

# **A STUDY ON EMIGRATION AND CAPABILITY EXPANSION OF LEFT-BEHIND MUSLIM WOMEN IN KERALA**

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for the award of the Degree of*

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*By*

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## **CERTIFICATE**

This is to certify that the thesis titled “A STUDY ON EMIGRATION AND CAPABILITY EXPANSION OF LEFT-BEHIND MUSLIM WOMEN IN KERALA” is a bonafide record of research work done for the award of Doctor of Philosophy in Economics by SABIRA A, (Ref. No. U.O.No.17716/2019/Admn. Calicut University dated, 19.12.2019), Research scholar (Part-Time), EMEA College of Arts and Science, Kondotty. It is the original work of the candidate carried out under my guidance and supervision and the result of the research presented in this thesis, in full or in part, has not been submitted to any other institute or University for the award of any degree or diploma or other similar titles. Plagiarism is checked and found within the permitted limits.

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## **DECLARATION**

I, SABIRA A, affirms that the thesis titled “A STUDY ON EMIGRATION AND CAPABILITY EXPANSION OF LEFT-BEHIND MUSLIM WOMEN IN KERALA” submitted to the University of Calicut for the award of the degree of Doctor of Philosophy in Economics is a bonafide record of research done by me under the guidance of Dr. Shibinu S, Associate Professor, Department of Economics, PSMO College, Tirurangadi and Co- Guide, Dr. Ibrahim Cholakkal, Professor, Department of Economics, EMEA College of Arts & Science, Kondotty. I declare that I had not submitted this thesis earlier for the award of any degree, diploma, fellowship, or similar title or recognition of any University/Institution. The contents of the thesis have undergone a plagiarism check using iThenticate software at C.H. M.K Library, University of Calicut and the similarity index is within the permissible limit. I also declare that the thesis is free from AI-generated content.

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**SABIRA A**



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## **LIST OF ABBREVIATIONS**

WCI	:	Women's Capability Index
KMS	:	Kerala Migration Survey
HDR	:	Human Development Report
UNDP	:	United Nations Development Programme
QoLC	:	Quality of living Capability
EIC	:	Education and Information Capability
DMC	:	Decision-Making Capability
CoHRC	:	Control over Household Resources Capability
M F C	:	Mobility Freedom Capability
PC	:	Participation Capability
QoLCI	:	Quality of living Capability Index
EICI	:	Education and Information Capability Index
DMCI	:	Decision-Making Capability Index
CoHRCI	:	Control over Household Resources Capability Index
MFCI	:	Mobility Freedom Capability Index
PCI	:	Participation Capability Index
NGO	:	Non-Governmental Organisation
GCC	:	Gulf Corporation Council
UAE	:	United Arab Emirates
NRK	:	Non-Resident Keralites
CA	:	Capability Approach
HI	:	Health Index
HCDI	:	Household Consumer Durables Index
ECO	:	Economic Participation
SOC	:	Social Participation
NORKA	:	Non-Resident Keralites Affairs
CDS	:	Centre for Development Studies



## **ABSTRACT**

Migration refers to the movement of people from one location to another, either temporarily or permanently. People emigrating in search of jobs had an impact on both the migrants' and the state's socio-economic lives and consequently, migration is a multifaceted process. The oil shock of the 1970s in the Gulf countries, coupled with rising unemployment rates in Kerala, triggered substantial migration from the state to the Gulf region. In the past, religious orthodoxy among the Muslim community in Malabar, particularly in the Malappuram district, limited women's access to education and employment opportunities, thereby restricting their freedom and well-being. However, female perceptions have changed in response to changing needs and situations, in which migration and remittances brought in by migrants from abroad have a significant role. When the male migrates, the left-behind women have to undertake increased responsibilities that were unfamiliar to them, which influences the women's access and freedom of opportunity and improves their control over household resources, mobility and decision-making power. The utilisation of opportunities for left-behind women in the context of husbands' migration is measured in terms of the Capability Approach.

The study is concentrated in the Malappuram district in Kerala, as the district has the largest number of emigrants and the greatest proportion of foreign remittances among the districts in Kerala, since the first Kerala Migration Survey report of 1998. Multi-stage random sampling technique is applied to collect the primary data and the sample size is fixed as 423 based on the Kerala Migration Survey 2018.

In connection with evaluating the effect of male migration upon left-behind Muslim women, the Women's Capability Index was constructed by selecting the relevant capability dimensions of women affected by the research environment. The Ordinal Logistic Regression model is suitable for data analysis considering the Women's Capability Index as the ordinal and categorical dependent variable and the duration of the migration and the remittances that the migrants send to the family as the major independent variables. The study found that the migration duration is statistically insignificant whereas the foreign remittances have a statistically

significant effect on the expansion of the capabilities of the left-behind Muslim women in the study area.

To assess the factors contributing to the capability expansion of left-behind Muslim women in the study area, the Exploratory Factor Analysis with Principal Component Analysis was used. Eight factors with 36 sub-dimensions were identified based on the reviews of the previous studies and survey experiences of the pilot study. The result highlights that among the factors, migration and foreign remittances, availability of social infrastructure of Banking and Transport facilities exhibit higher factor loading ( $>0.08$ ) indicating these factors are most influential among the factors contributing to the capability expansion of left-behind Muslim women in the study area. Moreover, the association of the factors with the women's capability indices shows that the factors are the major determinants of the capability of left-behind Muslim women in the study area.

The study also assesses the role of capability expansion of left-behind Muslim women in their socio-economic participation by applying the Structural Equation Model. The parameter estimate shows that for every one unit increase in the Women's Capability Index, economic participation is expected to increase by 0.23 units and social participation is expected to increase by 0.31 units, holding other factors constant. Hence it is concluded that the expansion of left-behind women's capabilities has a positive statistically significant moderate effect on their socio-economic participation, demonstrating that when the left-behind women utilise the opportunities created due to their husbands' migration, their capabilities expand, which will enhance their socio-economic participation.

Hence the study highlights that male migration and foreign remittances they send to their households have positive effects on the capability expansion of left-behind Muslim women in the Malappuram district. The recent scenario of left-behind Muslim women in the Malappuram district enabled them to realise the benefits of socio-economic and political participation owing to increased educational opportunities and financial support from abroad.

Keywords: Emigration, Capability, Left behind women, Muslim ,Malappuram

# സംഗ്രഹം

കുടിയേറ്റം എന്നത് താൽക്കാലികമായോ ശാശ്വതമായോ ഒരു സ്ഥലത്ത് നിന്ന് മറ്റൊരിടത്തേക്ക് ആളുകളുടെ പാലായനത്തെ സൂചിപ്പിക്കുന്നു. സാമ്പത്തിക അവസരങ്ങൾ തേടിയുള്ള കുടിയേറ്റം കുടിയേറ്റക്കാരുടെയും കുടിയേറിയ രാഷ്ട്രങ്ങളിലെയും സാമൂഹിക സാമ്പത്തിക ജീവിതത്തെ ഒരു പോലെ സ്വാധീനിക്കുന്നു. തൽഫലമായി, കുടിയേറ്റം ഒരു ബഹുമാനപ്രദമായതാണ്. 1970-കളിൽ ഗൾഫ് രാജ്യങ്ങളിൽ എണ്ണ ഉൽപാദനത്തിലും പര്യവേക്ഷണത്തിലും ഉണ്ടായ വർദ്ധനവും കേരളത്തിലെ വർദ്ധിച്ചുവരുന്ന തൊഴിലില്ലായ്മ നിരക്കും സംസ്ഥാനത്ത് നിന്ന് ഗൾഫ് രാജ്യങ്ങളിലേക്കുള്ള ഗണ്യമായ കുടിയേറ്റത്തിന് കാരണമായി.

മുൻകാലങ്ങളിൽ, മലബാറിലെ മുസ്ലീങ്ങൾക്കിടയിലെ മത യാഥാസ്ഥിതികത, പ്രത്യേകിച്ച് മലപ്പുറം ജില്ലയിൽ സ്ത്രീകൾക്ക് വിദ്യാഭ്യാസം നേടുന്നതിനും ജോലി കണ്ടെത്തുന്നതിനും തടസ്സം സൃഷ്ടിച്ചു. ഇത് അവരുടെ സ്വാതന്ത്ര്യത്തെയും വികസനത്തെയും തടഞ്ഞിരുന്നു. എന്നിരുന്നാലും, മാറിക്കൊണ്ടിരിക്കുന്ന ആവശ്യങ്ങളോടും സാഹചര്യങ്ങളോടുമുള്ള പ്രതികരണത്തിൽ സ്ത്രീകളുടെ കാഴ്ചപ്പാടുകളിൽ മാറ്റങ്ങൾ ഉണ്ടായിട്ടുണ്ട്, അതിനു പുറമെ കുടിയേറ്റത്തിനും വിദേശ പണമയയ്ക്കലിനും മുഖ്യ പങ്കുണ്ട്. പുരുഷൻ കുടിയേറ്റന്മാർ അവരുടെ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന സ്ത്രീകൾക്ക്, പുരുഷ ആശ്രിതരുടെ അഭാവത്തിൽ, അവർക്ക് മുമ്പ് അപരിചിതമായ വർദ്ധിച്ച ഉത്തരവാദിത്തങ്ങൾ ഏറ്റെടുക്കേണ്ടി വരുന്നു. ഇത് സ്ത്രീകളുടെ കഴിവിനേയും അവസര സ്വാതന്ത്ര്യത്തെയും സ്വാധീനിക്കുന്നു. കുടിയേറ്റത്തിന്റെ പശ്ചാത്തലത്തിൽ ഭർത്താക്കൻമാർ വിദേശത്ത് പോകുമ്പോൾ അവരുടെ ആശ്രിതരായ, സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീംസ്ത്രീകളുടെ അവസരങ്ങളുടെ വിനിയോഗം അളക്കുവാൻ അമർത്യ സെനിയർ 'കേപ്പബിലിറ്റി' സമീപനമാണ് ഉപയോഗിച്ചത്. 1998-ലെ ആദ്യ കേരള മൈഗ്രേഷൻ സർവ്വേ റിപ്പോർട്ട് മുതൽ കേരളത്തിലെ ജില്ലകളിൽ ഏറ്റവും കൂടുതൽ വിദേശ പണമയയ്ക്കലും പ്രവാസികളും ഉള്ള ജില്ലയായതിനാൽ പഠനം മലപ്പുറം ജില്ലയിലാണ് കേന്ദ്രീകരിച്ചിരിക്കുന്നത്. പ്രാഥമിക സർവ്വേ ശേഖരിക്കുന്നതിന് മൾട്ടി-സ്റ്റേജ് റാൻഡം സാമ്പിൾ ടെക്നിക്കിന് ആണ് ഉപയോഗിച്ചത്. കേരള മൈഗ്രേഷൻ സർവ്വേ 2018 ഡാറ്റാ സെറ്റിന്റെ അടിസ്ഥാനത്തിൽ സാമ്പിൾ 423 ആയി നിശ്ചയിച്ചിട്ടുണ്ട്.

ഭർത്താവ് വിദേശത്ത് പോകുമ്പോൾ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളിൽ പുരുഷ കുടിയേറ്റക്കാരുടെ കുടിയേറ്റത്തിന്റെ സ്വാധീനം വിലയിരുത്തുന്നതുമായി ബന്ധപ്പെട്ട്, സ്ത്രീകളുടെ കേപ്പബിലിറ്റി സൂചിക നിർമ്മിച്ചു. ഓർഡിനൽ ലോജിസ്റ്റിക് റിഗ്രഷൻ മോഡൽ ഉപയോഗിച്ച് പുരുഷ കുടിയേറ്റക്കാരുടെ മൈഗ്രേഷൻ കാലയളവ്, സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിൽ സ്റ്റാറ്റിസ്റ്റിക്കലായി അപ്രധാനമാണെന്നും പഠന മേഖലയിലെ സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിൽ, വിദേശത്ത് നിന്ന് അയയ്ക്കുന്ന പണത്തിനു കാര്യമായ സ്വാധീനം ചെലുത്തുന്നുവെന്നും പഠനം കണ്ടെത്തി.

ഭർത്താവ് വിദേശത്ത് പോകുമ്പോൾ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിന് കാരണമായ ഘടകങ്ങൾ വിലയിരുത്തുന്നതിന്, പര്യവേക്ഷണ ഘടക വിശകലനം ഉപയോഗിച്ചു. പൈലറ്റ് സ്റ്റഡിയുടെയും മുൻ പഠനങ്ങളുടെയും സർവ്വേ അനുഭവങ്ങളുടെയും അവലോകനങ്ങളെ അടിസ്ഥാനമാക്കി 36 ഉപമാനങ്ങളുള്ള എട്ട് ഘടകങ്ങളിൽ നിന്ന് പര്യവേക്ഷണ ഘടക വിശകലനം പ്രയോഗിച്ച് 25 ഉപമാനങ്ങളുള്ള എഴ് ഘടകങ്ങൾ തിരിച്ചറിഞ്ഞു. കുടിയേറ്റം, വിദേശ പണമയയ്ക്കൽ, ബാങ്കിംഗ് സൗകര്യങ്ങൾ, ഗതാഗത സൗകര്യങ്ങൾ, സാമൂഹിക സാഹചര്യങ്ങൾ എന്നിവ ഉയർന്ന ഫാക്ടർ ലോഡിംഗ് (>0.08) കാണിക്കപ്പെടുന്നതിനാൽ പ്രസ്തുത ഘടകങ്ങൾ കൂടുതൽ സ്വാധീനം ചെലുത്തുന്നുവെന്ന് ഫലം എടുത്തു കാണിക്കുന്നു. കൂടാതെ ഘടനാപരമായ സമവാക്യ മാതൃക ഉപയോഗിച്ച് സാമൂഹിക-സാമ്പത്തിക പങ്കാളിത്തത്തിൽ സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ സ്വാധീനം വിശകലനം ചെയ്തു. സാമ്പത്തിക പങ്കാളിത്തത്തിന്റെ 0.23 എന്ന പാരാമീറ്റർ എസ്റ്റിമേറ്റ്, സ്ത്രീകളുടെ കേപ്പബിലിറ്റി സൂചികയിലെ ഓരോ യൂണിറ്റ് വർദ്ധനയ്ക്കും, സാമ്പത്തിക പങ്കാളിത്തം 0.23 യൂണിറ്റ് വർദ്ധിക്കുന്നുവെന്നും സാമൂഹിക

പങ്കാളിത്തത്തിന്റെ 0.31 എന്ന പാരാമീറ്റർ എസ്റ്റിമേറ്റ്, സ്ത്രീകളുടെ കേപ്പബിലിറ്റി സൂചികയിലെ ഓരോ യൂണിറ്റ് വർദ്ധനയ്ക്കും, സാമ്പത്തിക പങ്കാളിത്തം 0.31 യൂണിറ്റ് വർദ്ധിക്കുന്നുവെന്നും സൂചിപ്പിക്കുന്നു.

അതിനാൽ, ഭർത്താവിന്റെ കുടിയേറ്റവും വിദേശത്ത് നിന്ന് പണമയയ്ക്കലും മലപ്പുറം ജില്ലയിലെ ഭർത്താവ് വിദേശത്ത് പോകുമ്പോൾ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിൽ സ്വാധീനം ചെലുത്തുന്നുവെന്ന് പഠനം എടുത്തുകാണിക്കുന്നു. മലപ്പുറം ജില്ലയിലെ മുസ്ലിം സ്ത്രീകളുടെ മെച്ചപ്പെട്ട വിദ്യാഭ്യാസവും വിദേശത്തു നിന്നുള്ള സാമ്പത്തിക പിന്തുണയും സാമൂഹികവും സാമ്പത്തികവും രാഷ്ട്രീയവുമായ പങ്കാളിത്തത്തിന്റെ നേട്ടങ്ങൾ തിരിച്ചറിയാൻ അവരെ പ്രാപ്തമാക്കി എന്നും പഠനം തെളിയിക്കുന്നു.

സൂചകപദങ്ങൾ: കുടിയേറ്റം, കേപ്പബിലിറ്റി, സ്ത്രീകൾ, മുസ്ലീം, മലപ്പുറം



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## **ABSTRACT**

Migration refers to the movement of people from one location to another, either temporarily or permanently. People emigrating in search of jobs had an impact on both the migrants' and the state's socio-economic lives and consequently, migration is a multifaceted process. The oil shock of the 1970s in the Gulf countries, coupled with rising unemployment rates in Kerala, triggered substantial migration from the state to the Gulf region. In the past, religious orthodoxy among the Muslim community in Malabar, particularly in the Malappuram district, limited women's access to education and employment opportunities, thereby restricting their freedom and well-being. However, female perceptions have changed in response to changing needs and situations, in which migration and remittances brought in by migrants from abroad have a significant role. When the male migrates, the left-behind women have to undertake increased responsibilities that were unfamiliar to them, which influences the women's access and freedom of opportunity and improves their control over household resources, mobility and decision-making power. The utilisation of opportunities for left-behind women in the context of husbands' migration is measured in terms of the Capability Approach.

The study is concentrated in the Malappuram district in Kerala, as the district has the largest number of emigrants and the greatest proportion of foreign remittances among the districts in Kerala, since the first Kerala Migration Survey report of 1998. Multi-stage random sampling technique is applied to collect the primary data and the sample size is fixed as 423 based on the Kerala Migration Survey 2018.

In connection with evaluating the effect of male migration upon left-behind Muslim women, the Women's Capability Index was constructed by selecting the relevant capability dimensions of women affected by the research environment. The Ordinal Logistic Regression model is suitable for data analysis considering the Women's Capability Index as the ordinal and categorical dependent variable and the duration of the migration and the remittances that the migrants send to the family as the major independent variables. The study found that the migration duration is statistically insignificant whereas the foreign remittances have a statistically

significant effect on the expansion of the capabilities of the left-behind Muslim women in the study area.

To assess the factors contributing to the capability expansion of left-behind Muslim women in the study area, the Exploratory Factor Analysis with Principal Component Analysis was used. Eight factors with 36 sub-dimensions were identified based on the reviews of the previous studies and survey experiences of the pilot study. The result highlights that among the factors, migration and foreign remittances, availability of social infrastructure of Banking and Transport facilities exhibit higher factor loading ( $>0.08$ ) indicating these factors are most influential among the factors contributing to the capability expansion of left-behind Muslim women in the study area. Moreover, the association of the factors with the women's capability indices shows that the factors are the major determinants of the capability of left-behind Muslim women in the study area.

The study also assesses the role of capability expansion of left-behind Muslim women in their socio-economic participation by applying the Structural Equation Model. The parameter estimate shows that for every one unit increase in the Women's Capability Index, economic participation is expected to increase by 0.23 units and social participation is expected to increase by 0.31 units, holding other factors constant. Hence it is concluded that the expansion of left-behind women's capabilities has a positive statistically significant moderate effect on their socio-economic participation, demonstrating that when the left-behind women utilise the opportunities created due to their husbands' migration, their capabilities expand, which will enhance their socio-economic participation.

Hence the study highlights that male migration and foreign remittances they send to their households have positive effects on the capability expansion of left-behind Muslim women in the Malappuram district. The recent scenario of left-behind Muslim women in the Malappuram district enabled them to realise the benefits of socio-economic and political participation owing to increased educational opportunities and financial support from abroad.

Keywords: Emigration, Capability, Left behind women, Muslim ,Malappuram

## സംഗ്രഹം

കുടിയേറ്റം എന്നത് താൽക്കാലികമായോ ശാശ്വതമായോ ഒരു സ്ഥലത്ത് നിന്ന് മറ്റൊരിടത്തേക്ക് ആളുകളുടെ പാലായനത്തെ സൂചിപ്പിക്കുന്നു. സാമ്പത്തിക അവസരങ്ങൾ തേടിയുള്ള കുടിയേറ്റം കുടിയേറ്റക്കാരുടെയും കുടിയേറിയ രാഷ്ട്രങ്ങളിലെയും സാമൂഹിക സാമ്പത്തിക ജീവിതത്തെ ഒരു പോലെ സ്വാധീനിക്കുന്നു. തൽഫലമായി, കുടിയേറ്റം ഒരു ബഹുമാനപ്രദമായതാണ്. 1970-കളിൽ ഗൾഫ് രാജ്യങ്ങളിൽ എണ്ണ ഉൽപാദനത്തിലും പര്യവേക്ഷണത്തിലും ഉണ്ടായ വർദ്ധനവും കേരളത്തിലെ വർദ്ധിച്ചുവരുന്ന തൊഴിലില്ലായ്മ നിരക്കും സംസ്ഥാനത്ത് നിന്ന് ഗൾഫ് രാജ്യങ്ങളിലേക്കുള്ള ഗണ്യമായ കുടിയേറ്റത്തിന് കാരണമായി.

മുൻകാലങ്ങളിൽ, മലബാറിലെ മുസ്ലീങ്ങൾക്കിടയിലെ മത യാഥാസ്ഥിതികത, പ്രത്യേകിച്ച് മലപ്പുറം ജില്ലയിൽ സ്ത്രീകൾക്ക് വിദ്യാഭ്യാസം നേടുന്നതിനും ജോലി കണ്ടെത്തുന്നതിനും തടസ്സം സൃഷ്ടിച്ചു. ഇത് അവരുടെ സ്വാതന്ത്ര്യത്തെയും വികസനത്തെയും തടഞ്ഞിരുന്നു. എന്നിരുന്നാലും, മാറിക്കൊണ്ടിരിക്കുന്ന ആവശ്യങ്ങളോടും സാഹചര്യങ്ങളോടുമുള്ള പ്രതികരണത്തിൽ സ്ത്രീകളുടെ കാഴ്ചപ്പാടുകളിൽ മാറ്റങ്ങൾ ഉണ്ടായിട്ടുണ്ട്, അതിനു പുറമെ കുടിയേറ്റത്തിനും വിദേശ പണമയയ്ക്കലിനും മുഖ്യ പങ്കുണ്ട്. പുരുഷൻ കുടിയേറ്റന്മാർ അവരുടെ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന സ്ത്രീകൾക്ക്, പുരുഷ ആശ്രിതരുടെ അഭാവത്തിൽ, അവർക്ക് മുമ്പ് അപരിചിതമായ വർദ്ധിച്ച ഉത്തരവാദിത്തങ്ങൾ ഏറ്റെടുക്കേണ്ടി വരുന്നു. ഇത് സ്ത്രീകളുടെ കഴിവിനേയും അവസര സ്വാതന്ത്ര്യത്തെയും സ്വാധീനിക്കുന്നു. കുടിയേറ്റത്തിന്റെ പശ്ചാത്തലത്തിൽ ഭർത്താക്കൻമാർ വിദേശത്ത് പോകുമ്പോൾ അവരുടെ ആശ്രിതരായ, സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീംസ്ത്രീകളുടെ അവസരങ്ങളുടെ വിനിയോഗം അളക്കുവാൻ അമർത്യാ സെനിയുടെ 'കേപ്പബിലിറ്റി' സമീപനമാണ് ഉപയോഗിച്ചത്. 1998-ലെ ആദ്യ കേരള മൈഗ്രേഷൻ സർവ്വേ റിപ്പോർട്ട് മുതൽ കേരളത്തിലെ ജില്ലകളിൽ ഏറ്റവും കൂടുതൽ വിദേശ പണമയയ്ക്കലും പ്രവാസികളും ഉള്ള ജില്ലയായതിനാൽ പഠനം മലപ്പുറം ജില്ലയിലാണ് കേന്ദ്രീകരിച്ചിരിക്കുന്നത്. പ്രാഥമിക സർവ്വേ ശേഖരിക്കുന്നതിന് മൾട്ടി-സ്റ്റേജ് റാൻഡം സാമ്പിൾ ടെക്നിക്കിന് ആണ് ഉപയോഗിച്ചത്. കേരള മൈഗ്രേഷൻ സർവ്വേ 2018 ഡാറ്റാ സെറ്റിന്റെ അടിസ്ഥാനത്തിൽ സാമ്പിൾ 423 ആയി നിശ്ചയിച്ചിട്ടുണ്ട്.

ഭർത്താവ് വിദേശത്ത് പോകുമ്പോൾ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളിൽ പുരുഷ കുടിയേറ്റക്കാരുടെ കുടിയേറ്റത്തിന്റെ സ്വാധീനം വിലയിരുത്തുന്നതുമായി ബന്ധപ്പെട്ട്, സ്ത്രീകളുടെ കേപ്പബിലിറ്റി സൂചിക നിർമ്മിച്ചു. ഓർഡിനൽ ലോജിസ്റ്റിക് റിഗ്രഷൻ മോഡൽ ഉപയോഗിച്ച് പുരുഷ കുടിയേറ്റക്കാരുടെ മൈഗ്രേഷൻ കാലയളവ്, സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിൽ സ്റ്റാറ്റിസ്റ്റിക്കലായി അപ്രധാനമാണെന്നും പഠന മേഖലയിലെ സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിൽ, വിദേശത്ത് നിന്ന് അയയ്ക്കുന്ന പണത്തിനു കാര്യമായ സ്വാധീനം ചെലുത്തുന്നുവെന്നും പഠനം കണ്ടെത്തി.

ഭർത്താവ് വിദേശത്ത് പോകുമ്പോൾ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിന് കാരണമായ ഘടകങ്ങൾ വിലയിരുത്തുന്നതിന്, പര്യവേക്ഷണ ഘടക വിശകലനം ഉപയോഗിച്ചു. പൈലറ്റ് സ്റ്റഡിയുടെയും മുൻ പഠനങ്ങളുടെയും സർവ്വേ അനുഭവങ്ങളുടെയും അവലോകനങ്ങളെ അടിസ്ഥാനമാക്കി 36 ഉപമാനങ്ങളുള്ള എട്ട് ഘടകങ്ങളിൽ നിന്ന് പര്യവേക്ഷണ ഘടക വിശകലനം പ്രയോഗിച്ച് 25 ഉപമാനങ്ങളുള്ള ഏഴ് ഘടകങ്ങൾ തിരിച്ചറിഞ്ഞു. കുടിയേറ്റം, വിദേശ പണമയയ്ക്കൽ, ബാങ്കിംഗ് സൗകര്യങ്ങൾ, ഗതാഗത സൗകര്യങ്ങൾ, സാമൂഹിക സാഹചര്യങ്ങൾ എന്നിവ ഉയർന്ന ഫാക്ടർ ലോഡിംഗ് (>0.08) കാണിക്കപ്പെടുന്നതിനാൽ പ്രസ്തുത ഘടകങ്ങൾ കൂടുതൽ സ്വാധീനം ചെലുത്തുന്നുവെന്ന് ഫലം എടുത്തു കാണിക്കുന്നു. കൂടാതെ ഘടനാപരമായ സമവാക്യ മാതൃക ഉപയോഗിച്ച് സാമൂഹിക-സാമ്പത്തിക പങ്കാളിത്തത്തിൽ സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ സ്വാധീനം വിശകലനം ചെയ്തു. സാമ്പത്തിക പങ്കാളിത്തത്തിന്റെ 0.23 എന്ന പാരാമീറ്റർ എസ്റ്റിമേറ്റ്, സ്ത്രീകളുടെ കേപ്പബിലിറ്റി സൂചികയിലെ ഓരോ യൂണിറ്റ് വർദ്ധനയ്ക്കും, സാമ്പത്തിക പങ്കാളിത്തം 0.23 യൂണിറ്റ് വർദ്ധിക്കുന്നുവെന്നും സാമൂഹിക

പങ്കാളിത്തത്തിന്റെ 0.31 എന്ന പാരാമീറ്റർ എസ്റ്റിമേറ്റ്, സ്ത്രീകളുടെ കേപ്പബിലിറ്റി സൂചികയിലെ ഓരോ യൂണിറ്റ് വർദ്ധനയ്ക്കും, സാമ്പത്തിക പങ്കാളിത്തം 0.31 യൂണിറ്റ് വർദ്ധിക്കുന്നുവെന്നും സൂചിപ്പിക്കുന്നു.

അതിനാൽ, ഭർത്താവിന്റെ കുടിയേറ്റവും വിദേശത്ത് നിന്ന് പണമയയ്ക്കലും മലപ്പുറം ജില്ലയിലെ ഭർത്താവ് വിദേശത്ത് പോകുമ്പോൾ സ്വന്തം നാട്ടിൽ ജീവിക്കാൻ നിർബന്ധിതരാകുന്ന മുസ്ലീം സ്ത്രീകളുടെ കേപ്പബിലിറ്റിയുടെ വികാസത്തിൽ സ്വാധീനം ചെലുത്തുന്നുവെന്ന് പഠനം എടുത്തുകാണിക്കുന്നു. മലപ്പുറം ജില്ലയിലെ മുസ്ലിം സ്ത്രീകളുടെ മെച്ചപ്പെട്ട വിദ്യാഭ്യാസവും വിദേശത്തു നിന്നുള്ള സാമ്പത്തിക പിന്തുണയും സാമൂഹികവും സാമ്പത്തികവും രാഷ്ട്രീയവുമായ പങ്കാളിത്തത്തിന്റെ നേട്ടങ്ങൾ തിരിച്ചറിയാൻ അവരെ പ്രാപ്തമാക്കി എന്നും പഠനം തെളിയിക്കുന്നു.

സൂചകപദങ്ങൾ: കുടിയേറ്റം, കേപ്പബിലിറ്റി, സ്ത്രീകൾ, മുസ്ലീം, മലപ്പുറം

# CHAPTER 1

---

## INTRODUCTION



## 1.1 Introduction

Migration is the foundation of progress that humanity has achieved so far. Migration is a type of social and geographical relocation from one regional or national setting to another. The tendency for global linkages provides opportunities for the people to enrich their living. People have migrated in search of jobs, a place to live in, as well as to run their ventures. People may move temporarily or permanently, voluntarily or by coercion. Arab states of the Persian Gulf, with large-scale commercial oil extraction, started in the early 1950s and quickly grew as major oil exporters in the world. These nations were disadvantaged for having scarce workers and populations, whereas India, with extremely high unemployment rates, immediately recognized the chance for its inhabitants to benefit from the new employment opportunities. A significant turning point in the migration movement from India was the increase in oil prices in October 1973 in Gulf countries. Along with the oil boom, the Gulf countries began the rapid development of new infrastructure. Thousands of low-skilled Indian labourers moved to the Persian Gulf countries during the oil boom in the 1970s and the 1980s (Shibinu, 2017). The oil shock of the 1970s and India's mounting unemployment rates are the primary causes of this substantial migration from the nation (Gulati, 1983).

Kerala has drawn considerable attention for its paradoxical pattern of development with high social development and poor economic growth commonly referred to as the 'Kerala model of development'. The growth performance of Kerala has recently turned around with a significant increase in savings and consumption, placing the state as one of India's highest consumer states and it now ranks high among Indian states in terms of per capita income. This has primarily been accomplished by substantial development that was made possible by sizeable remittances from abroad (Kannan & Hari, 2020). For many households in developing nations, remittances sent home by migrants to provide for their left-behind household members are a crucial source of income. They have an immediate and significant effect on the standard of living of the households that receive these remittances. They are used for various forms of human capital enhancement or household expenditures such as health care and education (Shibinu, 2017).

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At the beginning of the 1970s, Kerala had a period of accelerated emigration, ever since then, the Gulf countries have been predominantly regarded as the emigrants' destinations. Even today, the main destination for emigrants from Kerala remains the Gulf nations. (Rajan & Zachariah, 2023). The role of gender in the process of development is an essential concern in Kerala, a socially elite state, where women make up more than half of the population and whose health and education greatly contribute to the Kerala model of development. Kerala has the lowest female labour force participation and the highest unemployment rate, particularly among educated women in the state (Sebastian & Navaneetham, 2012). The development experience of Malappuram district also shows a low female workforce participation rate (7.6 percent) and a comparatively high female literacy rate (91.62 percent) as per the 2011 census. In the past, conservative views within the Muslim communities of Malappuram district prevented women from pursuing higher education and seeking employment, which limited their freedom and well-being. One of the main reasons why Muslims in Malabar refused to send their children to school was their skeptical outlook toward liberal Western education (Ali 1990). Malappuram district, being a backward region, began with a lower base of education and required an extended period to keep up with other districts and now there is a gradual advance in women's education across generations (Jafar,2015). So, there have been changes in women's perspectives in reaction to changing needs and situations, for which migration and remittances made by migrants from abroad have been one of the most important contributing factors.

According to the Kerala Migration Survey (2018), with about one-fifth of the entire population as emigrants, Malappuram has the greatest number of migrants compared to other districts in Kerala. During the Persian Gulf Boom of the 1970s and early 1980s, the Malappuram district witnessed a substantial number of emigrants, particularly to the Gulf countries. Malappuram district received the highest amount of remittances compared to all other districts in the state. According to the Kerala Migration Survey 2018, Muslims are over-represented in emigration and there is male dominance in migration within the Muslim population (Zachariah & Rajan, 2018b). According to the UNDP Human Development Report 2009,

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migration has beneficial effects on human progress, including greater family income and enhanced access to healthcare and educational facilities and may benefit traditionally disadvantaged populations, particularly women (HDR, 2009).

When the male members of the family emigrate, they are geographically separated from the women of the household including spouses, mothers, daughters and sisters. The studies in this domain show that among the women who are left-behind due to male migration, the most affected are the wives who remained in their place of origin. Male out-migration enriches families in the places of origin, but it also has a significant impact on the lives of the wives who are left behind. (Zachariah & Rajan, 2018a; Desai & Lei, 2021). The separation of husbands causes major changes in the lives of wives who are left behind, increasing their responsibilities and family obligations as well as managing their money and belongings on the one hand (Gulati, 1993) and equipping greater decision-making ability and autonomy on the other hand (Desai & Banerji, 2008; Hadi, 2001; Zachariah & Rajan, 2018a). The remittances from their husbands abroad and increasing responsibilities due to the absence of male partners helped them gain autonomy, status, managerial skills and experience dealing with the world beyond their homes (Zachariah & Rajan, 2018a). Male migration changes the dynamics of power within households, giving women greater autonomy in making decisions than ever before (Gulati 1987).

Capability Approach of A.K Sen explores the interrelationships of individual choices, resources and entitlements to conceptualize the persistence of migrants. The selection of migrant's functioning and capabilities should be based on underlying social issues and ideals (Sen, 1990). Persons with greater capabilities, according to Sen, enjoy a more beneficial setting in society than those with narrow capability sets (Sen, 1989). The application of a Capability Approach to empirical migration research has enormous potential to identify the migration-related issues and prospects of both migrated and left-behind families, especially wives who are dependent on male migrants (Sabrina, 2016). The experiences of migrants broaden a person's real personal freedoms such as an increase in mobility and decision making. The migrant and the family, either take along with them or leave behind to enhance

their economic, political and social freedoms. The capabilities approach addresses the issue of global migration from demographic, sociological, geographical and economic standpoints. (Juran, 2016).

The theoretical framework put forward by Sen comprises significant elements that can be applied to analyze and assess the issues of international migration. Drawing analytical connections and identifying parallels between migratory ideologies and capability framework indicates the potential for new conceptual and methodological advances. Therefore, to explore the well-being of left-behind women in the context of male migration, the Capability Approach has been applied by selecting relevant capabilities. For an in-depth analysis, the Malappuram district was chosen and hoped to capture the effect of migration on the empowerment of left-behind women in the district through the lens of the Capability Approach.

## 1.2 Operational Definitions

- 1.2.1 Capability:** Capability refers to abilities that people have, to realize various valuable states of being and doing. The capability focuses on what they can do and different conditions or experiences a person can have rather than access to resources or opportunities for particular levels of enjoyment. The capabilities of women that would be aroused by the migration of their husbands are considered in the study.
- 1.2.2 Emigration:** Emigration is the act of leaving the Malappuram district of Kerala to settle in Middle Eastern nations such as Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates and doing a gainful job, leaving their family in the place of origin.
- 1.2.3 Emigrants:** Emigrants are the usual male members of households in the Malappuram district who leave their place of origin and live and work in any Middle Eastern nation, do a gainful job and send remittances to their family in the district. Families are not permitted to accompany their husbands, categorized as semi-skilled or unskilled labourers with their low salary scale.

- 1.2.4 Left-behind Women:** The Left-behind women are those Muslim women in the Malappuram district whose husbands have been working in any Middle Eastern Gulf countries in the last year and the respondents were residing in Malappuram district at least during the previous year before the survey.
- 1.2.5 Nuclear Family:** A nuclear family is a family unit consisting of a father, mother and their children living together as a single household in which the father or the male member is working in any Gulf country and the mother has to manage the household affairs.
- 1.2.6 Joint Family:** A joint family is a family unit that includes additional relatives such as grandparents, aunts, uncles and cousins living in the same home. When husbands from joint families migrate, their spouses usually live in their husband's houses with their parents and other relatives.
- 1.2.7 Female Headship:** Female headship refers to the female member who is recognized as the primary decision-maker or leader of a household. In a migrant household, in the absence of the male member who migrates, the Left-behind woman makes the major decisions either independently or by discussing with her husband.
- 1.2.8 Place of Origin:** Place of origin refers to the location or country where the person was born, lived, or was residing before migrating to another country. The place of origin of the respondents' husbands in the study is Malappuram district.
- 1.2.9 Destination:** The destination of a migrant refers to the place, country, or region to which a person migrates. The destination of the migrants in the study include gulf countries such as Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates where they are settled and doing a gainful job either temporarily or permanently

### **1.3 Significance of the Study**

Migration is the most significant factor in Kerala's development scenario throughout the last quarter of the 20th century. Migration affects the migrants as well as the society extensively at both the place of origin and destination. The phrase 'Gulf boom' describes the continuous emigration from the state to Gulf nations. The socio-economic environment of Kerala was changed by the diaspora to the Gulf countries. The patterns of consumption, investments, lifestyle, religion and education have been substantially influenced by migration.

