result appears to hold for non-food expenditure items. During the period of rapid growth in overall expenditure between the first two waves, expenditure on non-food household items grew by a remarkable 71.4 percent. However, once households were in the grip of the economic uncertainty created by the pandemic, they appear to have scaled back their consumption of these discretionary items and expenditure on this component experienced a contraction of 14.3 percent.

The case of expenditures on health is especially interesting as the data are collected against the backdrop of the COVID-19 pandemic. The effect of the pandemic on the demand for health related services will be subject to a number of simultaneous but opposing forces. On the one hand, the demand for healthcare might increase due to COVID-19 infections. On the other hand, the adverse shock income and increase in economic uncertainty brought about by the pandemic may decrease all forms of discretionary expenditure, including on health. Between 2014 and 2017 expenditure on health grew by 42.8 percent, outpacing overall

expenditure growth. However, between 2017 and 2020, expenditure on health *decreased* by 16.1 percent. This suggests that during a time of economic stress, Bangladeshi households do indeed treat health as a discretionary expenditure category.

The pandemic will also influence expenditure on education. In Bangladesh, the pandemic has resulted in long-term widespread school closures. If private investments in education complement public investments, we would expect educational expenditure to decrease during the school closures. However, if private investments are substitutes to public ones, we would expect educational expenditure to increase. Between the first two waves, household educational expenditure exhibited relatively sluggish growth of 3.7 percent compared to the overall expenditure. During the pandemic, this fell by a substantial 27.4 percent suggesting that school closures were associated with smaller private investments in education.

The final row of Table 8.3.1 plots the evolution of expenditure on rituals. Rituals have constituted a decreasing share of the expenditure bundle from survey wave to survey wave. Between the first two waves there was a modest, 15.6 percent growth in ritual expenditure that was far less than overall expenditure growth over that period (24.6 percent). And over the second half of the panel, growth in ritual expenditure was essentially stagnant, exhibiting a 0.1 percent decline over the three years.

8.4 Expenditure growth by migrant type

We now turn our attention to determining if households with different migration profiles exhibited different rates of expenditure growth from survey wave to survey wave.

The first two columns of Table 8.4.1 present the observed levels of expenditure growth for internal migrant households, the second two present the statistics for international migrant households and the final two columns present the results for non-migrant households. In the case of overall expenditure, we find that only internal migrant households experienced relatively consistent growth across survey waves, registering 19.3 percent expenditure growth between the first two waves and 13.2 percent between the last two waves. This contrasts with the experience of international migrant and non-migrant households: both of these groups experienced strong expenditure growth between waves 1 and 2, but

contractions in expenditure between waves 2 and 3. International migrant households registered a 4.9 percent reduction in expenditure between 2017 and 2020 while non-migrant households experienced an 8.3 percent reduction in overall expenditure. Therefore, in proportionate terms non-migrant households appeared to have been hardest hit by the onset of the pandemic as compared with either internal or international migrant households.

Table 8.4.1: Expenditure growth by subcomponents and migration experience

Expenditure subcomponents	Internal migrant households (%)		International migrant households (%)		Non-migrant households (%)	
	2014-2017	2017-2020	2014-2017	2017-2020	2014-2017	2017-2020
Total	19.3	13.2	22.5	-4.9	22.1	-8.3
Food	6.0	25.3	6.6	12.6	10.5	3.4
Non-food	45.5	3.4	75.7	-17.7	71.6	-22.8
Health	29.7	7.2	35.9	-15.3	57.0	-36.0
Education	-5.7	-27.4	5.4	-28.7	0.3	-29.3
Ritual	56.2	-5.1	6.9	-2.7	7.8	-1.2

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

The experience of growth in food expenditure is also very different across households grouped by migration status. Between 2014 and 2017 internal migrant households experienced the slowest rate of growth in food expenditure (6.0 percent as compared with 6.6 percent for international migrants and 10.5 percent for non-migrants) of any of these groups. Between the later waves, this was reversed with internal migrant households experiencing the strongest growth in food expenditure at 25.3 percent. During this latter interval, non-migrant households experienced the slowest rate of growth in food expenditure at 3.4 percent. The experience of international migrants was middling, with 12.6 percent growth in food expenditure.

For all groups growth in non-food expenditure was remarkably robust between waves 1 and 2 of the survey (45.5 percent for internal migrants, 75.7 percent for international migrants and 71.6 for non-migrants). This contrasts sharply with the interval between waves 2 and 3 when internal migrant households were the only group who experienced positive growth in non-food expenditure, and even that was a relatively meager 3.4 percent. During this latter half of the sample period, the food expenditure

of international migrant households decreased by 17.7 percent, while that of non-migrant households decreased by 22.8 percent.

Studying the evolution of health expenditures over the duration of the panel is especially interesting given the rapid onset of the COVID-19 pandemic just before the 2020 wave of the survey was fielded. Before the pandemic, all household groups had strong, positive growth in this category of expenditure. The health expenditures of internal migrants grew by 29.7 percent, those of international migrants grew by 35.9 percent and those of non-migrant households grew by 57 percent. However, between 2017 and 2020, only internal migrant households experienced positive health related expenditure growth, and even that was a relatively modest 7.2 percent. Over this period health expenditures for international migrants decreased by 15.3 percent while non-migrant households saw the largest decline at 36.0 percent.

Even between the first two waves of the survey real expenditure on education was more or less stagnant: internal migrant households had a small (5.7 percent) decline in educational expenditures whereas international migrant households had a small increase (5.4 percent) and non-migrants were virtually unchanged (0.3 percent increase). The onset of the pandemic and the sustained and widespread school closures led to very sharp drops in educational expenditures across the board. Expenditure on education decreased by 27.4 percent for internal migrant households, 28.7 percent for international migrant households and 29.3 percent for non-migrant households.

In terms of expenditure on rituals, internal migrant producing households recorded substantial growth in ritual expenditure between waves 1 and 2 at 56 percent. However, both international migrant households and non-migrant households had relatively slow rates of growth in ritual expenditure during that period (5.4 percent and 7.8 percent respectively). Between Wave 2 and Wave 3 all groups exhibited modest falls in ritual expenditure with internal migrants having the largest fall (5.1 percent) followed by international migrants (2.7 percent) and non-migrants (1.2 percent).

Chapter conclusions

The results above suggest a great deal of heterogeneity in the distribution of expenditure growth both across expenditure subcomponents and across households grouped by migration experience during the most recent

waves of the survey. In sharp contrast to the first half of the survey when overall expenditure grew by 23.1 percent, between the most recent waves overall expenditure growth has been stagnant: between 2017 and 2020 real expenditure fell by 1.3 percent on average. Though the timing of the survey makes it difficult to establish this with any degree of certainty, a quick back of the envelope calculation reveals that the pandemic may have caused expenditure to contract by as much as 15 percent, with an implied cost in terms of growth foregone as high as 24 percent in 2020. The economic hardship and uncertainty created by the pandemic appears to have caused households to divert consumption away from non-essential expenditure categories in an effort to protect essential expenditure on food. On average real expenditure on non-food consumption has decreased by 14.3 percent, expenditure on health has decreased by 16.1 percent, education expenditure has decreased by 27.4 percent and expenditure on rituals has decreased by 0.1 percent. By and large, these efforts to protect real food expenditure were successful with growth in food expenditure averaging at 13.0 percent despite the contraction in overall expenditure.

The averages above hide important heterogeneity in household experiences by migration type. In terms of food, non-food, health, and education expenditures, non-migrant households were always the hardest hit, registering the least growth or sharpest declines by expenditure component. Food expenditure for this group only grew by 3.4 percent, non-food expenditure contracted by 22.8 percent, health expenditure contracted by 36.0 percent and education expenditure contracted by 29.2 percent. Internal migrant households have been most successful in coping with the economic climate registering 25.3 percent increases in food expenditure, 3.4 percent increases in non-food consumables, 7.2 percent increases in health expenditure and 27.4 percent decreases in educational expenditure. The experiences of international migrant households were middling, registering 12.6 percent growth in food expenditure and contractions of 17.7 percent, 15.3 percent and 28.7 percent in non-food, health, and education expenditures. As noted above, expenditure on rituals was fairly constant across survey waves for all migrant categories.

CHAPTER IX

POVERTY, POVERTY DYNAMICS AND MIGRATION

C. Rashaad Shabab

This chapter studies the dynamics of poverty among households surveyed by the SDC and RMMRU panel data on migration. The panel interviewed the same sample of households in 2014, 2017, and again in 2020. It thus provides a unique opportunity to understand differentials in vulnerability to and resilience against poverty across international migrant, internal migrant and non-migrant households in the wake of the COVID-19 pandemic. The chapter finds that between 2017 and 2020 poverty declined significantly among sample households. What is more, the relative decline in poverty rates was sharpest among internal migrant households, as opposed to international and non-migrant households.

This is not the first contribution that analyses the effect of the pandemic on poverty in Bangladesh. PPRC-BRAC (2021) fielded a rapid response telephone data collection effort that yielded important insights into the dynamics of poverty at three distinct points during the pandemic (April 2020, June 2020 and March 2021). While the high-frequency sampling approach adopted in that study offered invaluable real-time policy advice, it could not offer the longer horizon view of migrant households that our seven-year panel does. The Household Income and Expenditure Survey (Bangladesh Bureau of Statistics, 2017) is a notable, long-running panel survey that has been extensively used to study poverty dynamics in Bangladesh. However, as of the writing of this chapter a post-Coronavirus wave of the HIES is not available. Furthermore, the SDC and RMMRU panel has been explicitly designed to enable the comparative analysis of international migrant, internal migrant and non-migrant households as has in contrast to the HIES which is designed to be nationally representative. Due to these differences in sampling methodology and time scales, the results presented in this chapter are not directly comparable to these earlier studies. Specifically, the present chapter is restricted by the data to benchmark poverty in 2020 against levels observed in 2017 and so we are unable to rule out the possibility that poverty declined in 2018 and 2019,

but then increased in 2020. Due to the purposive oversampling of migrant households and migration intensive areas the levels of poverty reported here will differ from those identified in nationally representative samples.

In the analysis that follows we begin by studying the unbalanced panel of households and then go on to study balanced panel. We find evidence of a sharp decline in poverty among sample households between 2017 and 2020. This is true of internal migrant, international migrant and non-migrant households. In absolute terms, international migrant households are found to have the lowest level of poverty while in relative terms poverty has declined most sharply among the households of internal migrants.

9.1 Defining poverty

This report uses a poverty head-count applied to household expenditure to measure poverty. In the headcount measure a household is defined as poor if overall expenditure falls below some threshold value. So as to ensure comparability with results documented for earlier waves of the survey, in this report we use the threshold identified by Siddiqui and Mahmood (2015) that was applied to the first wave of the SDC and RMMRU dataset. That is, a household is said to be poor if total real per-capita monthly expenditure falls below Taka 1,544 in 2014 prices. Siddiqui et al. (2018) adjusted that poverty line using an inflation rate of 20 percent and applied and used it to study poverty in the 2017 wave of the SDC and RMMRU dataset. In a similar vein, guided by Bangladesh Bank estimates, we apply an inflation rate of 20 percent between waves 1 and 2, and a rate of 15 percent between waves 2 and 3. Thus expenditures in 2020 are deflated by a factor of 1.38 before comparison with the 2014 poverty line.

An alternative to the Siddiqui and Mahmood (2015) poverty line would be to use the 16 different regional poverty lines developed by the Bangladesh Bureau of Statistics & World Bank Group (2017) using the 2016 wave of the HIES. While this approach captures important geographic heterogeneity living expenses across different regions at a particular point in time, it offers no guidance on how these differences may vary over time, especially in the wake of macroeconomic shock such as the global pandemic. As such, the present chapter makes the simplifying assumption of imposing one nationwide poverty line that is adjusted over time using national inflation statistics. Nonetheless, we identify constructing regional

poverty lines for 2014 and 2020 using the SDC and RMMRU data as an important area of future research.

In the present chapter the expenditure aggregate that is used to compute poverty is based on the same expenditure subcomponents as were used to study expenditure growth in the preceding chapter (Chapter VIII). In the survey data, expenditure on food and expenditure on education are measured on a monthly basis whereas expenditure on non-food items, expenditure on healthcare and expenditure on rituals are measured on an annual basis. These annual components are divided by 12 to make them comparable with the monthly components. The resulting components are added together to arrive at an expenditure aggregate. The data are then adjusted for household size using data on the number of members who reside in that household. The resulting figure is adjusted for inflation as described above and compared with the poverty line from Siddiqui and Mahmood (2015). If per-capita real expenditure falls below the poverty line, the household is classified as poor, and if per-capita expenditure does not fall below the poverty line the household is classified as non-poor.

9.2 Poverty dynamics in the unbalanced panel

We start by studying the evolution of poverty in all households that were surveyed by the IMPD project in 2014, 2017 and 2020. In the whole sample there are 13,733 observations. Applying the measure of poverty defined above identifies 2,028 observations as 'poor,' implying an overall incidence of poverty of 14.8 percent. However, the average over the pooled sample is not informative of changes in the incidence of poverty over time. During the different waves of the survey we are able to reach 3,913 households in 2014, 3,896 households in 2017 and 5,924 households in 2020. Table 9.2.1 allows us to study the evolution of poverty over the different years of the survey.

The poverty dynamics suggested by Table 9.2.1 make for interesting analysis. The incidence of poverty did reduce somewhat between waves 1 and 2 from approximately 18.9 percent to 16.6 percent. While any reduction in poverty is welcome, the reduction that took place between these two waves still left one in six households afflicted by poverty. Between 2017 and 2020 however, poverty declined more sharply. By 2020 poverty had been alleviated to the point where it only affected roughly one-in-ten sample households.

Table 9.2.1: The evolution of poverty over time in the unbalanced panel

Year	Poverty rate (%)	N
2014	18.9	3913
2017	16.6	3896
2020	10.9	5924

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

The present dataset has been collected to study the distribution of poverty across households with different migration experiences. To this end we now turn our attention to understanding whether poverty is distributed differentially between internal migrant, international migrant and non-migrant households. Table 9.2.2 presents the results. The number in the cell below each poverty rate represents the number of households in that migration-type / survey-year cell.

Table 9.2.2: Poverty by contemporaneous migration status in the unbalanced panel

Migration Status	2014	2017	2020
Internal migrant (%)	31.8	25.5	15.1
N	968	836	1296
International migrant (%)	9.8	10.6	7.5
N	1,597	1,674	2703
Non-migrant (%)	20.3	18.4	12.7
N	1,348	1,383	1925

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

Table 9.2.2 reveals that in all years, the incidence of poverty is highest among internal migrant households. This begins at almost 31.8 percent in 2014 and declines by one-quarter by six percentage points by 2017 to 25.5 percent. However, the decline is even faster between the second and third waves with the incidence of poverty falling by more than 10 percentage points to just over 15 percent by 2020.

International migrant households have the lowest incidence of poverty among these three groups in all waves of the survey. The poverty rate among international migrant households starts off at 9.8 percent in 2014 and actually increases slightly between waves 1 and 2 to 10.6 percent. However, between waves 2 and 3 there is reduction in the incidence of poverty in this group with the poverty rate falling to 7.5 percent in 2020. With a poverty rate of 20.3 percent in 2014, non-migrant households

started off more than twice as likely to suffer from poverty as their international migrant producing peers, but were still considerably less likely to suffer from poverty than internal migrant producing households. Among this group poverty only fell slightly between waves 1 and 2 from 20.3 to 18.4 percent. However, progress between waves 2 and 3 was much more robust with the incidence of poverty falling to 12.7 percent by 2020 among this group.

9.3 Poverty dynamics in the balanced panel

The figures above are based on the largest possible group of households sampled by the present project. While this expansive coverage is certainly valuable, it comes at an important cost: the changes in the circumstances of households are conflated with compositional changes in the panel as some households leave the panel due to attrition and other households enter the panel to replace them. Though the results above appear to suggest a robust reduction in poverty between waves 2 and 3, we need to be certain that this is not driven by such compositional changes in surveyed households. As a safeguard against this possibility, we now focus attention on the balanced panel of 3,323 households who we have successfully interviewed in all three waves of the survey. Focusing on this fixed-membership group allows us to be sure that the measured reduction in poverty is not driven by poorer households dropping out of the panel or richer households replacing households who were subject to attrition. Table 9.3.1 presents the dynamics of poverty in the balanced panel.