Malappuram district has the highest emigrants and foreign remittances among the districts in Kerala which have a far-reaching impact on the economy of the district. In the past, the freedom of women and well-being were limited by the religious conservatism among the Muslim communities in Malabar, particularly in the Malappuram district, which constrained them from pursuing education and employment. However, with the changes in the needs and aspirations, the perspectives of women have also changed. Gradually, Muslim women are becoming more and more persuaded to education and their parents are supporting them.

Today, they have attained the highest academic achievements and credentials, such as numerous scholarships and they recognise that education is a tool for the transformation of women. As a result, the enrollment of Muslim women on the campuses in Malappuram district has increased. They started leaving their states and nations to pursue higher education and started to be involved in public affairs, including politics. Many factors, such as education, political empowerment of the community and the Renaissance, have contributed to changes in the perception of women in the Malappuram district. Among these, the most prominent factors are migration and remittances from abroad. The Muslim community utilised the foreign remittances to the district to establish educational institutions, shopping malls, Madrassas and Masjids. The expansion of educational opportunities in the district has increased educational options for women, especially those belonging to the Muslim community in the district.

Being a Muslim-majority district, Muslims have a significant share in emigration in Malappuram district. Within the Muslim population, migration is

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dominated by men (Zachariah & Rajan, 2018b). The studies show that the separation of wives from their husbands due to out-migration is the highest among the Muslims in Kerala and Malappuram district has the highest number of such separated women from husbands due to male migration. For a comprehensive and micro-level analysis, the study focuses on the socio-economic impact of emigration on left-behind Muslim women in the Malappuram district and includes changes in household dynamics and social networks, changes in responsibilities and utilisation of opportunities for left-behind women due to the absence of their husbands. The study analyses the relative significance of Malappuram district and the Muslim community in the emigration scenario of Kerala in terms of the pattern of emigration and household remittances. The study also identifies the extent of socio-economic participation of left-behind Muslim women in the Malappuram district and envisages the changes in the autonomy of women due to extensive migration and other factors, by comparing younger and older generations. The study also tries to evaluate the policies for addressing the needs of left-behind women and extend recommendations for enhancing support structures.

#### **1.4 Statement of the Problem**

Malappuram tops the district-wise emigration and foreign remittance in Kerala. Almost 70 percent of the population of the district are Muslims and the majority of them come from emigrant homes. Since the low-educated and low-skilled males migrate and are mostly engaged in manual jobs in Gulf countries, they cannot afford family visas and leave their families behind in their place of origin. Even if the emigrants have family accommodation privileges, they cannot utilise the same, as their spouses are responsible for providing care for the children and aged members at home.

When the male migrates, leaving the dependent women behind in the place of origin, especially the spouses, they have to perform more duties and responsibilities that were earlier unfamiliar to them, which increases the access and freedom of opportunity of the left-behind women. These left-behind women explore a variety of opportunities and manage challenges as they take on numerous

responsibilities and deal with intricate situations to accomplish the needs of themselves and their family members, which were earlier performed by their husbands. These roles of women have positively changed from that of modest housewives to effective managers of household affairs, handling a variety of duties that include caring for the family, organising the education of their children, managing family properties, doing various bank transactions and interacting with the outside society and neighbourhood to perform their responsibilities. When the women Left-behind receive adequate remittances from abroad, they will gain control over financial resources, which will in turn improve their status and autonomy, independence and expertise in handling their affairs.

In recent years, the research on the capabilities approach has also grown at an exponential rate. The capability approach has immense scope for analysing the increased agency of left-behind women while utilising the opportunities availed due to the migration of their husbands. If utilised in the right direction, these women can convert these situations into functioning that they have reason to value which enables them to secure better prospects for themselves and family, which requires positive attitudes and a favorable family environment. Hence by using the Capability Approach, the study focuses on qualitative data gathered from the subjective perceptions of Left-behind wives of migrants who are either living with their in-laws or serving as de facto heads of households.

### **1.5 Research Questions**

The study finds the capabilities approach to be a beneficial paradigm for understanding the impact of migration and remittances on left-behind spouses due to the migration of their male counterparts. Though there has been considerable progress in developing the capabilities of women, their participation in socio-economic decision-making remains very limited (UNDP, 1995). The participation of women in certain socio-economic spaces has not improved in accordance with their high educational status. Given the unique social pattern of development in the state, the proposed study addresses the basic question of how emigration from Kerala to the Middle East has contributed to the capability expansion of left-behind Muslim

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women in the study area. This study aims to answer the following research questions:

- How well migrant households are utilising the expanded resources from migration in attaining capabilities in their quality of living, expanding education and knowledge dimensions?
- What are the capabilities that are relevant for the Left-behind Muslim women?
- How well does the situation of husbands' absence increase their responsibilities which enables them to expand their involvement in household decision-making, their ability to deal with the properties and finances from various dimensions of the family and socio-economic participation?
- What are the other factors that contribute to the capability expansion of left-behind Muslim women in the study area apart from the migration of their husbands?

The broad question that the thesis seeks to address is, what is the impact of male migration and consequent separation of spouses and the remittances on the capability expansion of women who are Left-behind in the place of origin, based on the indicators developed to analyse the capabilities of women. By considering the main question of the role of migration on the capability expansion of Muslim women in the study area, the study aims to identify those capabilities of women that would be influenced due to the migration of their spouses and remittances.

### **1.6 Objectives of the Study**

To address the broader research questions, the following primary objectives are set:

1. To understand the role of emigration on the capability expansion of the Left-behind Muslim women in Malappuram district.

2. To investigate the factors that contributed to the capability expansion of left-behind Muslim women in the district.
3. To assess the role of capability expansion in the socio-economic participation of left-behind Muslim women in the study area.

### **1.7 Hypotheses.**

1. The foreign remittances sent by the husbands have a positive effect on the capabilities of left-behind Muslim women.
2. The capability of left-behind Muslim women is positively related to the duration of their husbands' stay overseas.
3. The capability expansion of left-behind Muslim women influences their socio-economic participation positively.

### **1.8 Methodology**

The study is both analytical and empirical, based on both primary and secondary data. Primary data has been obtained from 423 households in the Malappuram district. Secondary data has been taken from various sources like Indian Migration Reports of 2020 and 2021, Kerala Migration Surveys 1998, 2003, 2008, 2013 and 2018, various publications of the Centre for Development Studies, Ministry of External Affairs, Economic and Political Weekly, Census Reports of 2001 and 2011, Economic Reviews, Human Development Report of 2009, Journal of Social and Economic Development, Pravasi Malayali Census conducted by NORKA, reports and publications from the different departments of the Government of India and Kerala Panchayath level statistics, data published by the Department of Economics and Statistics, Government of Kerala, etc.

The researcher selected Malappuram district for the study because Malappuram is the highest migration pocket of Kerala, as the district has the distinction of sending out the largest number of male emigrants and consequent left-behind women, receiving the largest amount of remittances in Kerala as per Kerala Migration Survey, 2018. Also, according to Census 2011, Malappuram is a district

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with the largest number of Muslims. Hence the sample unit of the study is left-behind Muslim women whose husbands migrated to Gulf countries, as 41.7 percent of the migrants from Kerala are Muslims and 89.2 percent of Kerala migrants have migrated to the Gulf countries according to the Kerala Migration Survey, 2018.

The primary data collection involved a field survey with a structured questionnaire administered through personal interviews with the left-behind Muslim women of male migrants living in the Malappuram district. Data has been collected randomly from selected panchayaths and municipalities in six taluks (as per the 2011 census) in the Malappuram district using a Stratified Multi-stage Sampling technique. The taluks in the Malappuram district were categorised into two strata-Urban and Rural. This resulted in a total of 12 strata with six urban strata and six rural strata in six taluks. From the urban stratum, Malappuram, Nilambur, Perinthalmanna, Tirur, Parappanangadi and Ponnani Municipalities were selected at random. From the rural stratum, Mampad panchayath from Nilambur taluk, Edappal panchayath from Ponnani taluk, Anakkayam panchayath from Eranad taluk, Moorkanad panchayath from Perinthalmanna taluk, Othukkungal panchayath from Tirurangadi taluk, Kuttippuram and Thirunavaya panchayaths from Tirur taluk were selected at random.

From the selected panchayaths and Municipalities, one ward or division was selected at random. From the selected ward of the panchayaths and the divisions of Municipalities, the researcher identified the Muslim migrant households with the help of elected ward members based on the electoral roll. Based on the list of Muslim migrant households, the Muslim women whose husbands have been working in Gulf countries for at least one year were selected. Accordingly, from each taluk, the required number of samples were collected.

### **1.9 Data**

To understand the implications of the migration and remittance of males on the left behind women in Kerala through the Capability Approach, it is required to look into micro-level realities for which Malappuram district in Kerala is selected for the study and the study is undertaken by collecting primary data. The primary

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data was collected from the field survey carried out by the researcher in Malappuram district from November 2022 to August 2023.

The population of the study is Muslim married women who are left-behind in the Malappuram district by their husbands who migrated to the Middle Eastern Gulf countries of Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain and Oman and working there for at least two years before the survey and these left-behind women who are not able to enjoy the family visa privilege to accompany their spouses abroad. Hence the respondents are typically residents of Malappuram district by birth, marriage, or for other reasons and are still residing in the district.

### **1.10 Selection of Sample-The Sampling Design**

The population of the study is Muslim married women who are left behind in the Malappuram district by their husbands who migrated to Middle Eastern Gulf countries of Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain and Oman and working there for at least two years before the survey and these left-behind women who are not able to enjoy the family visa privilege to accompany their spouses abroad. Since the population is unknown, the sample size is fixed based on the Kerala Migration Survey 2018 data set.

The Kerala Migration Survey, 2018 was done by CDS, Trivandrum, Kerala with a sample of 15000 households spread across the 14 districts of Kerala, selected by the stratified multistage random sampling method. The Kerala Migration Surveys are the original, most credible and genuine source of information about international migration from Kerala (Zachariah & Rajan, 2018b). The Kerala Migration Survey 2018 was the eighth series of studies undertaken by the Centre for Development Studies (CDS) on international migration based on a large-scale sample survey. The sample unit of the study is Muslim married women from the Malappuram district whose husbands have been working in Middle Eastern countries for at least two years. The sample size for the study is determined in the following way.

The Kerala Migration Survey 2018 selected 15,000 households which are distributed over the districts of Kerala. From the data set of KMS 2018, 1500 samples which included both migrants and non-migrants from the Malappuram district were extracted which constituted 965 Muslims, 486 Hindus and 49 Christians. The sample comprised 688 migrants which included internal as well as external migrants and 641 external migrants were extracted. The external migrants include both males and females from which male migrants were extracted.

Finally, the Muslim married male migrants who migrated to Gulf countries were extracted and found to be 423, hence the sample size was fixed to 423 for the study. The number of samples from each taluk was determined based on the taluks of origin of these respondents as per the Kerala Migration Survey 2018 data set and is given in Table 1.1.

**Table 1.1 Distribution of Samples from Taluks in Malappuram District**

<b>Taluks</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Eranad	78	18.44
Nilambur	50	11.82
Perinthalmanna	64	15.13
Tirur	112	26.48
Tirurangadi	76	17.97
Ponnani	43	10.17
Malappuram	423	100

Source: Kerala Migration Survey 2018

Accordingly, the samples selected from each taluk are; Eranad- 78, Nilambur-50, Perinthalmanna- 64, Tirur-112, Tirurangadi- 76 and Ponnani- 43 and a total sample of 423 were selected from Malappuram district as given in Table. 1.1.

### **1.11 Methods of Analysis**

With the help of a detailed survey schedule, information was gathered on the different socio-economic profiles of the respondents, various aspects of migration, dimensions of various capability indices, and different factors contributing to the capability of women and various aspects of socio-economic participation. The study

includes descriptive and analytical aspects, performed using the appropriate statistical tools such as descriptive statistics and inferential statistics like chi-square tests, F-tests, t-tests ANOVA (Analysis of Variance), and MANCOVA. In addition to this, non-parametric tests such as the Mann-Whitney U Test, Kolmogorov-Smirnov Test, Kruskal-Wallis H Test, Cronbach's alpha Test, Spearman's Rank Correlation Coefficient and Kendall's Tau -b and diagrams such as Bar Charts, Pie diagram and Box plot are also included. For the analysis of three objectives Ordinal Logistic Regression Analysis, Exploratory Factor Analysis with Principal Component Analysis and Structural Equation Modeling (SEM) were applied. Moreover, to gather in-depth insights and qualitative information about the left-behind women in the absence of their husbands due to migration and their coping strategies, a Focus Group discussion was conducted using structured questions.

#### **1.11.1 Women's Capability Index (WCI)**

The methodological structure for constructing the Women's Capability Index was provided by Greco (2013) by applying the Capability framework of Amartya Sen on the argument that people's freedom to live the kind of life they have good reason to value constitutes their well-being. Based on a household survey the capabilities of the women were evaluated and these capabilities were aggregated into a composite measure to create an index and the reliability, construct validity and content validity criteria were used to validate the index (Greco, 2013).

The following methods were used to create the Women's Capability Index for the current study:

1. Selection of capability dimensions and setting variables to achieve the indicators.
2. Collecting data on the variables from the sample respondents.
3. Examine the expected relationships of the sub-dimensions with key socio-economic characteristics of the respondents.
4. Construction of Women's Capability Indices.
5. Aggregation of the indicators into a single Capability index.

## 6. Validation of the Capability Index.

### **1.11.2 Selection of Capability Indicators and Setting Variables to Achieve the Indicators**

Since the capabilities are by nature immeasurable, what is measurable are the functionings, or achievements in each dimension at the individual level which tend to be recognized by appropriate indicators that show the performance in the respective domain (Krishnakumar, 2007). In the current study, considering the relevance of the research environment in the study area, the literature reviews on the Capability Approach and the experience of the pilot study, those capabilities of the women that would be affected by the migration of husbands, remittances and living arrangements of the left-behind women at the place of origin were identified with its sub-dimensions and were taken into account while selecting the Women's Capability set. Accordingly, six indicators are selected for the study namely; Quality of Living Capability, Education and Information Capability, Decision Making Capability, Control over Household Resources Capability, Mobility Freedom Capability and Participation Capability.

The findings of the study on the impact of male migration and left-behind women show that male out-migration could increase access to the assets and resources, mobility and decision-making authority of left-behind wives (Iqbal et al. 2014; Maharjan et al.,2012) and autonomy of the women to make decisions, control over the finance (Ullah, 2017; Sadiqi & Ennaji, 2004; Menjiver & Agadjanian, 2007; Hadi, 2001; Mc Evoy, 2008) and decision-making authority, physical mobility, participation in socio-political spheres and access to information (Saroj,2023).

### **1.11.3 Collecting Data on the Variables and Examining the Expected Relationships.**

By using the structured questionnaire meant for the research thesis, the field survey in the study area was conducted through personal interviews. The expected relationships of the sub-dimensions with key socio-economic characteristics of the

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respondents were examined and found that there exist statistically significant associations between most of the variables.

#### **1.11.4 Construction of Women's Capability Indices.**

The survey responses to the questions of various sub-dimensions of capability indicators were used to quantify and standardise the individual indicators of the Women's Capability Index (WCI). Each sub-dimension has given equal weightage to show how vital they are in inducing multi-dimensions of the capability of left-behind Muslim women. Pandey et al. (2012) argued that assigning identical weights prevents subjectivity and prejudice and improves the comparability and transparency of indices. Saroj (2023) reasoned that it is rational to assign identical weights because assigning random weights is not justified or even statistically generated weights could yield outcomes that are ambiguous and weight values are not substantiated. Hence the study proposes a multidimensional and comprehensive framework for the construction of the Women's Capability Index (WCI) conducive to the research context of male out-migration and left-behind women assigning equal weightage for all the six dimensions and sub-dimensions. The steps taken to calculate indices are detailed below.

**1.11.4.1 Quality of Living Capability (QoLC):** According to Sen (1985), someone's capability to accomplish the 'beings and doings' that they have a reason to value in life should be a measure of their quality of living. These precious 'beings and doings' might be anything from simple functions like having access to nutritious food and a comfortable home to more sophisticated functioning like having autonomy over one's own choices (Greco et al., 2016). While calculating QoLC, four sub-dimensions of Quality of living are considered; (1) Access to adequate nutritious Food (QoLC1) (2) Suitable accommodation (QoLC2) (3) Having money that they can decide how to use (QoLC3) and (4) Allocate own time and engage in recreations (QoLC4) were considered. Questions were formulated in a simple local language and collected responses in a Likert scale regarding QoLC1, QoLC2, QoLC3 and QoLC4.

**1.11.4.2 Education and Information Capability (EIC):** Education is one of centrally important beings and doings that are crucial to their general well-being. (Nussbaum, 2002, 2004). According to Sen (1992), a key component of the Capability Approach is education. Jafar (2015) observed that the majority of Gulf women have higher educational qualifications in the Malappuram district and most of them are enrolled in private, self-financing universities and colleges. The respondents' ability to (1) Make rational decisions (EIC1) (2) Use the internet and social media (EIC2) (3) Continue education after marriage (EIC3) (4) Acquire a good job (EIC4) were considered the indicators of Education and information Capability (EIC).

**1.11.4.3 Decision-Making Capability (DMC):** The decision-making processes of migrant wives, how they gained access, control and manage the financial resources and what new responsibilities women had to take on after the migrant left, reflect the agency of women (Lenoel, 2018). While calculating the decision-making Capability Index, four functionings of decision-making; being able to (1) Take care of the health of self and family members (DMC1), (2) Make decisions about the education of children (DMC2), (3) Decisions regarding the visit of friends and families (DMC3) and (4) Decision regarding food habit or dress Style (DMC4) were considered. Questions were asked to the respondents who made the final decision regarding DMC1, DMC2, DMC3 and DMC4 in the household.

**1.11.4.4 Control over Household Resources Capability (CoHRC):** The financial status of the women, or their relative control over vital economic resources including income, property and other means is the most important dependent variable impacting gender relations at the family level (Sebastian & Navaneetham, 2008). The respondents were asked about their ability (1) To spend their husbands' income (CoHRC1) (2) To purchase daily necessities (CoHRC2) (3) To purchase major household consumer goods (CoHRC3) (4) To manage the family property (CoHRC4). Questions were asked to the respondents about their ability to access and control CoHRC1, CoHRC2, CoHRC3 and CoHRC4 in the household.

**1.11.4.5 Mobility Freedom Capability (MFC):** Mobility Freedom Capability is necessary to make use of regional resources and assimilate into society (Gasper & Truong, 2010 ). Financial capacities of the left-behind women have increased due to the influx and accessibility of foreign remittances which accelerated mobility (Saroj, 2023; Desai & Banerji, 2008). For the Mobility Freedom capability (MFC), four indicators of mobility associated with freedom of mobility for (1) Going to a hospital or Clinic (MFC1), (2) Going to a bank and performing transactions (MFC2), (3) Participation in social events and festivals (MFC3) and (4) Visit public offices (MFC4) were considered. The respondents were asked whether they had the autonomy to travel regarding MFC1, MFC2, MFC3 and MFC4.

**1.11.4.6 Participation Capability (PC):** Participation has an intrinsic value as a capability and the Capability Approach values the empowerment of individuals as active agents of their development. (Clark et.al., 2018). Four functionings regarding the participation of left-behind women were used to estimate Participation Capability (PC) depending on their participation in (1) Social Organization, (2) Regional Politics (PC2), (3) Business (PC3) and (4) Household Management.

After collecting data on the various sub-dimensions, the sub-dimensions under each indicator were aggregated using the arithmetic mean score. The indices of the indicators were calculated by standardising the mean score for each respondent by using the equation:

Capability Index for  $i^{\text{th}}$  respondent =  $\frac{(X_i - X_{\min})}{(X_{\max} - X_{\min})} \times 100$  where  $X_i$  is the observed mean individual mean score of the  $i^{\text{th}}$  respondent,  $X_{\min}$  is the minimum mean score of the particular capability indicator and  $X_{\max}$  is the maximum mean score of the particular capability indicator. Accordingly, six indices were constructed for the indicators; Quality of Living Capability Index (QoLCI), Education and Information Capability Index (EICI), Decision Making Capability Index (DMCI), Control over Household Resources Capability Index (CoHRCI), Mobility Freedom Capability Index (MFCI) and Participation Capability Index (PCI).

### 1.11.5 Aggregation of the Indicators into a Single Capability Index

Finally, a single composite index was prepared by aggregating all the six Capability Indices scores and calculating the mean score. The final WCI was calculated using the equation below:

$$WCI = \frac{QoLCI + EICI + DMCI + CoHRCI + PCI + MFCI}{6}$$

Thus, the Women Capability Index was calculated for each respondent, the value of the index ranges from 0 to 100, where 100 represents the highest level of WCI and 0 represents the lowest score of capability. The Women's Capability Index (WCI) satisfied the criteria for reliability, construct validity and content validity tests.

### 1.11.6 Role of Migration in the Capability Expansion of Left-behind Muslim Women

The methodology for finding the role of migration in the capability expansion of left-behind women bases the theoretical foundation on the research findings of Kathryn (2021) who explored how, when men migrate to the Gulf, their wives have access to a variety of previously unknown opportunities for enhanced independence and autonomy as they manage their families and engage in work outside their households in Kerala. When males migrate, women's ability to address migration-related constraints increases by taking on new roles. In addition to woman-headed homes, migrants' wives gain economic autonomy by moving outside the domestic sphere to pursue employment. Kerala women who are left-behind in their homes by their male migrants are becoming empowered as gender roles and expectations change as a result of Gulf migration. Furthermore, as migrant wives manage families and take on new duties and obligations, their agency grows. Through this increased agency and boosted confidence, the capabilities of left-behind women are enhanced.

Considering WCI as the ordered and categorical dependent variable, Ordinal Logistic Regression has been used to analyse the impact of migration on the expansion of the capability of women who are left behind. The two main

independent variables selected are the length of the husbands' migration and foreign remittances sent to the left-behind households. The socio-economic characteristics of the respondents such as age, education, occupation of the respondents, occupation of the respondents' husbands and family type are taken as factors. The data set of the Ordinal Logistic Regression satisfies the assumptions of (1) the dependent ordinal variable, (2) the independent variables being either continuous, categorical, or ordinal, (3) no multicollinearity and (4) proportional odds.

The ordinal logistic regression model can be defined as:

$$\text{logit}(P(Y \leq j)) = \beta_{j0} + \beta_{j1}X_1 + \beta_{j2}X_2 + \dots + \beta_{j9}X_9 + \varepsilon$$

where Y= Women's Capability Index (WCI) score; the score of WCI ranges from 0 to 100 where 0 indicates the lowest WCI score and 100 indicates the highest WCI score. WCI is the multi-dimensional, composite ordinal dependent variable.  $\beta_{j0}$  represents the intercept or constant term in the regression equation which signifies the baseline value of Y when all other predictors are absent or have a value of zero.  $\beta_{j1}, \beta_{j2}, \beta_{j3}, \dots, \beta_{j9}$  are the estimated coefficients of independent variables.  $X_1$ = migration duration,  $X_2$ =monthly foreign remittances.  $X_3$ =age and  $X_1, X_2$  and  $X_3$  are continuous independent variables. The categorical independent variables are;  $X_4$ = remittances duration; 1= monthly, 2=quarterly and 3= no pattern (the reference group),  $X_5$ =to whom the remittances are sent; 1=the respondents, 2= in-law parents and 3= others (the reference group),  $X_6$ = education of the respondents; 1=primary/secondary, 2=higher secondary, 3=graduation, 4=post-graduation or above (the reference group),  $X_7$  =occupation of the respondents; 1=salaried, 2=self-employed and 3= unemployed, (the reference group),  $X_8$ = husbands' occupation; 1= professionally employed, 2= salaried job and 3=self-employed (the reference group),  $X_9$ =family type; a dummy variable, 1 = nuclear family type and 0= joint family, (the reference group) and  $\beta_{j9}$  shows the effect of being in a nuclear family on y, compared to a joint family.  $\varepsilon$  represents the error term. The coefficients  $\beta_{j1}, \beta_{j2}, \beta_{j3}, \dots, \beta_{j9}$  quantify the impact of each independent variable and factors on the women's capability.

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### **1.11.7 Factors Contributing to the Capability Expansion of Left-behind Muslim Women**

The theoretical structure to assess the factors contributing to the capability expansion of left-behind Muslim women is specified by Hassan & Jebin (2018) and Gulati, (1993). Hassan & Jebin (2018) observed that migration has resulted in migrant households having greater levels of capabilities and functioning, such as ‘well-being’ and ‘social relations’ when compared to non-migrant homes as the migrant households, in particular, have greater levels of food intake, accommodation and clean living, educational expenses, medical expenses, acceptance in society, interactions and so on. Furthermore, women have greater decision-making authority, indicating an improvement in the social process. Gulati, (1993) observed that the left-behind women would be more than capable of handling jobs from which they were previously barred by men if they were adequately empowered in education, health care, work participation and sharing of responsibilities.

To analyse the factors contributing to the capability expansion of left-behind Muslim women in the study area, the Exploratory Factor Analysis with Principal Component Analysis was applied. Considering the study environment 8 factors with 36 variables or sub-dimensions were identified namely;

1. Health conditions- Frequent Health checkups, Immediate treatment when sick, Having Sufficient Finances for maintaining health and Consulting Doctors in Super Specialty Hospitals.
2. Availability of social infrastructure- Recreation facilities, Public health, Transport facilities, Public Education and Banking.
3. Possession of Consumer Durables – Possession of Motor Car/ Scooter, Mobile Phone, Computer, AC, Inverter, Washing Machine, Refrigerator and LPG/Electric stove
4. Conversion Factors- Health Level, Educational Level, Occupational Level, Financial Level and Living Situation.

5. Political and Religious Conditions - Caste Vote, Contest in Elections, Political & Administrative Leadership and Practice religion without restraints.
6. Husbands' migration and Support- Increased Responsibility, Financial Freedom, Social & Economic Involvement and Mobility Decisions.
7. Education – Educational Level and Pursuance of Higher education after marriage.
8. Living Arrangements - Nature of relationship with in-laws and Family Type.

Since the factors contributing to the capability expansion of women are numerous, Principal Component Analysis is used to reduce the number of variables in a dataset while retaining as much information as possible making it easier to explore and interpret. The results of the KMO (Kaiser Meyer Olkin) measure of sampling adequacy and Bartlett's test of sphericity indicate that the dataset is suitable for factor or Principal Component Analysis. Out of the 8 factors and 36 sub-dimensions of the factors contributing to the capability of left-behind women, the Principal Component Analysis identified 7 components with Eigen values over 1 with 25 factors with strong factor loadings.

#### **1.11.8 Role of Capability Expansion in the Socio-economic Participation of Left-behind Muslim Women**

The theoretical structure to assess the role of capability expansion in the socio-economic participation of left-behind Muslim women is explored in the writings of Hassan and Jebin (2019) who observed that husbands' migration improves freedom of movement, better control over their spending and as a result, the left-behind wives engage in more outside and inside jobs, which increases their income and their social interactions. To analyse the role of capability expansion in the socio-economic participation of left-behind Muslim women in the study area, 13 avenues of economic participation of women and 14 avenues of social participation of women were identified namely;

1. Economic Participation - Online & offline shopping, paying bills, purchasing gold, financial help to relatives, purchasing land, home-based businesses, bank transactions, formal jobs, business investments, charity contributions, Self-Help groups, business organisations, and participation in Kudumbasree.
2. Social Participation – Visit the neighbourhood, participation in social clubs, recreational trips, and support services, share creative ideas through social media, participation in a religious organisation, participation in political organisation, and colleagues/friend’s gatherings, attend religious/ awareness classes, attend functions/parties, attend yoga/gym/ training class, virtual social meet, attending alumni meet and attending academic meetings of children.

Structural Equation Modeling was applied to assess the effect of the capabilities of women (WCI) on their social and economic participation. A comparison of the chi-square value for the user model and the baseline model with a significant p-value suggests that the user model fits the data better than the baseline model which implies that the model is testing the effect of women's capability on their social and economic participation. The SRMR (Standardised Root Mean Square Residual) of 0.046 indicates a good fit, as lower values indicate a better fit. The RMSEA (Root Mean Square Error of Approximation) with 0.076 indicates a reasonable fit.

### **1.12 Organization of the Thesis**

The thesis is organised into eight Chapters.

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**Chapter One: Introduction**

- 1) Introduction
- 2) Significance of the study
- 3) Statement of the problem
- 4) Operational Definitions
- 4) Hypotheses
- 5) Research questions and Objectives of the study
- 6) Methodology
- 7) Selection of the study area
- 8) Pilot study
- 9) Data source
- 10) Sampling Design
- 11) Data collection and methodology
- 12) Methods of Analysis
- 13) Research Gaps
- 14) Limitations of the study
- 15) Organisation of the thesis.

**Chapter 2: Review of Literature**

- 1) Impact of male migration on the left-behind women - studies at i)The international level ii) National level iii) State level
- 2) Review of research work on the application of the Capability Approach to gender studies i) Theoretical ii) Empirical
- 3) The Capability Approach in migration studies.

**Chapter 3: Women in Malappuram District, International Migration of Male and Women Left-behind**

- 1) Introduction
- 2) Status of Muslim women in Malappuram district, past and present
- 3) International Migration from; i) India ii) Kerala and iii) Malappuram
- 2) Women left-behind
- 3) Impact of male migration on the left-behind women
- 4) Left-behind perspective in Migration Theories
- 5) An overview of the capability approach
- 6) Scope of the Capability Approach
- 7) Capability Approach in gender studies
- 8) Pursuing the capabilities approach within the migration framework- The theoretical approach
- 9) Selection of Capabilities list
- 10) Conclusion.

**Chapter 4: Role of Migration in the Capability Expansion of Left-behind Muslim Women in the Malappuram District of Kerala**

- 1) Introduction
  - 2) Socio-economic profile of the samples
  - 3) Capability Index
  - 4) Male Migration and Capability Expansion of Muslim Women
  - 5) Conclusion
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**Chapter 5: Factors Contributing to the Capability Expansion of Left-behind Women**

- 1) Introduction
- 2) The association of the factors with the indices of WCI
- 3) Explanatory factor analysis of the factors
- 4) Conclusion

**Chapter 6: Capability Expansion and Socio-Economic Participation of Left-behind Muslim Women**

- 1) Introduction
- 2) The Descriptives of Economic Participation
- 3) The descriptives of Social Participation
- 4) Capability expansion and Socio-economic participation of left-behind Muslim women
- 5) Conclusion

**Chapter 7: Conclusion**

- 1) Major findings
- 2) Policy Suggestions
- 3) Future research prospects
- 4) Conclusion

**1.13 Pilot Study**

A pilot study was carried out to assess whether the planned research questionnaire was viable for fulfilling the intended objectives and whether the data was reliable for analysis. Before collecting the actual data for the research, a pilot study was carried out in January 2023 that involved 100 responses. 50 samples each from Ponnani and Tirur taluks in the Malappuram district where the proportion of the sample was highest and lowest according to the sampling design was selected. Data were collected during three weeks using a structured questionnaire in the simple local language of the study area. After collecting the data, the distribution of responses across key variables is summarised.

Descriptive statistics and reliability analysis (Cronbach's alpha) were conducted using SPSS software. The purpose was to identify and correct any possible inadequacies and a comprehensive and well-defined range of responses to the questions was added. Additionally, potential modifications were made to the questionnaire after considering feedback and field experiences and they were added to the final survey. Some of the unclear survey questions were revised by

simplifying the language. The pilot study demonstrated that the research design and data collection methods are feasible. Most of the tools that were applied turned out to be appropriate for the variables. Hence the pilot study provided valuable insights into the research design and data collection process.

#### **1.14 Limitations of the Study**

One of the limitations of the study was identifying the appropriate capabilities in the context of left-behind women. The concept of ‘capability expansion’ is inherently subjective and difficult to quantify and the study is primarily qualitative. The questions to measure the capability index of the women contain purely categorical responses, ordinal in nature and subject to bias.

The study is limited to the Malappuram district only, which restricts the inter-district analysis. Also, the study is focused on the Muslim community and there is no scope for comparison between different communities. Only the women from migrant households are selected for the study which evades the scope of comparing the women from migrant and non-migrant households. Women may be reluctant to disclose personal or family matters due to social stigma, leading to incomplete or skewed data. There was also a tendency to hide the actual income they received in the form of foreign remittances.

#### **1.15 Conclusion**

The present chapter gives the introductory section which comprises the context of the study, significance of the study, statement of the problem, hypotheses, research questions and methodology. The study highlights the limited opportunities for formal education for Muslim women in Malappuram district in the past. However, with changing needs and aspirations, women from the Muslim community are now advancing in education, a shift largely influenced by the migration of male members and related factors. It also clarifies the context of the current study and validates the application of the Capability Approach in the migration study on gender perspectives. The methodology of the study justifies the selection of the study area and the respondents which also includes the sources of collection of the

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data used in the research. A detailed explanation of the validation of the sample size fixation and distribution of samples among the taluks in the districts and the primary data collection methodology is also given. The pilot study explains the relevance of ensuring the validation of data and questionnaires for the actual survey.

In the method of analysis section, the specification of the theoretical underpinnings and methodology used in constructing the Women's Capability Index is detailed and the validation methods are mentioned. Details regarding the many statistical techniques utilised in the analysis are also mentioned. The rationale for using the Ordinal Logistic Analysis to analyse the role of migration in the capability expansion of left-behind Muslim women is also detailed. The justification behind the selection of factors contributing to the capability expansion of left-behind women with the theoretical framework is given. Using the Capability Approach as a framework, this research can explore how migration affects women's capabilities to lead lives they value and have reason to value. The application of various statistical tools to validate the findings may be helpful for policy suggestions.

The next Chapter provides a review of the studies on the impact of male migration on the left-behind women, the theoretical as well as empirical works on the Capability Approach in gender studies. It also establishes that there are very few studies on the application of the Capability Approach to left-behind women at the international level and there are extremely few studies concentrating on the issues of left-behind women in Kerala. Moreover, none of these studies have made a micro-level and comprehensive study on the capability of left-behind women in Kerala concentrating in the Malappuram district.

## **CHAPTER 2**

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## **REVIEW OF LITERATURE**



## **2.1 Introduction**

After discussing the broader context of the research, the objectives the research aims to address, the research problem or question, the research design and methodology, the method of analysis, the structure of the thesis and offering an adequate basis for comprehending the subsequent study in the previous chapter, this chapter investigates into an extensive understanding of the body of existing research works related to the research questions and identify the unexplored areas in the existing research works. This Chapter presents the reviews of the studies on the impact of male migration on left-behind women at the international, national and state levels. This Chapter also attempts to portray theoretical as well as empirical works on the Capability Approach in gender studies and demonstrates that there are very few studies on the application of the Capability Approach in migration scenarios. Also, this Chapter depicts that such migration studies concentrate on the capability of the left-behind women in Kerala is very rare or nonexistent.

Male out-migration has resulted in married couples living apart. Male out-migration improves families in the locations of origin, but it also has a significant impact on the lives of the spouses who are left behind. At the international level, there is much literature and research work available on the impact of male migration on the families left behind. Whatever literature is available, is on the economic, psychological, financial, family and health issues of the family members of the male migrants. Hence the impact of migration on the households can be useful to understand the issues related to the utilization of opportunities of the consequent situation of male members' absence for the family members especially the wives, who are left-behind by the male out-migration. There are studies on both positive and negative impacts of male migration and the consequence of their absence on the left-behind women and utilization of remittances from migrant workers as the biggest economic advantages for the families they leave behind in the place of origin. In India, several studies have been carried out on the issues of left-behind women. However, in Kerala, only a few such studies have been conducted.

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The review of literature includes research works and thesis which are categorized into three sections

## **2.2 Review of Research work on the Impact of Male Migration on the Left-Behind Women - Studies at the International level, National level and State level.**

## **2.3 Review Of Research Work on the Application of the Capability Approach in Migration Studies and Gender Studies – Theoretical and Empirical Works.**

## **2.4 Reviews of Literature on the Capability Approach in Migration Studies**

## **2.5 Research Gap**

### **2.2. Review of Research work on the Impact of Male Migration on the Left-Behind Women**

There is much literature available at the international level, in India and in Kerala on the effect of male migration on left-behind women. The previous literature shows that due to the migration of their male counterparts, women left-behind assume new responsibilities which increase their autonomy and, in some cases, add vulnerability to them.

#### **2.2.1. Review of Research Work on the Impact of Male Migration on the Left-behind Women - Studies at the International level**

There are many studies conducted on the effect of male migration on left-behind women in different nations. The studies show that due to the sociocultural interaction between the sending and receiving nations through migrants, there are also changes in the gender roles, family structure, and autonomy of women who are left behind. The works of literature on the effect of male migration on left-behind women at the international level are:

Gordon (1981) investigated the wives' lives while their husbands were away. Throughout Lesotho in South Africa, 524 wives of migrants were investigated. Information was gathered about the women's traits and attitudes and, through the creation of a strain score, those who were experiencing the most trouble. The results

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confirmed the idea that the position of migrating wives is quite challenging and identified a pattern by which they experience growing difficulties. The study discovered that women's position in the family is stressful because of the challenging role they play in making decisions. Women left-behind appear to be frequently tasked with carrying out family matters on their husbands' commands and she is ultimately answerable to them for their activities. She will almost certainly do so within a context of restricted autonomy of action, insufficient ability and inadequate funding. It is quite unlikely that women would hold an independent position in Lesotho.

Brink (1991) used a micro method to analyze the impact of the husbands' migration on the relationships between the wife and her in-laws, mother and kid and husband and wife in Egypt and observed that women can be empowered by having control over resources and the opportunity to make decisions about the home and budget when men are absent or de facto female headship. There are also changes in the family structure, gender roles and autonomy of women who have left-behind as a result of the socio-cultural interchange between the sending and receiving countries through migrants. He found that in Egypt, migrants' wives became responsible for every day and even big spending, as well as allocating funds for continuing expensive projects such as home construction. The ability to allocate food money; the ability to spend money for daily expenses such as clothing, medicine and educational items; the ability to make choices on purchasing extravagant items such as a television or washing machine; and the autonomy of leaving their homes despite permission were all used to assess women's status.

Khalida (1993) focused on several migration-related variables that either encourage or inhibit changes in the decision-making capability, behavior patterns and attitudes of women whose spouses immigrated to the Middle East from a village in Pakistan's North-West Frontier Province. The three most significant factors in the analysis of "left-behind" women were the husbands' separation and the duration of the absence, the level of the migrant's interaction with his home, and the sort of family structure in which the wife stays. The findings show that education plays a

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significant role in shaping contemporary attitudes and migration itself. Longer periods of husbands' absence from the home also increase the number of decisions that women make, which increases the likelihood that they will live in homes headed by women. Women who have property-owning spouses have more influence over home decisions.

Khaled (1995) analysed how the left-behind wife might be affected by the husband's migration to Jordan. The wife's involvement in decision-making is focused, particularly when it comes to managing the family's finances and authority; family structure and spatial independence; inter-family connections; and the kind and scope of women's economic roles both inside and outside the house. For comparison, an equal number of samples were drawn from the women of male migrants and wives whose husbands were not migrants, that is households where both spouses were residents. He observed that if a woman successfully fulfills her husband's tasks, particularly in financial and social family power and maintains or strengthens her economic involvement, particularly in non-domestic activities, her status will improve. If, on the other hand, her husband's responsibilities were transferred to someone else her status would be reduced or unchanged.

Hadi (1999) investigated how the economic and social effects of international migration could enhance the quality of life for those household members who were left-behind in Bangladesh's rural villages. The study looked at three dimensions of migration, namely the length of the migration period, the intensity of migration and the form of exposure to migration, to analyze the consequences of overseas migration on well-being. The results showed that the amount of remittances increases significantly with the duration of stay of migrants in overseas places; hence, the length of stay abroad is seen as an essential predictor of well-being. The frequency with which migrants communicate with those left-behind is expected to increase with the number of migrants per household; thus, the number of migrants per household is thought to be a predictor of the intensity of impact on both the economic and social well-being of those left behind. Furthermore, more involvement of left-behind women in household decision-making occurs when

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women assume control over household resources due to men's lengthy absence from the households. With a better awareness of the social and cultural variables impacting women, they may be able to move more freely, minimize their reliance on conventional patrons and boost their self-esteem.

Hugo (2002) investigated the effects of international migration on families and examined that the migration of male members leaving the household affects Indonesian families positively and negatively. International migration helps families left-behind in various situations. Families with minimal employment prospects and the lowest rates of investment and economic development in the country now have a source of income through foreign remittances. In certain instances, migration has improved the status of women inside and outside the family and community. The economic and social standing of women in the home and in the community has improved as a result of migration. The status of women who are left-behind has improved as a result of male labor migration, even though male relatives who are still in the village may still maintain overall power. Family members frequently get separated by international migration, which increases reliance on the nuclear family.

Sadiqi and Ennaji (2004) examined the effects of male migration from Morocco to Europe on the women left behind. Depending on the social category to which a person belongs and the size of the household, the effect of migration may be good, negative, or both. These women's new situation has given them more authority, but their social situation and lack of amenities have also taken away some of their influence. According to the study, women who stay at home are responsible for taking care of the home, upholding family honor and raising children. Over the years, it has been shown that women have agency in Moroccan society, but obstacles like illiteracy and restricted access to positions of power still stand in their way. They develop into economic regulators, which considerably affects their general standing.

Kaspar (2005) examined in Kalabang, Nepal, how gender relations are impacted by male labour migration, specifically how women's participation in decision-making is affected. Semi-structured interviews served as the foundation for

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the findings. The study examines operational and strategic decisions about specific decision-making sectors as well as the general applicability of decisions. The indicator of women's participation in decision-making processes, whether at the home, community, or institutional level, is frequently used to analyze the position of women in society. The study concluded that more women would be involved in home decision-making if more men left the country. Additionally, including additional topics like social networks will give a more comprehensive picture of how migration affects gender relations.

Menjvar and Agadjanian (2007) evaluated how men's migration in Guatemala and Armenia affected gender norms and relationships. Both the sociocultural framework in which women reside and the environment in which men make their living influence men's movement on their wives' lives. The findings indicate that men's migration has a variety of impacts on the lives of their wives. According to the study, women assume additional obligations when their partners relocate for work, yet these additional duties have no impact on women's status and interpersonal interactions. Women's submissive status in the home and men's role as major decision-makers are stressed. The extent of change in women's positions is determined by the duration of the effect of secular ideals received by women who have been left behind. The study found that women's individual and socioeconomic traits have a significant impact on their status, however, the impact is significantly greater among women from migrant households than non-migrant ones.

McEvoy (2008) evaluated the effects of male out-migration on the lives of women in three areas, household finances and material circumstances, concerns about unfaithfulness and women's vulnerability and the gendered division of labour. This case study in Mexico examined the consequences of male emigration on the lives of women using information from semi-structured qualitative interviews. Overall, this study indicated that male out-migration affected the women left-behind in both positive and negative ways. A few women received large, regular remittances, but the rest received little, irregular payments. These differing financial outcomes have varying implications on the lives of women. Gender relations

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changed as a result of women's new roles. Despite the women's reports of a lack of empowerment, it is vital to keep in mind that over time, these shifts in gender roles and relationships may have an impact on gender ideology, such as ideas of what women can and should accomplish and lead to greater women's empowerment.

Khalaf (2009) made an effort to concentrate on any fundamental alterations made in the home, primarily on the wife left-behind when the husband moved to work overseas, specifically on decision-making and well-being in Lebanon. To evaluate the changes that have occurred, this study looks at four independent variables: the husband's salary, the duration of his absence, his educational attainment and the wife's educational attainment. According to the report, the husbands' relocation has forced the wife who was left-behind to take on new responsibilities outside of the home. She thus gets increasingly active in making decisions and in the public domain and the majority of women who are left-behind and come from wealthier families or receive more remittances are also less likely to work outside the home. They are also more likely to play an increasing role in decision-making when it comes to finances, including remittances and the marriage and education of their children.

Haas & Van Rooij (2010) examined how men's internal and external emigration has impacted the status of women who have been left-behind in a rural area of Southern Morocco. This study demonstrates that although women are living better and more autonomously than in the past, internal and international migration has not played a significant and distinct role in this change. Although women's jobs and responsibilities temporarily rise as a result of their husbands' migration, this new role is typically seen as a burden and shouldn't be linked with independence in the sense of making independent decisions that go against established gender norms. Significant advancements in rural women's positions are generally the outcome of broader social and cultural development, while migration may have had an implicit, promoted effect in these developments. Despite the absence of men having resulted in a significant increase in the tasks and control over decisions of the wives of both

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internal and international migrants, this has largely been a temporary change, as most men return to their conventional patriarchal roles.

Yabiku et al. (2010) studied the impact of separating migrants from their families on family members' lives. They investigated the connection between men's labour migration and the autonomy of decision-making of women who stayed behind using data from a survey in southern Mozambique. According to research, when it comes to their freedoms in the areas of movement, consumption, production and health, women in rural Mozambique have more autonomy as a result of men moving their labour force there. The findings demonstrate a favourable relationship between men's overall migration history and present migration status and women's autonomy, with the impacts on autonomy perhaps lasting long after the man's return. This supports the notion that the migrant's absence has a "direct" impact on his wife's independence.

Antman (2013) explored how migration affects non-migrant spouses, parents and children who are left-behind in Mexico. For the analysis, data from the Mexican Health and Aging Study, a panel data set of Mexicans that is nationally representative, were used. According to the survey, it's a persistent problem that when people leave the country, they leave behind a lot of problems that must be handled by family members who may or may not be prepared for this. Regressions on happiness can focus on the effects of these diverse benefits and drawbacks of migration on the happiness outcomes of those who stay in the nation of origin. Migration is generally accepted to be connected with similar factors that affect outcomes for family members left-behind since migration is not random and migrants self-select. Children migrating may have a crucial mediating role.

Gartaula et al. (2012) investigated how Nepalese women felt about their quality of life after their spouses left the country to better understand both objective and subjective well-being. Both qualitative and quantitative research techniques are used in the work. Its main emphasis is on the lives of the four women who were abandoned by their migrant husbands, with quantitative data from a poll serving as a supplement. Their material or objective well-being has improved as a result of an

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increase in income from their husbands' remittances. The cognitive and emotional dimensions, however, frequently have not improved. A woman's subjective well-being may not necessarily improve with her objective welfare improving.

McEvoy et al. (2012) investigated that male out-migration has determined women in South East Mexico to perform labour responsibilities that are connected to new spatial and mobility patterns, potentially leading to greater female empowerment. To provide a more contextual examination of the effect of men's out-migration on women's mobility, a variety of data collection techniques were used, including a focus group session, a household survey, in-depth interviews and participant observation. They concluded that male labour out-migration had conflicting effects on women's mobility and ambiguous effects on women's gender empowerment. They acknowledge the potential of women's new roles and responsibilities but they also acknowledge that for the majority of women, increased mobility has not been accompanied by access to new opportunities but has instead increased their susceptibility to harmful rumors spread by the community.

Maharjan et al. (2012) studied the effects of male emigration on the workload and status of the women left-behind in rural Nepal. The study makes use of original information gathered through household surveys in two districts of the central hills of Nepal. The study specifically looked at how women's labour has changed, how their roles have expanded, how they own and have access to productive resources and how they participate in household decision-making. The findings imply that as a result of male emigration, the involvement of women in rural life has increased and deeper, which may have a positive or negative impact on women's empowerment. The physical job load was typically lighter and the decision-making positions were expanded as remittances increased in size, empowering the women who were left behind.

Boyles (2013) used a mixed-methods, interdisciplinary case study methodology to examine the advantages, hazards and difficulties of male migration for the women who live in San Juan Guelava, Oaxaca, Mexico. This case study technique examines in the absence of their husbands how women's attitudes to their

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jobs vary depending on their age, the age of their spouses and the degree of influence their husbands have over their activities. Until their children start school, women's opportunities for earning money are mainly restricted to jobs that they can do at home or in places that can accommodate their kids. Compared to women 35 and younger and women over 50, women with absent spouses are significantly more likely to be income-producing than women without absent husbands. Data from this study demonstrate that women prioritize employment to 'assist' husbands in their position as economic providers. Nonetheless, many mothers are aware of the need for them to generate income, particularly for women whose husbands are absent and have not sent remittances, but also for women whose husbands generate less than required.

Rashid (2013) analysed the perceptions of Bangladeshi women regarding the emigration of their husbands. It focuses on the daily routines of women who are left-behind in two Bangladeshi villages with high levels of migration, including their lifestyles, household obligations, and degrees of conformity to or rebellion against conventional gender beliefs. The ability of the wife to manage the money, which is otherwise seen as a 'man's job' in Bangladesh, is crucial to the effective use of remittances in a home with few resources and little access to education. Some of the women left-behind by their husbands' migration may benefit from it since it gives them the chance to break free from traditional gender norms and expand their knowledge, experiences and skill sets. This allows them the chance to take advantage of their strengths and agency, although this may vary depending on the agents' social and cultural circumstances and willingness to adapt.

Kousar et al. (2014) sought to investigate the economic, social and psychological aspects of a family affected by migration in Daska, a city in the Punjab region of Pakistan. The study uses a qualitative research design and a small sample of ten wives from migrant households in the Daska Tehsil. The participants were chosen using the snowball sampling technique and at the convenience of the participants. According to a study, children of migrants have better access to health and educational possibilities. The study concludes that a woman faces many

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problems in exchange for economic wealth, but it also shows that women do not play a significant part in decision-making.

Iqbal et al. (2014) investigated the potential effects of migration of men on the alteration of the role and autonomy of women who are left behind. This study takes a gender perspective on the male labour migration from Pindi Baha-ud-Din village of Pakistan and its effects on the women left behind. The data generated from this study were primarily collected and analyzed using a qualitative technique and the findings are largely based on empirical observations. To collect and examine data, the researchers used individual in-depth interviews, hands-on chores and observation, content analytic techniques and other techniques. The findings of the study demonstrated that the movement of the male members of the family has a significant impact on the shifting roles and autonomy of women. Remittances allow migrant families to spend more money on education, alleviating many of the challenges experienced by migrant women regarding the education of their children and workload. They found that the level of education that migrant mothers attained significantly influenced the personalities of their children and improved their decision-making. The payments that their husbands have contributed have helped to improve the financial conditions of the family. The women were more powerful than they had been before the relocations of their husbands.

Sarker & Islam (2014) examined the impact of the international labour migration of the husbands over the positions of the left-behind women in rural Bangladesh. Personal interviews were used to collect data for a cross-sectional study that was conducted in the Sylhet area of Bangladesh. The 220 migrant families were selected using a two-stage cluster sampling method and a stratified random sample procedure. The results show that the role of women in decision-making and their autonomy was positively correlated with the labour mobility of men. The variations in women's decision-making roles and autonomy in migrant and non-migrant families were compared. The effects of labour mobility of men on the positions of women may vary according to family type. The labour migration of men has a good impact on the decision-making skills and the autonomy of women who are left-

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behind in the nuclear family. However, in a joint family, the mothers-in-law or other male members of the household have the most autonomy. They are seen as an inactive family member.

Lodigiani & Salomone (2015) examined the role of foreign migration as a means of exposure to practices associated with female political empowerment in Italy. The study measures the impact of transnational migrants on gender equality in their country of origin by looking at the percentage of women enrolled in the lower house of national parliaments. The study investigated the phenomenon of ‘migration-induced transfer of norm’ by utilizing panel data spanning ten years, from 1960 to 2010. The study found that overall, international migration had a major impact on the political empowerment of the women in their home nations. Foreign migrants have acted as ‘informational’ channels, bringing foreign values to their home nations, generating advantageous probabilities, modifying perceptions and instituting new norms around women.

Sylvie (2015) analysed that depending on the specific circumstances, the impact of a family member moving away can either be positive or detrimental for those left behind. The standard research strategy is used to compare the outcomes of interest for households that send migrants and for households that do not send migrants. Instrumental variables, selection-correction models, natural experiments and matching techniques have all been used by the researcher. According to the findings of the study, remittance transfers can loosen financial restrictions and boost spending on health care and education, enhancing the long-term well-being of households in the nation of origin. However, non-migrants, such as the spouses or children, may suffer as a result of the absence of migrants. Migration may reduce the need for jobs for family members who remain behind, particularly women. Countries may need to create supporting structures to assist families that remain behind in adjusting to the loss of an economically engaged member or carer due to migration. Policy alternatives include establishing formal insurance and credit markets, boosting remittance transmission by decreasing remitting costs and enhancing access to education and health care.

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Matz and Mbaye (2017) analysed the influence of the movement of male household heads of the family on the autonomy of their spouses. Using panel survey information on households from Ethiopia, the research primarily focuses on an instrumental variables technique to address the variability inherent in relationships using migration as the instrument and closely examining the effect of remittances. The study concludes that male migration boosts women's capability for self-determination, decision-making authority and interest protection. From a policy standpoint, this study implies that the movement of household heads provides an opportunity for their spouses in traditional communities in terms of autonomy.

Akkoyunlu (2017) investigated the impact of migration on the empowerment of women in Turkey. The percentage of women in the Turkish parliament, as well as other factors like the relative education of women and a democracy index, are potential variables. The impact of emigration on women's empowerment - the engagement of women in politics in Turkey – was examined using time series data on Turkish emigration at the aggregate level as well as by destination countries, utilising data spanning six decades from 1960 to 2011. The findings prove that women's suffrage and the proportion of women in parliament are now linked to the emigration rate, relative education levels among women and a gauge of democracy.

Valentina (2018) analysed how having relatives overseas affects the happiness of those who remain in Armenia and Georgia. To establish objective welfare, the research takes a multidimensional method, creating a composite index from seven different types of human deprivation. Additionally, it combines an objective indication with a subjective one to gauge how people perceive actual living standards. The findings indicate that migration has a favourable influence on both objective and subjective well-being, validating the relevance of migration as an economic household strategy and a development tool for the country of home and that while it can enhance the financial situation of the households, remittances are unable to offset the detrimental effects of being separated from family members on subjective well-being.

Agadjanian & Hayford (2018) investigated the relationships between the migration of husbands and the autonomy of women in making decisions. The study uses longitudinal data from rural Mozambique, a setting that is quickly changing with widespread but diversified male labour out-migration and extremely variable economic returns to such migration. The findings indicate that women who are married to migrants have a higher risk of divorce than women who are married to non-migrants. The direct presence of the spouse may be the most influential element determining this link between autonomy and divorce. Women married to non-migrant males can use their decision-making authority to negotiate their relationships with their spouses and influence behavioural adjustments to sustain and even deepen their marital relations.

Audrey and Anda (2018) evaluated the various contributions that international migration and remittances made to the female labour force participation in the origin-country households and analysed the consequences on the emancipation of women. The study used a mixed-methods approach and found that emigration does not always result in gender-sensitive development at home, even though it raises the standard of living for many women. They discover that having an emigrant among household members increases female labour force participation, whereas receiving remittances decreases it. According to this study, even while emigration raises the living conditions of many women, it does not always result in gender-sensitive growth at home. Migration and remittances may even make available the resources for conservative forces to prevent progressive changes in terms of gender equality and status at home.

Lenoel (2018) investigated how migration and remittances affect the ability of women to negotiate and make decisions for themselves and their families back home in a southwestern Moroccan town. It looks at how migration impacts household nuclearization, a process that allows migrant wives to become more financially independent and free from their in-laws' authority. This process is widely recognised as an agent for women's empowerment. It illustrates how the status of women and power shift over time, tracking the key phases of the household cycle

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and the migratory paths of their husbands. Three 'ages' for spouses left-behind are distinguished in this research, each of which reflects a distinct power structure in local and international homes. The interviews indicate that contrary to the empowerment theory, migration might strengthen the adaptability of the traditional extended household structure

Luna and Rahman (2019) examined the impact of male migration on the empowerment of left-behind wives by comparing the emigrant wives and non-emigrant wives. They found that emigrant wives frequently adapt to new roles and responsibilities and experience empowerment during the migration process. The empirical fieldwork of this study was mostly conducted in two Bangladeshi communities that served as migratory sources. According to the study, emigrant wives typically engage in four main activities when their husbands are away from home such as access to financial resources, physical mobility, residential independence and taking charge of important family decisions. The study focused on interviews with emigrant wives, who gave insight into the complex issues of migration and empowerment. According to the study, emigrant wives acquired new skills for interacting with their families and society as a whole, making them more empowered than non-emigrant wives.

Imran et al. (2019) analysed the overall developmental effects of remittances of male migrants on migrant-sending households in areas of Punjab, Pakistan. The Multiple Indicator Cluster Survey 2014-2015 is the source of the data. The survey data is broken down into four categories: data relating to the educational status of children, women, and household members and data connected to household features. In terms of household head features, an experienced and educated household head is more important for the growth of the household than a younger or uneducated household head. Remittance income spending patterns may differ between poor and wealthier households. According to the study, the majority of households who send migrants are better affluent than households who don't have this source of income.

Shwe et al. (2019) investigated how the migration of husbands affects the autonomy of wives in making decisions. The research was based on a cross-sectional

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survey that was carried out using the multi-stage random sample approach in 22 villages in the Pakkoku district of the Magway Region. The data indicates that in central rural Myanmar, successful foreign migration has unquestionably had an impact on both women's autonomy and household economic position. When male members of the household migrate and send money to their wives, the political structure of the migrants' family may change and the wives of international migrants have authority or control over the family. Thus, gender beliefs about what women are capable of accomplishing and achieving may shift.

Critelli et al. (2020) highlighted the numerous social-psychological dimensions of individual mobility. It was difficult to categorise these effects as either positive or bad. Rather, migration involves a series of trade-offs, benefits and losses in family and community life that must be understood in the context of Kyrgyzstan's social, economic and cultural context, as well as variables such as gender, age and other personal and family situations. The researchers managed to acquire comprehensive descriptions and capture the viewpoints of research participants by applying qualitative research methodologies. A number of the participants complained that it was difficult to achieve family goals. There are several effects on family members at every stage of the migration chain that resonate across the whole family system. Migrating family members find work, freedom and the sense of accomplishment of adding to the greater well-being of their families.

Ahmed (2020) examined the influence of migration on power dynamics and gender norms for women left-behind who live in rural Southern Punjab, Pakistan. The study examines how male migration patterns affect the ability of women who are left-behind to make decisions and understand the gender dynamics in their households when their husbands migrate. It is based on qualitative interviews and focus groups with women who were left behind. The results of this study show that when given the chance and without upsetting the status quo that may otherwise endanger their physical safety and social standing, women can negotiate and bargain their positionality in the absence of their migratory husbands. To improve living

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conditions for themselves and their children, women who are left-behind make behind-the-scenes and covert efforts to exercise their agency.

Fakir & Abedin (2021) examined the empowerment of the women left-behind in rural Bangladesh as a result of the emigration of male members. They concentrate on empowering women because the departure of male family members will have a favourable impact on their access to assets, ability to make effective decisions about home expenses, personal autonomy and unfavourable impacts such as vulnerability to domestic abuse. For effective estimates, they use propensity score matching and instrument variable approaches. The findings show that even while the women who were left-behind own more assets, their ability to make decisions about how best to use those assets has not improved. The study also reveals that women have a higher standing within the family and face less domestic violence while their husbands are not home. A heavier workload in the absence of a spouse may be a burden and detrimental to self-empowerment. Furthermore, in fundamentalist patriarchal cultures, the presence of dominant in-laws could restrict the roles of women in the absence of male spouses, thus, it leads to working against autonomy. This also raises questions about the long-term viability of greater ownership of assets.

Ghimire (2021) explored that the migration of men has a significant impact on how left-behind wives perceive gender and family roles. The out-migration of husbands may leave more responsibility or more liberty for their left-behind spouses. Increased participation of wives in leisure activities, media consumption and everyday activities outside the home are all correlated with the out-migration and remittance status of their husbands. The out-migration of husbands may either benefit or burden their wives. It can increase their workload while simultaneously enhancing their freedom of movement, leisure activities, and media consumption. The workload of women who are left-behind is impacted by their husbands' overseas migration, not by the money the husband sends home in remittances, but rather by the loss of labour. Nonetheless, the autonomy and leisure activities of wives are positively correlated with the absence of their husbands and the remittances they

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send. This analysis takes into account the unique background traits of the spouses, household characteristics, and community environment factors.

Uddin (2022) examined the changes in the agency and autonomy of women left-behind by international migrant males. It highlights the transnational communication network involved in the movement of women within the community and the resulting shifts in gender roles. The research adhered to intersectional and post-structural feminist theories and proposed that the migration of men allows certain women to benefit from increased flexibility. The study also revealed that those women who are most effective at negotiating, reshaping and rearranging their boundaries as well as expressing their agency and autonomy within cultural codes were impoverished before the migration of their male counterparts and have become financially secure. These women take pride in their ability to negotiate and navigate public spaces. The results addressing the sustainability of the behaviours indicate whether the women will return to their household responsibilities or carry on performing in public and private settings, depending on their husbands' jobs.

Lomibao (2023) explored the effects of movement from 2013 to 2018 on the household members left-behind utilizing the microdata from the 2018 National Movement Survey in the Philippines and found that migration has a negative effect on the proportion of households. The key finding of this paper is that households with a female migrant experience a significantly more negative impact at the household level than those with a male migrant. Due to remittances, migrant families typically have greater disposable income than non-migrant families; however, this could still be a disadvantage since the extra money that migrants create isn't used to purchase assets that would increase the productivity of those who stay behind when they eventually join the labour force.

Saroj (2023) analysed the effect of male out-migration on left-behind women. The study suggests and employs a novel paradigm for estimating the Women Empowerment Index to compare women with or without international male migrants. Data was collected from 373 respondents from three different locations in Nepal using cross-sectional surveys and unstructured interviews. The findings show

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that left-behind spouses have more decision-making authority, physical mobility and engagement in socio-political arenas than women with husbands at home. However, in the absence of their spouses, left-behind wives experienced a wider unclaimed workload and limited possibilities for information, as well as mental and emotional problems.

### **2.2.2. Review of Literature - Effect of Male Migration on the Left-behind Women- Studies in India**

There is a lack of literature and studies on the effects of male migration on the families left-behind in India. The accessible research also focuses on the financial, medical, health and psychological problems faced by the families of male migrants. There are relatively few or no studies on the capability expansion of women who are left-behind by male migrants. Research and literature from Indian society are included in this survey of literature.

Roy and Nangia (2005) compared how male migration affected social well-being, mental stress and physical health, particularly the reproductive health of left-behind women of male out-migrants to the wives of non-migrants in Bihar. The report is based on a 2001 survey of 354 left-behind women and 192 wives of non-migrants. In the absence of the husband, the obligations of wives regarding the health and education of their children, societal expectations, and reliance on others for even small tasks increase. Those who do not get assistance face problems in caring for their children and grandparents. In addition to the absence of the spouse, emotional crises, non-cooperative conduct of relatives, drinking habits and extramarital relations of the migrant husband worsen their situation and raise their mental stress. They embrace it as their fate and a need for the survival of their families. While male migration gives economic relief to their families, left-behind females suffer the burden of rising obligations of managing their houses and meeting societal standards, resulting in increased mental stress. Invariably, they must rely on the assistance of others for outside tasks.

Desai & Banerji (2008) investigated how the migration of husbands impacted the lives of women left behind. They concentrated on two aspects of the

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lives of women using information from the India Human Development Survey 2005: women's autonomy and control over their lives and the participation of women in the labour force. According to the findings, the primary mediating element that determines how women are affected by the absence of their husbands in the home structure. Women who don't live in extended families are subject to higher expectations and enjoy greater autonomy, but women who do not experience these demands or advantages do not enjoy greater autonomy. Women who live alone are much more likely to make their own decisions both for the short term and long term and they are more physically mobile and independent than women who live with their husbands. Furthermore, migration may promote new perspectives and views in men, thereby changing gender roles in the household.

Ganguly and Negi (2010) conducted a comparative study of wives from rural India whose husbands have emigrated and those who remain with their husbands, concentrating particularly on decision-making power with the data from the National Family Health Survey (2005–2006). Thus, the sample includes 29 states and 99 percent of India's population. The variable decision-making power has been divided into three categories: those who make decisions alone, those who make decisions with others and those who make no decisions at all. The decision-making abilities of women whose husbands have moved away and those whose husbands are staying have been compared using multinomial logistic regression. It has been discovered that spouses who are left-behind have more decision-making authority than wives who stay with their husbands.

Datta & Mishra (2011) examined the effects of male migration on the lives of women left-behind in rural Bihar. The study examines the numerous sides of continuity and change in the lives of these women, notably evaluating the effects of migration on paid and unpaid works of women, household decision-making, mobility, engagement in money management and access to credit. The survey of groups of women in 12 chosen villages spanning 7 districts in north and south Bihar served as the foundation for this empirical effort. Employment of women inside and outside the home underwent significant changes as a result of male migration at the

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survey locations and women were forced to take on more activities, especially those requiring mobility.

Sinha et al. (2012) examined how women are empowered in families where the male members have moved away. Women empowerment is primarily evaluated on three factors: their ability to make decisions, the limitations placed on them and their mobility. Using information from the 2005–2006 National Family Health Survey–3, multinomial logistic regression models were used to analyze these three indicators of women empowerment (NFHS-3). The results of this study demonstrate that the autonomy of women has not been significantly impacted by the out-migration of men. Age, educational achievements, marital duration, employment and living in metropolitan regions are common criteria that boost the decision-making power and mobility of women while reducing societal restraints put on them.

Kakati (2014) assessed how migration affected the women who were left-behind in the Oraon community in a Jharkhand hamlet. The report is based on early research into the issue that was undertaken using a limited number of Focused Group Discussions (FGDs) with three groups of women in the village who were family members of male migrants. Women were asked to speak and explore how migration has affected them and how it has altered their sense of self. In general, out-migration causes social, cultural and economic change in the locations of origin, regardless of the causes. Before migration takes place in the family, the nature of work and responsibilities are completely monitored by their husbands. When their husbands migrate, women assume new duties and responsibilities. They were forced to rely on the older male members who remained in the family or the spouse who had migrated to finalize a decision. The absence of the husbands has not only increased the physical workload of the women but aggravated their emotional stress. It is because women who are left-behind must rely on others for decision-making despite performing all activities.

Kaur (2015) investigated the psychological effects of male migration on women who are widowed in Punjab. Ten women who were divided into two age groups - those under 35 and those over 45- were the subjects of qualitative

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interviews. The husbands of participants have recently migrated to the UK, the USA and Arab nations. Problems with emotional illness were revealed via case studies and narratives. Women under the age of 35 experience increased loneliness and emotional breakdown once their spouses migrate, whereas women over the age of 45 have improved emotional health, greater security and a more positive outlook on their future. Six case studies and four interviews were conducted to better understand the connection between migration and emotional health. A comparison of the emotional well-being of the two age groups was made.

Demurger (2015) explained that depending on the specific situation, the impact of a family member moving away can either be positive or detrimental for those who stay behind. Even while remittances have the potential to be a significant tool for reducing poverty and family financial constraints, those with the greatest vulnerability may suffer if a family member migrates. The physical absence of the migrant may have several negative effects on the social status, education, health and labour supply response of family members. Remittances can ease financial and budgetary constraints and improve long-term welfare through investments in healthcare and education of households. To the detriment of the most vulnerable populations, migration may also disrupt existing kinship networks and care arrangements in rural communities. The association between migration and the health of individuals left-behind varies by age and gender, just as it does with education.

Khan & Valatheeswaran (2016) investigated the labour supply behavior of women whose husbands have emigrated. International migration of males improves the involvement of female left-behind members with domestic duties. The analysis reveals that international migration has a greater impact in rural areas than in urban regions. According to the findings of the study, left-behind individuals reduce their work supply in reaction to an overseas migrant person in their household. The rise in unemployed members in emigrant households even after they have left the labour force suggests that remittance inflows make it economically feasible for left-behind family members to remain unemployed. The results reveal that the self-employment

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activities of left-behind female members are increasing by reducing the financial restraints faced by the left-behind female members through foreign remittances.

Ullah (2017) investigated how the relocation of husbands affects the lives of women who are 'left behind'. Focusing on three broad dimensions of empowerment such as resources, agency and achievements, the study specifically investigates the autonomy of women and control over their lives; financial concerns; and women's participation in politics and the labour force. Through the snowball method, 53 women from five Middle Eastern and North African countries were chosen for this study, all of whose husbands had left their respective countries at least six years prior. The women effectively utilised their ability to be leaders in the absence of their spouses, which means they have the autonomy to make decisions and that freedom contributes to their positive empowerment. They gradually face changes in their autonomy in terms of making choices, movement and involvement in politics. The migration of men has changed gender roles, regardless of their country of origin.

Kaur (2018) investigated how remittances affect families where the male members or breadwinners reside abroad. Six case studies and four semi-structured interviews were conducted during fieldwork in the Punjabi province of Doaba as part of the qualitative approach to data collection. To comprehend the phenomenon of movement among the communities in the Doaba region, non-participant observation was also carried out. The study charts the major shifts in the family structure, including more autonomy, financial autonomy, increased mobility of women in society, etc... and when combined with freedom of choice, it can be a breath of fresh air for women as they serve as the head of the household.

Singh (2018) examines a range of economic, psychological and political effects of male emigration on women who remain in their home countries. The study investigates how women are affected or empowered when a male family member leaves for employment. Using the snowball methodology, the study conducted a primary survey of 100 women in two randomly chosen villages in the Uttar Pradesh Jaunpur area. The study concludes that there are both positive and negative aspects

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to how male outmigration affects women. Their household income has improved as a result of migration, elevating their social prestige in the community. Though decision-making power has given women more prospects, they are nevertheless constrained by a lack of financial independence and their ineffectiveness in making critical judgments.

Das (2018) investigated the experiences and issues of women whose spouses have emigrated while they remained in their nation of origin. For the study, data was collected through observations and semi-structured interviews. In the interviews, participants were asked to briefly explain their lifestyles after which further in-depth questions or probes were asked. Comprehensive information was collected to know whether remittances aided or hindered these advancements of women; and how the out-migration of their male counterparts affected their mobility, autonomy and decision-making in the home. The study concluded that the women who were left-behind enjoyed the role of de facto family leader because they had to live without their spouses.

Mahapatro (2019) explored the relationship between migration and empowerment by addressing the research issue of whether labour migration results in changes in gender relations and empowers women, measured in terms of intra-household decision-making and job involvement. The research evaluates the social effects of labour migration on women who are left-behind in Bihar with the highest out-migration rates using data from the India Human Development Survey (2011–12). Various characteristics of gender relations within the home and community, such as economic decisions, mobility decisions, health, employment and daily activity decisions, among others, were analyzed in the survey, including the health and fertility behaviour of women. The quantitative methodologies are used to explore the relationship between male migration and the empowerment and employment of women. The study concluded that the migration of men is unlikely to improve the status of women since patriarchal institutions dominate family relationships.

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Choithani (2019) evaluated the impact of men leaving rural Indian homes headed by women on food security. Both quantitative and qualitative methods, such as surveys, observations and interviews, were used to obtain the data. The results show that the involvement of women in home decision-making increased as a result of men migrating. In many houses where there were no male household heads, women took on this role. These findings imply that the consequences of male migration on the autonomy of women persisted for the duration that the men were abroad, but for the majority of the year, women in these families, especially those with nuclear units had more power to make decisions. The results show that households led by women have gender-based disadvantages in food security outcomes, negating even the potential benefits of increased female autonomy.

Singh et al. (2020) compared the well-being of married migrant and non-migrant women in rural Haryana in which 80 women from each group made up the sample equal to 160. Along with the quantitative data, the participants were interviewed one-on-one and content analysis was done on the qualitative data. The results of the study show lower levels of happiness and life satisfaction among married migrant women. The study underlines significant differences between migrant and non-migrant women in terms of their overall health, happiness and life satisfaction as well as the presence of acculturative stress. The study also discovered that married migrant women were prohibited from interacting with other migrant women in the villages and their husbands and in-laws were aware of every move they made.

Hena & Jahan (2021) concentrated on the difficulties experienced by the wives left-behind and how they handled themselves when their migrant husbands went to the Persian Gulf nations to find better work opportunities. The study is qualitative, both focus groups and in-depth interviews are used to collect data. According to the findings, patriarchy, in its conventional societal structure, is the main factor causing problems in all aspects of the lives of the spouses who are left behind. The results show that left-behind spouses in extended families face more obstacles to exercising their right to self-determination both within and outside of

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their homes than do wives in nuclear families. Developing strong relationships with family and the community and implementing new norms in daily life serve as coping mechanisms for overcoming obstacles.

Das & Prasad (2022) explored the physiological, economic, social and psychological effects of male-selective migration from rural areas on the women left-behind as well as changes in their decision-making processes by conducting household surveys among 195 migrant homes. There are both positive and negative effects for women who are left behind. The workloads of these women significantly increase, which puts them under physiological stress. Young women experience greater insecurity when migrating, both at their place of origin and upon arrival. Particularly for young women, access to and involvement in household resource management and activities have improved, but this hasn't necessarily translated into more control over resources. Women in the older group exhibit greater improvements in access, engagement and control over social activities compared to those in the younger generation.

Cagliani (2023) examined the effects on the spouses who remain behind in the origin place when the male migrates from the Indian district of Dehradun. It takes a social resistance approach by emphasizing the opportunities and challenges that women encounter when their husbands migrate. The research identifies four resistance domains and four elements that influence the resistance of these women. Even while wives of wealthy and well-connected men typically feel stronger after their husbands move, their situations still interact in complex and perhaps unexpected ways. The remittances can provide migrants and their families with a sense of resilience and even empowerment. A special focus of welfare and social protection measures should be on stay-behind women, which encourages greater autonomy of the women over how they spend their remittances.