Table 9.3.1: The evolution of poverty over time in the balanced panel

Year	Poverty rate (%)	N
2014	18.8	3,323
2017	16.2	3,323
2020	8.5	3,323

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

A comparison between Table 9.3.1 and Table 9.2.1 reveals that the results in the balanced panel and the unbalanced panel are reassuringly consistent. In waves 1 and 2 there is a slight downward revision in estimated poverty in the balanced panel as compared with the unbalanced panel. There is a somewhat more pronounced downward revision of the incidence of poverty in 2020 in the balanced panel. Thus in the balanced panel the core insight gained from Table 9.2.1 carries through – there appears to be

a very sharp reduction in poverty over the duration of the panel and the bulk of this poverty reduction takes place between 2017 and 2020.

Proceeding as before we now attempt to understand if in the balanced panel there is any evidence of heterogeneity in the incidence of poverty reduction across households with different migration experiences. Table 9.3.2 presents the relevant results.

Table 9.3.2: Poverty by contemporaneous migration status in the balanced panel

Migration Status	2014	2017	2020
Internal migrant (%)	31.5	25.0	11.6
N	806	713	796
International migrant (%)	10.0	10.0	6.0
N	1339	1416	1565
Non-migrant (%)	20.1	18.4	10.2
N	1178	1193	962

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

A careful comparison between Table 9.3.2 and Table 9.2.2 reveals that the results are not overly sensitive to the choice of balanced or unbalanced panel. For waves 1 and 2 the differences in estimated poverty rates are very minor and never exceed one percentage point. For the final waves of the survey the differences between the balanced and unbalanced panel a little more pronounced. In all of these cases the poverty rates identified in the balanced panel exhibit an even greater decline than the rates identified in the unbalanced panel. Again, the overall incidence of poverty is lowest among the households of international migrants, but the rate of reduction of poverty is highest among the households of internal migrants. We are once again reassured for all migration types' poverty declines sharply over the panel and the bulk of this decline occurs between waves 2 and 3.

9.4 The balanced panel and final migration status

Though the results of table 9.4.1 go a long way towards reassuring us that the reported decline in poverty is not driven by a change in the composition of panel households, the keen reader will observe that the reported migration-type/ year cell sizes change from year to year. This is because between each wave there is some transitioning of households from one migration type to another (this is studied formally in the accompanying chapter on migration transitions). We now conduct a final check to hold

the composition of households within each migration type constant over time. To do this, we plot poverty rates over different years by grouping the households in their final migration status, i.e. the migration status reported in 2020. Table 9.4.1 presents the results.

Table 9.4.1: Poverty by final year migrant status in the balanced panel

Migration Status	2014 (%)	2017 (%)	2020 (%)	N
Internal migrant	30.4	24.6	11.6	796
International migrant	10.9	8.1	6.0	1565
Non-migrant	21.9	22.5	10.2	962

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

These results show that it is not the transition of households from one form of migration to another over the duration of the panel that drives the reduction in poverty rates in different sub-groups. Rather, classifying households by their migration status in 2020 and looking back at the same group of households in earlier waves also generates the result that poverty has fallen over the duration of the panel across all groups and that the decline in poverty is especially rapid between 2017 and 2020.

9.5 When and in which group does poverty decline the most?

The chapter so far has documented a rapid decline in poverty rates across different waves of the survey across all migration classifications. However, an important question remains unanswered: which migration classification has experienced the greatest fall in poverty and which period did this fall occur in? To understand this, rather than looking at the prevalence of poverty, Table 9.5.1 computes the proportionate decline in poverty rates between waves by household migration status for the balanced panel.

Table 9.5.1: Proportionate poverty reductions

Migration Status	2014-2017 (%)	2017-2020 (%)
Overall	13.8	47.3
Internal migrants	20.8	53.7
International migrants	-0.2	40.1
non-migrants	8.8	44.5

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020

The first row of Table 9.5.1 compares the overall level of poverty across waves. Between waves 1 and 2, the incidence of poverty declined by 13.8 percent. While this is impressive, it is clearly inferior to the dramatic

reduction of poverty experienced in the sample between waves 2 and 3: over this interval the incidence decreased by 47.3 percent. This is a truly remarkable and rapid decrease in the incidence of poverty.

The overall decrease is also borne out in the different subgroups by migration status. Internal migrants experienced a considerable decrease in poverty between waves 1 and 2, but an even more substantial decrease in poverty between waves 2 and 3. In fact, the 53.7 percent decrease in the incidence of poverty among internal migrant households is the greatest we document over any period in any subgroup. In the case of international migrants, poverty was relatively low to begin with and increased slightly between the first two waves. Despite relatively low initial poverty in this group, there was nonetheless a strong decline between waves 2 and 3 with the incidence of poverty declining by 40.1 percent over this interval. Non-migrant households experienced a relatively small reduction in the incidence of poverty between waves 1 and 2 (8.8 percent). However, between the last two waves even these households experienced a reduction in the incidence of poverty of 44.5 percent, which is more substantial than that enjoyed by international migrant households, but less than that of internal migrant households.

Chapter conclusions

Poverty in the SDC and RMMRU panel sample has declined sharply between 2017 and 2020. This is suggestive of a remarkable degree of resilience in the capacity of households to meet basic expenditure needs even during the onset of the pandemic. Between 2014 and 2017, poverty only fell marginally, from 18.9 to 16.2 percent. Between 2017 and 2020 there was a rapid decline in the overall incidence of poverty from 16.2 to just 8.5 percent. While this is certainly a remarkable result, it falls short of cleanly identifying the effect of the COVID-19 pandemic on poverty as the benchmark year is 2017 and not 2019. In other words, it is entirely consistent with the data that the gains in poverty reduction occurred in 2018 and 2019 but stalled during the pandemic in 2020. The level of poverty was lowest among international migrant households, only 6.0 percent of which were still afflicted by poverty in 2020. The steepest decline in poverty was among internal migrant households who experienced a 53.7 percent decline in the incidence of poverty between 2017 and 2020. Thus internal migration has enabled households to maintain the highest degree of resilience in the face of the multiple challenges and shocks that have materialised between 2017 and 2020.

CHAPTER X

MIGRANTS' INVESTMENT

Tasneem Siddiqui

This chapter compares the investment patterns of internal, international and non-migrant households using the SDC and RMMRU panel survey. It looks into five major areas of investment. These are, land ownership and land use, contribution to agricultural development, investment in agro-industries, enterprise development, and investment in financial instruments.

10.1 Agricultural production and equipments

Table 10.1.1 compares the investments of international, internal and non-migrant households in agricultural production and equipment. During the Wave 1 and Wave 2 surveys, international migrant households invested more in agricultural production compared to the other two groups. In Wave 3 however, non-migrant households are almost at par with those of international migrants with respect to involvement in agriculture. The data reveal differences in the type of modern equipment used across households grouped by migration status. 28 percent of the international migrant households and 30 percent of the non-migrant households used better quality seeds. Internal migrant households are less likely to use better quality seeds (24 percent). Part of this difference is explained by the extent to which households are involved in agriculture. 25 percent of international migrant households, 24 percent of non-migrant households, and 19 percent of internal migrant households use an irrigation pump.

22 percent of international migrant households and 20 percent of the non-migrant households reported using power tillers, as compared with only 15 percent of internal migrants. The usage of tractors is highest among international migrant households at 22 percent. 20 percent of non-migrant and 15 percent of internal migrant households used tractors. Similar patterns are observed in the use of rice threshing mills and portable rice mills. Among the different investment categories, agricultural investments appear to be the least affected by COVID-19.

Table 10.1.1: Possession of agricultural equipment by migration type and gender

Agricultural Equipment	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Seeds	29.0	24.8	28.4	23.9	18.8	23.5	30.1
Fertilizer	29.1	25.9	28.7	24.6	24.0	24.5	31.0
Irrigation Pump	25.8	21.2	25.2	19.2	14.6	18.9	24.0
Power Tiller	22.5	15.9	21.7	15.1	12.5	14.9	19.6
Tractor/Mahinda	22.6	16.4	21.8	15.2	12.5	15.0	19.8
Dhan Marai Machine	21.2	12.8	20.1	14.8	11.5	14.6	19.0
Portable Rice Mill	18.6	11.1	17.6	12.8	11.5	12.7	16.3
Others	2.3	.8	2.1	2.7	2.1	2.6	1.9
Total no. of cases	**2352**	**359**	**2711**	**1201**	**96**	**1297**	**1928**
	Wave 2						
Seeds	33.0	23.6	31.3	37.0	43.2	37.8	39.8
Fertilizer	33.3	23.8	31.5	36.7	43.8	37.7	40.3
Irrigation Pump	23.6	12.6	21.5	25.3	30.2	26.0	25.1
Power Tiller	14.5	6.6	13.0	18.4	23.6	19.1	17.3
Tractor/Mahinda	12.0	8.0	11.2	8.0	12.0	8.5	11.0
Dhan Marai Machine	12.3	7.7	11.4	13.6	15.6	13.9	12.5
Portable Rice Mill	5.7	3.3	5.2	5.1	4.2	5.0	6.1
Others	.3	.2	.3	.8	1.0	.8	1.7
Total no. of cases	**2403**	**547**	**2950**	**1230**	**192**	**1422**	**1731**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Disaggretating the data by more and less climate change affected areas reveals interesting results. Investments in agricultural production and investments in equipment seem rather low in climate change affected areas. Only 5 percent of international, 2 percent of internal and 4 percent of non-migrant households of Shariatpur; and 7 percent of international, 11 percent of internal and 8 percent of non-migrant households of Satkhira used high yeild seeds, whereas 52 percent of international, 32 percent of internal and 42 percent of non-migrant households in Tangail, 41 percent of both internal and international, and 43 percent of non-migrant households of Gazipur used a high yeild variety of seeds. The use of fertilizer in agricultural production is also low in Satkhira and Shariatpur. Fewer than 3 percent of all types of households from Shariatpur and Sunamganj use irrigation pumps. Only 1 percent of households in Satkhira and 2 percent households of Shariatpur use a power tiller. Again, the use of tractors is very low in Satkhira and Shariatpur (1 percent and 3 percent

respectively). The use of paddy threshing machines is less than 2 percent in both of these areas. However, use of agricultural equipment is also low in a few other areas which traditionally use other methods of cultivation. Khagrachari is a good example. 51 percent of all types of households of Khagrachari use better quality seeds, 62 percent use fertilizer, but only 11 percent of them use power tillers, 5 percent use tractors, 6 percent use paddy threshing machines, and 2 percent use a portable rice mill. Dohar is another area which less agriculturally intensive than average. Fewer than 6 percent of all types of households use high yeild seeds, fertilizer, irrigation pumps, power tillers, tractors or paddy threshing machines.

10.2 Agro-based farming

We investigate two categories of agro-based farming, poultry and fisheries.

Poultry: The devastating COVID-19 pandemic hit in 2020. Every migration group contained households who suffered income losses related to the pandemic. This has a bearing on their ability to invest. The SDC and RMMRU data reveal that compared to the previous waves the overall percentage households investing in poultry decreased in Wave 3. International migrant households are the exception where participation in poultry decreased by 1 percentage point. In Wave 2, 48 percent of international migrant households participated in poultry and in Wave 3 this came down to 47 percent. 58 percent of the internal migrant households had investments in poultry in Wave 2 but in Wave 3 this came down to 56 percent. The drop in poultry farming is more evident in the case of non-migrant households. During Wave 2, 54 percent of households took part in poultry farming, while in Wave 3 this came down to 48 percent households.

Khagrachari is one of the hill districts of Bangladesh where members of ethnic minority communities were interviewed. 62 percent of internal migrant households and 79 percent of non-migrant households of Khagrachari are involved in chicken rearing. 63 percent of international migrant households, 61 percent of internal and 68 percent of non-migrant households of Barishal are involved in poultry farming. Thus, it is difficult to establish a linkage between poultry farming and climate change. In Satkhira, 67 percent of the international, 68 percent of internal and 50 percent of non-migrant households are involved in poultry. In Satkhira, this is mostly duck rearing. Chicken rearing requires open space, whereas duck rearing requires water bodies. In water abundant Satkhira, duck

rearing is thus more widely adopted. In Dohar and Munshiganj, the prevalence of poultry farming is low. Only 21 percent of the former and 26 percent of latter are involved in poultry.

Table 10.2.1: Ownership of poultry by migration type and gender

Ownership of poultry	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
No	52.3	59.3	53.2	44.4	39.6	44.0	52.0
Yes	47.7	40.7	46.8	55.6	60.4	56.0	48.0
Total no. of cases	**2336**	**359**	**2695**	**1199**	**96**	**1295**	**1923**
	Wave 2						
No	50.9	59.5	52.5	42.0	42.7	42.1	46.5
Yes	49.1	40.5	47.5	58.0	57.3	57.9	53.5
Total no. of cases	**2405**	**546**	**2951**	**1231**	**192**	**1423**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Animal husbandry: During Wave 3, 28 percent of the international, 37 percent of the internal and 33 percent of the non-migrant households were involved in animal husbandry. In comparison to Wave 2, the participation rates of all types of household in animal husbandry decreased. For international migrant households the rate reduced by 1 percentage point, for internal migrant and non-migrant households, it reduced by 5 percentage points. During Wave 3, many of the districts were inundated by consecutive floods. This may have contributed to the decrease.

Involvement in animal husbandry differs significantly by district. Lakshmipur is an area affected by flash floods and monsoon floods. In Shariatpur and Munshiganj the prevalence of animal husbandry is low. In Shariatpur, 5 percent of internal migrant households and 4 percent of non-migrant households participate in animal husbandry. In Munshiganj only 8 percent of the international, 3 percent of internal, and 13 percent of non-migrant households participate in animal husbandry. In contrast, animal husbandry is very common in areas which are not affected by climate change in a major way. Surprisingly, animal husbandry is less common in Chattogram. Only 16 percent of households there are involved in animal husbandry, even though the consumption of been if very high in Chattogram. In Mymensingh, 63 percent of international, 56 percent of the internal, and 56 percent of the non-migrant households take part in animal husbandry. 40 to 60 percent of the households of Khagrachari, Gazipur and Rangpur are involved in animal husbandry.

Table 10.2.2: Ownership of domestic animals by types of migration and gender

Ownership of animals	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
No	72.9	66.6	72.1	63.6	59.4	63.3	67.4
Yes	27.1	33.4	27.9	36.4	40.6	36.7	32.6
Total no. of cases	**2338**	**359**	**2697**	**1200**	**96**	**1296**	**1923**
	Wave 2						
No	72.0	68.1	71.3	59.2	53.1	58.4	62.5
Yes	28.0	31.9	28.7	40.8	46.9	41.6	37.5
Total no. of cases	**2405**	**546**	**2951**	**1231**	**192**	**1423**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Investment in fish-culture: In comparison to Wave 1, in Wave 2 participation in fish-culture increased significantly. In the 2014 sruvey, 5 percent of all types of households invested in fish-culture. In 2017, this increased to 13 percent. However in 2020 it reverted down 6 percent.

Disaggregating the data by household migration status shows that around 6 percent of international, 6 percent of internal, and 5 percent of non-migrant households are involved in fish-culture in Wave 3. In drought-prone Chapainawabganj only 1 percent of the households are involved in fish-culture. In Munshiganj, only 2 percent of the international, 7 percent of internal, and 4 percent of non-migrant households are involved in fish culture. 16 percent of the international, and 13 percent each for internal and non-migrant households of Cumilla take part in fish-culture. Fish culture is very well established in Cumilla in part due to early exposure to the BARD project.

10.3 Enterprise development

In general, the rate of investment in business enterprise is very low. The level of investment remains the same during Waves 2 and 3 of the survey. Very few new investments were made preceding the Wave 3 survey. Only 2 percent of all types of households invested in different enterprises. Enterprise includes textile factory, spice mills, saw mills, hotels, restaurants, etc. In this respect the highest number of investments came from international migrant households. 38 international migrant households, 27 non-migrant households and 22 internal migrant households invested in enterprise

development. This represents a very marginal increase compared to Wave 2 when 1 percent of all types of household invested in enterprises. In Wave 3, the rate of enterprise investment remained roughly constant.

Table 10.3.1: Investment in Enterprises by migration type in Wave 2 and Wave 3 surveys

Investment in Enterprise	Wave 2 survey (%)	Wave 3 survey (%)
International migrants	1.4 (40)	1.4 (38)
Internal migrants	1.1 (15)	1.7 (22)
Non-migrants	1.9 (33)	1.4 (27)
Percentage of Total	1.4 (88)	1.5 (87)
Total Positive Response	176	174
Total number of Households	100% (6133)	100% (5906)

Source: SDC and RMMRU Panel Survey 2017 and 2020

Table 10.3.2: Investment in mills and factories by migration type and gender

Enterprise	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Handloom/textile factory	.4	0.0	.3	.3	1.0	.4	.5
Spice mill	.1	0.0	.1	.1	0.0	.1	.2
Saw mill	.3	0.0	.3	.2	0.0	.2	.1
Restaurant	.1	.3	.1	.2	0.0	.2	.1
Roadside food hotel	.2	0.0	.2	.2	1.0	.2	.3
Roadside food outlet	.2	.3	.2	.3	0.0	.2	.1
Mobile recharge shop	.3	.6	.4	.5	0.0	.5	.4
Others	.3	0.0	.3	.3	0.0	.3	.3
Total no. of cases	**2327**	**358**	**2685**	**1199**	**96**	**1295**	**1918**
	Wave 2						
Handloom/textile factory	.2	.4	.2	.2	.5	.2	.4
Fish/poultry feed factory	0.0	0.0	0.0	.1	0.0	.1	0.0
Ice factory	.1	0.0	.1	0.0	0.0	0.0	.1
Plastic recycling factory	0.0	0.0	0.0	.1	0.0	.1	0.0
Large rice mill	.1	0.0	.1	0.0	1.0	.1	.3
Saw mill	.1	0.0	.1	.1	0.0	.1	.1
Roadside food hotel	.0	0.0	.0	.1	0.0	.1	.1
Roadside open food outlet	.0	0.0	.0	.1	0.0	.1	0.0
Others	1.0	.7	.9	.5	1.6	.6	1.3
Total no. of cases	**2405**	**547**	**2952**	**1230**	**192**	**1422**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Business enterprises are less likely to be situated in climate change affected areas compared to areas which are less affected by climate change. Out of a total of 87 enterprises 6 are situated in Satkhira. One of the enterprises is a handloom factory and the rest are different types of food outlets. 6 enterprises have been reported in Lakshmipur: 1 spice mill, 1 saw mill and 2 food outlet and 2 mobile phone recharge shop. In Munshiganj also there are 6 enterprises. Tangail and Narayanganj are less affected by climate change. Major business enterprises are located in these two areas, as reported in the data. Tangail is known for handloom Saris. Households predominantly invest in handloom textiles. In Narayanganj 4 households also report investing in textile factories, 1 established a saw mill and others opened food outlets (mobile recharge shops, spice mills, restaurant and road side eateries).

10.4 Transportation

Investment in transportation increased for all three groups of household between Waves 2 and 3. This is despite the onset of movement restrictions imposed in response to the COVID-19 pandemic. During Wave 2, 4 percent of international migrant households invested in transportation whereas in Wave 3 this doubled to 8 percent. In the case of internal migrants, investment in transportation increased modestly from 5 percent in Wave 2 to 8 percent in Wave 3. Non-migrant households increased transportation investment from 7 percent to 9 percent over the same period. Households have invested in rickshaws, rickshaw-vans, *nosimon*, *korimon*, *tempu*, CNG, EZbike, cars, microbuses, trucks.

Table 10.4.1: Investment in transportation by migration type in Wave 2 and Wave 3 surveys

Investment in Transportation	Wave 2 survey (in %)	Wave 3 survey (in %)
International migrants	4.2 (124)	6.8 (145)
Internal migrants	4.7 (110)	8.4 (107)
Non-migrants	6.6 (115)	8.6 (167)
Percentage of Total	5.7 (349)	7.7 (419)
Total number of Households	**100% (6133)**	**100% (5936)**

Source: SDC and RMMRU Panel Survey 2017 and 2020

In Wave 1 more households invested in *Nosimon* and *Korimon*. By Wave 2 *Nosimon* and *Korimon* were already replaced by other forms of vehicles.

This is also true between Wave 2 and Wave 3. Investments in *tempu* also reduced between Wave 2 and Wave 3. During Wave 3 more investments were made in EZbikes which have become the most popular mode of transportation in rural areas.

Table 10.4.2: Investment in transportation by migration type and gender

Type of transport	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Rickshaw/van	.9	3.1	1.2	2.0	2.1	2.0	2.5
Nosimon/korimon	.2	.8	.3	.2	0.0	.2	.5
Tempu	.0	0.0	.0	.3	0.0	.2	.2
Cng/baby taxi	1.0	1.7	1.1	.4	0.0	.4	.9
EZbike (battery run)	1.5	4.7	1.9	1.6	3.1	1.7	2.2
Boat	1.7	0.0	1.4	3.2	1.0	3.1	1.6
Microbus/car	.1	0.0	.1	.3	0.0	.2	.3
Bus/truck	.5	0.0	.4	.2	0.0	.2	.3
Others	**.3**	**0.0**	**.2**	**.3**	**0.0**	**.3**	**.4**
Total no. of cases	**2330**	**358**	**2688**	**1200**	**96**	**1296**	**1914**
	Wave 2						
Rickshaw/van	.5	3.7	1.1	2.2	3.6	2.4	2.7
Nosimon/korimon	.1	.4	.1	.2	0.0	.1	.1
Tempu	.1	.2	.1	0.0	0.0	0.0	.1
Cng/baby taxi	.5	.9	.6	.5	1.0	.6	.3
EZbike (battery run)	.7	2.7	1.0	1.9	.5	1.8	1.2
Boat	.9	.4	.8	2.3	1.6	2.2	1.0
Microbus/car	0.0	0.0	0.0	.2	.5	.2	.1
Bus/truck	.1	.2	.1	.1	0.0	.1	.2
Others	.2	.5	.2	.4	.5	.4	1.0
Total no. of cases	**2404**	**547**	**2951**	**1231**	**192**	**1423**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

There are district-wise variations in transportation investments. In severely climate change affected Satkhira, transportation is a major difficulty so that substantial investments in transportation are to be expected. Motorcycles are a major mode of transportation in the area. International and non-migrant households of Tangail tended to invest in EZbikes. Households of Khagrachari, Chattogram, Barishal, Faridpur and Gazipur hardly invested in transportation.

10.5 Shops

Table 10.5.1 provides the number of investments made by migrant and non-migrant households in different types of shops during Wave 3 of the survey. These include roadside shops close to the homestead, shops in local marketplaces as well as in major *upazila* or district level towns. 12 international and 12 non-migrant households have invested in shops. Investment in shops is the highest among all types of investment made by migrant and non-migrant households. The majority of shops are located in local market places, followed by roadside shops. Investment from our sample at in shops operating at the district-level is very low. A comparison among international, internal and non-migrant households shows that around 12 percent of international and non-migrant households and 10 percent of internal migrant households invested in shops.

Table 10.5.1: Investment of migrant and non-migrant household in shops

Investment in shop	Wave 2 survey (%)	Wave 3 survey (%)
International migrants	10.4 (310)	12.3 (332)
Internal migrants	6.6 (94)	10 (129)
Non-migrants	12.2 (212)	11.8 (229)
Percentage of Total	10.0 (616)	11.6 (690)
Total number of Households	**6133 (100%)**	**5936 (100%)**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Investment in shops of internal migrant households increased from 7 percent to 10 percent between Waves 2 and 3. In the case of international migrants, it increased from 10 to 12 percent. For non-migrant households the percentage remains the same. There is not much difference between investment patterns in shops when the data are divided into climate change affected and less climate change affected areas (Annex 9).

10.6 Financial instruments

Financial literacy is an important indicator of social and economic development. This section compares the involvement of migrant and non-migrant households with different financial instruments. Financial instruments include bank account, savings, insurance, etc. Table 10.6.1 gives an idea of the level of financial literacy of migrant and non-migrant households.

Bank accounts: The table shows that for all three groups of household,

the likelihood of holding a bank account increased significantly between Wave 2 and 3. By 2020, 54 percent of the international migrant households, 31 percent of internal migrant households, and 27 percent of non-migrant households possess a bank account. During Wave 2, the percentage of individual households where one or more member held a bank account was 28 percent for international migrants households, 15 percent for internal migrant households, and 13 percent for non-migrant households. This is a substantial increase. This positive trend is visible in the case of both male and female migrants. In the case of male international migrants, it increased from 28 percent to 53 percent, while for female international migrants it increased from 26 percent to 56 percent. The high percentage of international migrants possessing bank accounts can be explained by their need to transfer remittances.

Table 10.6.1: Types of savings by migration type and gender

Type of savings	Wave 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Insurance	14.6	17.5	15.0	10.9	5.2	10.5	8.1
Account in bank	53.2	55.7	53.6	30.5	36.5	30.9	26.8
Monthly DPS	11.4	11.4	11.4	10.0	10.4	10.0	9.7
Fixed deposit	1.0	.6	1.0	.8	1.1	.8	.7
NGO savings	23.0	30.4	24.0	32.1	37.5	32.5	27.7
Friends, relatives and neighbours	1.3	1.7	1.3	5.5	3.1	5.3	2.3
Others	.9	.3	.8	.5	1.0	.5	.3
Total no. of cases	**2341**	**359**	**2700**	**1200**	**96**	**1296**	**1922**
	Wave 2						
Insurance	15.4	13.3	15.0	11.9	7.8	11.3	9.7
Account in bank	28.4	25.6	27.9	15.2	9.9	14.5	12.9
Monthly DPS	10.0	6.6	9.3	11.1	5.7	10.4	8.1
Fixed deposit	1.1	.9	1.1	.8	1.0	.8	.6
NGO savings	14.0	17.4	14.6	33.7	36.5	34.0	26.4
Friends, relatives and neighbours	.7	2.0	.9	3.1	2.1	3.0	1.6
Others	.2	.7	.3	.5	.5	.5	.3
Total no. of cases	**2406**	**547**	**2953**	**1230**	**192**	**1422**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Savings: These families also have other forms of savings, such as savings with the NGOs, group savings with friends and neighbours, DPSs, fixed deposits, etc. 24 percent of international migrant households, 33 percent of internal migrant households, and 28 percent of non-migrant households

are members of different NGOs in addition to having their own savings. Around 10 percent of all three groups of households have invested in a monthly DPS with a bank. In Wave 2 male migrant households were more involved in DPS programmes compared to female migrant households. In Wave 3 the percentage of male and female participants became similar. Group savings with friends and neighbours are quite low and their prevalence has reduced over the years. 15 percent of international migrant, 11 percent of internal migrant, and 8 percent of non-migrant households have purchased different insurance packages. For international migrants, the percentage remains roughly constant in two waves whereas for internal and non-migrant households it has fallen slightly.

Among the three groups, the participation of international migrants is highest in almost all types of financial instruments. Clearly, migration has increased the number of households participating with formal financial institutions.

Chapter conclusions

This chapter demonstrates that international migrant households' investment in agriculture, agro-based farming, enterprise development, transportation, and shops either remained static or reduced between 2017 and 2020. In the case of internal migrants the downward trend is more pronounced. Compared to Wave 2, more non-migrant households have been able to increase their investments in agriculture in Wave 3.

Participation in enterprise development has been low throughout successive survey waves for all three groups of households. This is also true in the Wave 3 data. The exception is investment in transportation business which has experienced a small increase. Interestingly the type of vehicle where households have invested has changed. Earlier investments were on *tempu*, *nosimon*, etc. but this time a disproportionate amount of investment has flowed to EZbikes.

CHAPTER XI

GENDER DIFFERENCES IN MIGRATION

Ananta Neelim

Achieving gender equality is one of the United Nation's seventeen Sustainable Development Goals (goal 5[16]). According to the World Bank, in 2019 female labour force participation was around 38.4 percent in Bangladesh, much lower than 57.2 percent for males. While the gender gap in labour force participation has decreased substantially over the years (from 45.8 percentage points in 2000 to 18.7 percentage points in 2019), still there is a long way to achieve gender parity in labour force participation. Similarly, according to Rahman & Hasan (2019) the gender wage gap in Bangladesh stood at 12.5 percent in 2016, which is lower than the 26 percent gap in 2009 that was reported in Ahmed & Maitra (2015). Against this backdrop, this chapter provides an overall picture of migration and earnings outcomes across gender and in doing so presents descriptive evidence of how migration provides an avenue through which gender equality in earnings can be achieved.

The chapter begins with an account of the overall macro trends in international migration by gender in Bangladesh (section 11.1)[17], followed by the socio-economic profile of male and female migrants (section 11.2) based on the SDC and RMMRU panel dataset. Section 11.3 investigates occupation and destination choices across genders over time. Section 11.4 to 11.6 investigates gender gaps in earnings, migration costs, returns to and financing of migration. Section 11.7 provides concluding remarks.

11.1 Migration and gender: overall trends

At be beginning of the decade, in 2011, females accounted for 5.4 percent of the total 0.56 million of the short-term international migrants from Bangladesh[18]. The number of female migrants as well as their share of the

16 Goal 5: Achieve gender equality and empower all women and girls

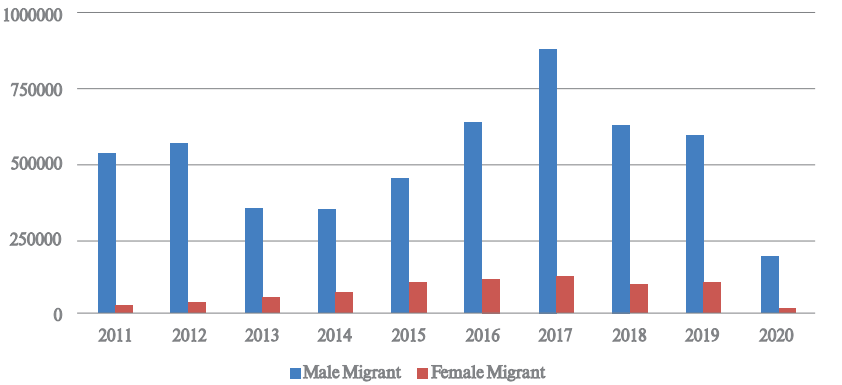
17 Comparable data for internal migration is not available for analysis.

18 RMMRU (2012) http://www.rmmru.org/newsite/wp-content/uploads/2020/01/Migration-Trends-Report-2012.pdf

total international migration increased as we moved to the middle of the decade (Figure 11.1.1). From Figure 11.1.2, it is observed that between 2011-2016 female migration grew by double digits every year. The year 2017 recorded 121,925 new female international migrants, the highest number for a year in that decade. In terms of females as a percent of total international migrants, the highest value was 18.7 percent, which was recorded in 2015. Since 2016, the growth in female migration has decreased, with negative growth exhibited in 2017-18 and 2019-20. To put this in context, overall international migration rates have been decreasing since 2017-18. Further, the change in female migration rates has been generally better than that of males before the arrival of COVID-19 (Figure 11.1.2). Female migration rates dropped by 79 percent between 2019-20, which is larger than the 67 percent drop posted by male migrants.

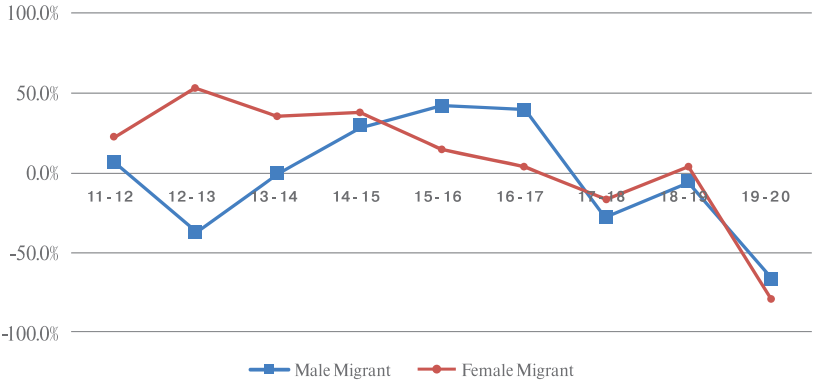
In response to increased female international migration rates, the second wave of the SDC and RMMRU panel sampled households from regions that were female migration pockets. This was done to address the lack of a sufficient number of female international migrants to conduct rigorous statistical analysis. In the 2017 (Wave 2) 16.2 percent of the surveyed international migrants were females. In 2020 (Wave 3), this number was slightly lower at 11.6 percent mostly owing to the higher rates of return among female migrants.

Figure 11.1.1: Breakdown of new international migration by year and gender-based on BMET data



Source: Prepared from BMET data

Figure 11.1.2: Growth rate of new international migration by year and gender-based on BMET data



Source: Prepared from BMET data

11.2 Socio-economic breakdown of male and female migrants

We start by looking at international migrants. Male and female international migrants in our sample differ significantly in terms of their profiles. First, from Table 11.2.1, we can observe that female international migrants were on average 0.9 years older than their counterparts ($p < 0.01$, T-test). Second, in terms of marital status, female international migrants were less likely to be single (17.2 percent vs 42.5 percent) and more likely to be separated/divorced/widowed (32.4 percent vs 0.5 percent). Using a $x^2 x^2$ test, we can reject the null hypothesis that male and female samples come from the same distribution in terms of marital status ($p < 0.01$). Third, male international migrants were less likely to be illiterate (9.2 percent vs 26.1 percent) and more likely to hold some level of post primary education (64.0 percent vs 35.0 percent). Again, a $x^2 x^2$ test rejects the null hypothesis that the two samples are drawn from the same underlying distribution in terms of education status ($p < 0.01$). Finally, female migrants tend to come from poorer households (Annually Taka 61,434 vs Taka 86,781, $p < 0.01$, T-test).