### **2.2.3. Review of Literature- Effects of Male Migration on the Left-behind Women- Studies in Kerala**

In Kerala, there is a limited availability of literature and research on the impact of male migration on the families left behind. The study focuses on the

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financial, psychological and medical issues that male migrant families confront. There is little, if any at all, research on the capability advancement of women left-behind due to male migrants. This study of literature includes literature and research on the impact on the women left-behind by male migrants

Gulati (1983) examined the effects of large-scale male migration on family members left behind, particularly women in Kerala. The main economic consequence of this migration at the family level has been the influx of remittances and the resulting improvement in living conditions and extensive renovation. With the period of stay abroad increasing, women have begun to take a more active role in the management of family matters, becoming less dependent, though not entirely autonomous. Women from traditional and conservative families began coming out of their houses when their husbands left them to work abroad. For example, Muslim women from migrant families have begun to operate their bank accounts. Women have felt the necessity to learn to read and write to deal with banks alone. In families with no close male relative, women must take on a far more active role in family affairs management. Women from migrant houses have been reported to be more interested in reducing the frequency of depression and anxiety. Conflict might emerge between the woman and her in-laws over the distribution of remittances received by the husband.

Gulati (1993) investigated the effects of the migration of men from Kerala to West Asian countries on the women they leave behind. Gulati analysed the numerous physiological, psychological, economic and family concerns that develop when males leave the family, focusing on profiles of the spouses of ten migrants from the villages of Alakad and Bhimapally of Trivandrum district in Kerala. These women describe a unique coping mechanism that they use. Women from migrant families deal with a variety of issues. They require a lot of help from their family, friends and neighbours to get through these difficulties. The effect of migration on a family is a dynamic process that varies according to the duration of the migrant's stay abroad. Women gradually assumed more roles in household management as time passed by. The study concludes that women would be more than capable of

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handling jobs from which they were previously barred by men if they were adequately empowered in education, health care, work participation and sharing of responsibilities.

Zachariah et al. (2001) investigated how migration that separates women from their husbands affects the gulf wives who are left behind. Women have more difficulty in dealing with the disturbances of separation along with this they undergo severe loneliness, new obligations, negative impact on children's education, debt acquired to fund emigration, increased anxiety and financial gains not up to expectation. The greater the average time of separation, the greater the sense of loneliness. At the same time, the absence of their spouses generates some openings, just as, it might provide a chance for Gulf wives to enhance their abilities, knowledge, management skills, prestige and autonomy. Frequent communication greatly decreases the problem of loneliness. The ability to communicate whenever required was extremely beneficial for women who had additional obligations, particularly those linked to money management. The situation was made worse by the fact that spouses did not have complete control over their finances. They had to obey the orders of their husbands and keep their in-laws pleased.

Neetha & Rajan (2018) examined how gender relations are impacted by male migration in Kerala. The status of women in the home may change as a result of male migration due to changes in household dynamics and gender power relationships. With male migration, the woman becomes the head of the household in the nuclear family. Women gain independence, autonomy and confidence in both the public and private worlds. Positions of women differed in joint families and there was no change in gender relations in homes where spouses had no access to or influence over remittances. The duration of male migration is also found to be important, such that men's long-term duration of migration promotes women to take on all key responsibilities in home management. Due to the continual growth in their responsibilities and the addition of new tasks that they are not accustomed to doing, some women continued to experience increased levels of issues.

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Rajan & Zachariah (2018) assessed that the influence of male migration on women can be favorable, harmful, or both depending on their abilities and background. Due to male member migration and remittance, there are changes in land ownership, housing, household amenities and the health and nutrition of the left-behind family members. Changes in social status are reflected in the relationship of family with the community and the quality and quantity of education provided to their children. Women who were previously used to have a safe lifestyle are now expected to take on a variety of duties at home. Women who have not previously handled huge quantities of money would be in charge of the financial affairs of the households. They would have to create bank accounts and go to governmental agencies for several reasons. Women who are successful in taking on more tasks gain new skills, increase their self-confidence, become more independent and rise in terms of social status. Those who fail to rise to the occasion face the contempt of their spouses and other family members, as well as social and psychological issues.

Jasmin (2018) explored that following their husbands' move, some women have asserted a temporary shift in family structure and autonomy, but these changes will eventually reverse once the male members return and stay in their home country according to a study in Malabar in Kerala. The experiences of women who leave their homes vary widely depending on the type of family and societal structure. A broader trend indicates that while women in nuclear families enjoyed greater freedom and decision-making authority when their husbands were away, women in extended families were subject to stringent oversight and control over their freedom of movement. While some women managed to deal with the emotional disturbance, many more even reached the point of psychological disease that is generally referred to as Gulf syndrome.

Green et al. (2019) investigated the conditions in which remittances sent home by migrants had an impact on the health of women left-behind in the southern Indian state of Kerala. Women who are left-behind may become more reliant on members of their husbands' families or have restricted access to social institutions. These variations in the decision-making authority of women can have serious

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consequences for their health and well-being. They indicate that the positive effect of remittances on the autonomy of women shows predominantly through the time of remittance receipt, not the quantity of money transmitted. Regular remittances are connected with higher levels of autonomy than irregular remittances, net of the amount remitted.

Gallego et al. (2020) investigated the impact of male migration on the three domains of the well-being of women in Kerala, that is, decision-making autonomy, mobility and justifying violence in the home. Based on a sample of over 2,000 women, assessed the spouses of current migrants, wives of return migrants and wives of non-migrants. In comparison to non-migrant women, wives of emigrant males make decisions solely on their own, according to the study. Migrant wives are also more prone to rationalise the use of physical violence in specific situations. The decision-making autonomy enjoyed by the left-behind women is only transitory and the return of their husbands is likely to be accompanied by seeking to reset pre-migration gender norms.

Lekshmi & Ani (2020) investigated the impact of emigration on familial connections as well as the psychological and emotional challenges encountered by the family left behind. The study is based on primary data from families of emigrant workers to the Middle East. Most of them are low or semi-skilled workers who are ineligible for family visas. The sample size is 150 families chosen using the snowball sampling method. The study found that migration enhanced their socio-economic conditions and helped them to achieve their goals. However, migration also brought socio-psychological pressure to the household members. The migrant worker bears more obligation and burden due to the family's reliance on them. The survey also indicated that the majority of migrant workers were socially and economically disadvantaged groups and that migration contributed to their financial burden. Even though the stresses and strains created by migration were unbearable, the majority of the left-behind families were willing to put up with the hardships of migration as they see migration as an improved means for enhancing their status and acceptance in society and a simple means to earn revenue.

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Kaimal & Paul (2021) examined that the migration of a member from the family improved their socio-economic scenarios and they were able to retrieve their lost possessions and assets. Besides these advantages, the migration of the head member caused socio-psychological stress among family members. Wives were emotionally distressed and parents who are elderly, experienced symptoms of empty nest syndrome. Even though the pressures and strains created by migration were terrible, most left-behind families were willing to put up with the problems in the migration process because they regarded migration as a better method to enhance their position and recognition in society and an easy way to generate money.

Ratheesh and Anitha (2022) explored the non-monetary effects of male migration on left-behind women in Kerala, such as the well-being of left-behind wives. The study involves a thorough analysis of the prevalence of time poverty among left-behind women in Kerala. They compared the time allocation of left-behind spouses to married women in non-migrant houses for paid and unpaid household tasks, personal care activities, leisure activities and cultural and social events. Left-behind wives spent more hours per day on unpaid domestic care and maintenance obligations in the absence of male partners than married women in non-migrant families. It reduces their time for personal activities such as recreation, education and interaction with others, increasing the prevalence of time poverty which increases the frequency of loneliness and depressive behaviors among them.

Devi (2024) explored the experiences of the left-behind wives of male migrants in Kerala by performing a qualitative research investigation obtained from semi-structured interviews with fifteen Thiruvananthapuram women whose husbands have moved to the Gulf for work. The study is focused on the impact of international migration of adult male members particularly on their spouses, with an overall objective of identifying any challenges or worries these women may have in the physical absence of their husbands. The purpose of the study was to distinguish the gendered experiences of these women, particularly about the agency, autonomy and decision-making ability they possess in family environments. An overview of the social costs of migration that the wives experienced while their migrant

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husbands were away from home was provided in the study such as isolation, lack of company, distrust, overindulgence in work and childcare, multiple constraints from in-laws, elderly relatives and neighbors, periodic breakdowns, a sense of depravity of appreciation and ultimately a diminished sense of overall autonomy and decision-making ability.

### **2.3 Review of the Capability Approaches in Gender Studies**

The studies on the application of Capability Approaches in gender studies show that the Capability Approach has more possibility when it is applied to gender studies. The application of the Capability Approach to the issues of women highlights the security integrity, healthy food, physical well-being, education, and political participation of women and focuses on the importance of enabling women more autonomy and creating favourable circumstances to afford them the same access to political, social, and economic power as males. The studies on the application of Capability Approaches in gender studies are categorised into theoretical and empirical research studies.

#### **2.3.1 Review of Theoretical Studies on the Capability Approaches in Gender Studies**

There is not much literature and research work available on the application of Capability Approaches in gender studies on a theoretical basis. And whatever literature available, is on women's capabilities and gender disparities or gender equality. Hence the research work available on the application of Capability Approaches in gender studies can be useful to understand how Amartya Sen's notion of the Capability Approach is applied in gender studies and the issues related to utilisation of opportunities for the capability expansion of women.

UNDP (1995) explored that initiatives to advance human development have significantly accelerated the development of capabilities of women and the reduction of gender disparities in those skills. Despite these advancements, there is still a pervasive pattern of inequality between men and women, particularly when it comes to women's engagement in the political, economic and health arenas. The upscaling

of women's skills may vary according to the socio-political outlooks of nation-states. Societies adopting socialist models, for instance, used social and political mobilization and organisation to design social changes that would increase possibilities for women while achieving rapid and equal growth in health and education for men and women.

Nussbaum (1995) argued that the best method to address the issues of the equality of women in developing nations is to start with a conception of the human being and human functioning. This paper offers a self-consciously normative notion of what it means to be human and to live a good life, as well as a proposal for a culturally sensitive development ethic, by viewing some abilities and functions as more fundamental to human life. Societies are already split according to gender, therefore, it would be wiser to develop the resources of that gender-divided structure, seeking greater independence and fulfillment for women inside it, rather than trying to break it up, if we are moving toward a situation in which women would be able to exercise all of the primary functions. The conclusion is that the qualities that have historically distinguished the male and female domains as distinct are inseparable without suffering a serious functional loss. They help and instruct one another; therefore, the community cannot aim for completion by merely incorporating another sphere. It must make an effort to help every person reach their maximum potential.

Gaspar (1997) reviewed Nussbaum's detailed version and Sen's abstract version of capabilities theory, and how these ideas are applied to the lives of women. The capability approach of Sen is a valuable addition to the moral and welfare economics discourses of mainstream Western culture. Nussbaum does not see the growth of capabilities as valuable. This study updates Nussbaum's lists of morally necessary capabilities and functionings. It speaks persuasively to the need for 'internal critique' in bringing about change.

Neera (1997) elaborated and justified the capabilities approach by concentrating on the case study on the fight for women's equality in India and Bangladesh highlighting the pervasive underperformance of women in developing

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nations. The book focuses on questions of justice and provides analytical evaluations of the conditions of women in India, Mexico, China, and sub-Saharan Africa. It also examines Sen's and Nussbaum's definitions of 'capabilities and 'functioning'. The study demonstrates the tyranny of tradition and custom in effectively restricting the access to legally protected rights of women. The analysis of human potential and functioning, gender justice and the insightful philosophical and sociological examinations of quality of life in certain countries are concentrated.

Kabeer (1999) examined women's empowerment as the process of acquiring decision-making authority for those who have been denied the right to make strategic life decisions. The ability to exercise choice includes three interconnected dimensions: agency, which includes decision-making processes as well as less quantifiable manifestations of agency like negotiation, deception and manipulation; resources, which includes not only access but also future claims to both material and human and social resources; and accomplishments as well-being outcomes. The study is an attempt to analyze women's empowerment while incorporating the structural factors of human choice. Lack of consistency in functional achievements cannot be immediately created as proof of inequality since it is exceedingly improbable that all members of a particular society will place equal importance on diverse conceivable ways of 'being and doing'. As a result, if gender inequalities in functional successes occur, we must distinguish those that represent differences in preferences from those that constitute a denial of choice.

Sen (1999) introduced that the Capability Approach, a collection of principles concerning the fundamental standards of living, is critical to preserving freedom, boosting personal and societal well-being and fostering the development of capabilities in people by expanding their range of possibilities. Recent research on gender equality has shifted away from the conventional emphasis on earnings of women and status in the workforce and towards a concern for freedom and human rights, which highlights a more fundamental feature of people. The potential of women to realise the value of life is limited and, in many situations, restricted by social and institutional systems. Sen opposed that education is not only necessary for

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freedom, but it is also a vital source of empowerment for women. It not only affects her future but also enables her to serve others in a meaningful way by maximizing individual potential and correcting larger discrimination, such as the conditioning of women's submissive role in society through educational systems. It is a public benefit, an investment in the future of society, enabling, if not ensuring, the economic involvement of women, and hence their autonomy and freedom.

Nussbaum (1999) addressed concerns that arise when we attempt to explore any cross-cultural paradigm for discussing advancements in the lives of women. The capability-based approach to achieving gender equality emphasises the value of increasing freedom and establishing supportive environments so that women can have the same access to social, economic and political power as men. She proposes a list of unique human functional skills by concentrating on what fully humans are capable of being and doing. For such fundamental human needs, women have historically lacked support, which is in part because they are female. But if given enough sustenance, education and other assistance, women have the potential to develop these human capabilities. Women across the world face uneven treatment in terms of work, individual safety, integrity, basic nourishment, physical wellness, education and political representation. Many of these difficulties are caused by their gender. Women who can work outside the home have greater means to preserve their physical integrity against assaults within it. Such findings provide yet another reason why we should not encourage one capability at a time than other capabilities.

Nussbaum (2000) observed that women lack support for many essential human life tasks around the world. Even if she is not ill-treated, it is doubtful whether she will receive loving care or have her education supported. While the capabilities approach is appealing for many reasons, it has particular benefits when applied to the unique issues that women experience on a practical and intellectual level. Women are considered mere tools of others and have unequal human capabilities as a result of unequal social and political conditions. Globally, women have experienced a lack of support for fundamental human needs, which is partially due to their gender. However, with enough nourishment, education and other

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assistance, women, like men, can become capable of fulfilling human responsibilities. Their unequal failure in capability is a problem of justice, it is up to the society to find a solution to this issue. Women have fewer options than men to live without fear and to enjoy fulfilling sorts of love. Women are viewed as simply means to an end, reproducers, those who care for others, sexual outlets and agents of the overall success of the family.

Sen (2001) investigated issues related to social discrimination against women, differences in survivorship between men and women under such settings and the agency of women in the social development process. In addition to improving the independence of women and well-being, the advancement of the capabilities of women has numerous positive repercussions on everyone's lives. In many situations, increasing the active agency of women can have a significant impact on everyone's lives, including men, women, children and adults. It is obvious that the gainful employment of women, particularly in more fulfilling occupations, contributes to improving the situation for women and girls. Women's engagement has numerous other social benefits in addition to only providing them with income as a result of their increased status and independence. In many parts of the world, women are given less attention and health care than males and girls are sometimes given far less assistance than boys. As a result of this gender imbalance, female death rates in these nations frequently outnumber male mortality rates. The term 'missing women' is used to convey the vastness of the phenomena of the mortality of women by focusing on women who are just not present. Career advancements of women, particularly in more fulfilling jobs, definitely have a role in improving the conditions of women and girls.

Robeyns (2003) investigated how gender disparity in Western societies might be conceptualised and evaluated using Amartya Sen's capability framework by developing a list of capabilities by defending a procedural approach to the selection of capabilities and outlining five criteria. To conduct a thorough analysis of gender inequality, it is necessary to identify the resource disparities that contribute to gender disparities in functioning and capability as well as map these disparities. A

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review of empirical data reveals that women are less fortunate than men in certain aspects, better off in some and equally situated in others, while the evaluation is ambiguous for others. The Capability Approach has tremendous promise for resolving feminist issues and challenges. Since its start, the movements of women have prioritized concerns other than financial well-being, such as reproductive health, voting rights, political power, domestic abuse, education and social standing.

Nussbaum (2005) concentrated on the capabilities of women who are victims of violence or fear that they may be and argues that the violence and its ongoing threat, against women, interferes with every major capability in a woman's life and that the capabilities approach is most appropriate to describe the damage done by such violence among women and to make the most helpful recommendations for dealing with it. She also sketches some possible implementations of the capabilities approach. Practical reason and affiliation are highlighted as having the utmost significance as the two deepest-level capabilities on which the international community must approach the issue of violence against women. The capabilities approach makes a notable contribution to the solution of one of the worst and most persistent issues in human life by demonstrating multiple relationships between the capabilities of women and multiple points of intervention, as well as multiple strategies for empowerment through practical reason and affiliation.

Robeyns (2005) examined how to select the capabilities that are important for assessing quality of life, putting aside the other approaches to capability analysis. Sen has not specified which capabilities should be chosen as the crucial ones and this argument militates against using Nussbaum's list to gauge the quality of life. He created a list of pertinent capabilities in an empirical analysis of gender inequality and suggested a strategy that begins with some brainstorming. The social factors that reflect a person's quality of life in quality of life measurement are functionings and capabilities. The narrative in descriptive analysis includes the functionings and capabilities. This description might reflect on the quality of life, but it can also try to comprehend another part of the existence of people, such as explaining behaviour that appears irrational based on standard economic analysis. Various roles that

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functionings and capabilities play in different sorts of capability analyses have significant implications for the question of how to pick the relevant capabilities: each epistemological purpose will necessitate its response to this question.

Qizilbash (2005) stated that Amartya Sen's work is related to gender issues on various levels, and the Capability Approach is a theoretical framework for thinking about gender equality as well as its applications to gender bias in undernutrition and measures of gender inequality. The study includes the Capability Approach as an essential framework for addressing gender equality; and specific applications of the Capability Approach, such as applications for addressing gender bias in malnutrition. Sen's collaborative work on the evaluation of gender inequality, issues related to the economics of families, intra-family conflict, and intra-family inequality examined gender disparity. The process element of freedom, which includes autonomy of choice, which is a form of independence, is merely one of Sen's categories for freedom. The article concluded that excluding women from the decision-making process would constitute a rejection of both autonomy and agency of womanhood.

Ibrahim and Alkire (2007) suggested a condensed set of internationally equivalent measures of personal empowerment. Control over personal decisions, domain-specific autonomy, household decision-making and the capability to alter aspects of one's life on an individual and collective level are all included in the suggested 'shortlist' of indicators. Lack of agency lies at the heart of how poor people describe their state of ill-being, according to sources that draw on these individuals' judgments of their circumstances. The first part of empowerment is the growth of an agency and the second part gives people the chance to use their agency effectively. The advantages and disadvantages of each indication are examined, as well as the necessity of adding more variables to this shortlist. Autonomy, agency, self-direction, self-determination, freedom, participation, mobilization and self-assurance are all closely associated with the idea of empowerment.

Dubois and Rousseau (2008) examined the relationship between vulnerability, risk and capability, focusing on improving the capabilities of women

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to address both vulnerability and poverty through the design of 'human development strategies' such as improving access to health and education, clean water and sufficient dietary habits; this results in an increase in the level of human capital. Additionally, it strengthens the level of social capital through enhancing involvement in public decision-making and empowerment, both of which contribute to the battle against social exclusion. Commodities should be seen broadly to include all types of goods and services since the Capability Approach links commodities to capabilities, functionings and levels of well-being attained. The overall endowment of a person consists of a variety of goods, services and assets. They are all directly related to the capabilities of women, when capabilities increase, people become less susceptible to the numerous threats they experience.

Elizabeth (2008) addressed Sen's argument that society should support gender equality in the realm of capabilities. The well-being of a person might be defined by her ability to be healthy, well-fed, physically fit, literate, engaged in community life, mobile, cheerful, respected, confident and other states of being and doing, and consider such conditions as functioning. The range of functions that a person is capable of, given her access to social, material and personal resources, constitutes her capabilities. Capabilities measure a person's freedom to carry out desired functions rather than actual functions that have been attained. The more options one has for efficiently accessing considerably varied opportunities for functioning or leading her life in the manner she values most, the more freedom she has. Different social structures have different effects on people's ability to convert resources into desired ways of life, regardless of their talent, physical wellness, handicaps, gender, age, class, race, ethnic origin, caste, or other attributes.

Nussbaum (2011) developed a capability theory of justice and topics like gender issues, care for the elderly and disabled, education, the environment and constitutional law are discussed together with topics that have lately been addressed by researchers using the capabilities approach. With the capabilities approach, policy and development analysis shifts its attention from resources to people's capabilities and asks which real opportunities are available to individuals. Nussbaum

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contends that the distinction between agency freedom and well-being freedom is unnecessary since she places more emphasis on capabilities than functionings and gives capabilities like practical reason, a prominent place on her list of fundamental rights. Nussbaum adopts the capabilities method and a list of ten key capabilities to establish a theory of fundamental political entitlements and a philosophy of basic social justice. Nussbaum uses the capabilities approach in developing a theory of universal basic political entitlements based on a list of ten central capabilities. These entitlements place obligations on governments, ensuring that all persons reach the bare minimum of those skills.

Felice (2012) analysed the works of Nussbaum and determined that Nussbaum adapts the Capability Approach framework of Amartya Sen as a means of combating the exploitation and oppression of women. Nussbaum demonstrates how the denial of fundamental capabilities is connected to both dominance and dependency. The capabilities method requires that a woman have a genuine chance to overcome financial hardship and poor expectations. Her approach to capabilities does not focus just on the personal preferences of women. Instead, it is the absence of a person's different fundamental human abilities that is significant in and of itself. By fostering human capabilities, actual freedoms of a man can be increased and an environment where human rights can be fulfilled may be fostered. Nussbaum aids in illuminating the effectiveness and value of this strategy.

Klugman et al. (2014) investigated the ongoing barriers and disadvantages that keep many women around the world from realising their potential and have a significant impact on people, families, communities and even countries. They place a strong focus on the value of inclusion, capability development and empowerment in the process of economic growth. The agency of women is increased through education and more educated women are frequently better equipped to choose their paths and make decisions even in situations when gender norms are restrictive. All people-men, women, girls and boys have the opportunity to develop their potential and participate fully in all facets of life. This is how the agency is sometimes characterised. At the individual level, this necessitates agency, or the capability to

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decide what to do with one's own life and then take action to bring about the intended result without fear, violence, or retaliation. Voices of women may be amplified and their agency can be increased, which will benefit not just them but also their families, communities and societies.

O'Neil & Domingo's (2015) studied of the decision-making authority of women focusing on their capability to sway political judgments about how to distribute resources, rights and authority in society. To take advantage of the opportunities that institutional and structural changes bring, women must rely on a variety of skills. The combined capabilities of women also influence their political power. The actual influence of women on decision-making is shaped by how capabilities, institutions and social structures combine and interact. The political economics of women's decision-making is represented by these interactions. Women from marginalized social groups are less likely to have the social and economic resources necessary to seize new prospects for political power than are women from dominating social groupings.

Araya & Moo (2015) addressed that gender equality, a vital institutional factor for development, changed its focus from the improvements of women's economic status to capability expansion and used statistical analysis to assess the effect of social policies on gender equality by capabilities approach. Economic advancement of women is no longer the primary goal of gender equality, which is shifting its attention to the development of capabilities. Social policy is an important tool for promoting gender equality in both developed and prosperous countries; specifically, spending on education and health is more successful than traditional social protection. Education and healthcare dimensions are chosen as basic capabilities for the gender inequality index and participation in the workforce, involvement in politics and availability of social infrastructure aspects are chosen as combined capabilities. Following the specification of relevant capabilities for each dimension, a simple average of each sub-indicator is estimated to develop Basic Gender Capabilities and Combined Gender Capabilities.

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Unterhalter (2016) focused on a specific comparative education problem of measuring the unmeasurable in education, taking into account how to assess gender equality in the classroom as well as how measurements reflect facts and uncertainties. The idea of negative capability describes aspects of educational practice that take into account both knowledge and uncertainty. Measuring gender equality alone, however, does not contribute to the growth of substantive equality since it tends to downplay the relationship between education, the rights of women and social justice. Measuring gender equality in education should take agency seriously, especially in light of the history of exclusion, subordination and injustice that is evident in every nation on earth.

Hammell (2016) explored the concept of empowerment and a new definition offers a foundation for comprehending how empowerment could improve the capabilities of people. This is the center of this framework, including their freedom or opportunity to select what they want to do and be as well as their capability to carry out their desires. Accordingly, the goal to improve the opportunities and capabilities of people to engage in and participate in the worthwhile professions of their daily lives can be seen as an expression or assertion of unequal power especially on a gender basis. They will have to work more at figuring out the assets, strengths and resources of the people. Enhanced capabilities shed light on practical opportunities for the people. An important component of an individual's practical opportunities might be increasing individual abilities, but obviously, capabilities are the preferred measure of individual abilities. Empowerment necessitates that individuals can convert their choices into activities.

Gammage et al. (2016) investigated the voice and agency of women and girls utilising bargaining theory, as well as behavioral and experimental economics to understand the disparities in power and agency about various institutional domains and socio-economic processes. The idea that capabilities can be transformed into individual agency and that the lack of investment in capabilities, as expressed in child marriage and demonstrated by school dropout, limits the agency of women and girls and reduces their ability to make independent decisions was implicit in this

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study. Employment with income-generating activities of women can boost their abilities to negotiate in the household by strengthening their defensive position and enabling decision-making to improve well-being. Higher levels of autonomy and a change in intrahousehold dynamics of power favours the women with lower fertility, domestic assault and better health outcomes.

Naz (2016) conducted a thorough analysis of the relevant literature for the conceptualisation and evaluation of human well-being to empirically explore the promise as well as the boundaries of Sen's Capability Approach. The agency describes the capability of a man or woman to take action and affect change. It accepts social and environmental conversion elements and the possibility that people's conversion capabilities may vary based on their unique characteristics or structural disparities in society, such as gender, class, or caste, thus the Capability Approach is non-individualistic. The research concludes that one needs to utilise carefully thought-out procedural approaches for the identification of related capabilities if one wants to apply the Capability Approach to build an empirically based assessment of well-being. The interdependence between functionings and capabilities exists because one's ability to select a set of functioning is dependent on the functioning previously obtained by the individual in his or her life. Entitlements produce capabilities as a means of expanding freedom of choice and involvement in society.

Greco (2016) sought to create the Women's Capabilities Measure, a multidimensional index based on the capabilities framework of Sen, to evaluate the well-being of women. The project specifies a collection of capabilities that are relevant to the context, offers a methodology to assess these capabilities effectively, combines the capabilities into a single index, and then verifies and tests the index. This study focuses on index weighting and aggregation. The Capabilities Index of women was created in a series of steps such as the creation of a theoretical structure, the creation of an assessment model, the construction of the capability set, evaluation and aggregation; and the verification of the index. Equal value, normative, hybrid and data-driven approaches are used to set the weights for the

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Capabilities Index of women. The findings demonstrated that the selection of aggregate affected how people were classified as ‘worse off’ in society and quintiles.

Cin (2017) explored the relationship between gender, education and equality with an emphasis on concerns of justice and equality for female workers as social actors and change agents through the perspective of the Capability Approach. Through a multigenerational study of women, this study reframes gender and education issues from a feminist and capabilities viewpoint. It examines how various conceptions of gender, equality and education lead to a range of strategies for pursuing gender equality in education. The author examines the private lives of women, drawing on the list of capabilities created for this study, to ascertain the degree to which women have attained their valued capability sets, what conversion factors play a part in these capabilities and their enactment of agency. It stresses the necessity for creating a gender-just society by using the capabilities method critically and creatively to analyse valued functionings and capabilities, freedom and lack of opportunities in the lives of women. The author demonstrates how gender injustice and opportunity disparity between men and women, who were not culturally denied the same opportunities and freedoms, contribute to the failures of women to obtain the skill sets in the private sphere.

Gram et al. (2019) created an empowerment notion to direct measurement and evaluation. Since the capability of groups to achieve collective results typically rests as much on the quality of member connections as it does on individual abilities, a model of individual empowerment that incorporates individual possession of interpersonal capabilities is required. Even though many women reported having high levels of social support on an individual basis, this does not imply that all women are empowered. If a woman is pushed against her will to be either independent or dependent on another person, that disempowers her. Empowerment is centered on capabilities, opportunities and choices. Since people are only considered empowered when they feel empowered, regardless of whether there are external restraints on their behavior, internal factors must be at play.

Bhukuth et al. (2019) evaluated the effects of the entrepreneurship initiative on the welfare of women. The goal of the study was to investigate the strategies used by NGOs through entrepreneurship to empower women in their households, communities and businesses. The Capability Approach of Sen is utilized to analyze how NGOs' projects for women empowerment in Surabaya, Indonesia, helped to build the capabilities of women entrepreneurs. The projects are predicated on the idea that families have to spend money on housewives. As a result of the entrepreneurship projects, housewives will no longer be a burden in the family economy; instead, they will be able to generate revenues and become financially independent. Individual empowerment depends on their ability to do and be. The projects focused on entrepreneurship seek to boost the income of women to elevate their status in the family and community. Individuals are empowered depending on their capability to act and be. According to the report, if women are more empowered, it could cause problems in the family and community. Women are keenly aware of their boundaries and wish to uphold them to preserve societal and familial harmony.

Jain (2020) examined the achievements attained in the capabilities approach applying the gender lens, as well as the policy framework aimed at addressing gender inequality. The study advocates that achieving gender equality requires more education and awareness for women, and women's participation in many domains including the participation of men in childcare responsibilities, paternal leaves and maternity benefits, etc. Inequalities arise as a result of varying exposure to opportunities and barriers in terms of education and health throughout the life cycle of a human being. The level of exposure would decide the probability of mobility across generations.

Beatrice (2020) argued that the development of skills is essential for promoting personal well-being and advancing people to perform well at various levels of society. The arguments are the challenge of women's continued marginalization in South African higher education by proposing a Capability Approach (CA) to human development that should be taken into consideration as a

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potential framework for investigating and evaluating gender and gendering. To analyse conceptions of social justice and a capability perspective on human development, the study has employed a critical exploration methodology. The paper concludes that everyone should have access to education since it is a crucial part of human growth, regardless of social status, gender and race.

### **2.3.2 Review of Empirical Studies on the Capability Approaches in Gender Studies**

The empirical studies on the Capability Approaches in gender studies show that the capability approach has special advantages when it is applied to gender studies. Such studies focus on gender equality, evaluating the quality of life of women, deprivation of opportunities for women, etc. There are many empirical studies on the Capability Approaches in gender studies such as

Zein-Elabdin (2002) explored finding a middle ground between universalism and relativism in assessing how ‘tradition’ affects the capabilities of women in ‘poor’ countries. The study examines themes of justice, law and reason in connection to women in the Third World Countries. The case study describes how selected women from China, India, Mexico and Nigeria were affected by the practice of isolation. The author contends that a key factor in determining the skills of women is their right to employment.

Sargeson (2007) applied the idea of capabilities of Sen to examine how the management of urbanisation in China affects the capabilities of rural women. It demonstrates how the government of urban expansion is influencing the generation of rural women by drawing on interviews, press reports and government and Women's Federation papers from Zhejiang province. The article draws two conclusions: first, the capabilities of rural women will not significantly increase unless the leaders of China commit to including the representatives of rural women in urban planning and management, upholding the property rights of women and allowing women to choose whether and when to work and retire; and, second, that Sen's concept ignores organizational and material conditions that are required for women to improve their capabilities.

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Greco et al. (2015) developed a quality-of-life indicator for rural Malawian women based on Sen's Capability Approach. Several focus group discussions were held to examine notions of quality of life that were pertinent to the area. The framework for women's capabilities served as a guide for listing the capabilities variables. The capabilities variables indicate the capabilities of women, including various sub-dimensions such as physical stamina, psychological well-being, domestic well-being, communal relations, economic security and happiness. Several interconnected dimensions were used to characterise the quality of life. The study concluded that complicated emotions, relationships and social norms have a significant impact on quality of life in addition to meeting basic material necessities like appropriate nutrition and shelter.

Evans (2015) examined the reasons why women are becoming more active in politics in Zambia and makes the case that unequally distributed resources may not be as good in boosting skills as is often assumed to be progress. This study heavily cites individual interviews, group discussions and in-depth life histories. As a result of their accomplishments, women who were once thought to be incapable of leading because of the work's link with men are now seen as equally capable. Many people had doubts about the capabilities of women in these fields since they had only seen men in leadership roles and they saw women's leadership as dangerous.

Loots & Walker (2015) analysed the possibilities of the capabilities approach to inform policy formation and make the case for the creation of a higher education institution policy based on opportunities for meaningful functionings as the informational foundation for gender equality. The study examines how gender equality is addressed in higher education policies or ignored altogether. It also enquires into how policy objectives are perceived to determine which intervention measures should be used. South African higher education is used as the case study. According to the capabilities approach, which serves as a normative framework, the well-being of a person is dependent on the freedoms or capabilities available to them, as well as their ability and choice to use these capabilities (their agency) to live the lives they have reason to value. The data reveal the opportunities these

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males and females find important for their progress and directly and indirectly for gender equality. The study concluded by focusing on the larger contributions the capabilities approach makes to policy formation and discussing the significance of the data for igniting public debates toward establishing a skills-based gender equality policy.

Cin et al. (2018) examined the most recent educational reform and initiatives in Turkey from the perspective of capabilities-based gender equality to understand how gender equality is conceptualized in policymaking and the extent to which changes have promoted gender equality in girls' education. From the standpoint of developing policies, the data demonstrates that the reform was successful in terms of an observable, quantifiable improvement in enrolment rates. This can be linked to an increase in the number of religious schools and the introduction of single-sex education with an emphasis on narrowing the gender gap and a conceptually limited view of gender equality. However, from the standpoint of the practitioners, gender equality and the limited capabilities of females have received little attention. By emphasising the need for a thorough and inclusive understanding of gender equality in educational policy-making and developing a capabilities-based gender equality policy that can dismantle traditional and gendered structures, the paper clarifies the conflicts between policy-makers and practitioners.

Mills et al. (2018) created the Women's Capabilities Index (WCI), a multidimensional index built on Sen's capability framework to measure capabilities in a low-income environment. It was created to evaluate the standard of living for women in rural Malawi, London. A participatory method was used in the capability selection process. Through a series of focus group conversations, the thoughts, values and opinions of 129 women from Malawi, were gathered. This study offers the first thorough validity assessment of a novel measure built on Sen's capabilities framework. The findings of the validity and reliability tests offer convincing proof that a locally created capability measure may be utilised as a reliable tool for evaluating the quality of life of women.

Kamila et al. (2019) focused primarily on the effects of education and employment on women's empowerment in their study of the status of women in Balochistan in Pakistan to enhance their ability to make key life decisions to achieve the capability desired for themselves and their families. The majority of women are still denied access to opportunities for economic and educational advancement, including schooling and employment opportunities. To acquire data, a cross-sectional, descriptive and empirical study was conducted utilizing the survey approach. The findings also provide insight into the status of women in Quetta. The results indicate that employment and education have a considerable beneficial impact on women's capabilities. The findings show that employment helps women gain participation in decision-making at the household and social levels, such as increasing the earning power of women by making them contributors to the family income, which can help them have better health and educate their kids and other family members, but the earning power of women is declining.

Anand et al. (2019) examined a self-help program in terms of its influence on the quality of life of women in the rural parts of Uttar Pradesh using 15 capability indicators created based on self-reported survey data to give a quality of life. The research calculates propensity score matching models using fresh data on a range of self-reported capability indicators from members and non-members. According to reported data, self-help group members had stronger capability indicators than non-members in several life categories. The study examines robustness and concludes that the program has improved the quality of life of people in several dimensions, which has contributed to sustainable development.

Sahoo & Pradhan (2020) highlighted the abilities of tribal women in post-displacement settings in the Indian States of Odisha and Chhattisgarh by data collection using a sequential explanatory study approach. In total, 194 displaced tribal women between the ages of 15 and 49 who were living in the rehabilitation colonies were surveyed and focus groups were held with the displaced women. To gauge the potential of women, qualitative data were gathered. The major results of the study indicate that women (57 percent) are unaware of their child spacing

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options and the unfulfilled desire for family planning is considerably greater. Domestic violence affects more than half of women, limiting their capability to get reproductive healthcare, it also hurts the immediate well-being of their children. Women in this study have no say over reproductive healthcare choices. As a result, women lack political and social autonomy.

The empirical and theoretical studies on the Capability Approach to the issues of women show that the well-being of women depends on their freedoms or capabilities, as well as their ability and decision to exercise these capabilities or their agency to lead the lives they have good reason to value. The data shows that these potentials are critical to their advancement and, both directly and indirectly, to gender equality. Hence it highlights the importance of the data on women's capabilities for generating public discussions about creating a skills-based gender equality policy, as well as the broader benefits the capabilities approach brings to policy formulation.