Turning to internal migrants, we find that the differences between male and female migrants are not as stark. The average difference in age across gender is only 0.4 years, which is not statistically significant. Similarly, the probability of finding individuals with single marital status is roughly

the same across genders. However, differences arise in the married and widowed/divorced/separated categories. Female internal migrants are more likely to be widowed (32.4 vs 0.6 percent) and less likely to be married (62.2 vs 38.3 percent) compared to male internal migrants. In terms of overall differences in marital status, a x^2 x^2 test rejects the null that the two gender-based samples come from the same distribution. On the other hand, in terms of education, the differences across gender are not statistically significant (p = 0.223, x^2 x^2 test). Finally, we also find that the average household per-capita income of households from which male and female migrants originate are not statistically significant (p = 0.159. T-test).

Table 11.2.1: Profile of international and internal migrants across gender

Characteristics	International			Internal		
	M	F	p-value	M	F	p-value
Age (at migration)	25.1	26	< 0.01	23.6	23.2	0.47
Marital Status						
Single(%)	42.5	17.2	< 0.01	37.2	39.4	< 0.01
Married(%)	56.8	50.7		62.2	38.3	
Widow(%)	0.5	32.4		0.6	32.4	
Education						
No Schooling(%)	9.2	26.1	< 0.01	13.1	17.1	0.22
Primary Schooling(%)	26.8	38.9		29.6	30.3	
Secondary Schooling(%)	61.4	34.7		49	45.5	
Higher Schooling (%)	2.6	0.3		8.3	7.1	
Annual HH Income per-capita (BDT)	86781	61434	< 0.01	40333	37184	0.16

Source: SDC and RMMRU Panel Survey 2014, 2017 and 2020
Note: Only migrants who migrated 2010 onwards were included

To summarise, we find that both female internal and international migrants tend to come from more disadvantaged backgrounds relative to male migrants. Whether migration provides an avenue to allow these female migrants to improve their fortunes is dependent on the income improvements secured by migrants relative to the costs incurred by them in the migration process. We investigate that in sections 11.4-11.6.

11.3 Destination and occupation choice of migrants

In this section, we investigate the destination and occupation choices of male and female migrants from Wave 2 and 3 of the survey. We start

with international migrants. First, the job choice of female international migrants is more homogenous relative to male migrants. From Table 11.3.1, we observe that the share of the top-three occupations for female international migrants was 88.7 percent in Wave 2 and 81.5 percent in Wave 3 of the survey. On the other hand, the share of the top-three occupations of male international migrants is around 30 percent of total jobs in both Wave 2 and Wave 3 of the survey. In terms of destination, we observe a similar pattern. The choice of destination for female international migrants is a lot narrower than that of male international migrants. From Table 11.3.1, across both of these survey waves, we observe that the share of top-five destinations for female migrants was close to 90 percent. In contrast, the share of top-five destination for male international migrants was less, at around 70 percent.

Table 11.3.1: Occupation choice across male and female migrants

International Migrant			**Internal Migrant**		
Male					
	Wave 2	**Wave 3**		**Wave 2**	**Wave 3**
Construction Worker	14.2	12.8	Agri Labour/Day labour	11.2	12.8
Factory Worker	5.5	8.2	Construction Worker	11.5	8.2
Agri Labour/Day labour	9.3	10.0	Garments Workers	10.4	
			Factory Worker		9.3
Share of top 3	29.0	31.0	Share of top 3	33.1	30.3
Female					
	Wave 2	**Wave 3**		**Wave 2**	**Wave 3**
Domestic Work/ Housekeeper	76.2	63.0	Garments Worker	64.3	46.9
Cleaner	4.3	13.5	Factory Worker	8.8	18.4
Garment's Worker	8.2	5.0	Day Labour	5.7	6.12
Share of top 3	88.7	81.5	Share of top 3	78.8	71.4

Source: SDC and RMMRU Panel survey 2017 & 2020
Note: Only migrants who migrated 2014 onwards were included

While the overall share of the top-three occupations and top-five destinations did not change drastically between Wave 2 and Wave 3 for either male or female international migrants, some observations are important to note. First, in Wave 3, the reliance on Saudi Arabia as the top destination has increased. In Wave 3, Saudi Arabia accounts for about 30 percent and 40 percent of male and female international migrants respectively. This is a 21 percent increase for males and a 72 percent

increase for female migrants over the Wave 2 numbers. Second, for female international migrants, the share going to Lebanon and Jordan has declined from 38.5 percent to 21.1 percent in Wave 3.

Table 11.3.2: Destination choice across male and female migrants

International Migrant			Internal Migrant		
Male Migrants					
Country	Wave 2	Wave 3	City	Wave 2	Wave 3
Saudi Arabia	26.4	32.1	Dhaka	61.1	61.4
UAE	17.2	16.3	Chattogram	14.8	10.2
Oman	9.7	8.5	Gazipur	2.53	3.5
Malaysia	10	9.6			
Italy	8.5	6.6			
Share of top 5	71.9	73.1	Share of top 3 Destination	78.4	75.1
Female Migrants					
Country	Wave 2	Wave 3	City	Wave 2	Wave 3
Saudi Arabia	24.0	41.3	Dhaka	64.0	51.7
UAE	18.2	22.7	Chattogram	18.3	31.6
Jordan	20.8	14.8	Gazipur	8.0	0.0
Oman	7.2	5.4			
Lebanon	17.7	6.3			
Share of top 5	87.9	90.5	Share of top 3 Destination	90.3	83.3

Source: SDC and RMMRU Panel survey 2017 & 2020
Note: Only migrants who migrated 2014 onwards were included

Turning to internal migrants, a similar pattern emerges when compared to that of international migrants in terms of occupation choice. The share of the top-three occupations for male migrants accounted from between 33.1 percent and 30.3 percent in Wave 2 and Wave 3 of the survey respectively. For female internal migrants the share of the top-three occupations ranged between 71.4 percent and 78.8 percent over the same period. On the other hand, in terms of destination choice, gender differences in destination were not very stark. The share of the top-three destinations for males ranged from 75.1 to 78.4 percent and for females it was 83.3 to 90.3 percent across Wave 2 and Wave 3 of the survey.

Finally, occupation and destination choice has been roughly consistent for male internal migrants between Wave 2 and Wave 3. For females, fewer internal migrants are going to Dhaka and Gazipur, while more are going to Chattogram. However, it is important to note that the number of female internal migrants have drastically reduced (by about a third)

in Wave 3 compared to Wave 2 and as a result the sample size in Wave 3 may not be very reliable.

11.4 Migration and income

This section investigates the dynamics of the gender gap in income across three waves of the survey. To establish a baseline group, we focus on individuals who were non-migrants. For male individuals who fit this description, the average monthly real income was Taka 7,239 in Wave 1, Taka 7,817 in Wave 2 and Taka 8,791 in Wave 3 (Table 11.4.1). Thus, between Wave 1 and Wave 3 real monthly income for this group increased by 21 percent. On the other hand, for female non-migrant individuals the average monthly real income was Taka 5,846 for Wave 1, Taka 3,234 for Wave 2 and Taka 4,184 in Wave 3. Therefore, between Wave 1 and Wave 3 of the survey real monthly income decreased by 28 percent for non-migrant females. The unadjusted gender pay gap in Wave 1 of the survey was 19 percent. That is, on average, non-migrant women earned 79 percent of what non-migrant men earned. This increased to 52 percent in Wave 3.

Table 11.4.1: Income and gender gap in income across migration status

Wave	Internal Migrant			International Migrant			Non-Migrant		
	F	M	Gap (%)	F	M	%	F	M	%
1	5919	9974	41	15816	36766	57	5846	7239	19
2	7102	9944	29	15045	26908	44	3234	7817	59
3	9577	10275	7	14323	21524	33	4184	8791	52
Change between 1 & 3 (%)	62	3		-9	-41		-28	21	

Source: SDC and RMMRU Panel survey 2014, 2017 & 2020

Now turning to international migrants, we see that on real income terms, male migrants earned Taka 36,766 in Wave 1, which reduced to Taka 26,908 in Wave 2 and further reduced to Taka 21,524 in Wave 3. The overall reduction in monthly real income across Wave 1 and Wave 3 was 41 percent. On the other hand, female international migrants had relatively stable incomes across waves. In Wave 1, monthly real income was Taka 15,816, which reduced to Taka 15,045 and 14,323 in Wave 2 and Wave 3 respectively. Across the three waves, female international migrants only saw a decline in real monthly income of 9 percent. It is important to note that these drops in income maybe an artefact of the

way we are accounting for inflation in our sample, which is based on Bangladeshi inflation figures. Between Wave 1 and Wave 3 (2014-2020) we assumed inflation to be 38 percent, which is significantly lower than the inflation rates in countries that Bangladeshis migrate to. Finally, the unadjusted gender gap during this period has decreased significantly from 57 percent in Wave 1 to 33 percent in Wave 3. We discuss the issue of gender differences in real income in international migration in more detail in section 11.5.

Next, we investigate income patterns of male and female internal migrants across our survey waves. First, male internal migrants recorded a small increase in real income of 3 percent: from Taka 9,974 in Wave 1 to Taka 10,275 in Wave 3. Second, female internal migrants saw large increases in real incomes. In Wave 1, the average real monthly income was Taka 5,919, which increased to Taka 9,577 in Wave 3 (an increase of 62 percent). As a result, the gender gap in earnings for internal migrants has decreased between 2014 and 2020. In Wave 1, the gender gap in earnings was 41 percent, which reduced to 29 percent in Wave 2 and reduced further to 7 percent in Wave 3.

To summarise, we find that migration (particularly internal migration) provides an avenue for females to increase their earnings significantly and more importantly, to close the gender gap in earnings. In contrast, females who did not undertake migration in our sample saw a decrease in real income and an increase in the gender gap in earnings.

11.5 Cost and returns to new international migration

In this section, we investigate the costs and returns to new international migrations between Wave 2 (2014-2017) and Wave 3 (2017-2020) across genders. We focus on two countries (Saudi Arabia and UAE) for the gender comparison because of data limitations imposed by low numbers of female migration to other countries. We also limit our analysis to individuals who undertook migration for the first time during this period. Cohort 1 refers to new migrants in Wave 2 and cohort 2 refers to new migrants in Wave 3. Focusing on Saudi Arabia, we find that the average cost of migration for cohort 1 males was Taka 393,221 and for cohort 1 females was Taka 85,663 (Table 11.5.1). For cohort 2 migrants in Wave 3, there was a significant decrease in the real cost of migration (migration costs rose at a lower rate the inflation rate of 15 percent across Wave 2 and Wave 3). Cohort 2

male migrants saw the real cost of their migration drop by 10.2 percent (p = 0.05) relative to their cohort 1 counterparts. The cost of migration for cohort 2 females was 4.9 percent lower than cohort 1 females. However, this difference was not statistically significant (p = 0.76). As a result, the relative cost of migration to Saudi Arabia for males decreased compared to females in cohort 2, i.e., the average cohort 1 male migrant paid 4.6 times more in migration costs than female migrants. This figure dropped to 4.2 times in cohort 2. Turning to UAE, we find that the real costs of migration did not substantially change across the two survey waves.

Table 11.5.1: Cost and returns to international migration across Wave 2 and Wave 3

Description			Cohort 1	Cohort 2	Change (%)
Saudi Arabia	Cost	Male	393221	353028	-10.2 (0.05)
		Female	85663	81507	-4.9 (0.76)
	Income	Male	362268	277199	-23.5 (< 0.01)
		Female	207595	198368	-4.4 (0.38)
	Remittance	Male	187560	150060	-20.0 (<0.01)
		Female	105552	126583	19.9 (0.10)
	Remittance as a part of income	Male	0.5	0.6	4.6
		Female	0.5	0.6	25.5
	Cost Recovery	Male	25.2	28.2	12.2
		Female	9.7	7.7	-20.7
	Male vs Female Ratio	Cost	4.6	4.3	
		Income	1.7	1.4	
		Remittance	1.8	1.2	
UAE	Cost	Male	289326	286663	-0.9 (0.91)
		Female	99456	103200	3.8 (0.85)
	Income	Male	301358	232730	-22.8 <0.01)
		Female	233148	199446	-14.5 (0.26)
	Remittance	Male	165203	132484	-19.8 (0.01)
		Female	131222	112826	-14.0 (0.26)
	Remittance as a part of income	Male	0.6	0.6	3.8
		Female	0.6	0.6	0.5
	Cost Recovery	Male	21.0	26.0	23.5
		Female	9.1	11.0	20.7
	Male vs Female Ratio	Cost	2.9	2.8	
		Income	1.3	1.2	
		Remittance	1.3	1.2	

Source: SDC and RMMRU panel survey 2017 and 2020

For example, although male migration costs decreased by 0.9 percent and female migration costs increased by 3.8 percent across cohorts, these differences are not statistically significant ($p > 0.1$). Therefore, the cost ratio across gender also did not change between the two cohorts.

Next, we look at income across gender. From Table 11.5.1, cohort 1 male migrants to Saudi Arabia earned an average annual real income of Taka 362,268. The annual real income of cohort 2 migrants was lower at Taka 277,119 (23.5 percent decrease, $p < 0.01$)). In other words, there was a 23.5 percent decrease in inflation adjusted annual income across cohorts. Female migrants, on the other hand, saw a much smaller drop (4.4 percent) in inflation adjusted income across cohorts and this drop is not statistically significant ($p = 0.38$). As a result, the ratio of income across gender became smaller across cohorts. In Wave 2, the ratio of income across gender was 1.7 which reduced to 1.4 in Wave 3. Cohort 2 migrants to the UAE also saw a real income decline relative to their cohort 1 counterparts. For male migrants, this drop was 22.8 percent ($p < 0.01$) and for female migrants this drop was 14.5 percent ($p = 0.26$). The ratio of income across gender remained roughly equal across cohorts.

In terms of inflation adjusted remittance, cohort 2 male migrants to Saudi Arabia saw a 20 percent drop ($p < 0.01$) relative to their cohort 1 counterparts. On the other hand, cohort 2 female migrants to Saudi Arabia remitted 10 percent more than cohort 1 female migrants. As a result of these changes, the gender gap in remittance sent dropped drastically from 1.8 for cohort 1 to 1.2 for cohort 2. This implies the remittance sent back by cohort 2 male migrants is only 1.2 times higher than those of female migrants. Turning to the UAE, inflation adjusted remittance decreased for both male and female migrants (although the latter is smaller and not statistically significant). As a result the remittance ratio across gender did not reduce by much across cohorts.

Next, we investigate the amount of time required for male and female international migrants to pay back the cost of migration. For male migrants to Saudi Arabia, the cost recovery time was 21 months for cohort 1 and it increased to 24 months for cohort 2. On the other hand, for female migrants, the cost recovery time decreased from 9.7 months in cohort 1 to 7.7 months in cohort 2. In the UAE, the cost recovery time increased by around 20 percent for both genders.

In summary, we find that new male migrants saw a modest decline (or no increases) in migration costs across but a substantial decrease in real incomes over time. On the other hand, the costs of migration of female migrants increased slightly, and real income increased for Saudi Arabian female migrants and decreased for UAE female migrants. The overall impact of these changes is that the gender gap in income has reduced significantly in favour of women (particularly in Saudi Arabia). Given that the costs of migration for male migrants are substantially higher than female migrants, the average cost recovery time is 2.5-4 times more for newer male migrants than newer female migrants.

11.6 Financing international migration

In this section, we investigate gender differences in financing international migration. We follow the same terminology as in section 11.5. From Table 11.6, we can observe that for new female international migrants in cohort 1 (Wave 2), 33.5 percent and 56.3 percent of migration costs were financed by savings and loans respectively. For male migrants, these numbers were 42.3 percent and 46.3 percent respectively.

Table 11.6.1: Financing of international migration

Details	Female		Male	
	Cohort 1 (%)	Cohort 2 (%)	Cohort 1 (%)	Cohort 2 (%)
Savings	33.5	41.1	42.3	49.3
Personal	20.4	21.8	19.6	15.2
Family	9.6	19.4	16.8	34.1
From extended family	3.5	0.0	6.0	0.0
Loans	56.3	43.5	46.3	38.4
From extended family	28.0	7.3	26.8	7.2
From a moneylender	18.1	19.4	13.2	23.0
From a bank	4.7	13.7	5.3	7.4
Advance from employer	5.5	3.2	1.1	0.8
Sale/ Mortgage of Assets	6.1	4.0	10.0	3.6
Other Sources	4.1	11.3	1.3	8.7

Source: SDC and RMMRU panel survey 2017 and 2020

Male migrants were more likely to use their own/family savings and less likely to take loans to finance their migration. For cohort 2 migrants, this gender disparity persists: male migrants were 8.2 percentage point more likely to use savings and 5.1 percentage point less likely to take out loans to finance their migration costs relative to females. Finally, the sale or

mortgage of fixed assets accounted for 6.1-10 percent of financing for cohort 1 international migration. This decreased to 3.6-4 percent in cohort 2 migrants.

Chapter conclusions

The purpose of this chapter was to describe gender differences in the entire migration process and descriptively investigate whether engaging in the migration process provides an avenue for females to improve their labour market standing vis-a-vis males. In section 11.2, we showed that female migrants come from systematically different socio-economic backgrounds compared to their male counterparts. Female migrants are more likely to come from traditionally disadvantaged backgrounds. They are more likely to come from the lower end of the education spectrum, to be divorced/separated/widowed, and to come from poorer households. These differences are more pronounced for international migrants relative to internal migrants.

In section 11.4, we showed that while participating in migration improves real income for both male and female migrants relative to non-migrants, the improvement recorded is especially high for female (internal) migrants. The unadjusted gender gap in earnings for non-migrants was around 20 percent in Wave 1 of our survey and increased to around 50 percent in Wave 3. This is in stark contrast to that of internal and international migrants. For internal (international) migrants in Wave 1 of the survey, the unadjusted gender gap in was 41 (57) percent and by Wave 3 it reduced to 7 (33) percent. Further, from section 11.5 we also showed that the relative costs of international migration were substantially lower for females and the time required to recoup migration costs are substantially lower for female international migrants. These findings provide strong descriptive evidence that participating in migration is indeed helping women close the earnings gap with men.

Despite these positive outcomes, there are some potential challenges. In section 11.1, we showed that female participation in international migration from Bangladesh has reduced in both absolute and relative terms. More importantly, the COVID-19 pandemic has exacerbated the situation. Overall migration in our sample in Wave 3 has dropped, particularly for females. In section 11.3, we also showed that females operate in a narrower international labour market relative to males. Over

time, the narrowness of the market has not improved.

Moving forward, the focus of policy makers should be to find innovative tools to facilitate both international and internal female migration. In that regard, traditional policies like the provision of subsidies (for internal migration) and low interest loans (for international migration) may be effective. Further, policymakers need to understand gender differences in behavioural dispositions (for a review see Croson & Gneezy, 2009) and the impact of gender norms (for a review see Jayachandran (2021) that influence employment and migration choice for gender. For example, Bryan et al. (2014) show that while investments in migration have positive benefits, it is often constrained by an individual's risk attitudes. Previous research in behavioural economics can provide guidance in this regard. This literature has shown that behavioural preferences are malleable (Alan et al., 2019) and gender norms that constrain women are often misperceived and correcting them through social interventions can improve female labour force participation (Bursztein et al., 2020).

CHAPTER XII

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Tasneem Siddiqui, Ananta Neelim and C. Rashaad Shabab

12.1 Summary

This book is the final output of a 7-year longitudinal research project encompassing three survey waves spanning 6,143 households from across 20 districts of Bangladesh. It studies the impact of migration on various aspects of development. Wave 1 of the survey focused on the impact of migration on poverty and local development. The Wave 2 focused on the dynamics of poverty and expenditure growth since the first wave. Wave 3 concentrates on the sustainability of migration outcomes particularly in the context of single or multiple stresses.

Chapter 1 of the book sets the conceptual framework to understand the link between migration and development. It draws from the sustainable development literature as well as recent research on 'transformation to sustainability in the context of migration'. It follows Gavonel et al. (2021) by observing that migration can contribute to sustainability by increasing well-being and reducing inequality. Unplanned migration can lead to unsustainable outcomes. Whether migration leads to sustainable or unsustainable life trajectories not only depends on migrants or migrant households, but also on the policies adopted by origin and destination countries. COVID-19 and the simultaneous onset of climate related disasters have created a unique opportunity for this research project to explore the sustainability of migration outcomes during the dynamic interplay of multiple crises. This book arrives at the conceptual understanding that in the context of climate change or a health crisis, migration may result in major loss and damage to the affected households. At the same time, for some people further migration may become a successful adaptation or resilience building mechanism enhancing the sustainability of households.

Chapter 2 attempted to catalogue and understand the trends in migration

from Bangladesh, building on the above conceptual understanding. It showed that in 2020 and 2021 migration reduced significantly. These reductions in migration flows were directly linked to the COVID-19 pandemic. The health crisis has reduced the flow of migration from Bangladesh by three quarters compared to flows recorded in regular migration years. During the first year of the COVID-19 pandemic formal remittance flows to Bangladesh grew dramatically. This was due to a number of factors including, among other things, the extraordinary scale of return of migrant workers during the pandemic, the reduced import of goods, and the reduced need to purchase of worker visas resulting in low demand for *hundi*, and a 2 percent incentive offered by Bangladesh Bank to remittance senders. As predicted by migration researchers, remittance flows decreased by 13 percent from January to September 2021, despite the 2 percent incentive. This illustrates that even though the impact of a crises may not be felt immediately, it may still have longer term effects on the sustainability of remittance flows.

Chapter 3 presents the socio-demographic and living standard profiles of sample households. It shows that the membership of households has reduced in Wave 3. This is mostly because of split in households, death of members and addition of new households with fewer members to make up for attrition. More than one-third of the male members of all three types of household were less than 21 years of age. The percentage of people without any education has been reducing gradually over the three survey waves for all migration categories. With respect to living standard indicators, during the Wave 3 survey a new trend in accessing drinking water has become apparent: a small group of households have started using tap water. These households have installed motorised pumps to extract ground water. The percentage of households using water-sealed toilets has increased as well, more so in the case of international migrant households. Changes are visible with respect to sources of power. In recent times the countrywide coverage of grid electricity has increased. This has resulted in the higher use of electricity as source of power and the lower use of solar power compared to Wave 2.

Chapter 4 outlined the profiles of internal and international migrants, their migration trajectories and the flow of remittances. It found that the percentage of migrants with no education has reduced. Saudi Arabia is still the dominant destination of international migrants while Dhaka and

Chattogram are the main destinations for internal migrants. Low-end service sector jobs have emerged as the major source of employment for both internal and international migrants.

Chapter 5 deals with the dynamics of migration decisions. It concludes that economic, political, social, demographic, and environmental factors all interact with each other and influence migration decisions. Under such broad influences, individual or household desires, hopes, imaginations and motivations interact with opportunities and financial ability to produce migration decisions. Social-networks play a bridging role. However, not all of these factors are of equal importance in migration decisions. In some cases, one or a few influencing factors may become more pronounced than others. Most literature on migration decisions finds that economic reasons usually take precedence over other factors. In this research as well, the overwhelming majority highlighted economic factors as key drivers of migration decisions. However, deeper analysis reveals that in reality, economic circumstances are shaped by social, political, environmental and demographic factors. The chapter also demonstrates that choices over moving from a place and staying in a place are gendered. Furthermore, migration decisions also depend on other demographic factors such as the composition of household members, the age group they belong to, and their ability to pay the cost of migration.

The influence of climate change in migration decisions varies according to location. Migrants from areas that are not greatly affected by climate change rarely identified climate and disaster events as contributing factors. By contrast, a significant section of the people in areas that are vulnerable to climatic events and disasters identified climate stressors as important influencing factors.

Chapter 6 analysed the costs of migration. Migration costs for female international migrants are one-quarter of those of male migrants. As per various policy initiatives, migration should be at zero cost, but it is well known that in practice migrants incur very substantial costs to migrate. In 2020, male migrants paid on average Taka 3,75,600 while female migrants paid Taka 86,450. Compared to 2017 after adjusting for inflation the cost of migration has decreased for both male and female international migrants. For females, the real cost reduced by 18 percent and for males it reduced by 7 percent. Nonetheless, migration costs remained very high.

Chapter 7 catalogued transitions in migration status. Around 31 percent of individuals changed their migration status across survey waves. The rate of change was highest among individuals who were internal migrants in a previous wave (around 50 percent). The corresponding figure for international migrants and returnee migrants was 35 percent and 20 percent respectively. Income is an important determining factor of migration transitions. The study finds that individuals with lower levels of income are more likely to transition their migration status from non-migrant to migrant and then to returned migrant. This result in more pronounced in households which already have a migrant member from before. Thus previous household migration experience enables less-productive members (in terms of income generation) to undertake migration and thus improve their financial situations. Returning from migration has the opposite effect. Income decreases when a migrant returns. Nonetheless, the observed decrease in income is only transitory, i.e. the income levels of returned migrants stabilise or slightly improve over time even if no further migration transitions are made.

Chapter 8 investigates expenditure growth among the international, internal and non-migrant households. The results suggest a great deal of heterogeneity in the distribution of expenditure growth both across expenditure subcomponents and across households grouped by migration experience during the most recent waves of the survey. In sharp contrast to the first half of the survey when overall expenditure grew by 23 percent, between the most recent waves overall expenditure growth has been stagnant: between 2017 and 2020 real expenditure fell by 1 percent on average. Though the timing of the survey makes it difficult to establish this with any degree of certainty, a quick back of the envelope calculation reveals that the pandemic may have caused expenditure to contract by as much as 15 percent, with an implied cost in terms of growth foregone as high as 24 percent. The economic hardship and uncertainty created by the pandemic appears to have caused households to divert consumption away from non-essential expenditure categories in an effort to protect essential expenditure on food. On average real expenditure on non-food consumption has decreased by 14 percent, expenditure on health has decreased by 16 percent, expenditure on education has decreased by 27 percent and expenditure on rituals has decreased by 0.08 percent. By and large, these efforts to protect real food expenditure were successful, with growth in food expenditure averaging 13 percent despite the contraction

in overall expenditure. The averages above hide important heterogeneity in household experiences by migration type. In terms of food, non-food, health, and education expenditures, non-migrant households were always the hardest hit, registering the least growth or sharpest declines by expenditure component. The expenditure profiles of internal migrants were the best protected among the three groups, while expenditure growth among international migrant households was middling.

Chapter 9 studied the dynamics of poverty over the duration of the panel. Poverty has declined sharply despite the onset of the COVID-19 pandemic and different climate change related disasters in 2020. This is suggestive of a remarkable degree of resilience in the capacity of households to meet basic expenditure needs even during the onset of the pandemic. Between 2014 and 2017, poverty only fell marginally, from 19 percent to 16 percent. Between 2017 and 2020 there was a rapid decline in the sample incidence of poverty from 16 percent to just 9 percent. Poverty rates were lowest among international migrant households, only 6 percent of which were still afflicted by poverty in 2020. The steepest decline in poverty was among internal migrant households who experienced a 54 percent decline in the incidence of poverty between 2017 and 2020. Thus, internal migration has enabled households to maintain the highest degree of resilience in the face of the multiple challenges and shocks that have materialised between 2017 and 2020.

Chapter 10 highlighted that investments in agriculture increased the most among non-migrant households. By 2020 these households were almost at par with international migrant households in the amounts they were investing in agriculture. Internal migrants on the other hand, invested relatively little in agriculture. Households in climate affected areas invested very little in agriculture compared to households in other areas. All three groups of household invested in poultry, with investment in poultry being most intensive in the hill district of Khagrachari. Around 30 percent of sample households invested in animal husbandry. As a group, internal migrant households invested the most in this sector. Investment in fish-culture was low for all three groups. Despite this, there was some inter-district variation with high rates of fish-culture in Cumilla and Munshiganj. Participation in enterprise development was very low for all three groups. A small increase is visible with respect to transportation enterprises. Interestingly, there has been a major change in the type of vehicle attracting investment.

Earlier investment was on *tempu, nosimon* etc. More recently, the bulk of investment is in EZbikes. A little more than 10 percent of households have invested in different types of shops and market outlets.

Chapter 11 explored gender differences in inputs and outcomes in the overall migration process. It found that female migrants were more likely to come from traditionally disadvantaged backgrounds, from the lower end of the education spectrum, with a higher percentage of people who were divorced, separated or widowed. These differences are more pronounced for international female migrants relative to internal female migrants**.** Participating in migration improves the real incomes of both male and female migrants relative to non-migrants. The improvement recorded is particularly high for internal female migrants. The unadjusted gender gap in earnings for non-migrants was around 20 percent in Wave 1 and increased to around 50 percent by Wave 3. This is in stark contrast to that of internal and international migrants. In Wave 1, the unadjusted gender gap in earnings for international (internal) migrants was 41 (57) percent and by Wave 3 it reduced to 7 (33) percent. The relative costs of international migration are substantially lower for females and so the time required to recoup migration costs is substantially lower for female international migrants. These findings provide strong descriptive evidence that participating in migration is indeed helping women close the earnings gap with men.

Despite these positive outcomes, there are some potential challenges. Female participation in international migration from Bangladesh has reduced in both absolute and relative terms. Moreover, the COVID-19 pandemic has exacerbated the situation. The overall number of current migrants in our sample has dropped in Wave 3, particularly for females. Females operate in a narrower international labour market relative to males. Over time, the narrowness of the market has not improved.

12.2 Major conclusions

- Consumption poverty in study areas has declined sharply despite the onset of the COVID-19 pandemic and multiple climate change related disasters between 2017 and 2020. This indicates that both migrant and non-migrant households could withstand COVID-19 and climate related stresses while sustaining consumption above the poverty line.

- Poverty rates have been the lowest among international migrant households. But more importantly, among the three groups, internal migrant households are best able to protect expenditure against shortfalls from adverse climate and health shocks.
- Migration provides opportunity to those members of the households who initially had relatively low incomes compared to other non-migrating members. By undertaking migration, these members significantly improve their income. Upon return, although, their income drops sharply in the short run, it stabilises in the medium to long run. Despite this drop in income, individuals who undertake migration have higher incomes than those members who have not participated in migration.
- Migration allows women to close gender inequalities in the labour market. Compared to male migration, the positive economic outcomes associated with female migration are more sustainable. In fact, in all the three waves of the survey, the earnings gap across genders has reduced significantly for migrants but increased for non-migrants.
- An important finding of the research is that, from Wave 1 to Wave 2 and from Wave 2 to Wave 3, after adjusting for inflation the real cost of migration has reduced. Still the cost of migration remains very high.
- Remittances sent by the international migrants have reduced between the last two waves. Compared to Wave 2, during Wave 3, real remittances have reduced by 23 percent.
- The migrants perceive that the predominant reason behind their migration decision is economic. In climate change affected areas, economic determinants are to a large extent shaped by climate change related factors.

12.3 Recommendations

Migration has been transforming a large group of households into non-poor. It has demonstrated its capacity to do so even under external shocks such as COVID-19 and climate change related disasters. Along side international migration, this research has for the first time highlighted the contribution of internal migration to facilitating consumption growth and poverty reduction. This has major policy ramifications. The following section highlights some broad policy recommendations to enhance positive outcomes of both internal and international migration.

12.3.1 Internal migration

- Internal migration should receive the same policy attention from different quarters of the government as international migration has over the last three decades. The Ministry of Labour and Employment needs to initiate the preparation of a national policy on internal migration. An action plan should follow on from the policy. The actions should be divided into three groups- short term, medium term and long-term.
- The policy should be rights based and consider internal migrants not only as economic entities, but as citizens with social, political and economic rights. It should be aligned with the 8th Five Year Plan of Bangladesh, the Delta Plan and the SDG implementation strategy.
- The dominant mindset of policy makers about internal migrants is that they are major problems for urbanisation. Therefore, the policies they pursue are dominated by actions that target the return of internal migrants to rural areas. This mindset has to be replaced with the understanding that internal migration takes place not only because of push factors in the origin areas, but also because of pull factors in the type of mega city centric economic development that is currently being implemented in Bangladesh. Internal migration will flow to those areas where the jobs are. Therefore, decentralisation of government decision-making, the encouragement of growth centres all over the country, the creation secondary cities, and connectivity with low cost, low carbon commuter trains should be the future path of sustainable development that is inclusive to internal migrants.
- The adoption of clear policy frameworks and actions on internal migration is also urgently needed to address the concerns raised by recent literature on climate change. By 2050, another 20 million internal migrants of Bangladesh will join the urban workforce solely due to slow onset climate change processes. To avoid a situation where climate change induced internal migration is forced and unplanned, a comprehensive policy is required. The policy process should be multi-disciplinary to achieve policy coherence among all relevant ministries which manage migration, labour, employment and welfare, climate change, urbanisation, railway, etc.
- Given the importance of internal migration alongside international migration in economic growth and poverty alleviation, the

development partners of Bangladesh should revisit all its development interventions with a view to including the rights of migrants and ensuring the provision of services to internal migrants.