#### **2.4 Reviews of Literature on the Capability Approach in Migration Studies**

There are few studies on the Capability Approach in migration studies and very few studies measure the capabilities of left-behind women by collecting primary data. Most of the studies highlight the issue of selecting relevant capabilities of the left-behind women.

Hadi (2001) looked into the effects of international migration on the capabilities of women among the socially underprivileged people of Bangladesh. A population surveillance system that encompassed 70 Bangladeshi villages provided the data. A comparable number of non-migrant families were randomly selected from the same villages. In-depth interviews with adult women from the sample families were conducted. According to a multivariate analysis, remittances have increased the financial capability of migrant households while also having secular consequences that may have altered women's standing. Findings reveal a substantial positive correlation between the overseas migration of adult males and the decision-making capability of women and the schooling of girls in migrant families. The extent of change in the positions of women is determined by the duration of the

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effect of secular ideals received by women who have been left behind. The study found that individual and socio-economic traits of women have a significant impact on their status, however, the impact is significantly greater among women from migrant households than non-migrant ones.

Gaspar & Truong (2010) identified the effects of international migration through the lens of the capabilities approach. Migration across borders has broad and significant implications. The ability to migrate depends on the ability to use local public services and to participate in society. Due to its emphasis on multi-dimensional, interpersonally disaggregated, reflective evaluation, the capabilities approach can be beneficial in evaluating the effects of migration. The realities of migration also put pressure on one's capability for thought. The capabilities approach will be able to better concretize and locate the idea of the 'we' who 'have (or seek) reason to value' alleged goods and rights by expanding its focus to migrants and the locality-spanning social and political settings in which they exist. Among the consequences of migration is an increasing tendency towards more identity complexities. Which is perhaps beneficial and the necessity for a new perspective of rights and entitlements corresponded to a transnationalised environment of mobility. The capabilities approach can contribute to and enrich attention to those issues.

Stephanie (2011) investigated how male migration and the remittances may or may not affect those left-behind in urban settings of Lebanon and whether male migration influences the capability of women to make strategic life decisions using the analytical framework of the three-dimensional perspective -Resources, Agency and Achievements on women empowerment. Within the resource component, the study discovered that remittances by their spouses abroad have a favourable economic impact on the women and families left behind. The three primary themes connected to the agency of left-behind women are greater responsibility, decision-making power and restricted movement. Women were given more decision-making authority as their responsibilities grew. Moreover, male migration will limit these women's capability to make such a choice. Hence, there is no evidence of an empowering process being launched as a result of male migration. The study

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concluded that the agency of women is constrained by the migration of their spouses, which may reduce female labour market participation and tighten these women's capability to make such a decision.

Sarkar (2012) investigated the status of de facto female headship, the status of decision-making authority and the nature of empowerment of women who are left-behind due to the migration of male labour in the Cooch Behar district of West Bengal. Several indices, including the Female Work Participation in Agriculture Index, the Decision Making Index, the Freedom of Movement Index and the Women Empowerment Index have been calculated to assess the condition of women who are left-behind as a result of the mobility of their husbands. The study came to the conclusion that left-behind women have developed self-confidence, a sense of independence and the capability to defend against prejudice imposed by the male-dominated culture.

Cenci (2015) addressed the theoretical shortcomings of traditional migration theories, particularly the circular migration model and especially the adverse effects of asymmetrical migrations for sending societies in the South Euro Zone. The theoretical shift from 'human capital' to 'human capabilities' as the emphasis of the analyses on various components including non-monetary aspects broadens the behavioral assumptions of traditional theories and takes into account specific context characteristics, such as political and socio-cultural barriers to equality for capabilities. The adoption of a capability viewpoint may sustain apparent beliefs about the critical role of beneficial collaboration between high-quality education, development approaches that respect the needs of individuals and a good social security system in increasing people's capabilities to have a satisfactory life. These variables may minimize the need for people to migrate in quest of better opportunities, allowing migration to be a true 'free choice.' People can choose to move or not move based on their true goals and dreams, in addition to their liberty, autonomy and decision-making.

Chapagain (2015) investigated how women might identify their objectives and carry them out in the multicultural surroundings of two different geographical areas in Nepal after their husbands temporarily relocated overseas. This study explores the convertibility of men's movement into the agency of women based on

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surveys, in-depth interviews with women, semi-structured conversations with their neighbors and several observations. This study contends that rather than leaving women dependent and 'behind,' the migration of husbands has given them more access to decision-making processes, financial and non-financial resources, social networks and information about services, all of which have enhanced capabilities, identity and agency of women even though some of these roles run counter to prevailing social norms and values. These qualities have been a result of the women's unique talents, know-how, exposure and a mix of innate ability and environmental factors.

Preibisch et al. (2016) examined the relationship between migration, development and human rights as well as the ability of migration to foster economic growth and eradicate poverty by focusing on the capabilities perspective, which regards enhancing human capabilities as the primary goal of development. The prevailing paradigm emphasizes the agency and potential of migrants to contribute to their own economic progress and poverty alleviation over their families, communities and countries of origin. It does this by combining the capabilities approach and the human development approach. Human rights, capabilities and development are inseparably linked, as no level of progress can be attained until the rights of migrant workers are safeguarded and fostered. The capabilities approach views enhancing human capabilities as the primary goal of development. The capabilities approach may provide a framework that emphasises the rights of migrant workers and encourages conditions that allow these persons' highest potential to be fully realised.

Sabrina (2016) evaluated the developmental characteristics of migration and viewed migration as the efforts of people to increase their freedom of opportunity and capabilities using the Capability Approach. Migration essentially can be regarded as a practice of freedom to move. The Capability Approach offers the best foundation for evaluating how international migration affects human development. The actual freedoms one has expanded by the experiences of the migrant families, which they either stay with or leave behind, gain more economic, political and social freedoms. However, the ability to select migration as a tactic to increase freedom depends on the access of people to different types of resources. These include the institutional setting and geographic circumstances which comprise economic,

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human, social, cultural and political capital. The functions and implications that migrants and their family members can achieve by exercising their freedom to move are dependent on the agency of the individual and the circumstances in which migration occurs. The capability to select migration as a freedom-enhancing choice is dependent on individuals having access to various types of resources such as financial, human, cultural, social and political power, as well as the institutional setting and geographic context in which it occurs. Such affordability and asset ownership play critical roles in the migration decision-making process.

Hassan & Jebin (2018) compared the capability attainments of Bangladeshi migrant and non-migrant households in rural homes. Multilevel Propensity Score Matching (PSM) based on logistic regression is used to create a 'treatment' group of migrant households and a 'control' group of non-migrant households. This method helps explore the impact of male migration and remittances on financial progress, poverty reduction, and capability expansion for those left behind. The study concluded that migration has resulted in migrant households having greater levels of capabilities and functioning, such as 'well-being' and 'social relations,' when compared to non-migrant homes. Migrant households, in particular, have greater levels of food intake, accommodation and clean living, educational expenses, medical expenses, acceptance in society, interactions and so on. Furthermore, women have greater decision-making authority, indicating an improvement in the social process.

Ivlevs et al. (2019) used a variety of subjective well-being measures to provide the first worldwide view on the effects of emigration on the well-being of individuals who are left behind. They examined whether the relationship between the emigration of males and the psychological well-being of those left-behind is affected by the level of inequality in society. The findings by the income inequality group show that remittances have been linked with analytical well-being in more unequal countries, which may reflect the capabilities-enhancing role of remittances in countries with weak social redistribution systems and support the income findings. Remittances seem to increase the positive connections associated with evaluative well-being as well as positive emotions, yet they don't seem to assist in stress and depression mitigation. According to the findings of the study, remittances are particularly helpful for life evaluations in poorer and more unequal countries, as

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well as among poorer respondents within a particular country. This is likely because remittances increase the opportunities and capabilities of respondents in these situations.

Hassan et al. (2019) investigated whether men migrating from Bangladesh give women left-behind more freedom and opportunities to participate in the economy. The purpose of this study is to determine how the movement of spouses affects the status of wives who are left behind. The research seeks to determine the effect of overseas remittance on the position of women in the family by using Propensity Score Matching on the extracted dataset from the 2015 Bangladesh Integrated Household Survey. Evidence reveals that left-behind women have more control over spending decisions when their husbands migrate, have more freedom to move about and experience less domestic abuse than their peers. The position of women is compared on four different dimensions of capabilities, namely involvement in decision-making processes, autonomy in mobility, involvement in reproductive choice-making and incidence of domestic assault; and the comparative distinction among these categories can be perceived as the impact of treatment.

Mkwananzi (2019) used the experiences of young migrants from Zimbabwe to Johannesburg in South Africa to illustrate the value of the Capability Approach for the study of migration and development. The Capability Approach provides a thorough examination of the multifaceted phenomenon of migration and shows that, in addition to being a capability in and of itself, migration is a crucial aspect of human growth. The development of the capability to aspiration of migrant youths is based on their intrinsic and instrumental values, which are used in this study as an illustration of this. According to the study, encouraging aspiration in a safe setting is essential for assisting young people in achieving their academic objectives. The ability of the Capability Approach to guide educational policies and practices that can improve the capability of young people to define, pursue and realize their ambitions is a significant factor highlighted by the study. Exposure and knowledge are hence capabilities that help other capabilities develop.

de Haas (2021) explored how capabilities could be used as a conceptual advancement to the migration-development relationships. The study claimed that certain capabilities are essential for large-scale workforce migration and migration

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may further expand the capabilities of people. He connected the aspiration/ability model of Carling with the Capability Approach of Sen to create an extended aspirations-capabilities framework that includes two-way links between migration and development. Migration outcomes are determined by the capabilities of people to migrate, which in turn may boost individual capabilities in a broader sense through flows of financial, human and social capital. According to the capabilities approach, the ability to migrate is a valued freedom in and of itself, irrespective of the choices of people for staying or departing and the capability to migrate is equally important to all those who wish to migrate. International migration is strongly associated with money and social advancement. This 'culture of migration' also contributed to quickly shifting conceptions of the 'happy life' and growing dissatisfaction with conventional rural lifestyles. So, the significant advances in local living standards, money and education, expanding desires and capabilities to move encouraged and enabled an increasing number of individuals to migrate.

Eichsteller (2021) investigated the connection between choices made by individuals, resources and entitlements in the context of migration studies, focusing on possibilities that allow the individual agent to deal with difficult situations and yield better social, economic and political outcomes than just providing short-term resources based on an external assessment of individual needs. To address the link between migration and inequality in society, this paper establishes analytical and thematic links between the 'Capability Approach' and inequalities, as well as fundamental components of international practices. The study considers migration in both senses: as a collection of capabilities set or as a set of possibilities that one can select between. Migration, as part of an individual's capability set, can be viewed as one of several options. The exploration of additional possibilities and the logic behind the decision to migrate contribute to the assessment of structural advantages in migratory analysis.

Obi (2021) explored that the capability-based paradigm is envisioned as a prospect in migration theory. To reflect the relevant traits associated with migration, migration dynamics must be revised and only a diverse and multidimensional

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capability-based method that prioritizes human agency and capabilities will address the issues. The study tackles three key issues: how do capabilities affect migration choices in the original country; what are the capability-depriving restrictions experienced by migrants in the destination nation; and how do migrants contribute to capability enhancement in the home country?

Kathryn (2021) explored how, when men migrate to the Gulf, their wives have access to various previously unknown opportunities for enhanced independence and autonomy as they manage their families and work outside their households in Kerala. When males migrate, the ability of women to address migration-related constraints increases by taking on new roles. In addition to woman-headed homes, wives of migrants gain economic autonomy by moving outside the domestic sphere to pursue employment. Malayali women who are left-behind in their homes by their male migrants are becoming empowered in gender roles and expectations change as a result of Gulf migration. The increased number of opportunities available to them influences women in Kerala. As a result, their goals and gender expectations are evolving to accommodate this expanded range of alternatives. Furthermore, as migrant wives manage families and take on new duties and obligations their agency grows, whether through an enlarged agency, enhancing capability, or fostering confidence.

Jahan (2021) explored the role of modern technology in shaping the international relationships between migrated men and their left-behind wives in Kerala. Meanwhile, left-behind wives have gradually gained autonomy and capability for financial transactions, connections and the education of their children with the improvement in technology. Earlier, in the absence of their husbands at home, their social progress was highly restricted, observed and surveilled. Recently, modern technological connections have kept husband-wife relations and communications alive in a virtual patriarchal culture, this virtual reality forces women into increasingly awkward experiences of submission.

## **2.5 Research Gap**

Several studies have been conducted exploring the driving force and effects of migration. It has investigated the impact of migration and remittances on the economy, the implications of male migration on the parents, spouses and children in addition to the issue of family separation it causes. Some studies are mainly concentrated on the impact of male migration on health, expenditure patterns, labour force participation, household income, and psychological issues on the left-behind women. Multidimensional well-being measures based on the capability framework of Sen have become more prevalent. Only a few studies have considered the immediate link between male out-migration and the general freedom and opportunities for left-behind women through the Capability Approach. A few studies have specifically attempted to develop an empirical approach based on the framework of Sen to measure the capability of left-behind women.

In Kerala also, the studies on the effect of male migration on the left-behind were examined, though not extensively, which are studied by comparing the households with migrant husbands and non-migrant husbands. Nevertheless, the application of the capability approach to study the impact of male migration on the women left-behind by measuring the capability of left-behind women is quite rare in Kerala. None of these studies have attempted to analyse the impact of male migration on the capability expansion of Muslim left-behind women in the Malappuram district. The current study is an attempt to fill this gap by estimating the Women's Capability Index via a survey conducted in Malappuram district, which has the distinction of sending out the largest number of emigrants from Kerala.

## **2.6 Conclusion**

International studies on the impact of male migration on left-behind women are extensively available. The literature review on the effect of migration on left-behind women shows that the absence of males due to migration and foreign remittances has both positive and negative implications for left-behind women. The studies on the positive effect of male migration on left-behind women investigate the enhancement of decision-making power, management of resources, increased

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mobility, education, health, etc. The studies on the negative effects of migration concentrate on the psychological issues of loneliness, increased responsibility and burden of caregiving, education of children, time management, etc.

The studies on the application of the Capability Approach in gender studies reveal that employment and education have a considerable beneficial impact on women's capabilities and the majority of women are still denied access to opportunities for economic and educational advancement, including schooling and employment opportunities. Moreover, gender equality and the limited capabilities of females have received little attention. The studies on the application of the Capability Approach in migration scenario shows the impact of male migration and remittances on financial progress, poverty reduction, and capability expansion for those left behind and the remittances increase the opportunities and capabilities of respondents

After having a review of previous research works on the left-behind women and the application of the Capability Approach to gender issues to analyse the lives of women critically and creatively to examine their valued functionings and capabilities, freedoms, lack of opportunities and gender injustice proves that migration studies, analysing the effect of male migration on the left-behind women by applying the Capability Approaches are few in India. In Kerala, no studies have analytically linked the capability framework with the migration scenario at the micro level, focusing on the Malappuram district. After identifying the research gap, an attempt is made to demonstrate a comprehensive background that defines the key terms, concepts and variables of the Capability Approach, the issues of left-behind women and the status of Muslim women in the study area, the migration scenario of India, Kerala and Malappuram district and a general theoretical framework for the study is presented in the next chapter.

## **Chapter 3**

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# **International Male Migration and Left-behind Women Within the Capability Framework**



### **3.1 Introduction**

The given Chapter provides the trends in data to offer an in-depth understanding of the current scenario of emigration from India, Kerala and the significance of the Malappuram district in the international migration set-up among the Kerala districts. It also discusses the gains and challenges of the left-behind women due to male migration. The Chapter narrates background information on the socio-economic status of Muslim women in the past and the changes that occurred over time. The Chapter introduces key concepts and definitions of the Capability Approach that are essential for understanding the research. Finally, the Chapter establishes the general theoretical framework of the study.

The Chapter is divided into five sections.

### **3.2. Muslim Women in Malappuram District: Past and Present**

### **3.3. International Migration**

### **3.4. Women Left -behind**

### **3.5. The Capability Approach**

### **3.6. Migration within the Capability Approach: The Theoretical Framework**

### **3.2. Muslim Women in Malappuram District: Past and Present**

Kerala is renowned for its improvement in many human development indicators including those associated with the status of women. The position of women in Kerala has significantly improved based on 'conventional' indicators like health, literacy, education and life expectancy and is even comparable to that of advanced nations. However, there has not been a corresponding improvement in the social and economic status of women, which is most apparent in their low work participation rate (25.51 percent as per the 2011 census), which indicates that their economic status has not improved. Malappuram district, being a backward region, had a lower educational foundation to begin with and took an extended period to

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catch up with the general trends. One significant barrier was the prejudice among Muslims toward liberal education. For many years, Muslims in Malabar refused to send their children to school (Ali, 1990). Here is an attempt to portray the status of Muslim women in Malabar, especially in Malappuram district in the past, the changes that occurred in their attitudes and socio-economic status and the factors that led to such changes.

The term Mappila is derived from two Malayalam words i.e. ‘Maha’ and ‘Pillai’. ‘Maha’ denotes the ‘great,’ while ‘Pillai’ denotes the ‘son’, they are referred to as ‘the great son.’ Fishing, self-employment and labouring in Gulf nations are the main jobs for individuals in this community. Geographically, Mappilas as a community remained predominantly concentrated in the Malabar region and continues to be home to more than seventy percent (72 percent) of Kerala's Muslim population (Alam,2021). More or less, the ‘Marumakkathayam’ system is still prevalent among the Mappila communities. The mother, or the female family member, is the sole source of identification for both the male and female children. In this setting, women have greater autonomy and decision-making capacity. The Muslims of Travancore and Cochin are not the same as those of Malabar, popularly known as the Mappilas, in terms of culture.

Orthodox social views dominated Kerala Muslims for a time. As a result, Malappuram, a Muslim-majority and underdeveloped district in Kerala, had a weaker educational foundation. Muslims in Malabar refused to send their children to school and they did not support the liberal education of the West. (Ali, 1990). From an Islamic perspective, every man and woman should pursue education and knowledge. ‘Knowledge Acquisition is mandatory upon both Muslim men and women.’ - Prophet Mohammad. Hence, there has been no significant advancement in the educational domain of the Muslim community in the Malabar region. The progress of a community depends greatly on the education of women. A significant social problem that prevents women from achieving much of their potential in life is the gender gap in educational success. According to the Sachar committee report,

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Muslims in India are at a distinct disadvantage due to their low educational attainment and poor educational quality.

Menon (1979) noted that several social, structural and institutional issues in the Muslim community impede the educational advancement of women in northern districts of Kerala including Malappuram districts, which comprise more than half of the Muslim population of the state. Girls started school later in life and were forced to stop when they reached puberty since she was no longer allowed to leave the house unaccompanied. Another significant barrier preventing women from completing their education is the widespread practice of early marriage in the Muslim community. It was extremely challenging for them to finish their studies as Muslim women were not allowed to leave the house without an escort, therefore after being married, she was forced to stop her studies (Menon, 1979).

When they grew up, Muslim girls were not permitted to leave the house. At their in-laws' home, they were given the kitchen and trained to be a wife and a 'model woman.' Therefore, they wouldn't continue their education past the fifth or sixth grade. Girls who completed up to the tenth grade were uncommon at the time. At home, they received a few religious lectures and their formal education came to a stop there (Menon, 1979). Muslim students are more likely to drop out of school than other communities and Muslim girls from traditional and economically deprived families are more likely to drop out of school. (Salim, 1999).

Mostly, Muslim women were unaware of the benefits of education and they were content with the life they had. A large number of early marriages occurred in Malappuram district; they kept thinking that women's only responsibility was to care for their families. They placed marriage much more than education. They did not attempt to evaluate the relative worth of work and education. Muslims in Kerala were conservative sects for a long time and the majority did not support liberal education. There are numerous socio-religious reform movements succeeded in influencing Muslim attitudes and the situation gradually shifted (Salim, 1998). However, over time, reform movements influenced the thinking patterns and started

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to shift. Women realised that they shouldn't be denied access to education. They realised that they also had the right to educate themselves on subjects that were as high as the sky.

The shift in perception of women toward themselves is another explanation for the development. The girls recognised the true worth of education as the most essential thing in life. The parents, most of whom were illiterate, started to believe that their daughters ought to have the benefits they were denied. Girls started to understand the value of education as well. Reform movements within the Muslim community established educational institutions with a special focus on girls' education. As a result of these combined efforts, many reputable universities now have more than half of their seats filled by female students. Women, like men, have aspirations for the future and their plans for their lives. In terms of careers, the aspirations of educated women have also altered. Parents today happily spend a lot of money on the higher education of their daughters. The migration from the Gulf, the improvement in the economic situation of the people, local community initiatives, the progressive Madrassa system, along individual volunteer efforts, have contributed to changing perceptions of women (Salim, 1999). The Islahi movement, Muslim Educational Society (MES) and Muslim Service Society (MSS) also played an important role in the upliftment of the Muslim community in the district. Many educational and cultural institutions started in the district to speed up the awakening of the Muslim community in the district. The migration of Keralites to the Arab Gulf nations brought about effects on socio-economic demographic, political and even religious facets of life in Kerala (Zachariah et al. 1999), particularly for the Muslims who make up the majority of the migrants from Kerala (Zachariah & Rajan, 2018).

### **3.3 International Migration**

Human migration refers to the movement of individuals from one location to another intending to relocate, either permanently or temporarily, to pursue any gainful employment. India has a long history of emigration. According to a United Nations estimate, India has the largest diaspora population, with 18 million Indians

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residing outside their homeland in 2020 and the United Arab Emirates, the United States and Saudi Arabia hosted the greatest number of Indian migrants (United Nations, 2020). An increase in migration enriches India because of remittances paid by Indians abroad and money deposited in Indian banks as NRI deposits. Both of these elements contribute to the external balance of the country. Since the turn of the present century, the number of Indians migrating outside the nation has grown exponentially. The era of the largest increase was from 2005 to 2010, which was also a period of economic stability for India (Benu, 2022).

Among Indian states, Kerala accounts for roughly 19 percent of the inbound remittances arriving in India (KMS 2018). Kerala had a non-migrating population till the 1940s. Migration had become a way of life for many educated people in the state after Independence in 1947. Initially, it was nearly exclusively restricted to India, but it has now expanded to encompass nations outside of India. Emigration has an impact on every aspect of life in Kerala, including the economic, social, demographic, political and even religious facets ( Zachariah et al.1999)

People from Kerala had the chance to earn significant amounts of foreign remittance as a result of the oil boom that occurred in the 1970s, particularly in the Gulf countries. Migration is one of the most dynamic drivers in the development of Kerala. (Prakash 1998; Zachariah et al., 1999). This is an attempt to investigate migration from India as well as Kerala in the past and present. Moreover, the chapter discusses the consequences of male migration and the economic and socio-political dimensions affecting women who are left behind.

### **3.3.1. Migration: Indian Scenario**

The early migration from India was the result of colonial design. Indians migrated to various other British colonies during the pre-independence period and worked in plantations and lower-ranking positions. The majority of them were low-paid manual labourers. In the post-independence era, three significant periods can be distinguished in the migration from India. The first wave, which started in the 1950s, was primarily made up of skilled workers migrating, such as physicians, engineers,

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scientists, teachers, architects and business owners. They migrated primarily to industrialized nations like the US, Canada, the UK and other European nations. However, these flows gradually decreased as a result of the strict immigration laws implemented in these nations and the scarcity of highly trained personnel.

The second phase started in the 1970s and mostly consisted of the migration of unskilled and semi-skilled workers (Prakash et al., 2017). The massive oil extraction and construction boom in the 1970s in the Persian Gulf region attracted retail and construction trades such as carpentry, electrical wiring and masonry and as a result, migrants without tertiary education moved to the Gulf region (Singh, 2022). When migration started during this period, the majority of them were from Tamil Nadu, Kerala and Andhra Pradesh, as these states have a long-standing experience with the Gulf countries, as well as significant Muslim populations and high unemployment rates (Naujoks, 2009). The Gulf Cooperation Council (GCC), which is made up of the oil-exporting Gulf nations of Saudi Arabia, Bahrain, Kuwait, Oman, Qatar and the UAE were the major destinations of Indian migrants during this period. (Prakash et al., 2017). Indian migration to the GCC has risen gradually over time, from 2.5 lakhs in 1975 to 3.31 million in 2001 and it increased to 3.5 million (Khadria, 2014).

After the 1990s and particularly after the implementation of liberalisation policies, the third phase of migration started. There doesn't seem to be any apparent migration pattern during this time. With the implementation of liberalisation policies, there has been an obvious increase in money and trade flows to and from different nations, paving the way for stronger economic growth and the emergence of new economic opportunities (Prakash et al., 2017). Since the turn of the present century, the number of Indians living outside the nation has expanded dramatically. India has a considerable diaspora in the United Arab Emirates (3.5 million), the United States of America (2.7 million) and Saudi Arabia (2.5 million). Other nations hosting considerable numbers of Indian migrants include Australia, Canada, Kuwait, Oman, Pakistan, Qatar and the United Kingdom. (The Economic Times, 2021).

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The current wave of migration from India includes physicians, engineers, financial experts and others who are relocating to economically developed countries. Now, migration from northern, densely populated Uttar Pradesh and Bihar is primarily composed of semi-skilled and unskilled labourers, whereas migrants from southern Kerala and Tamil Nadu have greater levels of education (Singh, 2022). With their improved salaries, successful migrants became role models for many people in their villages and districts. Contracts for these employees often expire within two and five years; after completing their contractual job, they must return to India before being eligible for a contract renewal. The Gulf nations provide rare opportunities for family migration, unification, residence permits and citizenship (Naujoks, 2009).

### **3.3.2. Early Migration from Kerala**

Kerala is a small state in the southern region of India, comprising 1.2 percent of the country's total land area and 2.7 percent of its total population. Kerala was formerly noted for its internal (inside India) migration rather than its overseas migration. The historical trend of Kerala's migration history is divided into two main stages. The first process of migration happened in the 1940s when migration was closely connected with the rest of India. Kerala was a net in-migration state, with more people coming from neighbouring states to Kerala than moving to these states. Kerala became a net out-migration state following its integration. People from Kerala moved to Madras, Bombay, Calcutta, Delhi and other major cities in greater numbers than people from other states migrated to Kerala. Pathanamthitta district (29 out-migrants per 100 homes) and Kasaragod district (22 out-migrants per 100 households) outnumber other districts in terms of migrants. Hence the first transition of Kerala's migration was from a net in-migration to a net out-migration. (Zachariah et al., 2001).

Kerala saw a second phase in migration in the 1970s when it became a prominent emigration state. Until then, foreign migration from Kerala was small in comparison to internal migration. After the 1970s oil boom, the relative positions of emigrants and out-migrants changed considerably. Net external migration was approximately 555 thousand people in the 1981-1991 decade, compared to net

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internal movement of 189 thousand people. The second transition was from out-migration dominance to emigration dominance (Zachariah et al.,2001).

Sanandakumar (2015) observed that in the mid-1960s, Malayalees with no skills and a poor background hung onto the waving sails that brought them to an unknown land of affluence in the Persian Gulf. The rapid oil boom of the Persian Gulf in the 1970s attracted unskilled cheap labourers. The first wave of migratory Malayalee laborers did not achieve considerable financial status. They only knew their native language of Malayalam, their virgin paddy fields, plentiful Kerala rivers and the sound of never-ending rain, but soon they were all transforming their desert fantasies into castles and returning home, constructing a new Kerala (Sanandakumar, 2015). In Kerala, migration has made a substantial contribution to the reduction of poverty, unemployment and relative deprivation. There has been consistent migration from the state to Gulf nations, other regions of India and other areas of the world for more than three decades (Rajan & Zacharia, 2007).

### **3.3.3. Migration from Kerala- the Current Scenario**

The current scenario has changed. Malayalees are no longer obligated to compete in Gulf nations as they once were. Doctors, engineers, architects, super-specialists in every profession, teachers and journalists are now flocking to Middle Eastern countries (Sanandakumar, 2015). Decades of migration have made Keralites educated and qualified enough to pursue more specialised jobs (Panicker, 2018).

Gita (2020) noted that there was a sizable proportion of blue-collar and skilled employees among the new migrants, including nurses, technicians, physicians, engineers and teachers. No one asked the man what he did or how he lived, as long as the remittances were sent regularly. Families were grown by single moms and could see their dads only once a year or several years, for a month or two. Highly skilled professionals, who migrated made a lot of money, sent their children to the best schools and constructed nice homes, hospitals and schools in their home communities. A sizable number of female professionals also joined the migration (Gita, 2020)

Migration has been one of the most dynamic factors in the development scenario of Kerala (Zachariah et al., 1999; Prakash, 1998). The majority of Kerala migrants migrated to the Middle East or the Gulf area, where the UAE is the favourite destination. In 2018, around 1.89 million Kerala emigrants resided in Gulf nations. More than 89.2 percent of the emigrants of Kerala went to the Gulf Cooperation Council (GCC) countries of Saudi Arabia, the United Arab Emirates, Kuwait, Qatar, Oman and Bahrain. The remaining 10.8 percent of emigrants are located in other nations such as the United States, the United Kingdom and other European countries, as well as Australia, Singapore and New Zealand. (Zachariah & Rajan, 2018).

### 3.3.3.1 Estimated Emigrants from Kerala

The highest rate of migration of labour from India is recorded in Kerala, followed by Tamil Nadu and Andhra Pradesh. Other states with significant labour emigration include Karnataka, Maharashtra, Punjab and Rajasthan (Rajan & Zachariah, 2023). The emigrants from Kerala estimated by the Kerala Migration Survey for the five years with a gap of five consecutive years since 1998 are given in Table 3.1.

**Table 3.1. Estimated Emigrants from Kerala**

Districts	1998	2003	2008	2013	2018	2018 (percent)
1 Thrissur	161102	178876	284068	230081	241150	11.36
2 <b>Malappuram</b>	<b>296710</b>	<b>271787</b>	<b>334572</b>	<b>455696</b>	<b>406054</b>	19.14
3 Kozhikode	116026	167436	199163	226499	160691	7.57
4 Palakkad	116026	177876	189815	70506	89065	4.20
5 Wayanad	4552	7704	13996	22568	30650	1.44
6 Kasaragod	38747	71449	67851	104334	67281	3.17
7 Kannur	88065	202414	119119	291321	249834	11.77
8 Thiruvananthapuram	130705	168046	308481	241727	137007	6.46
9 Kollam	102977	148457	207516	199933	240527	11.34
10 Pathanamthitta	97505	133720	120990	141343	109836	5.18
11 Alappuzha	62870	75036	131719	93096	136857	6.45
12 Kottayam	35494	106569	89351	107931	166625	7.85
13 Idukki	7390	7880	5792	23967	32893	1.55
14 Ernakulam	103750	121237	120979	191373	53418	2.52
Kerala	1361919	1838478	2193412	2400375	2121887	100

Source: Kerala Migration Survey, 2018

Table 3.1 shows the trends of emigration from Kerala for the five rounds of Kerala Migration Surveys. According to data 21,21,887 Kerala residents emigrated to other countries in 2018. The number of emigrants from Kerala has been increasing from 1998 to 2003, 2008 and 2013. However, from KMS 2013 to KMS 2018, the number of emigrants decreased from 24,00,375 to 21,21,887. In each year of the Kerala Migration Surveys, Malappuram has the highest rate of emigration when compared to other districts.

The number of emigrants from the Malappuram district has decreased from 4,55,696 in 2013 to 40,6,054 in 2018. Still, Malappuram has the largest number of migrants compared to other districts. In 2018 19.14 percent of emigrants were from Malappuram district, showing the highest proportion among the districts. Malappuram has the highest emigrant population, accounting for about one-fifth of the total population of the district (Zachariah et al. 2018) and in the Malappuram district, 71percent of households have an emigrant or a returned emigrant (KMS 2018).

### **3.3.3.2 Household Remittances in Kerala**

The Kerala Migration Surveys show the estimates of remittances received by the households in Kerala sent by the emigrants from abroad. Household remittances are received regularly by households to cover their immediate living expenses, though the nature of those requirements has changed. Household remittances include payments for household consumption expenditures such as gifts, building a house/buying land, purchasing a car, business, paying dowry, schooling and so on (Zachariah & Rajan, 2018).

The household remittances and the percentage of household remittances for all the districts of Kerala, according to the Kerala Migration Surveys 2013 and 2018 are shown in Table 3.2. The household remittances in Kerala increased from 24,374 crores in 2013 to 30,717 crores in 2018. Overall, Kerala has a 26 percent increase in household remittance from foreign countries between 2013 and 2018. Among the districts, Malappuram district has the largest household foreign remittances with Rs.

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3510 crores (20.6 percent) in 2013 and Rs. 6326 crores (14.4 percent) in 2018 followed by Kollam district with 2168 (15 percent) in 2013 and 4602 (8.9 percent) in 2018. The share of these districts has decreased while the share of Ernakulam and Kasaragod in the household remittances in Kerala has increased.

**Table 3.2. Household Remittances in Kerala**

Sl. No.	Districts	2013 (in crores)	Percent age	2018 (in crores)	Percent age	HHs Received Remittance in 2018 (Percentage)
1	Thiruvananthapuram	1847	9.5	2904	7.6	14.2
2	Kollam	2168	15	4602	8.9	22.9
3	Pathanamthitta	1478	7.2	2220	6.2	16.5
4	Alappuzha	2065	5.8	1795	8.5	14.5
5	Kottayam	699	3.5	1062	2.9	12.7
6	Idukki	228	0.9	277	0.9	5.0
7	Ernakulam	3210	1.4	435	13.2	4.2
8	Thrissur	2527	10.9	3350	10.4	15.3
9	Palakkad	1009	4.1	1270	4.2	9.7
<b>10</b>	<b>Malappuram</b>	<b>3510</b>	<b>20.6</b>	<b>6326</b>	<b>14.4</b>	<b>33.9</b>
11	Kozhikode	1967	8.7	2662	8.2	19.8
12	Wayanad	303	1.4	432	1.2	10.8
13	Kannur	1976	7.6	2320	8.2	20.3
14	Kasaragod	1294	3.5	1061	5.3	19.2
	Kerala	24374	100	30717	100	16.3

Source: Kerala Migration Survey, 2018

Table 3.2 indicates that the percentage of households that received foreign remittances by district in 2018 is also shown in Table 3.2. Malappuram district leads, in terms of the percentage of households that received remittances as per the Kerala Migration Survey 2018. About 34 percent of households in the Malappuram district received remittances, followed by Kollam (22.9 percent), Kannur (20.3 percent), Kozhikode (19.8 percent) and Kasaragod (19.2 percent). Hence the present study is concentrated in Malappuram, the district where the number of emigrants, the amount as well as the proportion of household remittance and the proportion of

households that received the remittances are the most, compared to the other districts in the state.

### 3.3.3.3 Emigrants by Religion in Kerala

In Kerala, though Hindus are the majority of the total population, Muslims are over-represented in terms of emigration. The majority of emigrants from Kerala are Muslims i.e., about 42 percent, followed by Hindus with 35 percent. Between 2013 and 2018, the percentage of Christians with 24 percent among the emigrants remained unchanged. Table 3.3 represents the emigrants by their religion as per the Kerala Migration Survey 2013 and 2018.

**Table 3.3. Emigrants by Religion in Kerala**

Religion	EMIGRANTS				Per 100 HH	
	2013	Percentage	2018	Percentage	2013	2018
Hindus	861235	35.9	737011	34.7	18.1	14.9
Christians	571799	23.8	500236	23.6	34.9	27.6
<b>Muslims</b>	<b>967342</b>	<b>40.3</b>	<b>884640</b>	<b>41.7</b>	<b>54.2</b>	<b>42.6</b>
Kerala	2400375	100	30717	100	29.3	24

Source: Kerala Migration Survey, 2018

Table 3.3 shows the emigrants classified based on religion in Kerala in 2013 and 2018, its percentage and emigrants per 100 households as per Kerala Migration Survey. In Kerala, the Muslim community constitutes a larger proportion of emigrants than any other community, that is 9,67,342 in 2013 and 8,84,640 in 2018. Table 3.3 also shows the proportion of emigrants based on religion. Muslims have the highest proportion with 40.3 in 2013 and 41.7 in 2018 compared to other communities. Though the number of emigrants from all the communities including Muslims has declined, in terms of the proportion of emigrants at the state level, Muslims constitute the highest proportion. While comparing the number of emigrants per 100 households, Muslims had 54.2 and 42.6 emigrants per 100 households in 2013 and 2018 respectively. Hence the study is concentrated on the left-behind women by male migrants in the Muslim community. In Kerala,

compared to other religions, Muslims had a significant increase in emigration between 2013 and 2018 (Zacharia & Rajan, 2018)

### 3.3.3.4 Pattern of Emigration from Kerala

The Gulf countries are the most popular destination for emigration. The other destinations of emigrants are the USA, UK, Australia, etc. (KMS,2018). This trend is driven by better employment opportunities and higher wages in these regions. Additionally, the cultural and linguistic similarities in the Gulf countries make it easier for Malayalees to adapt and thrive. Table 3.4 shows that in 2018, there were 1.89 million emigrants living in the Gulf nations which is about 89.2 percent of total migrants. Migration to other countries such as the USA and the UK constituted 10.8 percent of total migrants from Kerala.

**Table 3.4. Pattern of Emigration from Kerala**

Destination Countries	1998		2008		2018	
	Number of Migrants	Percentage	Number of Migrants	Percentage	Number of Migrants	Percentage
<b>UAE</b>	<b>421959</b>	<b>31</b>	<b>918122</b>	<b>41.9</b>	<b>830254</b>	<b>39.1</b>
Saudi Arabia	510895	37.5	503433	23	487484	23
Oman	139571	10.2	167628	7.6	182168	8.6
Kuwait	68163	5	129282	5.9	127120	6
Bahrain	74654	5.5	101344	4.6	81153	3.8
Qatar	62969	4.6	121613	5.5	185573	8.7
Total	1278211	93.9	1941422	88.5	1893752	89.2
Other Countries	83744	6.1	251993	11.5	228135	10.8

Source: Kerala Migration Survey, 2018

Table 3.4 also shows that the number of emigrants to Middle Eastern countries is decreasing whereas the number of emigrants to other than Middle east

countries increased from 6.1 percent in 1998 to 10.8 percent in 2018. Saudi Arabia had the largest number of migrants from Kerala followed by UAE in KMS 1998. However, the pattern has changed as UAE is the largest attraction of destination for Kerala emigrants both in Kerala migration Surveys 2008 and 2018.

### 3.3.4 Migration Scenario of Malappuram District

Malappuram district has the distinction of sending out the largest number of emigration from Kerala and receiving the largest amount of remittances by migrant households (KMS, 2018).

#### 3.3.4.1 Number of Households having NRKs and total NRKs in Malappuram District

The number of households having Non-Resident Keralites (NRK) and the total number of NRKs in taluks of Malappuram District is given in Table 3.5.

**Table 3.5 Number of Households having NRKs and total NRKs in Malappuram District**

Taluks	Households Having NRKs	Percent	Total NRKs	Percent
Eranad	48039	21.00	59186	20.22
Nilambur	28183	12.32	35340	12.07
Perinthalmanna	31073	13.59	39586	13.52
Tirur	57631	25.20	74904	25.59
Tirurangadi	38862	16.99	49541	16.92
Ponnani	24918	10.90	34196	11.68
Malappuram	2,28,706	100	2,92,753	100

Source: Computed from Pravasi Malayali Census, 2015

Table 3.5 indicates that in Malappuram district, Tirur taluk has more households having Non-Resident Keralites (NRK) with 25.2 percent and the total number of NRKs from Tirur taluk is also the largest with 74,904, compared to other taluks in Malappuram District and Ponnani taluk has least number of households

having NRK with 11 percent and total number of NRKs in Ponnani taluk is also the lowest with 34,196 compared to other taluks in the district.

### 3.3.4.2 Destination of Emigrants from Malappuram District

The destination nation of emigrants from the Malappuram district and the Non-Resident Keralites from the Malappuram district who are staying abroad without family are given in Table 3.6.

**Table 3.6 Destination of Emigrants from Malappuram District**

<b>Gulf Countries</b>	<b>Number of Emigrants</b>	<b>Percent</b>	<b>NRKs Staying Abroad without Family</b>	<b>Percent</b>
Saudi Arabia	1,47,452	52.96	1,01,811	69.05
UAE	88,457	31.77	55,138	62.33
Kuwait	9,460	3.40	6,360	67.23
Oman	9,673	3.47	6,430	66.47
Qatar	13,698	4.92	8,641	63.08
Bahrain	4,160	1.49	2,614	62.84
Total	2,72,900	98.03	1,80,994	66.32
Other Countries	5,496	1.97	3,326	60.52
Total Emigrants	2,78,396	100.00	1,84,320	66.21

Source: Computed from Pravasi Malayali Census, 2015

Table 3.6 shows that the largest number of emigrants from the Malappuram district migrated to Saudi Arabia, 52.96 percent followed by UAE with 31.77 percent and the least number of migrants from the district migrated to Bahrain among Gulf countries. The proportion of migrants who migrated to Gulf countries is about 98 percent whereas about 2 percent of them only migrated to other countries. The Non-Resident Keralites from the Malappuram district who are staying abroad without family are about 61 to 69 percent in all destinations.

### 3.4. Women Left-behind

While men migrate in pursuit of jobs, they are forced to leave their spouses, parents and children at home, who are known as 'left behind' by male migrants

(Rajan & Zachariah, 2018a ). Migration to the Gulf countries is not the same as migration to other, more developed nations as most of the workers in the Gulf countries are unskilled or semi-skilled. Most young married men who migrate from India to the Gulf countries work in skilled, semi-skilled and blue-collar jobs and are referred to as ‘temporary contractual labourers.’ Families are not allowed to accompany the employees who belong to workers in the specific categories and earn lower wages (Arokkiaraj et al.,2021).

According to Rajan & Zachariah (2001) findings confirm that within a few days or a month of their marriage, a sizable proportion of Gulf brides in Kerala had been separated from their husbands who migrated abroad. However, for most of the couples, the emigration of husbands took place some years after the wedding. Nearly a million married women in Kerala have been separated away from their spouses due to migration. Most of these so-called ‘gulf wives’ were already lonely and they were loaded with additional household obligations to which they had not been used while their husbands were present. Their gains in autonomy, prestige, managerial skills and experience dealing with the world enable them to develop new skills that would benefit their families and society for the rest of their lives (Zachariah et al., 2002).

When these left-behind members are mostly women in the household, they have to shoulder all the responsibilities that the males had previously. The main issue with male migration is the social impacts of migration, especially separating women from their male counterparts. Male migration has two major effects on families: firstly, the absence of a male partner drives or frees women to take on new roles, which would increase their dignity. Secondly, women have to face financial difficulty and greater duties in the absence of their men. Emigration of men has resulted in the availability of more money to their families, particularly to their women (Rajan & Zachariah, 2018a).

The Kerala migration surveys (1998–2018) explored the status of 'left-behind women' and the issue of family separation caused by the male movement, claiming

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that such migration has particular effects on parents, wives and children. In Kerala, the migration of married men to Gulf countries, who leave family management in the hands of the women of the family, has given rise to the phenomenon of one million 'Gulf wives.' These positions of women have risen from that of humble housewives to that of proficient administrators of household affairs, carrying out a variety of responsibilities (Arokkiaraj et al., 2001).

Male migration from Kerala has been extensively recorded, but less emphasis has been devoted to the consequences on the families left-behind (Gulati, 1993) The focus turned to women left-behind in the 1980s (Gulati, 1983); since then, attention has been devoted to the impact of male migration on the families left-behind by women, particularly wives (Sekher, 1997). According to KMS data on Gulf migration, Muslim emigrants have a major role in contributing to the economic success of the Muslim community. Within the Muslim population, migration is dominated by men.

According to the Kerala Migration Survey, 2018 women left-behind are higher among Muslims in Kerala. The number of separation between Male and female partners considerably increased due to the migration. While it is rare for females to migrate alone, it is more common for husbands to migrate without their spouses. Both men and women experience unique benefits and losses due to migration, but women are less capable of managing them independently without the assistance of their husbands (Zachariah & Rajan, 2001).

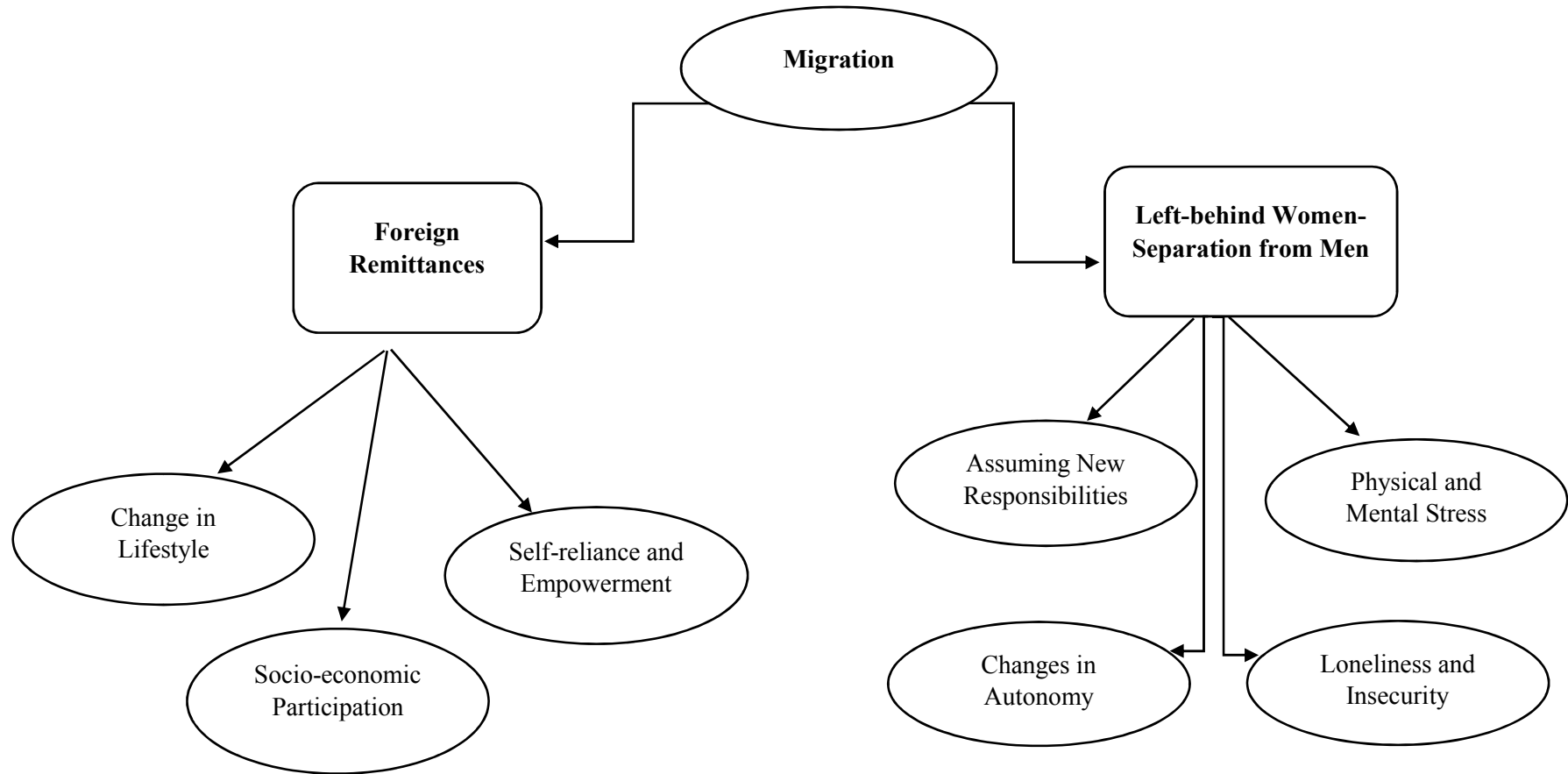
### **3.4.1 The Impact of Male Migration on the Left-behind Women**

Depending on the abilities, and familial context of the women, the effect of migration on women may be favourable, undesirable, or both (Zachariah & Rajan, 2001). The absence of husbands may raise the need for the involvement and management of the women in the family's issues, which may be confronted by them differently. Accordingly, the left-behind women are facing different situations due to their husbands' migration and consequent circumstances. Hence the impact of male migration on the left-behind can be categorised as illustrated in Figure 3 which

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depicts that when the left-behind women are receiving remittances from their husbands abroad, that will result in a change in lifestyle, self-reliance empowerment and socio-economic participation. The separation of left-behind women from their husbands leads to assuming new responsibilities, physical and mental stress, changes in autonomy loneliness and insecurity.

**Fig. 3.1 The Impact of Male Migration on Left-behind Women**



Source: Derived by the Researcher from Secondary Sources

Figure 3.1 depicts that the major changes that happened to the left-behind women due to the migration of their men are mainly categorised into receiving foreign remittances and issues related to the separation of left-behind women from the migrants. Hence the impact of male migration on left-behind women is discussed as follows

#### **3.4.1.1 Change in Lifestyle**

The migration of males from Kerala to the Gulf has resulted in various changes in lifestyle and consumption patterns, such as ownership of land, building modern house styles for residing, providing comfortable domestic utilities and improving the nutritional and physical condition of household members (Zachariah and Rajan,2001). Increased money due to foreign remittances causes many adjustments in their lifestyles and purchasing habits. There are a few noticeable differences in the lifestyle of left-behind women, but one of them is the type of fuel used for cooking liquified petroleum gas instead of kerosene or electricity (Zachariah et al., 2003). Remittances were critical in enhancing the social status of the families and improving the prestige of the family among the family network and neighbourhood (Arokkiaraj et al.,2001). The remittance that the emigrants sent back home is the major effect of emigration on women left-behind and their households. Women left-behind by migrants in the household determine the amount, frequency and use of remittances sent by migrants to their homeland. Remittances are substantial in comparison to the income women left-behind were used to, before the emigration of their husbands. In over 70.5 percent of cases, husbands transferred money in the name of their spouses (Rajan & Zachariah,2018a).

Remittances have significantly increased the income of the wives of male migrants. The ownership of land, housing and household amenities; the nutritional and health status of the household members; the relationship between the family and the community; and the standard of education for children are a few changes in lifestyle and consumption patterns that have been influenced by increased income (Zachariah & Rajan, 2001). Receiving such enormous sums has several advantages

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as well as disadvantages. Benefits of foreign money to the households include changes in land ownership, housing, household amenities, nutritional and health conditions of family members, social standing as represented in the family's interactions with the community and the quality and amount of education received by their children, etc. (Rajan & Zachariah, 2018a).

#### **3.4.1.2 Socio-economic Participation and Mobility**

When males work abroad for an extended period, the women left-behind participate more actively in all financial matters. Furthermore, when migrant husbands arrive for vacation visits, they only stay for a short period and do not exercise control over their wives because they handle everything while they are away. Women are increasingly actively involved in the outside world as a result of migration and remittances. They not only manage their personal lives, but they also deal with the public domain (Kaur, 2018). If women do not reside in an extended home, their husbands' movement has a significant impact on their lives. Women who live separately significantly have higher physical mobility and freedom than women who live with their husbands. These women are also more likely to work (Desai & Banerji, 2008).

When the women in a migrant family become involved in both the inside and outside of the home, they begin to handle both spheres efficiently, but this increases their workload. Previously, their job was restricted to home tasks and the male was responsible for the public realm, but now since their spouses are absent, all the workload goes to the women (Kaur, 2018). Women in migrant households who have taken on new duties have become more mobile to perform their duties than other women in the region (Gulati, 1993).

#### **3.4.1.3 Self-reliance and Increased Empowerment**

Gulati (1993) observed that the majority of the women whose men left them due to migration learn to manage problems on their own by becoming self-reliant and resolute. When compared to other non-migrant homes, a general understanding of global trends improved significantly. As a result of the migration of men, the

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'left-behind' women are empowered by improving access to resources, agency and success as women are using their untapped potential to overcome economic problems and to become autonomous in their family sphere (Kaur, 2022). Left-behind women who live away from their in-laws have more agency and responsibilities (Desai & Banerji, 2008).

Women who have been successful in accepting the extra duties have gained new knowledge and self-assurance. They have advanced in social standing and gained more independence. A reserved, dependent woman was transformed into a successful supervisor with self-esteem and social standing on par with any man in the community by the absence of their husbands, increased financial resources at her command and the ability to contact him whenever necessary. Women have nurtured an inherent ability to accomplish tasks, both at home and in society (Rajan & Zachariah, 2001).

#### **3.4.1.4 Assuming New Responsibilities**

Rajan & Zachariah (2018) observed that women who were previously used to a safe lifestyle are now expected to take on a variety of home responsibilities. Women who have to handle huge quantities of money would be in charge of the household's financial management. They would be obliged to open bank accounts and visit public offices. Due to the relocation of their husbands, women who had previously been used to protected lifestyles were compelled to take on several household duties, both within and outside the home (Zachariah & Rajan, 2001). When women left-behind were inquired about the difficulties they experienced when their husbands departed, most mentioned extra duties, financial concerns and raising children as the main issues. Women who are successful in taking on more tasks learn new skills, enhance their self-esteem, become more autonomous and improve in social status. Those who fail to respond to the situation face the hatred of their spouses and other family members, together with social and psychological issues (Rajan & Zachariah, 2018a).

The supervision of the education of their children was one of the important additional duties that Gulf spouses assumed as a result of the emigration of their husbands. Before migration, husbands handled most of the responsibility for the education of their children; but, after the migration, the wife had to assume the role (Zachariah & Rajan, 2001). Gulati (1993) noticed that in the absence of their husbands, the women left-behind obtained working skills in multiple areas and even began small enterprises of their own, keeping them occupied. Women in migrant homes with new or increased responsibilities become more mobile than others in the region. The understanding that females can function effectively without their husbands typically leads to a sense of equality in their thoughts, helping them feel at ease (Kaur, 2018). Additional responsibilities include managing the earnings and remittances of husbands abroad, maintaining communication with spouses who live overseas and caring for the health of family members (Zachariah & Rajan, 2001).

#### **3.4.1.5 Changes in the Autonomy**

The left-behind women of migrant men have experienced a change in their autonomy in terms of decision-making, mobility and political involvement (Ullah, 2017). Rajan & Zachariah (2018) observed that over time, the separation between a woman left-behind and her emigrant spouse makes her more independent and autonomous and she is presently actively involved in both the private and public spheres of family life. When a spouse or male family member migrates, the left-behind woman is actively involved in all the issues of the family and as a result, she gains more confidence and becomes more self-sufficient, autonomous and bold in handling family issues and (Kaur, 2018). Previously unfamiliar with managing big sums of money, women are now in charge of the household finances. For several reasons, they have been required to contact public officials and open accounts with financial institutions (Rajan & Zachariah, 2001).

In the absence of the spouse, the majority of decision-making rests on the woman if the other members of the household are not interfering in the decision-making process. Most issues concerning the healthcare of family members and the

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purchasing of everyday home necessities are handled by women left behind, whereas the choices about the use of household funds are decided jointly by the woman left-behind and her husband. Even big home purchases and family trips to see family/relatives are made jointly by couples. However, some women left-behind do not influence the management of money (Rajan & Zachariah, 2018a)

#### **3.4.1.6 Physical and Mental Stress**

In the absence of men, women have to face extreme physical and emotional stress (Roy & Nangia, 2005). Young wives had little opportunity to get to know the families of their husbands before their husbands departed for migration. They likely experienced severe emotional issues. The husband and wife may experience issues if they have been apart for a long period and misunderstandings with the husband's family members (Rajan & Zachariah, 2001). When women left-behind were asked to share their severe negative experiences as a result of the absence of their husbands, they mentioned worry, anxiety, health issues and concerns about the future and studies of their children (Rajan & Zachariah, 2018a). Migrant women confront a variety of home issues, including being overwhelmed with responsibilities, having a dual task, stress and tension. (Kaur 2018). Women who failed to rise to the occasion to take on greater responsibilities in the absence of their husbands were the targets of resentment from their spouses and other family members and even developed social and psychological issues (Rajan & Zachariah, 2001).

Gulati (1983) reported that male migration creates severe psychological discomfort due to stress, tensions, conflicts and anxiety among left-behind women. Stress is caused by a tough and unpleasant connection with in-laws/relatives. Tense relationships with in-laws have an impact on the psychological challenges that wives suffer while their husbands are away. Wives are less likely to experience psychological discomfort when they have a typical supportive connection with their in-laws (Arokkiaraj et al., 2001). When women are forced to stay with in-laws, often without financial stability, they create unnecessary stress and tension (Kaur, 2018).

### **3.4.1.7 Loneliness and Insecurity**

According to the KMS (2013), both the husband and wife experience significant loneliness as a result of their separation. When women left-behind were inquired about the difficulties they experienced when their husbands departed, most mentioned 'loneliness and extra duties' (Rajan & Zachariah, 2018a) and reported that when women left-behind were asked whom would they prefer to marry their daughter of marriageable age, majority of these moms wanted their daughters to marry someone who work within the state and not outside Kerala. This reaction might be attributed to the loneliness and frustration of separation experienced by these women left-behind in their married lives due to the migration of their husbands.

The most significant, but regrettably inevitable, effect of emigration is the loneliness of women due to the migration of husbands. The separation of married emigrant males from their spouses lasts for several years under Kerala's present emigration pattern. Younger women were more affected by the problem of spouse separation than older women (Rajan & Zachariah, 2001). Gulati (1993) observed that men's migration breakdown and women's isolation enhance mobility and bring them into contact with a broader network of institutions that they had not previously contacted. Wives experiencing feelings of loneliness due to the migration of their husbands notably mentioned psychological issues (Arokkiaraj et al., 2001). Regular communication between husband and wife is crucial to lessening the extent of loneliness and mitigating its serious consequences. (Rajan & Zachariah, 2001).

As a result of the migration of husbands, gulf wives experience both positive and adverse effects. The negative effects are experienced by the wives due to the migration of their husbands which include added responsibilities, loneliness, mental stress, hard work and minor problems with in-laws and children. Moreover, the economic benefits due to remittances outweighed the burdens and hardships resulting from the absence of their husband.

### 3.4.2 Left-behind Perspective in Migration Theories

Migration theories attempt to explore the logic and reasons underlying individuals' and households' decisions to migrate from one region to another - domestically or globally - as well as the elements that explain the persistence of migration patterns over time (Bueno, 2019). There are numerous theories of migration and each focuses on different aspects of the causes and consequences of migration. People migrate in quest of better living conditions or opportunities, such as jobs, better salaries and financial security.

The majority of people relocate in search of better prospects, Push-pull models often include factors in the source and destination regions but do not explain how these factors bring about migration. According to neoclassical migration theories, people migrate to maximize their earnings or well-being. (de Haas, 2014). Neoclassical theories of migration were criticized for their failure to explain real-world migration patterns and processes, as well as for making unrealistic assumptions (de Haas, 2021). Examinations of historical and present data demonstrate that growing emigration is originally connected with human and economic progress (de Haas, 2010).

The new economics of labour migration hypothesis is derived from the neoclassical approach and is the refined form. The essential element of this approach is that it views migration as a family or household decision rather than a personal choice. (Stark & Bloom 1985). According to the new economics of labour migration approach, emigration enables the diversification of family resources in the case of failure or instability in local revenue sources. Thus, aging parents and other kin who remain in the place of origin can rely on remittances, maintaining the well-being of older generations, particularly in developing countries where authorities do not necessarily have provisions for social protection (Massey et al. 1993).

Massey et al. (1993) perceived that the assumption of perpetual labour demand for external low-skilled workers underpins the global systems theory. This viewpoint is based on the concept of a global market economy in which capitalism from industrialized nations spreads to peripheral non-capitalist societies, resulting in migrant movements from the non-capitalist to the capitalist societies. International

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migration and significant rural-urban mobility of younger employees, in this paradigm, enhance the aging processes of elderly persons left-behind in less developed areas. (Bueno 2019).

According to the push-pull theory of migration, the choice to migrate is influenced by 'push and pull' forces. Poverty, socio-political unrest and other causes motivate people to migrate to another country, while the high degree of economic development in the destination draws them in (Taylor, 1987; Stark, 1984; Massey, 1990; Massey and Parrado, 1994;). It may be inferred that migration has become a survival strategy for families who have been left-behind to overcome economic challenges. Such movement causes changes in the family structure, affecting the lives of the women who are left behind. (Hadi, 2001)

According to network theory, the spread of migration experiences from migrants to family and friends in the countries of origin is a motivating factor behind international migration (Massey et al. 1987). These networks give much-needed assistance to families, would-be migrants and newly landed migrants in their unfamiliar settings. This assistance may take the shape of income support for friends and relatives or crucial information (Bueno 2019).

The institutional theory explains how profit and nonprofit organisations provide services and support in the form of transportation, labour contracts, documents, housing, legal advice for migrants and mediate the migration process by capitalizing on the mismatch between a large number of potential migrants seeking to migrate to developed regions and government restrictions on legally admitting those migrants into their territories (Bueno 2019). This viewpoint is critical for emphasising vulnerable groups such as women, children and the elderly, who are now the key target groups for non-governmental organisations assuring the defense of their human rights and improving their living conditions upon arrival and while in transit (Massey et al. 1993).

According to Myrdal (1957), Cumulative theory perceives migration as a social phenomenon driven by the dissemination of knowledge, resources and support through social networks in the communities of origin. According to the cumulative causation theory, when people gain migratory experience, they become a source of

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'migratory social capital' for others left-behind in the same community of origin (Massey et al. 1987).

To conclude, the absence of husbands would increase the inevitability of the involvement and management of women in the day-to-day concerns of the family. Hence the level of capability that occurred to the left-behind women as a result of migration should be focused on. While male migration may be connected with a greater probability of remittances, women may be required to fill in for absent spouses in a variety of ways, such as decision-making, financial management, working in the family company, management of household affairs, etc. The advancement of technology has enabled migrant families to communicate with their families back home. Loneliness and additional duties plague the women left behind, who must take care of the family members alone and discharge their duties without fail.

### **3.5 An Overview of the Capabilities Approach**

Capabilities are the true freedom that persons have to realise their potential doings and beings. In this view, true freedom implies having all of the essential means to do or be anything one desires. The 'various combinations of functionings that a person is capable of achieving' are characterised as capabilities. In other words, capabilities are 'the substantial freedoms he or she possesses to live the type of life he or she has reason to value' (Sen, 1999). Capabilities are true opportunities that do not relate to access to resources or possibilities for certain degrees of satisfaction; rather, they refer to what a person is capable of doing and the many states of being that person possesses (Robeyns 2016).

Capabilities correspond to a kind of opportunity freedom. A person with numerous capabilities, like a person with a pocket full of money, may enjoy many different pursuits and explore different life tracks. As a result, the capability set was compared to a budget set. Hence, capabilities describe a person's genuine true potential (Alkire & Deneulin, 2009). This section tries to provide a theoretical examination of the Capability Approach and how the Capability Approach is applied in gender studies to analyse the impact of migration on women.

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### 3.5.1 Capability Approach

The term capability was pioneered by economist and philosopher Amartya Sen in his Tanner lecture (Sen 1980, 1984, 1985a, 1985b, 1990, 1992, 1993, 1995, 1999a). Later it was extensively developed by Martha Nussbaum (Nussbaum 1988, 1992, 1995, 1998, 2000, 2003, 2004) and a growing number of other scholars (Robeyns, 2005; Alkire, 2002) in the Humanities and Social Sciences. The Capability Approach is concerned with the capabilities of people, or what they are effectively capable of doing and being (Sen, 1992). Although some of the basic notions of the Capability Approach may be traced back to Aristotle, Adam Smith and Karl Marx, the concept of capabilities was first proposed in the literature of Amartya Sen (Sen, 1980). Amartya Sen argues that expanding the opportunities available to individuals to live the lives that they desire is the fundamental goal of development (Sen, 1985(a), 1999). Sen argued that expanding people's potential for what can be referred to as 'real freedoms' - that is, being able to do and be more - is just as important to human progress as attaining and maintaining high rates of economic growth or utilities (Sen, 1980).

The Capability Approach, according to Sen, "is an intellectual discipline that accords a key role to evaluating the achievements and freedoms of a person in terms of his or her real ability to perform the various things a person has reason to value doing or being" (Sen, 2009). Sen contends that rather than focusing on the actual freedoms to live meaningful lives, we should pay attention to people's capabilities to engage in good states of existence like health or literacy or to engage in activities like working, reading, or participating in politics. In the capability Approach, Sen argues that rather than emphasizing people's earnings or consumption patterns, normative assessments should instead focus on what people are capable of becoming and doing. The latter are only tools for achieving well-being, whereas assessments and decisions ought to center on the intrinsic values or capabilities of an individual (Robeyns, 2003).

Human Development Report (2019) presents the notion of capabilities, as 'broadly defined as people's freedom to choose what to be and do,' highlighting that they cannot be reduced to money and wealth because these resources are only

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‘instrumental’ in realising human capabilities (HDR, 2019). Furthermore, the resource-based approach ignores individual differences in their ability to turn resources into capabilities (Jain, 2020). The Capability Approach is related to various aspects of the lives such as people’s health, the education they can enjoy and the support they can enjoy from their social networks; it is also associated with what people can do, such as being able to do work, raising a family, traveling, or being politically active. The extent to which people have the freedom to pursue valuable activities or functions is referred to as capability (Sen, 1992).

The Capability Approach is concerned with the genuine freedom of people to accomplish things, as well as the degree of satisfaction they will achieve when choosing among the alternatives available to them. It is a comprehensive, multifaceted strategy (Robeyns, 2017). According to Nussbaum (2011), the general Capability Approach focuses on the relative quality of life and justice theory and emphasises what people are capable of doing and being (Nussbaum, 2011). Capability is thus a sort of freedom: the real freedom to attain various functioning combinations. The Capability Approach is characterised by its emphasis on what individuals are effectively capable of doing and being, i.e., on their capabilities (Robeyns, 2003).

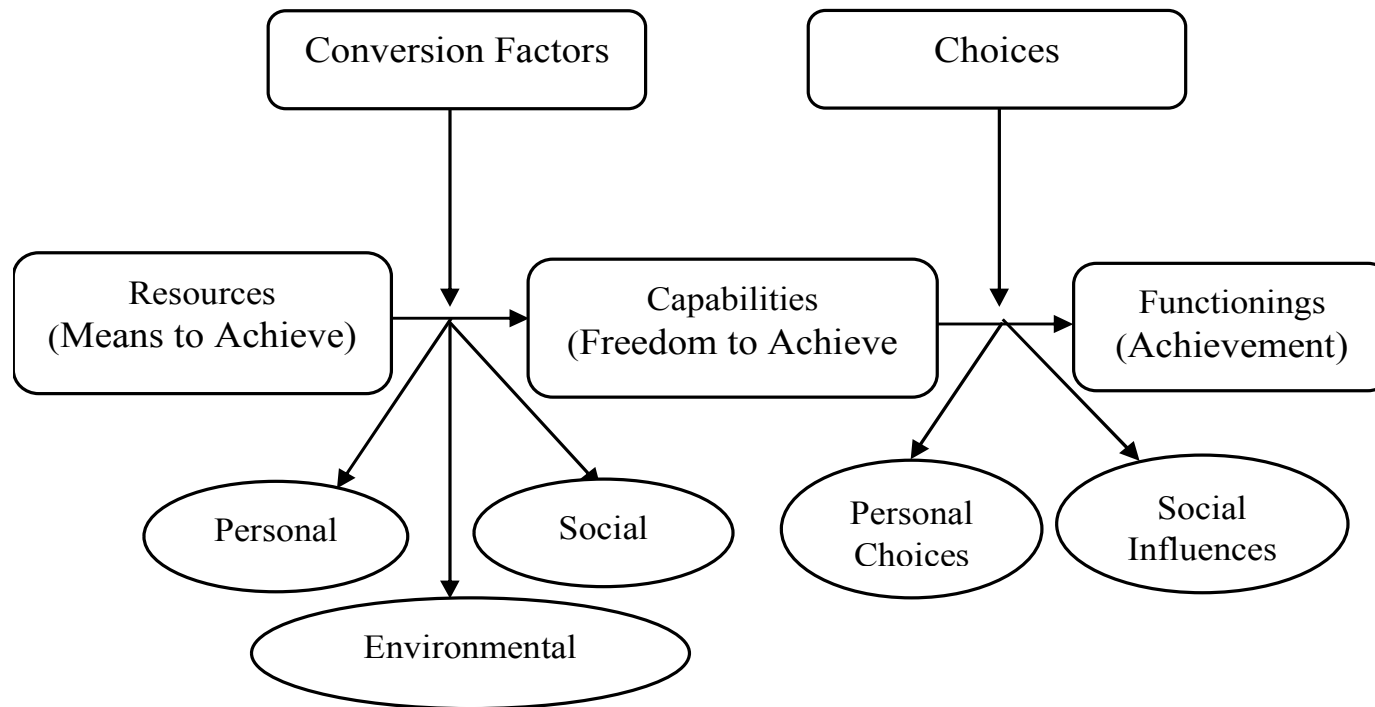
### **3.5.2 Functionings and Capabilities**

The key components of the Capability Approach are its functionings and capabilities. Functionings are a person's ‘beings and doings,’ whereas capability is ‘the various combinations of functionings that a person can attain.’ Thus, the capability is a set of dimensions of functioning that indicate the freedom of a person to live one form of life or another (Sen, 1992) Functionings are distinct components of living situations and are more directly tied to living conditions whereas capabilities are conceptions of freedom (Sen, 1993).

People's potential functionings are identified as their capabilities. Beings and doings are the functioning. Examples include having access to a healthy diet, participating in community activities, having a place to live, interacting with others, being part of the workforce, taking care of others and being in good health. Similar distinctions exist between an achievement and the freedom to do something, between an

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outcome and an opportunity and between a functioning and a capability. Collectively, all capabilities add up to the complete autonomy to live the life that one has good reason to value (Robeyns, 2003). The Capability Approach distinguishes clearly between resources, capabilities and achieved functions. The relationship between the resources, capabilities and functioning is illustrated in Figure 3.2.

**Fig. 3.2 Resources, Capabilities and Functioning**

Source: Derived by the researcher from Secondary Sources

Fig.3.2 shows the relationship between the resources, capabilities and functioning in the Capability Approach. The 'resources' refers to the commodities, services and physical wealth that an individual has access to, which include income, properties, access to education, healthcare and social services. The ability to convert these resources into valuable outcomes depends on conversion factors. Conversion factors can be environmental (e.g., geographic location, infrastructure), social (e.g., gender norms, social structures), and personal (e.g., skills, health). The ability to choose between various functionings is made possible by these capabilities, leading to actual outcomes in a person's life where social influences determine personal choice.

Sen (1988) observed that capabilities are the collection of opportunities that an individual can use to convert their abilities into actual functioning. In contrast, functionings are the ways of being and doing that a particular person possesses, such as working or being literate. Sen (1992) called 'achieved functioning as what makes a life valuable and a person's capability is a set of possible functioning bundles. Functionings are the valuable acts and situations that constitute the well-being of people, such as health, safety, education, a decent job and the ability to visit loved ones. (Alkire & Deneulin,2009). Working, relaxing being educated, healthy, a member of a community and so on are examples of functioning (Robeyns, 2003).

Functionings are connected to commodities and income, but they explain what a person can do or be as a result of the commodities and income. People enjoy the functionings of being well-nourished when their fundamental demand for food (a commodity) is supplied (Alkire & Deneulin,2009). The distinction between functioning and capability is similar to that between potential and reality, or between an opportunity and real achievement (Walker & Unterhalter, 2007). A capability is the capacity to achieve, whereas a functionings is an accomplishment. Since functionings are distinct components of living circumstances, they are, in a sense, more directly tied to living conditions. Contrarily, capabilities are ideas of positive freedom: what actual options you have for the kind of life you can lead (Sen, 1987).

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According to the Capability Approach, the ideals of well-being, justice and development should be understood in terms of the functional capabilities of people; such as their real opportunities to engage in the actions and activities they want to engage in. These beings and doings, which Sen refers to as functionings, are what make life worthwhile and meaningful (Robeyns, 2003). Capabilities are the actual freedoms or chances of people to perform functionings. As a result, whereas traveling is functioning, the real chance or opportunity to travel is the corresponding capability. A person who does not travel may or may not be autonomous and capable of traveling; the concept of capability seeks to determine precisely whether the person could travel if he/she chose to do so. The contrast between functionings and capabilities is between the achieved and the functionally feasible, or, in other words, between freedoms or opportunities from which one can select (Robeyns, 2017).

### **3.5.3 Well-being and Agency**

The distinction between well-being and agency goals is a vital part of Sen's Capability Approach. (Sen, 1985b). The theory views the potential of people through two lenses: the 'well-being aspect' and the 'agency aspect.' He defines agency as the ability to establish and pursue one's preferences and goals. One of the goals and interests might be the pursuit of one's well-being. Other goals may include advancing others' well-being, upholding societal and moral standards, or acting on political beliefs and the pursuit of a range of values. The ability of an individual to accomplish or achieve their personal goals is referred to as well-being. Agency (in both its freedom and achievement components) is intended to represent a broader variety of goals, not necessarily about one's well-being, but also, for instance, to the well-being of others or not at all (Sen 1985b, 1992, 2009). According to Sen, well-being overwhelms happiness as the most important factor and well-being is essentially an objective matter. As a result, he puts no value on subjective happiness perceived by an individual (Burns, 2023).

According to Claassen (2016), Sen has used the concept of agency to denote an ability of an individual to select choices from a set of capabilities that lead to that person achieving particular functions. This usage highlights the key concept of the Capability Approach: ensuring a set of choices from which the individual may select. A person is therefore considered an ‘agent,’ as opposed to a ‘patient’ whose main interest is his or her well-being or lack thereof (Robeyns, 2005). The basis for achieving functionings subject to people's agency and choice is considered their capabilities. If the capabilities of an individual are their actual freedom to enjoy the beings and doings they have good reason to value, then the agency component of that freedom is their ability to take action, effect change and pursue the objectives that are important to them (Sen, 1999a). The agency may be defined as a free and autonomous movement in a social process and an agent is an individual who can deliberate independently, i.e. has the capabilities necessary to set goals and decide how to achieve them and can exercise these abilities without interference from others and who can act freely, i.e. has the potentials necessary to act upon his preferences about goals and means and can exercise these potentials without intervention from anyone (Claassen 2016).