- ILO's Just Transition Framework can provide an impetus to ensure decent employment standards for internal migrants.

12.3.2 International migration

- The government has framed adequate national policies and laws to better govern international migration. However, target based implementation of these policies and actions are necessary to ensure that the intended beneficiaries enjoy the results.
- In order to reduce barriers to international migration the Ministry of Expatriates' Welfare and Overseas Employment has taken multiple steps. Exploring new labour markets, determining a rational cost of migration, signing of bilateral treaties, establishing migrants' bank are notable among them. A major barrier that remains is the cost of migration. Although the cost of migration has been reducing in real terms, it is still extraordinarily high. The ministry needs to be proactive in identifying cases where recruiting agencies have charged migrants more than the government determined costs and to provide legal redress to the victims.
- In order to make migration more affordable, the government has established a special bank known as the Probashi Kallyan Bank. Yet, the SDC and RMMRU survey shows that 23 percent of migration loans are still gathered from local moneylenders. The outreach of the Probashi Kallyan Bank needs to be enhanced through innovative partnerships with local micro finance institutions. Probashi Kallyan Bank can share profits with NGOs/ micro finance institutions and greatly increase its catchment area. Further research is necessary to assess why a section of migrants are not interested in taking formal loans and to identify alternative path to increase the accessibility of these loans.
- There are systematic gender-specific barriers that exist in female migration. It is important that these barriers are identified and addressed through meaningful policy changes. For example, the safety of workers in overseas markets has been identified as a major threat to female migrants for quite some time and meaningful, practical actions need to be undertaken to mitigate these concerns. Amongst

other things, this involves (i) running information campaigns on how to identify and respond to safety threats and (ii) putting in place institutional structures in destination countries that provide support for victims.

- In order to stabilise remittance flows, Bangladesh Bank has just increased the incentive on formal remittances from 2 percent to 2.5 percent. It may consider further increasing the incentive to 4 percent during and after a crisis. In addition to directly benefitting the migrants, such a policy will bridge the 4 percent difference between the official exchange rate and those offered by the *hundi* system.
- Upon return from international migration, migrants see a large drop in income. Policy intervention is required to ensure that this variability in income is reduced. This can be achieved by ensuring that returnee international migrants can easily integrate into the local economy by (i) accessing local job markets and (ii) starting profitable businesses.
- In order to encourage investments from migrants' remittances and to sustain the post migration economic standards of migrant households, the Probashi Kallyan Bank offers a reintegration loan. The benefits generated by such programmes can be improved if local organisations are consulted to help identify market oriented business models specific to the local area. Prior to the disbursement of credit, local market linkages need to be developed and migrants need to be trained accordingly.
- Access to existing investment products such as the Wage Earners Development Bond in which current migrants are entitled to invest, needs to be ensured. This will help supplement their income when they return. To encourage the uptake of these products financial incentives akin to the 3 percent remittance incentive can be offered.
- People of climate change affected areas mostly migrate internally. Their access to international migration needs to be improved by enhancing access to the services offered by BMET, the private sector, and NGOs in climate affected areas.
- The 6th Intergovernmental Panel on Climate Change (IPCC) assessment recognised that climate change contributes to migration. In order to avoid forced migration and to facilitate migration as a climate change adaptation tool, the Green Recovery Fund can be targeted to help develop marketable skills among the people in climate change affected areas.

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Annex 1

Table: Percentage distribution of Bangladeshi migrant workers by country of destination (2001- 2021)

Year	KSA	UAE	Kuwait	Oman	Qatar	Bahrain	Labanon	Jordan	Malaysia	Singapore	Brunei	Mauritius	Other	Total
2001	72.59	8.60	2.83	2.41	0.12	2.31	0.00	0.05	2.60	5.09	1.56	0.14	1.69	189060
2002	72.48	11.30	7.00	1.71	0.25	2.41	0.00	0.81	0.04	3.04	0.07	0.03	0.86	225256
2003	63.78	14.69	10.51	1.59	0.04	2.94	0.00	0.84	0.01	2.09	0.39	0.00	3.12	254190
2004	50.93	17.22	15.06	1.62	0.46	3.37	0.00	2.21	0.08	2.55	0.66	0.02	5.81	272958
2005	31.83	24.53	18.61	1.91	0.84	4.24	0.01	3.60	1.15	3.82	0.08	0.55	8.85	252702
2006	28.70	34.13	9.38	2.12	2.02	4.29	0.22	0.74	5.37	5.28	0.13	0.55	7.09	381516
2007	24.51	27.19	0.51	2.10	1.82	1.97	0.43	0.06	32.81	4.60	0.14	0.44	3.42	832609
2008	15.12	47.98	0.04	6.05	2.81	1.51	0.97	0.08	15.07	6.47	0.12	0.35	3.44	874055
2009	3.09	54.36	0.00	8.77	2.46	5.98	2.93	0.36	2.61	8.33	0.57	0.38	10.16	475278
2010	1.81	52.04	0.01	10.91	3.09	5.59	4.42	0.57	0.24	10.00	0.56	0.95	9.82	390702
2011	2.25	42.32	0.00	20.25	1.96	2.10	17.84	0.66	0.11	7.28	0.77	0.80	3.65	668062
2012	3.49	35.45	0.00	28.02	4.74	3.58	2.45	1.93	0.13	9.65	0.83	0.89	8.83	607798
2013	3.09	3.48	0.00	32.75	14.07	6.15	3.69	5.22	0.94	14.67	1.46	1.46	13.01	409253
2014	2.50	5.69	0.73	24.84	20.57	5.49	3.91	4.78	1.21	12.86	1.56	1.39	14.46	425684
2015	10.48	4.55	3.14	23.36	22.30	3.73	3.44	3.97	5.48	9.99	1.14	0.86	7.56	555881
2016	18.99	1.07	5.17	24.84	15.89	9.52	1.99	3.04	5.30	7.22	0.77	0.62	5.57	757731
2017	54.66	0.41	4.92	8.83	8.13	1.92	0.83	2.03	9.89	4.01	0.85	0.59	2.93	1008525
2018	35.05	0.44	3.76	9.88	10.43	0.11	0.82	1.32	23.96	5.64	0.61	0.90	7.08	734181
2019	56.99	0.47	1.76	10.38	7.18	0.02	0.69	2.91	0.08	7.12	0.52	1.08	10.81	700159
2020	74.30	0.50	0.80	9.68	1.66	0.00	0.22	1.73	0.06	4.63	0.24	0.93	5.25	217669
2021	74.08	4.73	0.30	8.91	1.81	0.00	0.04	2.24	0.00	4.52	0.00	0.03	3.33	617209
Total	29.84	18.77	3.03	12.52	6.73	3.05	2.43	1.83	7.41	6.76	0.61	0.65	6.36	10850478

Source: Prepared from BMET data

Annex 2

Table: Percentage distribution of Bangladeshi migrant workers by level of skills (2001- 2021)

Year	Professional	Skilled	Semi-skilled	Less-skilled	others	Total
2001	3.14	22.66	16.24	57.96	0.00	189060
2002	6.41	24.98	15.99	52.61	0.00	225256
2003	6.24	29.32	11.50	52.94	0.00	254190
2004	4.47	40.36	10.38	41.64	3.14	272958
2005	0.77	44.98	9.71	39.70	4.84	252702
2006	0.24	30.27	8.90	57.78	2.81	381516
2007	0.08	19.86	22.06	56.77	1.23	832609
2008	0.21	33.41	15.18	49.95	1.25	875055
2009	0.30	28.25	17.78	51.88	1.79	475278
2010	0.10	23.19	5.12	69.65	1.93	390702
2011	0.21	40.34	5.06	53.08	1.31	568062
2012	5.94	28.52	17.23	46.75	1.56	607798
2013	0.17	32.68	15.28	49.62	2.25	409253
2014	0.41	34.95	16.47	45.43	2.75	425684
2015	0.33	38.56	16.39	43.88	0.84	555881
2016	0.61	42.08	15.83	40.08	1.40	757731
2017	0.45	43.07	15.43	39.84	1.22	1008525
2018	0.36	43.25	16.04	38.55	1.80	734181
2019	0.27	43.55	20.36	28.15	7.67	700159
2020	0.18	29.22	4.46	66.14	0.00	211112
2021	0.14	21.33	3.28	75.24	0.00	604915
Total	**1.099**	**34.88**	**14.87**	**47.17**	**2.03**	**10732627**

Source: Prepared from BMET data

Annex 3

Table: Ownership of dwellings by migration type, gender and district

District	Ownerships	WAVE 3						
		International (%)			Internal (%)			Non-migrant (%)
		M	F	T	M	F	T	
Chapai Nawabganj	Owner of the Homestead	83.3	100.0	84.2	84.6	88.2	84.9	81.9
	Rented	0.0	0.0	0.0	.5	0.0	.5	0.0
	Not owner but without rent	16.7	0.0	15.8	14.9	11.8	14.7	18.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Barishal	Owner of the Homestead	91.0	85.7	90.6	79.6	100.0	80.2	76.2
	Rented	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Not owner but without rent	9.0	14.3	9.4	20.4	0.0	19.8	23.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rangpur	Owner of the Homestead	87.8	100.0	88.4	89.0	78.9	87.5	80.8
	Rented	0.0	0.0	0.0	0.0	0.0	0.0	1.5
	Not owner but without rent	12.2	0.0	11.6	11.0	21.1	12.5	17.7
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Satkhira	Owner of the Homestead	100.0	0.0	100.0	79.8	87.5	80.1	87.8
	Rented	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Not owner but without rent	0.0	0.0	0.0	20.2	12.5	19.9	12.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Shariatpur	Owner of the Homestead	81.3	50.0	80.9	70.2	0.0	70.2	67.3
	Rented	5.1	50.0	5.6	3.5	0.0	3.5	18.2
	Not owner but without rent	13.6	0.0	13.5	26.3	0.0	26.3	14.5
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0

Sunamganj	Owner of the Homestead	97.1	100.0	97.3	96.2	100.0	96.3	89.5
	Rented	.6	0.0	.5	0.0	0.0	0.0	2.1
	Not owner but without rent	2.3	0.0	2.2	3.8	0.0	3.7	8.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tangail	Owner of the Homestead	92.3	100.0	92.4	95.0	100.0	95.2	77.8
	Rented	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Not owner but without rent	7.7	0.0	7.6	5.0	0.0	4.8	22.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chattogram	Owner of the Homestead	99.3	100.0	99.3	95.7	0.0	95.7	97.7
	Rented	0.0	0.0	0.0	4.3	0.0	4.3	1.5
	Not owner but without rent	.7	0.0	.7	0.0	0.0	0.0	.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Khagrachari	Owner of the Homestead	100.0	0.0	100.0	98.9	96.4	98.4	95.5
	Rented	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Not owner but without rent	0.0	0.0	0.0	1.1	3.6	1.6	4.5
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Faridpur	Owner of the Homestead	80.0	75.8	77.6	69.0	50.0	67.7	76.8
	Rented	5.3	11.6	8.8	20.7	0.0	19.4	6.1
	Not owner but without rent	14.7	12.6	13.5	10.3	50.0	12.9	17.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gazipur	Owner of the Homestead	81.4	63.4	72.8	100.0	100.0	100.0	70.1
	Rented	1.0	2.2	1.5	0.0	0.0	0.0	2.3
	Not owner but without rent	17.6	34.4	25.6	0.0	0.0	0.0	26.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Narayanganj	Owner of the Homestead	98.7	78.4	92.2	88.0	100.0	89.7	92.5
	Rented	1.3	10.8	4.3	12.0	0.0	10.3	1.4
	Not owner but without rent	0.0	10.8	3.5	0.0	0.0	0.0	6.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Brahmanbaria	Owner of the Homestead	91.6	100.0	91.8	88.5	100.0	88.7	84.6
	Rented	.5	0.0	.5	0.0	0.0	0.0	0.0
	Not owner but without rent	7.9	0.0	7.7	11.5	0.0	11.3	15.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cumilla	Owner of the Homestead	97.5	100.0	97.5	100.0	50.0	98.1	100.0
	Rented	.6	0.0	.6	0.0	0.0	0.0	0.0
	Not owner but without rent	1.9	0.0	1.9	0.0	50.0	1.9	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dhaka	Owner of the Homestead	96.2	92.3	96.0	100.0	100.0	100.0	93.7
	Rented	2.2	0.0	2.0	0.0	0.0	0.0	1.3
	Not owner but without rent	1.6	7.7	2.0	0.0	0.0	0.0	5.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kushtia	Owner of the Homestead	80.9	0.0	80.9	79.5	100.0	80.2	86.6
	Rented	0.0	0.0	0.0	1.3	0.0	1.2	0.0
	Not owner but without rent	19.1	0.0	19.1	19.2	0.0	18.5	13.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Lakshmipur	Owner of the Homestead	88.1	33.3	87.1	84.4	100.0	84.8	92.1
	Rented	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Not owner but without rent	11.9	66.7	12.9	15.6	0.0	15.2	7.9
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Manikganj	Owner of the Homestead	86.0	92.3	88.4	83.3	0.0	83.3	87.6
	Rented	0.0	1.3	.5	0.0	0.0	0.0	0.0
	Not owner but without rent	14.0	6.4	11.1	16.7	0.0	16.7	12.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Munshiganj	Owner of the Homestead	90.3	0.0	90.3	69.6	0.0	69.6	83.0
	Rented	.6	0.0	.6	0.0	0.0	0.0	0.0
	Not owner but without rent	9.1	0.0	9.1	30.4	0.0	30.4	17.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Mymenshing	Owner of the Homestead	83.7	85.7	83.8	93.1	100.0	93.5	80.0
	Rented	.7	0.0	.6	0.0	0.0	0.0	0.0
	Not owner but without rent	15.6	14.3	15.6	6.9	0.0	6.5	20.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	Owner of the Homestead	90.3	78.6	88.7	85.4	89.6	85.7	86.3
	Rented	1.0	5.3	1.6	1.2	0.0	1.1	1.3
	Not owner but without rent	8.7	16.2	9.7	13.4	10.4	13.2	12.3
	Others	0.0	0.0	0.0	0.0	0.0	0.0	.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SDC and RMMRU Panel Survey 2020

Annex 4

Table: Type of homestead by migration type, gender and district

District	Nature of construction	WAVE 3						Non-migrant (%)
		International (%)			Internal (%)			
		M	F	T	M	F	T	
Chapai Nawabganj	*Katcha*	0.0	100.0	5.3	27.9	47.1	29.4	27.8
	Semi-*katcha*	50.0	0.0	47.4	60.7	41.2	59.2	62.5
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	50.0	0.0	47.4	11.4	11.8	11.5	9.7
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Barishal	*Katcha*	1.1	0.0	1.0	1.9	0.0	1.9	6.9
	Semi-*katcha*	61.8	85.7	63.5	84.5	66.7	84.0	83.2
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	37.1	14.3	35.4	13.6	33.3	14.2	9.9
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rangpur	*Katcha*	9.8	0.0	9.3	21.1	15.8	20.3	15.4
	Semi-*katcha*	61.0	100.0	62.8	73.4	84.2	75.0	78.5
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	29.3	0.0	27.9	5.5	0.0	4.7	6.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Satkhira	*Katcha*	33.3	0.0	33.3	22.9	25.0	23.0	34.7
	Semi-*katcha*	66.7	0.0	66.7	73.9	75.0	74.0	60.2
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	0.0	0.0	0.0	3.2	0.0	3.1	5.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0

Shariatpur	*Katcha*	0.0	0.0	0.0	1.8	0.0	1.8	0.0
	Semi-*katcha*	73.3	100.0	73.6	91.2	0.0	91.2	81.8
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	26.1	0.0	25.8	7.0	0.0	7.0	16.4
	Others	.6	0.0	.6	0.0	0.0	0.0	1.8
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Sunamganj	*Katcha*	11.5	0.0	10.9	53.8	100.0	55.6	37.9
	Semi-*katcha*	37.4	55.6	38.3	34.6	0.0	33.3	40.0
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	51.1	44.4	50.8	11.5	0.0	11.1	22.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tangail	*Katcha*	4.1	50.0	4.5	5.0	100.0	9.5	11.1
	Semi-*katcha*	81.0	50.0	80.7	85.0	0.0	81.0	81.5
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	14.9	0.0	14.8	10.0	0.0	9.5	7.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chattogram	*Katcha*	7.8	16.7	8.2	8.7	0.0	8.7	15.0
	Semi-*katcha*	68.8	83.3	69.4	73.9	0.0	73.9	75.2
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	22.0	0.0	21.1	17.4	0.0	17.4	9.8
	Others	1.4	0.0	1.4	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Khagrachari	*Katcha*	100.0	0.0	100.0	38.3	35.7	37.7	50.6
	Semi-*katcha*	0.0	0.0	0.0	41.5	53.6	44.3	44.3
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	0.0	0.0	0.0	20.2	10.7	18.0	5.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0