#### **3.5.4 Resources and Entitlements**

The concept of entitlement focuses on how people acquire capabilities. According to Amartya Sen, “Entitlement involves the set of different commodity bundles that a person can command in a community using the entire range of the freedoms and possibilities that he or she faces,” (Sen, 1983) According to this approach, entitlement consists of two components: one is resources (endowment) that may be acquired and the other is exchange possibilities (exchange entitlement) that are decided by their position and privileges. Sen emphasizes that the major commodity that a person can sell is his labour and as a result, the entitlement of a person is essentially determined by his or her capacity to obtain work, however, entitlement is more than just an indicator of income (Sen, 1983).

Entitlement is associated with what individuals can and cannot accomplish and should thus be conceptualised to represent the multifaceted nature of entitlement relations, such as accessibility to and expenses for health care, education, equal

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opportunity in society, self-esteem and freedom from violence (Sen, 1983). The capability of a person is a set of alternative functional bundles, just as their entitlement is a set of alternate commodity bundles (Sen, 1989). According to Sen, the tendency of current political philosophy to consider resource-based interpersonal comparisons as giving freedom is significantly inappropriate. In general, resource and primary goods comparisons cannot be used to compare freedoms (Sen, 1992). One of the key advantages of the Capability Approach is its emphasis on opportunities rather than resources. (Eichsteller, 2021). However, according to Robeyns the focus on capabilities does not decline the essential role of resources in people's well-being. Indeed, uneven distributions of resources can be substantial causes of capability inequalities. In-depth research on gender inequality must map out the disparities in women's functionings and capabilities as well as identify the resource disparities that give rise to those differences. Influencing the allocation of resources will be a key (though not the sole) means of determining the distribution of capability well-being, which is particularly significant when evaluating the policies that can minimize gender disparities (Robeyns, 2003).

### **3.5.5 Scope of the Capability Approach**

The Capability Approach has been applied and extended in a wide range of areas over the last twenty-five years. It encompasses world public health, development ethics, ecological sustainability, environmental balance, education, technology design, social welfare policies and welfare policies (Robeyns, 2017). Sen's Capability Approach has a wide range of applications, encompassing academic, activist, and policymaking spheres, and can be applied in conceptual, philosophical, pragmatic, realistic, theoretical, or empirical contexts. These might be about social, political, economic, legal, psychological, or other aspects, considered collectively, separately, or in any combination. They can be detailed for either global or local settings (Robeyns 2003).

The idea of capabilities is employed in particular to show how people may accomplish substantial goals for their families and themselves. According to Sen

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(1989), there is a wide variety of human skills, from basic freedoms like not being hungry to sophisticated capabilities like gaining self-respect. The capability method is unique in its inclusiveness and internal plurality, which enables its potential growth and application to a wide range of research domains (Alkire, 2002; Robeyns, 2005).

The capability approach is entirely global: the capabilities in question are important for every citizen, in every country and each should be regarded as a means to an end (Nussbaum, 2000). The Capability Approach is a wide normative structure for analysing and assessing individual and social well-being (Robeyns, 2005). The capability approach has also not been limited to empirical study. Some of its goals have been theoretical, such as the development of concepts of justice (Nussbaum 2000; 2005; Claassen 2016) or the creation of a richness line, which allows us to identify the affluent one (Robeyns 2017).

The Capability Approach is applied in a variety of disciplines, the majority of which notably in development philosophy, welfare economics, societal values and political ideology. It may be used to assess a wide range of dimensions of people's well-being (Robeyns 2003). Finally, the scope of the Capability Approach may be summarised as 'justice applies worldwide,' that is, it extends to all human beings regardless of their nation of origin or residency and it applies not only to government agencies but also to the societal ideals and social practices (Robeyns 2015).

### **3.5.6 Selection of Capabilities List**

The various roles that functionings and capabilities might play in different kinds of capability analyses have crucial relevance for the question of how to choose the relevant capabilities: each kind of analysis, with its own set of goals, will demand its response to this question (Robeyns, 2017). Basic capabilities are those that are required to have a specific type of individual agency (Claassen, 2016). Nussbaum argues that Sen should support a specific set of desirable capabilities if he wants to apply the Capability Approach to addressing social injustice and gender

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disparities (Nussbaum, 1988; 2003). However, Amartya Sen argues that basic capabilities should be selected by a public reasoning process, but he is reluctant to offer a uniform set of capacities. (Sen 1999a; 1999b; 2009).

According to Sen (2004), we cannot create a single final list of capabilities since various lists are utilised for different reasons, each of which may require its list. The 'capability set' of people is the complete set of functionings that are 'possible' within his/her range and from which choice can be made (Sen, 1985b, 1989). Sen's list of capabilities has to be dependent on the context and it needs to take into account both the type of evaluation that will be conducted and the region to which it applies.

Unlike the capability framework of Sen, Nussbaum offers a comprehensive set of human capabilities that every person on the globe is expected to have. Nussbaum (2011) claims that humans have ten central capabilities that an ideal political system must offer to all citizens: (1) Life; (2) Bodily Integrity; (3) Bodily Health; (4) Senses, imagination and thought; (5) Practical Reason; (6) Emotions; (7) Affiliation; (8) Other Species; (9) Play; and (10) Control over One's Environment. Nussbaum argues that even though it is universally genuine, the list would require additional development and context-specific adaptation (Nussbaum, 2011). According to him, these capabilities are required for every human being as the ethical entitlements to live in a truly human way and achieve human happiness and dignity. Nussbaum developed these capabilities at an abstract level and argued that it should be translated to implementation and policy at the local level, taking into consideration local unique characteristics. (Nussbaum, 2011),

Five methodological criteria are suggested by Robeyns for a suitable selection of appropriate capabilities. These include: identifying different levels of generality and drawing the list in two phases; an ideal list and then a second-best list that takes into account practical constraints, making the selection as transparent as possible because it must be defended and discussed; justifying the method used;

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making the selection sensitive to the context; and intended for the most comprehensive and complete selection possible (Robeyns 2003).

According to Robeyns, we cannot develop just one final list of capabilities since various lists are intended for numerous applications, each of which may require its own list. Furthermore, it employs lists of capabilities depending on different sociological, cultural and regional circumstances, which influence the selection (Robeyns, 2005). For the assessment of gender differences in post-industrialised Western cultures, Robeyns has suggested the following capabilities: "(1) Life and physical wellness; (2) Mental health; (3) Physical integrity and security; (4) Social interactions; (5) Political autonomy; (6) Knowledge and information; (7) Household work and nonmarket care; (8) Paid jobs and other tasks; (9) Having a Shelter and surroundings; (10) Recreation activities; (11), Time-autonomy; (12) Respect;"

According to Alkire and Black (1997), the items on a capability list ought to represent the most fundamental justifications for actions or the reasons of the people behind their choosing to act in a particular way. They contend that to determine whether some of the dimensions overlap, lists should be compared. To create a list of wholly irreducible dimensions, only those that are unable to be reduced to another dimension should be retained.

Alkire and Black(1997) end up with a list that contains the dimensions listed such as (1) Life; (2) Knowledge and appreciation of beauty; (3) Work and play; (4) Friendship; (5) Self-integration; (6) Coherent self-determination; (7) Transcendence; and (8) Being able to live with concern for and about plants, animals and the world of nature (Alkire & Black,1997). However, Robeyns argued that many of the elements on this list are too ambiguous and abstract and the elements in this list are extremely general compared to the more specialized capabilities that can be applied to the assessment of gender study (Robeyns, 2003).

### **3.5.7 Capability Approach in Gender Studies**

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Capability Approach has promising applications to address gender challenges and issues. Inequalities in resources can indeed be the primary causes of disparities in capabilities, thus they must be investigated as well (Robeyns, 2003). Sen has argued that the subject of gender inequality may be understood far better by comparing those things that fundamentally matter such as functionings and capabilities, rather than merely the means to attain them like resources. Ultimately, the question of gender inequality is one of unequal opportunities (Sen, 1992a). However, Sen's Capability Approach does not furnish a ready-made framework for studying gender inequalities. Sen has not answered one of the most important questions: which capabilities are significant for measuring gender inequality? (Robeyns, 2003).

According to UNDP (1995), progress in developing women's capabilities differs for each country. Countries following socialism scenarios, for example, applied social and political mobilisation and organisation to accomplish quick and equal development in education and health for men and women, as well as to engineer societal transformations to widen possibilities for women. In general, women have been able to succeed in dealing with cultural obstacles to developing their capabilities than in resolving obstacles to using these capabilities (HDR 1995). Women are financially insecure and have fewer alternatives since they are expected to handle the majority of unpaid home and care duties. Any explanation of gender inequality should discuss the gender difference between paid and unpaid work and the Capability Approach allows us to accomplish this since both paid and unpaid work can be conceived as significant human capabilities (Robeyns, 2017).

### **3.6 Migration Within the Capability Framework**

The capability approach enhances the theoretical analysis of the impact of husbands' migration on the women left-behind in the place of origin within the study area. According to Amartya Sen (1999a), development can be seen as a process of expanding real freedoms that people enjoy. One of the crucial aspects of development as freedom is an adequate recognition of political, economic, social participation and leadership space of women. According to Sen, women's participation is not merely to generate income for women, but also to provide the

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social benefits that came from the enhanced status and independence of women. The economic participation of women is, thus, both a reward on its own and a major influence on social change in general. Amartya Sen described human capability as the ability of individuals to lead lives they have good reason to value and to develop the meaningful choices they currently possess (Sen, 1999a).

The focus of the migration study within the Capability Approach will concentrate on the structural elements of social connections created based on entitlement (Sen, 1983). The concept of capabilities is applied to illustrate how people are capable of achieving important goals for themselves and their families (Preibischet et al., 2016). The capability theory of Sen can be used to provide a more comprehensive understanding of human mobility (de Haas 2009; 2014). The application of the Capability Approach also provides for a greater understanding of the underlying dynamic and developmental elements of global migration and the implications for people's freedoms (Sabrina, 2016).

Amartya Sen noted that expanding the skills of women improves independence, well-being and the advancement of women's capabilities, which has numerous positive repercussions on everyone's lives (Sen, 2001). While the capabilities approach is appealing for many reasons, it has particular benefits when applied to the unique issues that women experience on a practical and intellectual level. (Nussbaum, 2000) and the Capability Approach is most appropriate to evaluate the various circumstances faced by women and to make the most helpful recommendations for dealing with it (Nussbaum, 2005). Sabrina (2016) evaluated the developmental characteristics of migration and viewed migration as efforts of people to increase their freedom and capabilities. The capability to select migration as a freedom-enhancing choice is dependent on individuals having accessibility to various types of resources such as financial, human, cultural, social and political power.

Migration, according to the Capability Approach, is an attempt by individuals to broaden their capabilities and autonomy (Sabrina, 2016) which

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emphasised that the primary objectives of a capabilities-based system of justice are to focus on institutional opportunities as well as the liberty of choice, rather than the number of individual assets or the utility of a migrant. Such a focus might be quite useful in the realm of migration studies. Both capabilities and development approaches are utilised to highlight the agency and capability of migrants to contribute to their economic progress, as well as that of their families, communities and countries of origin (Preibisch et al., 2016). The relationship between autonomy and emigration emphasises how the agency of the women who remain behind may be impacted by the migration of household members (Lenoel, 2018).

Zachariah & Rajan (2001) observed that the separation of wives and children from husbands was one of the major implications of migration. The women who were now responsible for running their homes while the men were away showed an increase in confidence. Remittances have contributed significantly to the income of Gulf wives and their families. A rise in income has brought about several changes in household amenities, land ownership, health and nutrition of household members. The financial management of the household has fallen on women who were not used to handling big amounts of money. For several reasons, they have had to approach public officials and open bank accounts. Women who have been successful in accepting more responsibility have gained new skills and self-assurance. They now enjoy greater independence and a higher status in society (Zachariah, et al., 2001a),

The notion of capabilities is used to demonstrate how the left-behind women are capable of getting the outcome they are seeking for themselves and their families. The origin countries gain from the skills and remittances their citizens send home, destination countries meet labour demands while restricting permanent immigration and migrants' cross borders safely to access higher wages and improve the standard of living for their families (Preibisch & Hennebry, 2012). Hence the capabilities approach can offer a framework that prioritises the freedom of left-behind women of migrant workers and analyses the conditions under which their capabilities can be fully realised.

### **3.7 Conclusion**

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The position of Muslim women in the Malappuram district has been changed due to the varying scenarios of the women with enhanced education facilities and changing perceptions of the community. Many factors including migration and foreign remittances and its consequent factors have paved the way for such changes. Migration has both positive and negative effects on left-behind women. Left-behind women experience increased responsibilities, loneliness, mental stress, hard work and minor issues with in-laws and children due to the migration of their husbands. Sen's capabilities approach can be used to investigate the development effects of migration and remittances in origin communities, taking into account not only the monetary benefits but also the enhancement in living conditions that promote wellbeing.

The international migration scenario from Kerala states highlights the relative position of the Malappuram district in the migration scenario of Kerala that the district has the privilege of sending out the largest number of migrants and receiving the largest amount of remittances from the state and among the migrants from Kerala the Muslim community dominates in terms of number of emigrants and the amount of remittances received

The concept of capability is used to show how individuals can achieve goals they have established to benefit themselves and their families. Capability Approach provides an insight into the fact that well-being should be evaluated not just by the resources people have, but by what they can do and be with those resources and their functionings. The Capability Approach suggests that it is the combination of resources and the ability of individuals to convert the resources into capabilities that determine what they can achieve. The detailed description of the Capability Approach with its related concepts helps to give a deep insight into the various application of the Capability Approach migration scenario and gender studies.

The current chapter highlights how male migration affects family dynamics and empowers left-behind women to seize new opportunities, meet family demands in their spouses' absence, and improve their standard of living. The next chapter will

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validate the Capabilities Approach as a useful framework for examining the experiences of left-behind women. It will analyse how male migration contributes to the capability expansion of these women, particularly Muslim women, by focusing on their self-fulfillment and potential realisation.



## **Chapter 4**

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# **Male Migration and the Capability Expansion of Left-behind Muslim Women**



#### **4.1 Introduction**

This Chapter analyses the socio-economic profile of the respondents and the role of male migration in the capability expansion of left-behind Muslim women in the study area. The analysis is based on a primary survey conducted in the Malappuram district of Kerala. The respondents are the left-behind Muslim women of male migrants from the Malappuram district who migrated to Middle Eastern countries. A total sample of 423 was selected from six taluks of the Malappuram district and data was collected from them using a structured questionnaire.

The analysis is done by using statistical techniques of descriptive statistics, ANOVA, chi-square, Spearman's Rank Correlation, Kruskal Wallis Test and Mann-Whitney U Test. To analyse the role of male migration on the capability expansion of women, the Ordinal Logistic Regression was applied by taking the Women's Capability Index (WCI) as the dependent variable and migration duration and foreign remittance as the major independent variables along with other factors. Details of the analysis and the results obtained are discussed in this Chapter under three major heads.

#### **4.2. Socio-economic Profile of the Sample Respondents**

#### **4.3. The Women's Capability Index**

#### **4.4. Male Migration and Capability Expansion of Left-behind Muslim Women**

#### **4.2. Socio-Economic Profile of the Sample Respondents**

The socio-economic profile of the respondents includes the respondents' age, education, occupation, husbands' education and occupation, number of children, size of the family, characteristics of husbands' migration such as migrant nation of husband, duration of migration, monthly remittance received, etc. The analysis of the socio-economic characteristics is to assure the validity of the data, to compare the result with the authentic data of Kerala Migration Surveys and Census data and

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to provide the reliability of the socio-economic characteristics of the research environment for the instances of the major hypothesis of the study.

#### 4.2.1. Distribution Based on the Place of Residence of the Respondents: Region & Taluk-wise

The distribution of respondents across different taluks and between rural and urban areas within each taluk in the study area is presented in Table 4.1.

**Table 4.1. Distribution Based on the Place of Residence of the Respondents: Region / Taluk-wise**

SI No.	Taluks	Rural		Urban		Total	
		Number of Respondents	Percentage	Number of Respondents	Percentage	Number of Respondents	Percentage
1	Eranad	63	14.9	15	3.5	78	18.44
2	Nilambur	29	6.9	21	5	50	11.82
3	Perintalmanna	52	12.3	12	2.8	64	15.13
4	Tirur	81	19.1	31	7.3	112	26.48
5	Tirurangadi	50	11.8	26	6.1	76	17.97
6	Ponnani	34	8.0	9	2.1	43	10.17
Total		309	73.1	114	26.9	423	100

Source: Primary Survey

Table 4.1 reveals that out of the total samples of 423 for the study from Malappuram district, about 27 percent of the respondents are from urban regions and 73 percent of respondents are from rural regions. The proportion of samples selected from taluks follows the proportion of the male migrated population from taluks of Malappuram district to Middle Eastern countries as per the Kerala Migration Survey 2018 data set.

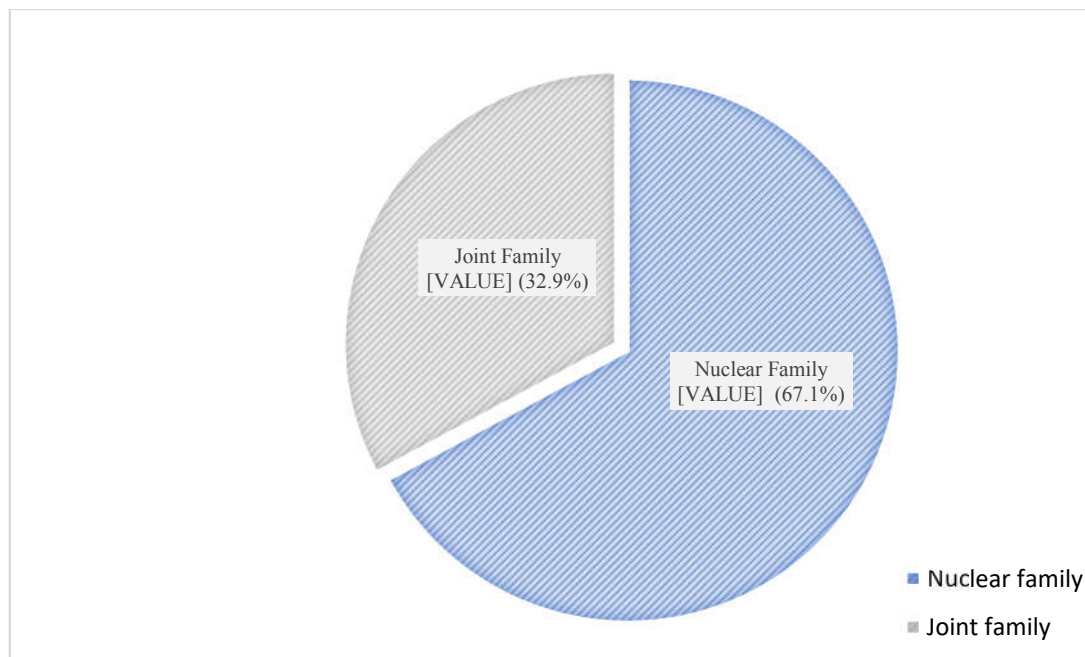
With 26.48 percent, the proportion of respondents from Tirur taluk is the highest followed by Eranad taluk with 18.44 percent and the least samples are selected from Ponnani taluk with 10.17 percent, as the largest number of emigrants from Malappuram district is from Tirur taluk followed by Eranad taluk as per the Kerala Migration Survey 2018 data set. From Tirur taluk, 19.1 percent of the

respondents are selected from rural areas and 7.3 percent of the respondents are selected from urban areas. The proportion of samples selected from Tirurangadi taluk is about 17.97 percent and 15.13 percent of the samples are selected from Perinthalmanna taluk.

#### 4.2.2. Distribution Based on the Type of Family

There are restrictions on the empowerment of women when they live in extended families with in-law parents as they do not gain more freedom and autonomy as long as they are living in an extended family (Desai & Banerji, 2008). The distribution of respondents based on the type of family they are living is presented in Figure 4.1.

**Fig.4.1. Distribution Based on the Type of Family**



Source: Primary Survey

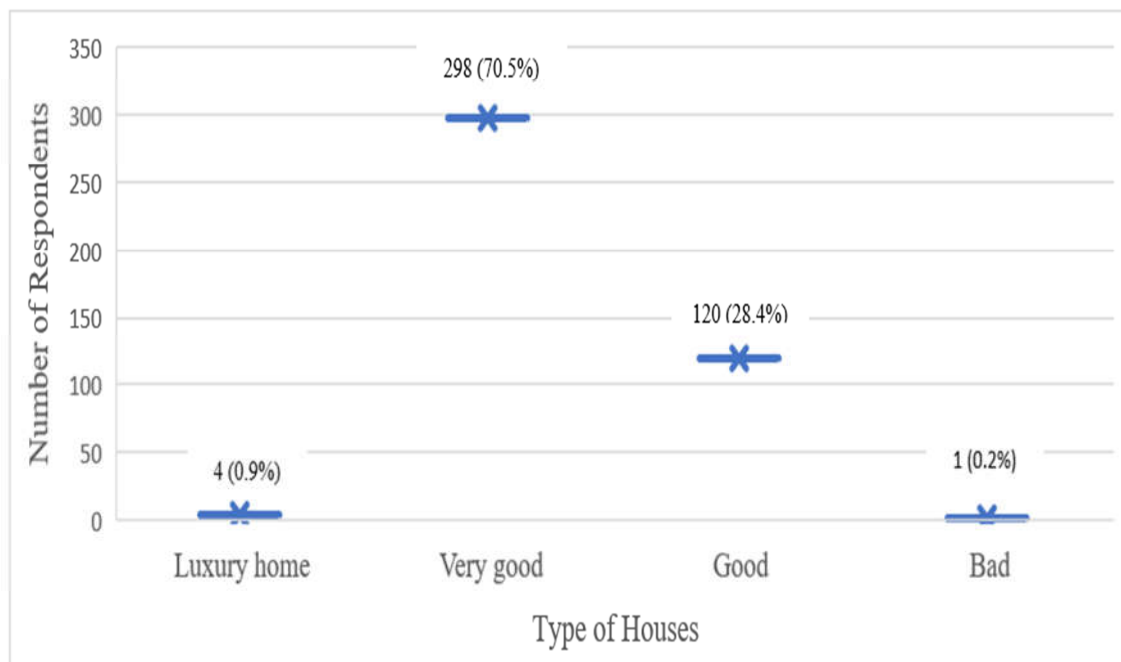
Figure 4.1 shows that 67.1 percent of the respondents belong to the nuclear family and only 32.9 percent of the respondents belong to the joint family. Hence it is inferred that the majority of respondents surveyed are from the nuclear family.



### 4.2.3. Distribution Based on the Types of Houses of the Respondents

The type of houses, such as luxury, very good, good, bad or katchahouses where the sample respondents are staying in the district is given in Figure 4.2

**Fig 4.2. Distribution Based on the Types of Houses of the Respondents**



Source: Primary Survey

Figure 4.2 displays that 70.5 percent of respondents live in very good houses specified as having 3 to 4 bedrooms with attached bathrooms, concrete roofs and tile/marble/ granite floors. 28.4 percent of them are living in good houses with brick, cement walls, concrete, or thatched roofs having 2 to 3 bedrooms. Only about 1 percent of the respondents live in luxury homes with home theater systems, outdoor kitchens, and luxurious amenities such as entertainment, fitness facilities and pools. The final 0.2 percent live in bad houses with brick walls, cement floors, tin or asbestos roofs and no one is residing in kutchahouses specified as mud walls, mud floors and thatched roofs. Hence it is inferred that migrant families in Malappuram district are living in good or very good houses. This supports the findings of Rajan & Zachariah (2018b) in a study based on the Kerala Migration Survey 2018.

#### 4.2.4. Distribution Based on the Age of the Respondents

The descriptive statistics of the age of the respondents are given in Table 4.2.

**Table 4.2. Distribution Based on the Age of the Respondents**

Sl No.	Age Group	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
1	20-30	194	45.9	45.9	Mean	32.95
2	30-40	95	22.5	68.3	SD	8.84
3	40-50	129	30.5	98.8	Maximum	57
4	50-60	5	1.1	100	Minimum	22
	Total	423	100		Total	423

Source: Primary Survey

Table 4.2 shows that the maximum and minimum ages of respondents are 57 and 22 respectively. The mean age of the respondents is 32.95 and the standard deviation of the age is 8.84 which indicates the spread of the ages around the mean age of the sample. About 46 percent of the respondents belong to the age group 20-30 followed by the age group 40-50 with 30.5 percent of the respondents. Only 1.1 percent of the respondents are aged above 50 and there are no respondents aged above 60 or below 20. Hence more respondents from the younger age group are included in the study.

#### 4.2.5. Distribution Based on Educational Status of the Respondents across the Age Groups

Table 4.3 provides data on the highest level of education attained by the respondents of different age groups. To analyse the educational status, the respondents are categorised into two age groups.

Table 4.3 describes that 37.4 percent of the respondents among the age category of 20-40 have higher secondary qualifications, 35.3 percent of the respondents have graduation as the highest level of education and 12.1 percent of the respondents have postgraduation. Only 15.2 percent of the respondents have a primary/ secondary education. Among the age category of 40-60, the majority of the

respondents have a primary/ secondary education level with 83.6 percent whereas the higher secondary, graduation and postgraduation or above level of education of this age group together constitute nearly 16 percent of the respondents.

**Table 4.3. Distribution Based on Educational Status of the Respondents across the Age Groups**

Educaional Level	Age Category		Total Number of Respondents
	Number of Respondents (20-40)	Number of Respondents (40-60)	
Primary/ Secondary	44 *(15.2)	112 (83.6)	156 (36.9)
Higher Secondary	108 (37.4)	8 (5.9)	116 (27.4)
Graduation	102 (35.3)	10 (7.6)	112 (26.5)
Postgraduation or Above	35 (12.1)	4 (2.9)	39 (9.2)
Total	289 (100)	134 (100)	423 (100)
Chi-Square Test Results	Chi-Square =187.719, d.f.=3, p<0.001 Cramer's V= 0.666, p<0.001		
Source: Primary Survey		*Percentage is given in brackets	

It is hypothesised that there are significant differences in the education attainment of the respondents belonging to the age category of 20-40 and 40-60. The chi-Square test statistic of 187.719 indicates that with 3 degrees of freedom (d.f.) and a p-value of less than 0.001, there are statistically significant differences in the education attainment of the age groups. The Cramer's V statistic with 0.666 and a p-value less than 0.001 confirms the relationship. Hence in Malappuram district, the educational attainment of the younger generation is improving compared to the older generation. The study findings align with the study conclusion of Jafer (2015).

#### 4.2.6. Distribution Based on Occupational Status of the Respondents across the Age Groups

Table 4.4 presents the occupational status of respondents belonging to different age groups.

**Table 4.4. Distribution Based on Occupational Status of the Respondents across the Age Groups**

Occupational Level	Age Category		Total Number of Respondents
	Number of Respondents (20-40)	Number of Respondents (40-60)	
Salaried Job	15 *(3.6)	6 (1.4)	21 (4.9)
Self-employed	16 (3.8)	6 (1.4)	22 (5.2)
Unemployed	241 (56.9)	122 (28.8)	363 (85.8)
Students	17 (4.1)	0	17 (4.1)
Total	289 (68.3)	134 (31.7)	423 (100)
Chi-Square Test Results	N= 423, Chi-Square= 11.676 d.f.=3, p=0.009 Cramer's V= 0.166, p= 0.009		

Source: Primary Survey

\*Percentage is given in brackets

Table 4.4 specifies that in both age categories, the majority of the respondents are unemployed. About 86 percent of the left-behind women are unemployed which shows low work participation among the women in the district. Among the age category 20-40, a total of 10.6 percent is employed either in salaried jobs or self-employed whereas in the age category 40-60, only 9 percent of the respondents are employed and a total of 10.1 percent of the respondents are employed in salaried jobs or self-employed. The main targets of self-employed workers are textiles, cosmetics, Mehandi making, bakery, or cake making, mostly online. It is hypothesised that there are significant differences in the occupation status of respondents among the age category of 20-40 and 40-60. The Chi-Square test result is 11.676, with d.f.=3 and p=0.009, indicating the statistically significant difference between the occupation status and age category of respondents. The

Cramer's V statistic of 0.176 with a p-value of less than 0.05 indicates a moderate association between the age group and occupation level of the respondent which implies that the occupation among the respondents in the younger age group 20-40 is moderately higher than that of the older age group of 40-60.

**4.2.7. Distribution Based on the Educational and Occupational Status of the Respondents.**

The employment status of the respondents against their education status is given in Table 4.5.

**Table 4.5. Distribution Based on the Educational and Occupational Status of the Respondents.**

Respondents' Education	Respondents' Occupation				Total
	Salaried Job	Self-employed	Unemployed	Student	
Primary/Secondary	2 *(0.5)	3 (0.3)	151 (35.7)	0	156 (36.9)
Higher Secondary	3 (0.3)	2 (0.5)	111 (26.2)	0	116 (27.4)
Graduation	8 (1.9)	5 (1.2)	85 (20.1)	14 (3.3)	112 (26.5)
Postgraduate or Above	8 (1.9)	12 (2.8)	16 (3.8)	3 (0.7)	39 (9.2)
Total	21(5.0)	22 (5.2)	363 (85.8)	17 (4.0)	423 (100)
Chi-Square Test Result	N= 423,	Chi-Square =1.164, Crammer's V= 0.303	d.f.=9 p<0.001		

Source: Primary Survey

\* Percentage is given in brackets

Table 4.5 indicates that about 86 percent of respondents are unemployed which includes 20.1 percent of graduates and 3.8 percent of post-graduate women and 4 percent of them are students. Among the respondents who are employed, 5 percent of them have a salaried job and 5.2 percent of the respondents are self-employed, indicating that the proportion of working women is low among the left-behind Muslim women. Most of the respondents who are employed are graduates (3.1 percent ) or postgraduates (4.7 percent).

It is hypothesised that as their education level improves, women tend to seek paid work. The Chi-Square value, with 9 degrees of freedom (d.f.), 1.164, with  $p=0.000$ , suggests that there is a significant association between the occupations of the respondents and their educational attainment.

A moderate association between occupation and education level is suggested by Crammer's V score of 0.303. The  $p<0.001$ , suggests that there is a significant association between the occupations and educational attainment of the respondents. However, the high proportion of unemployed women among the respondents highlights that in Malappuram district, the proportion of employed women is low among migrant households. The results go hand in hand with the findings of Khan and Valatheeswaran (2016) and Jafer (2015). Hence it is concluded that left-behind Muslim women from migrant families have less tendency to go for paid jobs.

#### **4.2.8. Distribution Based on Educational and Occupational Status of the Respondents' Husbands**

The educational and employment status of the respondents' husbands are given in Table 4.6. The analysis of data shows that though the level of education is low among the husbands they are mostly employed in self-employed or salaried jobs in gulf countries. Table 4.6 reveals that 40 percent of the respondents' husbands have primary/secondary education and 30.5 percent of them have higher secondary as their highest level of education. Among them, graduates are 23.6 percent and postgraduates and above are only 5.9 percent. However, 70.4 percent of them secured salaried jobs, 20.6 percent are self-employed in gulf countries and only 9 percent of them are graduates or postgraduates who are professionally employed. The professionally employed husbands of the respondents include doctors (4), engineers (21), teachers (6) and chief executive officers (7).

It is hypothesised that with the improvement in the education level, the husbands of the respondents tend to go for good jobs in gulf countries. The Chi-Square value, with 6 degrees of freedom (d.f.), 35.350, with  $p<0.001$  suggests that there is a significant association between the occupations of the respondents' husbands and their educational attainment.

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**Table 4.6. Distribution Based on Educational and Occupational Status of the Respondents' Husbands**

Education of Husbands	Occupations of Husbands							
	Self-employed		Professionally Employed		Salaried Job		Total	
	Number of Respondents	Percentage	Number of Respondents	Percentage	Number of Respondents	Percentage	Number of Respondents	Percentage
Primary/ Secondary	21	5.0	0	0	148	35.0	169	40.0
Higher Secondary	26	6.1	0	0	103	24.3	129	30.5
Graduation	32	7.6	28	6.6	40	9.5	100	23.6
Postgraduation or Above	8	1.9	10	2.4	7	1.7	25	5.9
Total	87	20.6	38	9.0	298	70.4	423	100
Chi-Square Test Result	N= 423		Chi-Square =35.350		d.f.=6		p<0.001	
			Crammer's V= 0.289		p<0.001			
Source:	Primary			Survey				

Table 4.6 indicate a moderate association between occupation and education level is suggested by Crammer's V score of 0.289 with a p-value equal to 0.000, suggesting that there is a moderately significant association between occupations and educational attainment. Hence it is concluded that the Muslim male migrants from the Malappuram district though not well educated secured gainful jobs in gulf countries. The outcomes of the current study support the study findings of Zachariah et al., (2001b). Hence it is concluded that the male migrants from the Muslim community in the Malappuram district have secured fair jobs in gulf countries despite their low educational standards.

#### **4.2.9. Distribution Based on Educational Status of the Respondents and their Husbands**

Table 4.7 shows the relationship between the education levels of the respondents and their husbands. Table 4.7 indicates a significant relationship between the educational levels of respondents and their husbands. For the respondents with primary/secondary education, 29.8 percent of them have husbands with the same education level, 11.1 percent of husbands have higher secondary education and there are 2 graduates and one postgraduate. For the respondents with higher secondary education, 12.3 percent of their husbands have the same education level, 12.5 percent of their husbands have primary/secondary education, 2.4 percent of their husbands have graduated and one has postgraduation.

For the respondents with graduation, 15.8 percent of the husbands have the same educational qualification, 5 husbands have primary/secondary education, 5.2 percent of their husbands have higher secondary education and 4.3 percent of them have postgraduation. For the respondents with post-graduation and above, 1.2 percent of their husbands have the same education level, another 1.2 percent of the husbands have primary/secondary education, 1.9 percent have higher secondary education and 4.9 percent are graduates.

It is hypothesized that there is an association between the educational qualifications of the respondents with that of their husbands.

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Table 4.7. Distribution Based on Educational Status of the Respondents and their Husbands

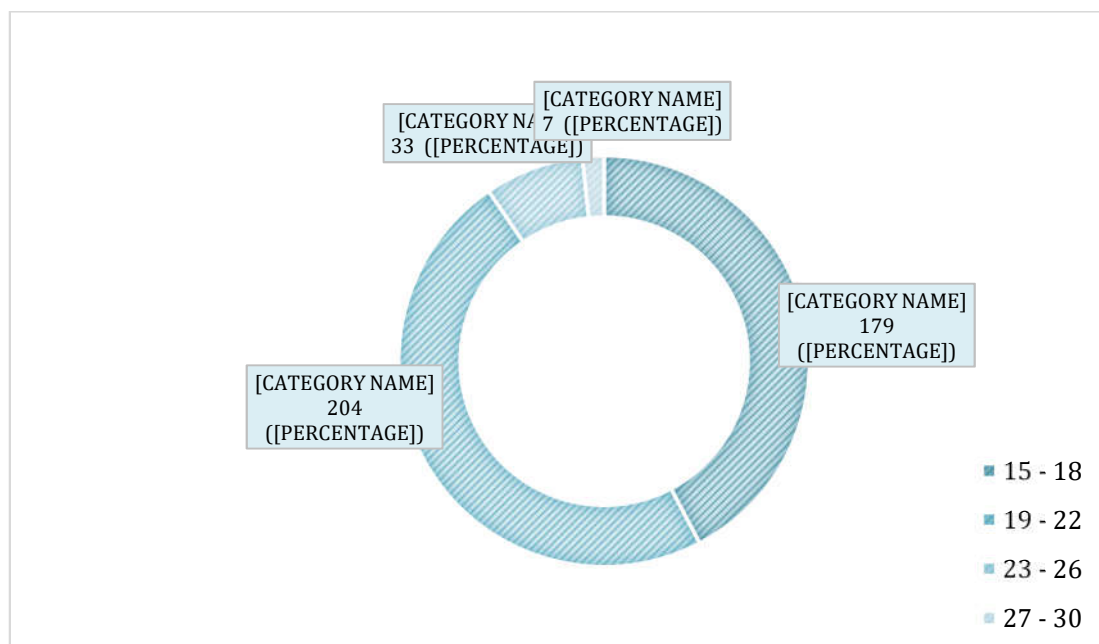
Educational Level of Husbands	Educational Level of Respondents									
	Primary/ Secondary		Higher Secondary		Graduation		Post-Graduation or Above		Total	
	Number of Respondents	Percentage	Number of Respondents	Percentage	Number of Respondents	Percentage	Number of Respondents	Percentage	Number of Respondents	Percentage
Primary/ Secondary	106	29.80	53	12.53	5	1.18	5	1.18	169	39.95
Higher Secondary	47	11.11	52	12.29	22	5.20	8	1.89	129	30.49
Graduation	2	0.47	10	2.36	67	15.84	21	4.96	100	23.64
Post-Graduation or above	1	0.24	1	0.24	18	4.26	5	1.18	25	5.92
Total	156	36.88	116	27.42	112	26.48	39	9.22	423	100
Chi-Square Test Result	N= 423, Chi square =223.297, d.f.=9 p<0.001 Crammer's V= 0.419 p<0.001									
Source: Primary Survey			* Percentage is given in brackets							

Table 4.7 indicate that the Chi-Square test statistic is 2.233 with 9 degrees of freedom and  $p < 0.001$  indicating a significant association in the education of respondents and their husbands. A Cramér's V value of 0.419 with a p-value of 0.000 suggests a moderate to a strong significant association between the educational attainment of husbands and the respondents, indicating that the respondents with higher educational qualifications have husbands with higher educational qualifications and vice versa.