Faridpur	*Katcha*	8.0	8.4	8.2	24.1	50.0	25.8	15.9
	Semi-*katcha*	82.7	87.4	85.3	72.4	50.0	71.0	81.7
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	9.3	4.2	6.5	3.4	0.0	3.2	2.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gazipur	*Katcha*	25.5	36.6	30.8	21.1	33.3	22.7	28.7
	Semi-*katcha*	65.7	59.1	62.6	68.4	66.7	68.2	65.5
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	8.8	4.3	6.7	10.5	0.0	9.1	4.6
	Others	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Narayanganj	*Katcha*	15.4	32.4	20.9	28.0	0.0	24.1	12.2
	Semi-*katcha*	46.2	48.6	47.0	40.0	100.0	48.3	70.1
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	38.5	18.9	32.2	32.0	0.0	27.6	17.7
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Brahmanbaria	*Katcha*	12.6	0.0	12.4	4.9	0.0	4.8	23.1
	Semi-*katcha*	59.7	66.7	59.8	83.6	100.0	83.9	71.8
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	27.2	33.3	27.3	11.5	0.0	11.3	5.1
	Others	.5	0.0	.5	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cumilla	*Katcha*	0.0	0.0	0.0	0.0	0.0	0.0	5.9
	Semi-*katcha*	79.5	0.0	79.0	86.3	100.0	86.8	88.2
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	20.5	100.0	21.0	13.7	0.0	13.2	5.9
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Dhaka	*Katcha*	0.0	0.0	0.0	0.0	0.0	0.0	5.1
	Semi-*katcha*	71.9	69.2	71.7	85.7	100.0	86.7	81.0
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	28.1	30.8	28.3	14.3	0.0	13.3	13.9
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kushtia	*Katcha*	0.0	0.0	0.0	1.3	33.3	2.5	3.1
	Semi-*katcha*	76.4	0.0	76.4	88.5	66.7	87.7	85.8
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	23.6	0.0	23.6	10.3	0.0	9.9	11.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Lakshmipur	*Katcha*	5.0	33.3	5.5	4.4	0.0	4.3	9.2
	Semi-*katcha*	75.0	66.7	74.8	86.7	100.0	87.0	88.2
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	20.0	0.0	19.6	8.9	0.0	8.7	2.6
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manikganj	*Katcha*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Semi-*katcha*	72.7	91.0	79.9	83.3	0.0	83.3	88.8
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	27.3	9.0	20.1	16.7	0.0	16.7	11.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Munshiganj	*Katcha*	9.1	0.0	9.1	8.7	0.0	8.7	14.8
	Semi-*katcha*	77.8	0.0	77.8	73.9	0.0	73.9	61.4
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	9.7	0.0	9.7	4.3	0.0	4.3	8.0
	Others	3.4	0.0	3.4	13.0	0.0	13.0	15.9
	Total	100.0	0.0	100.0	100.0	0.0	100.0	100.0

Mymensing	*Katcha*	15.0	14.3	14.9	41.4	50.0	41.9	26.1
	Semi-*katcha*	76.2	71.4	76.0	48.3	50.0	48.4	68.7
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	8.8	14.3	9.1	10.3	0.0	9.7	5.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	*Katcha*	6.9	16.4	8.2	18.0	30.2	18.9	18.7
	Semi-*katcha*	69.2	74.1	69.9	71.4	63.5	70.8	71.4
	Semi-*paka*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Paka	23.5	9.5	21.6	10.4	6.3	10.1	9.1
	Others	.4	0.0	.4	.2	0.0	.2	.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SDC and RMMRU Panel Survey 2020

Annex 5

Table: Sources of drinking water by migration type, gender and district

District	Sources	WAVE 3						
		International (%)			Internal (%)			Non-migrant (%)
		M	F	T	M	F	T	
Chapai Nawabganj	Pipe or Wasa waterline	38.9	0.0	36.8	7.0	0.0	6.4	6.9
	Tube well/deep tube well	61.1	100.0	63.2	93.0	100.0	93.6	91.7
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	1.4
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Barishal	Pipe or Wasa waterline	5.6	0.0	5.2	2.9	0.0	2.8	0.0
	Tube well/deep tube well	94.4	100.0	94.8	97.1	100.0	97.2	100.0
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rangpur	Pipe or Wasa waterline	0.0	50.0	2.3	1.8	0.0	1.6	.8
	Tube well/deep tube well	100.0	50.0	97.7	98.2	100.0	98.4	99.2
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Satkhira	Pipe or Wasa waterline	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tube well/deep tube well	16.7	0.0	16.7	9.0	0.0	8.7	9.2
	Pond/River/Lake	16.7	0.0	16.7	29.3	12.5	28.6	30.6
	Rain water/Fountain water	66.7	0.0	66.7	61.2	87.5	62.2	58.2
	Others	0.0	0.0	0.0	.5	0.0	.5	2.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0

Shariatpur	Pipe or Wasa waterline	6.3	0.0	6.2	1.8	0.0	1.8	12.7
	Tube well/deep tube well	93.8	100.0	93.8	98.2	0.0	98.2	87.3
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Sunamganj	Pipe or Wasa waterline	20.1	0.0	19.1	15.4	0.0	14.8	10.5
	Tube well/deep tube well	79.3	100.0	80.3	84.6	100.0	85.2	89.5
	Pond/River/Lake	.6	0.0	.5	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tangail	Pipe or Wasa waterline	.9	0.0	.9	0.0	0.0	0.0	1.9
	Tube well/deep tube well	99.1	100.0	99.1	100.0	100.0	100.0	98.1
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chattogram	Pipe or Wasa waterline	9.2	0.0	8.8	0.0	0.0	0.0	2.3
	Tube well/deep tube well	90.8	100.0	91.2	95.7	0.0	95.7	97.0
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	.8
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	4.3	0.0	4.3	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Khagrachari	Pipe or Wasa waterline	0.0	0.0	0.0	11.7	7.1	10.7	9.1
	Tube well/deep tube well	100.0	0.0	100.0	87.2	92.9	88.5	78.4
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	2.3
	Rain water/Fountain water	0.0	0.0	0.0	1.1	0.0	.8	6.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	3.4
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0

Faridpur	Pipe or Wasa waterline	1.3	2.1	1.8	0.0	0.0	0.0	0.0
	Tube well/deep tube well	98.7	96.8	97.6	100.0	100.0	100.0	100.0
	Pond/River/Lake	0.0	1.1	.6	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gazipur	Pipe or Wasa waterline	66.7	64.5	65.6	78.9	33.3	72.7	66.7
	Tube well/deep tube well	31.4	35.5	33.3	21.1	66.7	27.3	32.2
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Others	2.0	0.0	1.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Narayanganj	Pipe or Wasa waterline	69.2	64.9	67.8	76.0	50.0	72.4	79.6
	Tube well/deep tube well	29.5	35.1	31.3	24.0	50.0	27.6	20.4
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	1.3	0.0	.9	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Brahmanbaria	Pipe or Wasa waterline	1.0	0.0	1.0	1.6	0.0	1.6	0.0
	Tube well/deep tube well	99.0	100.0	99.0	98.4	100.0	98.4	100.0
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cumilla	Pipe or Wasa waterline	4.3	0.0	4.3	2.0	0.0	1.9	2.4
	Tube well/deep tube well	95.7	100.0	95.7	96.1	100.0	96.2	96.5
	Pond/River/Lake	0.0	0.0	0.0	2.0	0.0	1.9	1.2
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Dhaka	Pipe or Wasa waterline	3.2	7.7	3.5	0.0	0.0	0.0	3.8
	Tube well/deep tube well	96.8	92.3	96.5	100.0	100.0	100.0	96.2
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kushtia	Pipe or Wasa waterline	6.7	0.0	6.7	3.8	0.0	3.7	1.6
	Tube well/deep tube well	93.3	0.0	93.3	94.9	100.0	95.1	98.4
	Pond/River/Lake	0.0	0.0	0.0	1.3	0.0	1.2	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Lakshmipur	Pipe or Wasa waterline	3.1	0.0	3.1	0.0	0.0	0.0	1.3
	Tube well/deep tube well	96.9	100.0	96.9	100.0	100.0	100.0	98.7
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manikganj	Pipe or Wasa waterline	18.2	19.2	18.6	0.0	0.0	0.0	16.9
	Tube well/deep tube well	81.8	80.8	81.4	100.0	0.0	100.0	83.1
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Munshiganj	Pipe or Wasa waterline	4.0	0.0	4.0	13.0	0.0	13.0	1.1
	Tube well/deep tube well	95.5	0.0	95.5	87.0	0.0	87.0	96.6
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	.6	0.0	.6	0.0	0.0	0.0	2.3
	Total	100.0	0.0	100.0	100.0	0.0	100.0	100.0

Mymenshing	Pipe or Wasa waterline	43.5	42.9	43.5	44.8	100.0	48.4	30.4
	Tube well/deep tube well	55.8	57.1	55.8	55.2	0.0	51.6	69.6
	Pond/River/Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rain water/Fountain water	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	.7	0.0	.6	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	Pipe or Wasa waterline	13.4	29.5	15.5	7.5	7.3	7.5	14.4
	Tube well/deep tube well	86.1	70.2	84.0	77.9	84.4	78.4	79.6
	Pond/River/Lake	.1	.3	.1	4.7	1.0	4.5	1.9
	Rain water/Fountain water	.2	0.0	.1	9.7	7.3	9.5	3.6
	Others	.2	0.0	.2	.2	0.0	.2	.6
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SDC and RMMRU Panel Survey 2020

Annex 6

Table: Use of electricity as sources of power by migration type, gender and district

District	Sources	WAVE 3						
		International (%)			Internal (%)			Non-migrant (%)
		M	F	T	M	F	T	
Chapai Nawabganj	Electricity	100.0	100.0	100.0	92.0	82.4	91.3	95.8
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	1.4
	Kerosene	0.0	0.0	0.0	8.0	11.8	8.3	1.4
	Others	0.0	0.0	0.0	0.0	5.9	.5	1.4
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Barishal	Electricity	100.0	100.0	100.0	100.0	100.0	100.0	98.0
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rangpur	Electricity	100.0	100.0	100.0	100.0	100.0	100.0	96.9
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	2.3
	Others	0.0	0.0	0.0	0.0	0.0	0.0	.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Satkhira	Electricity	83.3	0.0	83.3	86.2	87.5	86.2	80.6
	Solar panels	16.7	0.0	16.7	12.8	12.5	12.8	15.3
	Kerosene	0.0	0.0	0.0	.5	0.0	.5	4.1
	Others	0.0	0.0	0.0	.5	0.0	.5	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Shariatpur	Electricity	97.2	100.0	97.2	100.0	0.0	100.0	94.5
	Solar panels	2.8	0.0	2.8	0.0	0.0	0.0	3.6
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	1.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0

Sunamganj	Electricity	96.6	88.9	96.2	88.5	100.0	88.9	91.6
	Solar panels	2.3	11.1	2.7	3.8	0.0	3.7	4.2
	Kerosene	1.1	0.0	1.1	7.7	0.0	7.4	4.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tangail	Electricity	99.5	100.0	99.6	100.0	100.0	100.0	98.1
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	.5	0.0	.4	0.0	0.0	0.0	1.9
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chattogram	Electricity	99.3	100.0	99.3	95.7	0.0	95.7	100.0
	Solar panels	.7	0.0	.7	4.3	0.0	4.3	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Khagrachari	Electricity	100.0	0.0	100.0	75.5	75.0	75.4	46.6
	Solar panels	0.0	0.0	0.0	20.2	21.4	20.5	50.0
	Kerosene	0.0	0.0	0.0	4.3	3.6	4.1	2.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	.6
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Faridpur	Electricity	98.7	97.9	98.2	93.1	100.0	93.5	95.1
	Solar panels	1.3	1.1	1.2	6.9	0.0	6.5	1.2
	Kerosene	0.0	1.1	.6	0.0	0.0	0.0	3.7
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gazipur	Electricity	99.0	95.7	97.4	100.0	100.0	100.0	97.7
	Solar panels	1.0	1.1	1.0	0.0	0.0	0.0	1.1
	Kerosene	0.0	3.2	1.5	0.0	0.0	0.0	1.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Narayangaj	Electricity	100.0	100.0	100.0	100.0	100.0	100.0	99.3
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Brahmanbaria	Electricity	100.0	100.0	100.0	100.0	100.0	100.0	97.4
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	2.6
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cumilla	Electricity	98.1	100.0	98.1	98.0	100.0	98.1	98.8
	Solar panels	1.9	0.0	1.9	2.0	0.0	1.9	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dhaka	Electricity	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kushtia	Electricity	100.0	0.0	100.0	100.0	100.0	100.0	99.2
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Lakshmipur	Electricity	92.5	100.0	92.6	100.0	100.0	100.0	96.1
	Solar panels	7.5	0.0	7.4	0.0	0.0	0.0	2.6
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	1.3
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Manikganj	Electricity	100.0	98.7	99.5	100.0	0.0	100.0	97.8
	Solar panels	0.0	1.3	.5	0.0	0.0	0.0	2.2
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Munshiganj	Electricity	100.0	0.0	100.0	100.0	0.0	100.0	98.9
	Solar panels	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Mymenshing	Electricity	98.0	100.0	98.1	100.0	100.0	100.0	97.4
	Solar panels	.7	0.0	.6	0.0	0.0	0.0	0.0
	Kerosene	1.4	0.0	1.3	0.0	0.0	0.0	2.6
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	Electricity	98.6	97.8	98.5	94.0	88.5	93.6	92.1
	Solar panels	1.2	1.1	1.2	4.0	7.3	4.2	6.1
	Kerosene	.2	1.1	.3	1.9	3.1	2.0	1.7
	Others	0.0	0.0	0.0	.1	1.0	.2	.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SDC and RMMRU Panel Survey 2020

Annex 7

Table: Types of toilets by migration type, gender and district

District	Type of toilet	WAVE 3						
		International (%)			Internal (%)			Non-migrant (%)
		M	F	T	M	F	T	
Chapai Nawabganj	Sanitary (Paka with water seal)	77.8	0.0	73.7	20.4	23.5	20.6	23.6
	Sanitary (Slave or ring toilet/ without water seal)	22.2	100.0	26.3	59.2	58.8	59.2	51.4
	Not Sanitary (Katcha toilet)	0.0	0.0	0.0	19.9	17.6	19.7	23.6
	Open area/no toilet	0.0	0.0	0.0	.5	0.0	.5	1.4
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Barishal	Sanitary (Paka with water seal)	60.7	28.6	58.3	38.8	100.0	40.6	30.7
	Sanitary (Slave or ring toilet/ without water seal)	38.2	71.4	40.6	60.2	0.0	58.5	61.4
	Not Sanitary (Katcha toilet)	1.1	0.0	1.0	1.0	0.0	.9	6.9
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rangpur	Sanitary (Paka with water seal)	48.8	50.0	48.8	24.8	31.6	25.8	29.2
	Sanitary (Slave or ring toilet/ without water seal)	48.8	50.0	48.8	70.6	57.9	68.8	60.0
	Not Sanitary (Katcha toilet)	2.4	0.0	2.3	4.6	10.5	5.5	9.2
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Satkhira	Sanitary (Paka with water seal)	66.7	0.0	66.7	14.9	0.0	14.3	22.4
	Sanitary (Slave or ring toilet/ without water seal)	33.3	0.0	33.3	76.6	100.0	77.6	61.2
	Not Sanitary (Katcha toilet)	0.0	0.0	0.0	8.0	0.0	7.7	12.2
	Open area/no toilet	0.0	0.0	0.0	.5	0.0	.5	2.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0

Shariatpur	Sanitary (Paka with water seal)	71.0	0.0	70.2	35.1	0.0	35.1	47.3
	Sanitary (Slave or ring toilet/ without water seal)	27.8	100.0	28.7	61.4	0.0	61.4	49.1
	Not Sanitary (Katcha toilet)	1.1	0.0	1.1	3.5	0.0	3.5	3.6
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Sunamganj	Sanitary (Paka with water seal)	75.9	66.7	75.4	42.3	0.0	40.7	45.3
	Sanitary (Slave or ring toilet/ without water seal)	19.0	33.3	19.7	38.5	0.0	37.0	35.8
	Not Sanitary (Katcha toilet)	4.0	0.0	3.8	19.2	100.0	22.2	16.8
	Open area/no toilet	1.1	0.0	1.1	0.0	0.0	0.0	2.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tangail	Sanitary (Paka with water seal)	69.2	50.0	69.1	80.0	0.0	76.2	40.7
	Sanitary (Slave or ring toilet/ without water seal)	27.1	50.0	27.4	20.0	100.0	23.8	48.1
	Not Sanitary (Katcha toilet)	3.2	0.0	3.1	0.0	0.0	0.0	11.1
	Open area/no toilet	.5	0.0	.4	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chattogram	Sanitary (Paka with water seal)	39.0	0.0	37.4	26.1	0.0	26.1	15.0
	Sanitary (Slave or ring toilet/ without water seal)	58.9	100.0	60.5	69.6	0.0	69.6	80.5
	Not Sanitary (Katcha toilet)	1.4	0.0	1.4	4.3	0.0	4.3	3.8
	Open area/no toilet	.7	0.0	.7	0.0	0.0	0.0	.8
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Khagrachari	Sanitary (Paka with water seal)	100.0	0.0	100.0	16.0	14.3	15.6	8.0
	Sanitary (Slave or ring toilet/ without water seal)	0.0	0.0	0.0	68.1	60.7	66.4	51.1
	Not Sanitary (Katcha toilet)	0.0	0.0	0.0	14.9	25.0	17.2	39.2
	Open area/no toilet	0.0	0.0	0.0	1.1	0.0	.8	1.7
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0

Faridpur	Sanitary (Paka with water seal)	36.0	16.8	25.3	24.1	0.0	22.6	19.5
	Sanitary (Slave or ring toilet/ without water seal)	62.7	73.7	68.8	65.5	100.0	67.7	68.3
	Not Sanitary (Katcha toilet)	1.3	9.5	5.9	10.3	0.0	9.7	12.2
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gazipur	Sanitary (Paka with water seal)	59.8	36.6	48.7	68.4	66.7	68.2	43.7
	Sanitary (Slave or ring toilet/ without water seal)	38.2	59.1	48.2	26.3	33.3	27.3	52.9
	Not Sanitary (Katcha toilet)	2.0	3.2	2.6	5.3	0.0	4.5	3.4
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	1.1	.5	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Narayanganj	Sanitary (Paka with water seal)	78.2	48.6	68.7	68.0	25.0	62.1	46.9
	Sanitary (Slave or ring toilet/ without water seal)	14.1	27.0	18.3	20.0	75.0	27.6	35.4
	Not Sanitary (Katcha toilet)	7.7	24.3	13.0	12.0	0.0	10.3	17.7
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Brahmanbaria	Sanitary (Paka with water seal)	48.7	33.3	48.5	24.6	0.0	24.2	17.9
	Sanitary (Slave or ring toilet/ without water seal)	49.7	66.7	50.0	70.5	100.0	71.0	74.4
	Not Sanitary (Katcha toilet)	1.6	0.0	1.5	3.3	0.0	3.2	2.6
	Open area/no toilet	0.0	0.0	0.0	1.6	0.0	1.6	5.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cumilla	Sanitary (Paka with water seal)	39.1	100.0	39.5	21.6	0.0	20.8	16.5
	Sanitary (Slave or ring toilet/ without water seal)	59.0	0.0	58.6	68.6	100.0	69.8	72.9
	Not Sanitary (Katcha toilet)	1.9	0.0	1.9	9.8	0.0	9.4	10.6
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Dhaka	Sanitary (Paka with water seal)	71.9	61.5	71.2	85.7	0.0	80.0	60.8
	Sanitary (Slave or ring toilet/ without water seal)	26.5	38.5	27.3	14.3	100.0	20.0	35.4
	Not Sanitary (Katcha toilet)	1.1	0.0	1.0	0.0	0.0	0.0	2.5
	Open area/no toilet	.5	0.0	.5	0.0	0.0	0.0	1.3
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kushtia	Sanitary (Paka with water seal)	85.4	0.0	85.4	64.1	33.3	63.0	59.8
	Sanitary (Slave or ring toilet/ without water seal)	12.4	0.0	12.4	26.9	33.3	27.2	33.9
	Not Sanitary (Katcha toilet)	2.2	0.0	2.2	9.0	33.3	9.9	6.3
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Lakshmipur	Sanitary (Paka with water seal)	60.0	0.0	58.9	42.2	0.0	41.3	27.6
	Sanitary (Slave or ring toilet/ without water seal)	37.5	100.0	38.7	53.3	100.0	54.3	71.1
	Not Sanitary (Katcha toilet)	1.3	0.0	1.2	4.4	0.0	4.3	1.3
	Open area/no toilet	.6	0.0	.6	0.0	0.0	0.0	0.0
	Others	.6	0.0	.6	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manikganj	Sanitary (Paka with water seal)	66.1	43.6	57.3	33.3	0.0	33.3	50.6
	Sanitary (Slave or ring toilet/ without water seal)	33.9	53.8	41.7	66.7	0.0	66.7	49.4
	Not Sanitary (Katcha toilet)	0.0	2.6	1.0	0.0	0.0	0.0	0.0
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Munshiganj	Sanitary (Paka with water seal)	46.6	0.0	46.6	60.9	0.0	60.9	33.0
	Sanitary (Slave or ring toilet/ without water seal)	51.1	0.0	51.1	39.1	0.0	39.1	56.8
	Not Sanitary (Katcha toilet)	2.3	0.0	2.3	0.0	0.0	0.0	8.0
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Others	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Total	100.0	0.0	100.0	100.0	0.0	100.0	100.0

Mymenshing	Sanitary (Paka with water seal)	63.9	57.1	63.6	65.5	50.0	64.5	40.0
	Sanitary (Slave or ring toilet/ without water seal)	27.9	14.3	27.3	31.0	0.0	29.0	33.0
	Not Sanitary (Katcha toilet)	8.2	28.6	9.1	3.4	50.0	6.5	27.0
	Open area/no toilet	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	Sanitary (Paka with water seal)	60.5	35.1	57.2	31.9	22.9	31.2	33.3
	Sanitary (Slave or ring toilet/ without water seal)	36.7	57.7	39.5	58.9	61.5	59.1	53.1
	Not Sanitary (Katcha toilet)	2.4	7.0	3.0	8.9	15.6	9.4	12.7
	Open area/no toilet	.3	0.0	.2	.3	0.0	.3	.8
	Others	.0	.3	.1	0.0	0.0	0.0	.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SDC and RMMRU Panel Survey 2020

Annex 8

Table: Sources of cooking fuel by migration type, gender and district

District	Sources	WAVE 3						
		International (%)			Internal (%)			Non-migrant (%)
		M	F	T	M	F	T	
Chapai Nawabganj	Firewood	44.4	0.0	42.1	59.7	82.4	61.5	43.1
	Cow dung/leaf/straw	38.9	100.0	42.1	40.3	17.6	38.5	52.8
	Gas/lp gas	16.7	0.0	15.8	0.0	0.0	0.0	4.2
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Barishal	Firewood	78.7	85.7	79.2	76.7	100.0	77.4	90.1
	Cow dung/leaf/straw	9.0	0.0	8.3	9.7	0.0	9.4	5.0
	Gas/lp gas	12.4	14.3	12.5	13.6	0.0	13.2	5.0
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rangpur	Firewood	46.3	50.0	46.5	30.3	36.8	31.3	33.8
	Cow dung/leaf/straw	39.0	50.0	39.5	58.7	63.2	59.4	54.6
	Gas/lp gas	14.6	0.0	14.0	10.1	0.0	8.6	11.5
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	.9	0.0	.8	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Satkhira	Firewood	16.7	0.0	16.7	63.3	87.5	64.3	55.1
	Cow dung/leaf/straw	16.7	0.0	16.7	17.6	0.0	16.8	20.4
	Gas/lp gas	66.7	0.0	66.7	19.1	12.5	18.9	24.5
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Shariatpur	Firewood	48.3	50.0	48.3	42.1	0.0	42.1	52.7
	Cow dung/leaf/straw	21.0	50.0	21.3	22.8	0.0	22.8	14.5
	Gas/lp gas	30.7	0.0	30.3	35.1	0.0	35.1	32.7
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Sunamganj	Firewood	55.7	33.3	54.6	84.6	100.0	85.2	66.3
	Cow dung/leaf/straw	8.6	22.2	9.3	0.0	0.0	0.0	11.6
	Gas/lp gas	31.6	44.4	32.2	11.5	0.0	11.1	20.0
	Bio-gas	4.0	0.0	3.8	3.8	0.0	3.7	2.1
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tangail	Firewood	69.7	50.0	69.5	60.0	100.0	61.9	79.6
	Cow dung/leaf/straw	9.0	0.0	9.0	0.0	0.0	0.0	3.7
	Gas/lp gas	20.8	50.0	21.1	40.0	0.0	38.1	16.7
	Bio-gas	.5	0.0	.4	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Chattogram	Firewood	51.8	66.7	52.4	52.2	0.0	52.2	72.2
	Cow dung/leaf/straw	5.7	16.7	6.1	17.4	0.0	17.4	3.8
	Gas/lp gas	42.6	16.7	41.5	30.4	0.0	30.4	24.1
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Khagrachari	Firewood	100.0	0.0	100.0	77.7	82.1	78.7	90.9
	Cow dung/leaf/straw	0.0	0.0	0.0	0.0	3.6	.8	0.0
	Gas/lp gas	0.0	0.0	0.0	22.3	14.3	20.5	9.1
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Faridpur	Firewood	50.7	54.7	52.9	48.3	0.0	45.2	43.9
	Cow dung/leaf/straw	32.0	34.7	33.5	44.8	100.0	48.4	51.2
	Gas/lp gas	16.0	9.5	12.4	6.9	0.0	6.5	3.7
	Bio-gas	1.3	1.1	1.2	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	1.2
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gazipur	Firewood	29.4	29.0	29.2	31.6	0.0	27.3	26.4
	Cow dung/leaf/straw	48.0	46.2	47.2	42.1	66.7	45.5	47.1
	Gas/lp gas	22.5	24.7	23.6	21.1	33.3	22.7	26.4
	Bio-gas	0.0	0.0	0.0	5.3	0.0	4.5	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Narayanganj	Firewood	2.6	2.7	2.6	4.0	0.0	3.4	2.0
	Cow dung/leaf/straw	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Gas/lp gas	97.4	94.6	96.5	96.0	100.0	96.6	98.0
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	2.7	.9	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Brahmanbaria	Firewood	36.6	66.7	37.1	57.4	100.0	58.1	51.3
	Cow dung/leaf/straw	17.3	0.0	17.0	14.8	0.0	14.5	12.8
	Gas/lp gas	46.1	33.3	45.9	26.2	0.0	25.8	35.9
	Bio-gas	0.0	0.0	0.0	1.6	0.0	1.6	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cumilla	Firewood	34.8	0.0	34.6	49.0	50.0	49.1	51.8
	Cow dung/leaf/straw	3.1	0.0	3.1	7.8	0.0	7.5	4.7
	Gas/lp gas	62.1	100.0	62.3	43.1	50.0	43.4	43.5
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dhaka	Firewood	66.5	84.6	67.7	50.0	100.0	53.3	81.0
	Cow dung/leaf/straw	7.0	0.0	6.6	7.1	0.0	6.7	7.6
	Gas/lp gas	26.5	15.4	25.8	42.9	0.0	40.0	11.4
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Kushtia	Firewood	38.2	0.0	38.2	44.9	100.0	46.9	30.7
	Cow dung/leaf/straw	37.1	0.0	37.1	35.9	0.0	34.6	53.5
	Gas/lp gas	24.7	0.0	24.7	17.9	0.0	17.3	13.4
	Bio-gas	0.0	0.0	0.0	1.3	0.0	1.2	2.4
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Lakshmipur	Firewood	80.6	100.0	81.0	71.1	100.0	71.7	88.2
	Cow dung/leaf/straw	2.5	0.0	2.5	4.4	0.0	4.3	5.3
	Gas/lp gas	16.9	0.0	16.6	24.4	0.0	23.9	6.6
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manikganj	Firewood	62.0	66.7	63.8	50.0	0.0	50.0	65.2
	Cow dung/leaf/straw	9.1	3.8	7.0	33.3	0.0	33.3	9.0
	Gas/lp gas	28.1	29.5	28.6	16.7	0.0	16.7	24.7
	Bio-gas	.8	0.0	.5	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Munshiganj	Firewood	48.3	0.0	48.3	56.5	0.0	56.5	43.2
	Cow dung/leaf/straw	6.3	0.0	6.3	8.7	0.0	8.7	22.7
	Gas/lp gas	44.9	0.0	44.9	34.8	0.0	34.8	34.1
	Bio-gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	.6	0.0	.6	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	0.0	100.0	100.0	0.0	100.0	100.0

Mymenshing	Firewood	73.5	85.7	74.0	69.0	100.0	71.0	71.3
	Cow dung/leaf/straw	10.2	0.0	9.7	13.8	0.0	12.9	16.5
	Gas/lp gas	15.6	14.3	15.6	17.2	0.0	16.1	12.2
	Bio-gas	.7	0.0	.6	0.0	0.0	0.0	0.0
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Electronic oven	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total	Firewood	53.5	47.4	52.7	57.0	67.7	57.8	56.3
	Cow dung/leaf/straw	13.2	23.7	14.6	23.1	20.8	23.0	19.6
	Gas/lp gas	32.8	28.4	32.2	19.4	11.5	18.8	23.8
	Bio-gas	.5	.3	.4	.3	0.0	.3	.3
	Kerosene	0.0	0.0	0.0	0.0	0.0	0.0	.1
	Electronic oven	.0	0.0	.0	0.0	0.0	0.0	0.0
	Others	0.0	.3	.0	.1	0.0	.1	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SDC and RMMRU Panel Survey 2020

Annex 9

Table: Ownership and location of shop by migration type and gender

Business	WAVE 3						
	International (%)			Internal (%)			Non-migrant (%)
	M	F	T	M	F	T	
Shops by the side of home/ road	3.8	3.9	3.8	4.4	2.1	4.2	5.1
Shops in local marketplace	8.0	3.9	7.5	4.8	2.1	4.6	5.8
Shops in district town	.6	.3	.6	.8	0.0	.7	.7
Others	.4	.3	.4	.5	0.0	.5	.2
Total no. of cases	**2329**	**357**	**2686**	**1194**	**96**	**1290**	**1913**
	WAVE 2						
Shops by the side of home/ road	3.3	2.8	3.2	2.4	2.1	2.3	3.6
Shops in local marketplace	.5	.2	.4	1.0	0.0	.8	.3
Shops in district town	.3	0.0	.3	.4	0.0	.4	.1
Others	.5	.2	.4	.2	0.0	.2	.6
Total no. of cases	**2405**	**547**	**2952**	**1230**	**192**	**1422**	**1732**

Source: SDC and RMMRU Panel Survey 2017 and 2020

Research Assistant

1. Ms. Anika Tabasum Barsha

Supervisors

1. Mr. Md. Redwanul Islam Chowdhury
2. Mr. Imran Hossain
3. Mr. Mohammad Abdur Rahim
4. Ms. Saira Afrin
5. Ms. Ashraka Saleem

Enumerators

1. Mr. Md. Saidur Rahman
2. Ms. Rokeya Begum
3. Ms. Hoimanti Chakma
4. Mr. Rabin Chakma
5. Mr. Md. Rabiul Awal
6. Ms. Oindrila Farzana
7. Mr. Shaikh Sadiqur Rahman
8. Mr. Md. Saifullah
9. Ms. Sumaiya Akter Rumi
10. Mr. Md. Mridul Khan
11. Ms. Mymuna Sharmin Nishi
12. Ms. Rubaiya Hamid
13. Ms. Khadiza Tun Habiba
14. Ms. Zannatul Firdaus
15. Ms. Tanzina Tahsin Trisha
16. Ms. Jaya Maitra
17. Ms. Naorin Akram
18. Ms. Ruksana Akter
19. Mr. Md. Nazmul Islam Nishat
20. Mr. Md. Arshadul Islam
21. Ms. Atkia Anmol
22. Ms. Kawshar Jahan Erin
23. Ms. Nishat Saba
24. Ms. Nowshin Anjum
25. Ms. Nowshin Tabassum
26. Ms. Sudipta Chakma

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