#### 4.2.10. Distribution Based on the Age at Marriage of the Respondents

The age at marriage refers to the age at which the left-behind Muslim women got married. Figure 4.3 shows the proportion of respondents who got married in different age categories.

**Fig 4.3 Distribution Based on the Age at Marriage of the Respondents**



Source: Primary Survey

Figure 4.3 discloses the age at which respondents got married. The figure indicates that 90 percent of the respondents got married between 15 to 22 years, only 8 percent of them got married between the age of 23 to 26 and 2 percent of them got married at the age between 27 and 30. The minimum age at marriage of the

respondents is 15 years and the maximum age at marriage is 29 years. The average age at which respondents got married is 19.38 years which shows similarity with the findings of Zachariah et al., (2001a). Hence the average age at marriage of women in migrant families in Malappuram district is lower.

#### 4.2.11. Distribution Based on Age at Marriage of the Respondents across the Age Group

It is hypothesised that there are significant differences in the means of age at marriage between the ages of 20-40 and 40-60. Mann-Whitney U Test was run to determine whether there are significant differences between the age at marriage of respondents belonging to different age groups.

**Table 4.8. Distribution Based on Age at Marriage of the Respondents across the Age Group**

Age category	Number of Respondents	Mean Rank	Sum of Ranks
20-40	289	226.49	65456.5
40-60	134	180.74	24219.5
Total	423		
Mann-Whitney U			15174.5
Wilcoxon W			24219.5
Z			-3.62
Asymp. Sig. (2-tailed)			0.000

Source: Primary Survey

Mann-Whitney U test result in Table 4.8 reveals that the mean rank for the 20-40 age group (226.49) is higher than that for the 40-60 age group (180.74). This shows that the age at marriage of the age group 20-40 is higher than those of the age group 40-60. The test statistics of Mann-Whitney U show that since the p-value is less than 0.001 ( $p < 0.05$ ), the null hypothesis is rejected that there are no significant differences between the two age groups of the respondents in their age at marriage. This indicates that there is a statistically significant difference in the age of marriage between the two age groups of 20-40 and 40-60. Since the mean rank for the age

group 20-40 is 226.49 which is higher compared to the age group 40-60 with 180.74. It can be inferred that the women in the age group 20-40 got married at a higher age compared to the 40-60 age group. The extremely low p-value ( $p < 0.001$ ) with a Z value of -3.620 further supports the statistically significant difference between the groups. Hence it can be concluded that the age at marriage of women from migrant families in Malappuram district is increasing among the younger generation with the increased educational facilities in the district, that women prefer higher education and postpone marriages. The study goes in line with the findings of Jafar (2015)

#### 4.2.12. Distribution Based on Number of Children of the Respondents

The number of children of respondents is given in Table 4.9.

**Table 4.9. Distribution Based on Number of Children of the Respondents**

Number of Children	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
No children	24	5.7	5.7	Mean	2.24
1	117	27.7	33.3	Median	2
2	103	24.3	57.7	Mode	3
3	119	28.1	85.8	Std. Deviation	1.3
4	45	10.6	96.5	Minimum	0
5	2	0.5	96.9	Maximum	6
6	13	3.1	100	Skewness	0.58
Total	423	100		Kurtosis	0.397

Source: Primary Survey

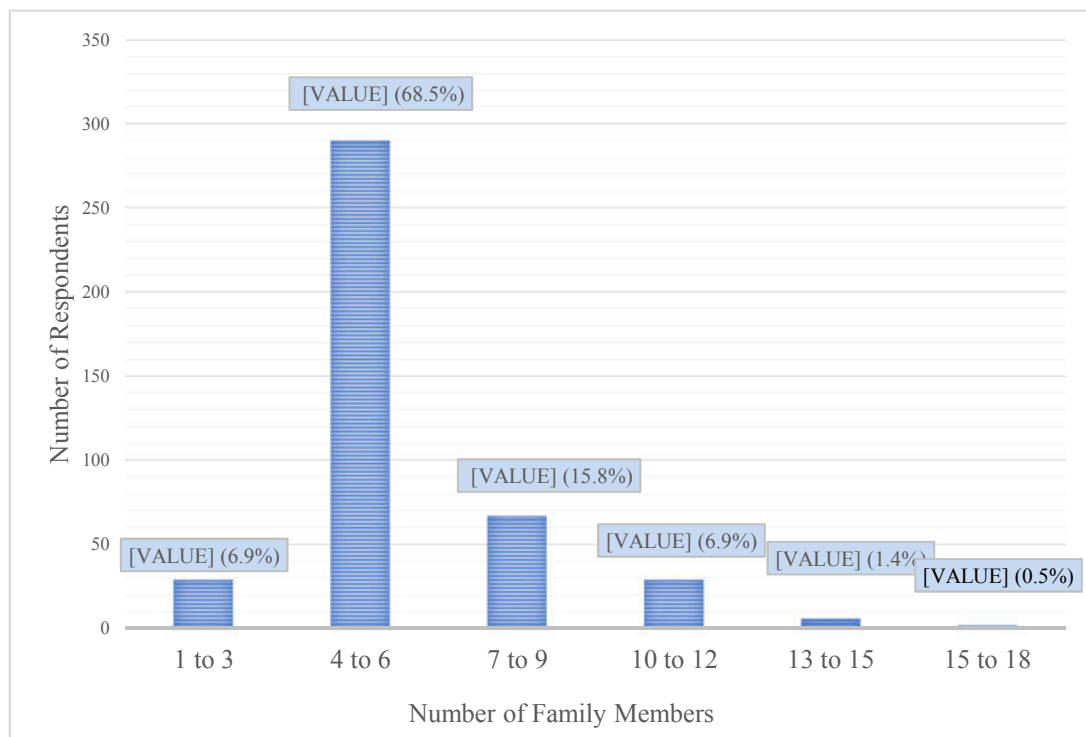
Table 4.9 indicates that 28.1 percent of the respondents have 3 children and about 28 percent and 24 percent of the respondents have one and two children respectively. The maximum number of children for the respondent is 6 and 5.7 percent of the respondents have no children. The average number of children of the respondents is 2, the median value is 2 and more respondents have 3 children. The standard deviation is 1.3, indicating that the number of children is somewhat spread out from the average. A skewness value of 0.58 suggests a moderate positive skewness, meaning that there are more respondents with fewer children compared to

those with more children. In addition to this, the kurtosis value of 0.397 indicates a fairly normal distribution with a slightly peaked shape.

#### 4.2.13. Distribution Based on Number of Members in the Family of Respondents

The responsibility of caring for the family rests on the Gulf wives following the migration of their husbands (Zachariah et al., 2001a). In the absence of male members in the household, the left-behind women have to take care of the aged and children. Hence the number of family members is a major aspect influencing the autonomy of left-behind women. Figure 4.4 displays the number of members in the family of the respondents.

**Fig. 4.4 Distribution Based on Number of Members in the Family of Respondents**



Source: Primary Survey

Figure 4.4 shows that the majority of the respondents have a family size between 4 and 6. Larger families do exist, but they are less typical than smaller and

medium-sized families. The smallest family size reported by the respondents is 3 members and the largest family has 17 members. The average number of family members is 6 in the respondents' households. Hence the family size in Malappuram district is small indicating that most of the migrant families are living in nuclear families.

#### 4.2.14. Distribution Based on Years of Family Life

The years of family life refer to the years that passed after the marriage of the respondents. When the husbands migrate leaving the wives in the household, they are residing in the homes of their husbands or staying with their parents and hence the years of family life is a major factor influencing the autonomy of women.

**Table 4.10. Distribution Based on Years of Family Life**

Years of Family Life	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
1-5	135	31.9	31.9	Mean	12.92
6-10	79	18.7	50.6	Median	10
11-15	68	16.1	66.7	Mode	5
16 - 20	15	3.5	70.2	Std. Deviation	9.486
21 - 25	72	17	87.2	Skewness	0.485
26 - 30	42	10	97.2	Kurtosis	-1.165
31 - 35	11	2.6	99.8	Minimum	1
36 - 40	1	0.2	100	Maximum	37
Total	423	100		Range	36

Source: Primary Survey

Table 4.10 shows that 31.9 percent of the respondents have a family life of one to five years and around 70 percent of them have a family life of less than 20 years. The mean years of family life among the respondents is 13 years. The median years of family life is 10 years, indicating that half of the respondents have a family life of 10 years or less and the other half with more than 10 years. The standard deviation of 9.486 indicates that the years of family life of respondents vary widely around the mean value. A skewness value of 0.485 indicates a slight positive skewness, suggesting that there are more respondents with fewer years of family life compared to those with more years of family life. The distribution is less peaked and

has lighter tails, as indicated by the negative kurtosis value of -1.165. The minimum number of years of family life reported by a respondent is 1 year and the maximum number of years of family life reported is 37 years, hence the range is 36 years.

#### 4.2.15. Distribution Based on the Interval between the Marriage and the First Emigration of Husbands

The interval between the marriage of respondents and the first emigration of husbands, categorised by the age group of the respondents is given in Table 4.11. One of the effects of migration is the separation of emigrating husbands from wives, known as the husband-wife separation ratio, which was highest among Muslims in Kerala and among the districts, the ratio is highest in Malappuram (Zachariah et al., 2001a).

**Table 4.11. Distribution Based on the Interval between the Marriage and the First Emigration of Husbands**

Months	Age group 20-40	Percentage	Age group 40-60	Percentage	All women	Percentage
>1 month	22	5.2	11	2.5	33	7.8
2	20	4.8	8	1.9	28	6.6
3	15	3.5	5	1.2	20	4.8
4	10	2.4	7	1.7	17	4.0
5	17	4.0	9	2.1	26	6.2
6	12	2.8	2	0.5	14	3.3
7	8	1.9	13	3.1	21	5.0
8	12	2.8	8	1.9	20	4.8
9	14	3.3	0	0	14	3.3
10	12	2.8	10	2.4	22	5.2
11 - 20	14	3.3	7	1.7	21	5.0
21 - 30	19	4.5	4	0.9	23	5.4
31 - 40	26	6.2	9	2.1	35	8.2
41 - 50	9	2.1	2	0.5	11	2.6
Above 50 Months Husband Migrated Before Marriage	20	4.8	18	4.3	38	8.9
Total	59	13.9	21	4.9	80	18.9
Total	289	68.3	134	31.7	423	100

Source: Primary Survey

Table 4.11 demonstrates that 7.8 percent of the husbands migrated for the first time within less than a month after their marriage and among them, 5.2 percent belong to the age category 20-40 and 2.5 percent belong to the 40-60 age category. The data also indicate that 18.9 percent of their husbands have migrated before their marriage and among them, 13.9 percent belong to the age category 20-40 and 4.9 percent belong to the 40-60 age category.

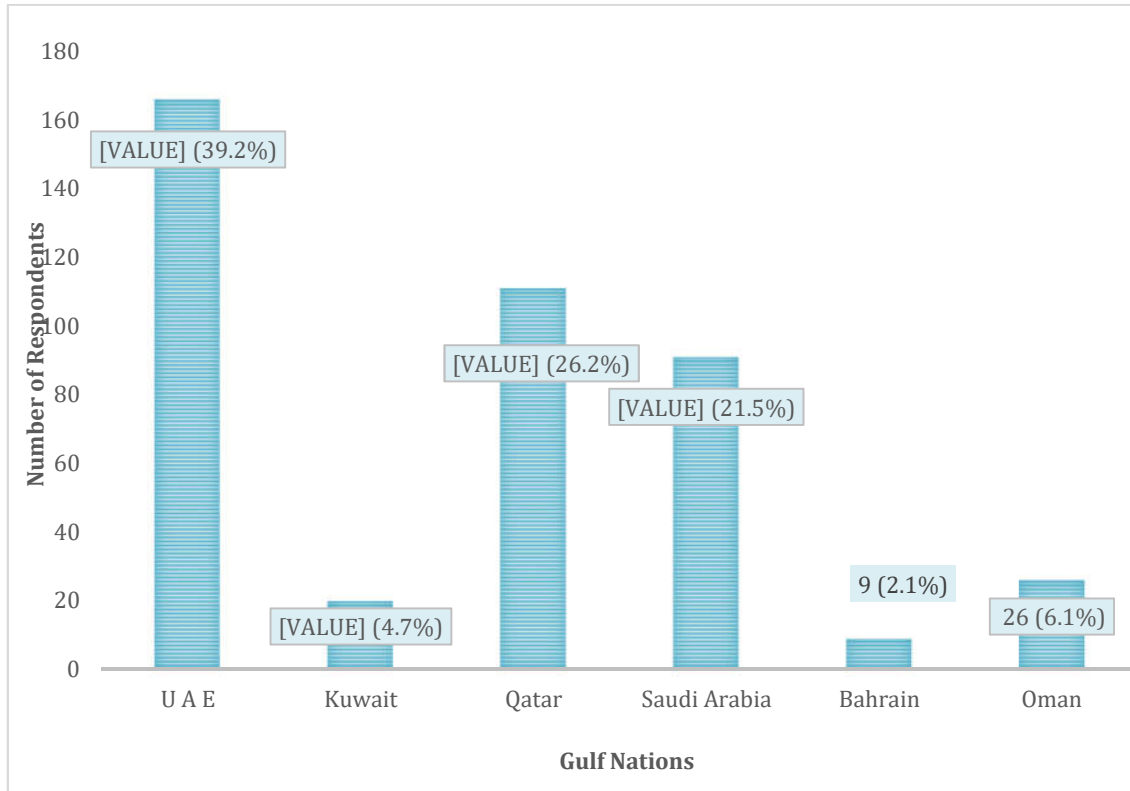
About 51 percent of the husbands left them and migrated within 10 months of their marriage and among them, 33.5 percent belong to the age category 20-40 and 17.3 percent belong to the 40-60 age category. Finally, 30.1 percent of the husbands migrated leaving them after 10 months of their marriage, of which 20.9 percent belong to the age category 20-40 and 9.5 percent belong to the age category of 40-60. Thus the respondents' husbands migrated and left them behind within a few days after their marriage. The findings are consistent with those of Zachariah et al. (2001a). Therefore, it is inferred that most of the respondents' husbands migrated within a few days or a month after their marriage leaving the women behind.

#### **4.2.16. Distribution Based on Destination of Migrants**

The data on the destination of the respondents' husbands depict the way the male Muslims in the Malappuram district have become accustomed to moving to the Gulf countries. Table 4.5 exhibits that the largest number of the respondents' husbands have migrated to the UAE followed by Qatar and the smallest number of them have migrated to Bahrain.

The findings support the analysis of Zachariah & Rajan (2018b) based on the Kerala Migration Survey 2018 that the UAE has always been a popular migration destination for Keralites. The destination nation of the respondents' husbands is given in Figure 4.5.



**Fig.4.5 Distribution Based on Destination of Migrants**

Source: Primary Survey

Figure 4.5 illustrates that 39.2 percent of the husbands have migrated to UAE, 26.2 percent migrated to Qatar, 21.5 percent of the husbands moved to Saudi Arabia and only 2.1 of them migrated to Bahrain. About 5 percent migrated to Kuwait and 6 percent of them have migrated to Oman. Hence the most popular Gulf destination for male Muslim migrants in the Malappuram district is the UAE and the least popular destination is Bahrain in Gulf countries.

#### 4.2.17. Distribution Based on the Destination of the Husbands across Taluks

Table 4.12 displays the distribution of the destination of husbands and their taluks of origin. Examination of the destinations of the respondents' husbands across the various taluks shows that 9.9 percent of the husbands from Tirur taluk have migrated to the United Arab Emirates (UAE), which is a higher proportion compared with other taluks.

**Table 4.12. Distribution Based on the Destination of the Respondents' Husbands across Taluks**

Taluks	Destinations- Number of Respondents						
	U A E	Kuwait	Qatar	Saudi Arabia	Bahrain	Oman	Total
Eranad	21 *(5.0)	2 (0.5)	8 (1.9)	38 (9.0)	2 (0.5)	7 (1.7)	78 (18.4)
Nilambur	13 (3.1)	3 (0.7)	14 (3.3)	19 (4.5)	0	1 (0.2)	50 (11.8)
Perintalmanna	29 (6.9)	0	16 (3.8)	14 (3.3)	4 (0.9)	1 (0.2)	64 (15.1)
Tirur	42 (9.9)	12 (2.8)	48 (11.3)	7 (1.7)	0	3 (0.7)	112 (26.5)
Tirurangadi	39 (9.2)	0	8 (1.9)	12 (2.8)	3 (0.7)	14 (3.3)	76 (18.0)
Ponnani	22 (5.2)	3 (0.7)	17 (4.0)	1 (0.2)	0	0	43 (10.2)
Total	166 (39.2)	20 (4.7)	111 (26.2)	91 (21.5)	9 (2.1)	26 (6.1)	423 (100)
Chi-Square Test Result	Chi-Square =1.523		d.f.= 30		p=0.000		
	Cramer's V =0.600		p=0.000				

Source: Primary Survey \* Percentage is given in brackets

Table 4.12 indicates that the two taluks with the lowest numbers of migrants to the UAE are Ponnani (5.2 percent) and Nilambur (3.1 percent). Nine percent of their husbands moved from Eranad taluk to Saudi Arabia, but only 1.7 percent of their husbands migrated from Tirur taluk to Saudi Arabia. From Perintalmanna taluk, a larger number of them (6.9 percent) migrated to UAE while from Nilambur a larger number of them (4.5 percent) migrated to Saudi Arabia. Eleven percent of the spouses moved to Qatar from Tirur taluk, while the least (9.0 percent) came from Eranad and Tirurangadi taluks. Out of the 4.7 percent of migrants to Kuwait, 2.8 percent are from Tirur Taluk.

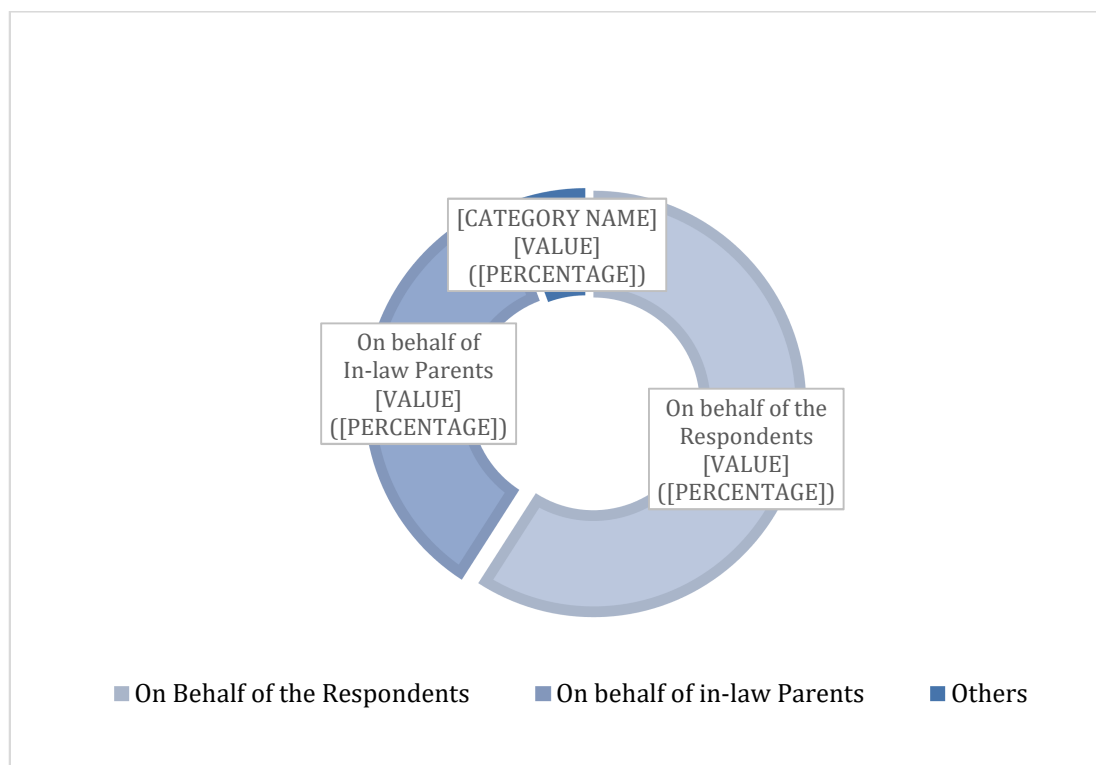
It is hypothesised that there are significant differences between the husbands' migration destinations across different taluks. The Chi-Square test statistic is 1.523 with 30 degrees of freedom and a p-value of 0.000 indicating statistically significant differences between the husbands' migration destinations across different taluks. A Cramer's V value of 0.600 with  $p < 0.001$  indicates a strong and statistically

significant relationship between the migration destinations of the respondents' husbands and the various taluks. Hence it is inferred that the respondents' husbands from the taluks have stronger networks or preferences for specific destinations which may be due to historical migration patterns, social links, or economic opportunities that attract people from specific taluks to certain destinations in the gulf countries.

**4.2.18. Distribution Based on to Whom the Remittances are Sent**

The status and influence of gulf wives in their households increased significantly as a result of the remittances sent by their husbands to their wives' accounts (Zachariah et al., 2001). The data regarding to whom the remittances are sent is given in Figure 4.6.

**Fig. 4.6 Distribution Based on to Whom the Remittances are Sent**



Source: Primary Survey

Figure 4.6 illustrates that among the respondents, 59 percent of the husbands are sending the remittances on behalf of the respondents, 35 percent of the respondents are receiving the amount through their in-law parents and 6 percent of their husbands are sending money to the accounts of their brothers or other relatives. Hence it is inferred that respondents are mostly receiving the remittances from abroad to their accounts.

#### 4.2.19. Distribution Based on to Whom the Remittances are Sent across Age Categories

Table 4.13 gives the cross-section analysis of the age categories of the respondents whose names the respondents' husbands sent the money.

**Table 4.13. Distribution Based on to Whom the Remittances are Sent across Age Categories**

Age Category	On behalf of the Respondents	On behalf of in-law parents	Others	Total
20-30	75 (17.73)	108 (25.53)	11 (2.6)	194 (45.86)
30-40	66 (15.6)	21 (4.96)	8 (1.89)	95 (22.46)
40-50	105(24.82)	20 (4.73)	4 (0.95)	129 (30.5)
50-60	5 (1.18)	0	0	5 (1.18)
Total	251 (59.34)	149 (35.22)	23 (5.44)	423 (100)
Chi-Square Test Results	Chi-Square =74.909 Cramer's V= 0.298	d.f.=6 p<0.001	p<0.001	

Source: Primary Survey

\* Percentage is given in brackets

Table 4.13 provides information on the respondents' age categories to whose names the money is sent from abroad by male migrants. In the 20-30 age category of respondents, 25.53 percent of the husbands are sending money to the accounts of in-law parents, while with the increase in the ages of respondents, there is a tendency to send the money into the accounts of the respondents. In the 40-50 age category, 24.8 percent of the respondents are receiving money on their behalf which is the highest compared to other age categories.

It is hypothesised that there are significant differences regarding whom the money is sent from abroad across the age categories. The Chi-Square test result (Chi-Square = 74.909,  $p < 0.001$ ) indicates statistically significant differences between the age categories of the respondents to whom the foreign remittances are sent. The p-value is less than 0.001 implies that the observed distribution of to whom the money is sent (on own behalf, on behalf of parents, or for others) across age categories is statistically significant, indicating the younger respondents (20-30) are more unlikely to receive money on their behalf and older age categories are mostly receiving money to their accounts from their husbands. Cramer's V is 0.298, indicating a moderately significant association ( $p < 0.001$ ) in the difference between age categories in receiving money from abroad. Hence it is concluded that the older age category of left-behind Muslim women mostly receive remittances from their husbands working abroad on their behalf directly, while the respondents of younger age receive the remittances sent by their husbands through in-law parents or others.

#### 4.2.20. Distribution Based on to Whom the Remittances are Sent and Family Headship

The association between whose name the respondents' husbands send the money and the family headship of the respondents' households is given in Table 4.14.

**Table 4.14. Distribution Based on to Whom the Remittances are Sent and Family Headship**

Family Headship	Whom the Remittances Send			Total
	On behalf of the Respondents	On behalf of the Husbands' Parents	Others	
The Respondents	113 *(26.81)	7 (1.60)	3 (0.70)	123 (29.1)
Husband	49 (11.61)	13 (3.11)	5 (1.21)	67 (15.8)
Husbands' Parents	89 (21.12)	128 (30.41)	9 (2.11)	226 (53.4)

Others	0	1 (0.20)	6 (1.41)	7 (1.7)
Total	251 (59.34)	149 (35.22)	23 (5.44)	423 (100)

Source: Primary Survey

\* Percentage is given in brackets

Table 4.14 displays that about 27 percent of the respondents who are the head of the family are receiving remittances from their husbands on their behalf and 21.12 percent of the respondents who are receiving remittances from their husbands on their behalf but are under the control of the in-law parents who are the head of the family. About 30 percent of the respondents' in-law parents are receiving remittances on their behalf and they are also the head of the family. About 12 percent of the respondents are receiving foreign remittances on their behalf, of which the head of the family is the respondents' husband who is managing or controlling household affairs from abroad. Hence it is concluded that most of the respondents or their in-law parents who are receiving the foreign remittances on their behalf have the status of 'head of the family'.

#### 4.2.21. Distribution Based on Migration Duration of the Respondents' Husbands

The duration of the migration of husbands is a major determinant of the effects of migration on their families, particularly on the wives of migrants (Hussain et al., 2023). Table 4.15 presents descriptive statistics of the length of the husbands' stay in gulf countries.

**Table 4.15. Distribution Based on Migration Duration of the Respondents' Husbands**

Migration Duration of the Husbands	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
1 - 5	141	33.3	33.3	Mean	11.31
6 - 10	86	20.3	53.6	Median	10
11 - 15	77	18.2	71.8	Mode	7
16 - 20	56	13.2	85	Std. Deviation	7.794

21 - 25	44	10.4	95.4	Skewness	0.586
26- 30	17	4.1	99.5	Kurtosis	-0.643
31- 35	2	0.5	100	Minimum	1
Total	423	100		Maximum	35

Source: Primary Survey

Table 4.15 shows that 85 percent of the respondents' husbands have a migration duration below 20 years and the maximum duration of migration is 35 years. The mean years of migration duration of husbands is 11.3 years. The median migration duration is 10 years, indicating that half of the husbands have been migrating for 10 years or less and the other half for more than 10 years and the mode value is 7 years.

The standard deviation of 7.794 indicates a considerable amount of variation or dispersion in the migration durations, showing that the durations of migration of husbands vary widely. A skewness value of 0.586 indicates a moderate positive skew, suggesting that there are more husbands with shorter migration durations compared to those with longer durations. The kurtosis value of -0.643 is negative, indicating a distribution with flatter tails and fewer extreme values compared to a normal distribution. The minimum migration duration reported is 1 year and the maximum migration duration reported is 35 years.

#### 4.2.22. Distribution Based on Monthly Remittances from Abroad

Malappuram district received the greatest amount of remittances compared to all the districts in Kerala, accounting for 21 percent of the total remittances in the State (Zachariah & Rajan, 2018b). The respondents were asked to report the highest monthly remittance they received during the last six months and the result is given in Table 4.16.

Table 4.16 indicates the monthly remittances received by the left-behind Muslim women in Malappuram district from their husbands. About 38 percent of the respondents are receiving remittances between Rs. 20000 to Rs. 40000 while 54 percent of respondents received remittances less than Rs. 40,000 and 96 percent of

the respondents received remittances below Rs. 80000 as their highest monthly remittance during the last six months before the survey. Whether intentionally or not, households are prone to underreport the remittances. The study report of Zachariah et.al. (2018) also reveals the same tendency of the Gulf migrant households in Kerala.

**Table 4.16. Distribution Based on Monthly Remittance from Abroad**

Monthly Remittances (in Rupees)	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
0 – 20,000	68	16.1	16.1	Mean	42507
20,000 – 40,000	159	37.6	53.7	Median	40000
40,000 – 60,000	113	26.7	80.4	Mode	40000
60,000 – 80,000	66	15.6	96.0	Std. Deviation	10393.38
80,000 – 1,00,000	15	3.5	99.5	Skewness	0.335
Above 1 lakh	2	0.5	100	Kurtosis	0.132
Total	423	100		Minimum	8000
				Maximum	115000

Source: Primary Survey

Table 4.16 also indicates that the average monthly remittance across all respondents is Rs. 42,507 and the median value of the remittances is Rs.40,000 indicating that half of the respondents receive less than or equal to this amount and the mode of the monthly remittance is Rs. 40,000 as more number of respondents received the amount. The standard deviation is Rs.10393.38, indicating considerable variation in the remittance amounts received. A skewness of 0.3351 suggests that the distribution is slightly skewed to the right indicating there are more values on the lower side, but there is a longer tail on the right side of the distribution. However, the skewness is close to 0, which implies that the data is approximately symmetric

and a kurtosis of 0.132 indicates the distribution is relatively flat and lacks extreme outliers.

#### 4.2.23. Distribution Based on Monthly Remittances from Abroad across the Age Categories

It is hypothesised that there are statistically significant differences in the monthly remittances across different age groups. Monthly remittances from abroad across the age categories of the respondents are given in Table 4.17.

**Table 4.17. Distribution Based on Monthly Remittance from Abroad across the Age Categories**

Age group	Number of Respondents	Percentage	Mean	Std. Deviation	Minimum	Maximum
20-30	194	45.86	31265	8100.27	8,000	82,000
30-40	95	22.45	47037	8954.75	10,000	82,000
40-50	129	30.5	56243	10045.1	12,000	1,15,000
50-60	5	1.18	41800	10899.5	20,000	80,000
Total	423	100	42584	10238.3	8,000	1,15,000
<b>One-way ANOVA Result</b>			F- value = 44.252	d.f. =3	p=0.000	

Source: Primary Survey

The results of One way ANOVA test on the monthly remittances received by the respondents from their husbands between the age categories indicate that 45.86 percent of the respondents in the age group 20-30 are receiving a monthly average remittance of Rs.31,265 which is the lowest average monthly remittance compared to the other higher age group. The respondents in the age group 30-40 which constitute 22.45 percent of the respondents are receiving average monthly remittance of Rs. 47,037. The respondents in the age group, 40-50 are receiving the highest monthly average remittances of Rs.56,243. The minimum monthly remittance of Rs. 8,000 is received by the age group 20-30 and the maximum monthly remittance of 1,15,000 is received by the age group 40-50.

The one-way ANOVA result  $F(3)=44.252$  with a p-value of 0.000 ( $p<0.05$ ) indicates that there are statistically significant differences in the mean differences of monthly remittances across different age groups. The monthly average remittances increase with the higher age group except the highest age category of 50-60 and there are statistically significant differences in the mean monthly remittances received by different age groups. The study findings go with the findings of Demurger (2015). Hence it is concluded that the age of respondents increases when the husbands' duration of stay abroad gets longer, which in turn increases the remittances they send to the households.

#### **4.2.24. Association of Migration Duration with the Number of Children, Monthly Remittance and Cost of Housing**

The association of the migration duration of husbands with the number of children, monthly remittance and cost of housing was analysed by using three-way ANOVA, taking the migration duration as the dependent variable and the monthly remittance, the number of children and the cost of housing as independent or predictor variables. It is hypothesised that the length of the husbands' migration duration is positively associated with the monthly remittance, the number of children and the cost of housing, the result of which is shown in Table 4.18.

**Table 4.18. Summary Statistics of the Association of Migration Duration with the Number of Children, Monthly Remittance and Cost of Housing.**

<b>Source</b>	<b>Type III Sum of Squares</b>	<b>d.f.</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Corrected Model	20464.941	55	372.09	26.412	0.000
Intercept	7658.095	1	7658.1	543.596	0.000
House Cost	676.905	5	135.381	9.61	0.000
Monthly Remittance	1067.564	3	355.855	25.26	0.000
Children	676.689	6	112.781	8.006	0.000
House Cost * Monthly Remittance	421.114	6	70.186	4.982	0.000
House Cost * Children	446.476	15	29.765	2.113	0.009
Monthly Remittance * Children	315.538	9	35.06	2.489	0.009
House Cost * Monthly	340.425	11	30.948	2.197	0.014

Remittance * Children				
Error	5170.241	367	14.088	
Total	79786	423		
Corrected Total	25635.182	422		
<b>R Squared = 0.798 (Adjusted R Squared = 0.768)</b>				
Levene's Test of Equality of Error Variances	F	d.f.1	d.f.2	Sig.
	4.342	55	367	0.056

Source: Primary Survey

The three-way ANOVA test result in Table 4.18 indicates the association between the migration duration and various independent variables or factors. The corrected model section of Table 4.18 indicates the overall significance of the model. The type III Sum of Squares is a measure of the variability explained by the model after removing the influence of other variables. In this case, the corrected model has a significant F-value of 26.412 with a very low p-value (0.000), suggesting that the model as a whole significantly predicts the dependent variable, migrant duration. The intercept represents the starting point for the model. It is also highly significant ( $p < 0.001$ ), indicating that even without considering the other variables, there is a significant effect on the dependent variable. The p-values of independent individual factors like the cost of housing, the number of children and monthly remittance indicate that they have statistically significant individual effects on the dependent variable of migration duration ( $p < 0.001$ ).

The interaction effects show that the interaction between house cost and the number of children ( $p = 0.009$ ), cost of housing and monthly remittance ( $p = 0.000$ ) and the number of children and monthly remittance ( $p = 0.009$ ) have statistically significant effects on the duration of migration. The three-way interaction between the monthly remittance, cost of housing and the number of children also has a statistically significant ( $p = 0.014$ ) effect on the migration duration. The  $R^2$  value (0.798) indicates that approximately 79.8 percent of the variability in the dependent variable of migrant's duration is explained by the independent variables in the model. The adjusted  $R^2$  (0.768) adjusts for the number of predictors in the model. Levene's Test of Equality of Error Variances indicates that variances are equal across groups with the F-value of 8.677 ( $p > 0.05$ ), d.f. (1) = 55 (for the numerator) and d.f. (2) = 367 (for the denominator), hence the three-way ANOVA assumption is made.

In summary, the model is overall significant in predicting the dependent variable of the migrant's duration of husband with the number of children, cost of housing and monthly remittance playing significant roles. Cost of housing, monthly remittance the number of children have both individual as well as interaction effects on the migration duration. Hence the null hypothesis is rejected and the alternate hypothesis that the length of the husbands' migration duration is positively associated with the monthly remittance, the number of children and the cost of housing is accepted.

Hence it is concluded that the duration of the husbands' migration is explained by the monthly remittance, the number of children and the cost of housing. The higher the monthly remittance, the lengthier the migration duration, the higher the cost of the house, the longer the migration duration of the husband and the more the number of children the lengthier the migration duration. Hence it is concluded that the migration duration of the respondents' husbands is explained by the number of children, cost of housing and monthly remittance.

#### 4.2.25. Distribution Based on Migrant Duration across Different Housing Conditions

It is hypothesised that there are significant differences in the housing types of the respondents across the emigration durations of their husbands. The migration duration of the respondents' husbands across different housing conditions is analysed using the one-way ANOVA and the result is presented in Table 4.19.

**Table 4.19. Descriptive statistics of Migrant Duration across different Housing Conditions**

Quality of Houses	Number of Respondents	Mean	Std. Deviation	Minimum	Maximum
Luxury Home	4	17	5.598	10	22
Very Good	298	12.26	7.46	1	35
Good	120	8.86	8.099	1	30
Bad	1	2	.	2	2
Total	423	11.31	7.794	1	35
<b>ANOVA Test Result</b>		F- value = 6.892		d.f. =3	p=0.000

Source: Primary Survey

Table 4.19 shows the One-way ANOVA test result, to determine if there are statistically significant differences between the average migration duration of the respondents' husbands across different housing types. The highest mean for the luxury home (17) indicates that the respondents living in luxury homes have their husbands with longer migration durations. The second highest mean for the very good houses (12.26) indicates relatively longer migration durations compared to the mean for the good houses (8.86) and bad houses (2) which have shorter migration durations for the respondents' husbands. The F value of 6.892 with 3 degrees of freedom and significant p-value ( $p < 0.001$ ) suggests that there are significant differences in migration durations across the different housing types. Hence it is concluded that with an increase in the duration of emigration, the housing quality of the emigrant households increases. This supports the study findings of Zachariah & Rajan (2018a). Hence it is inferred that with the increase in the length of the migration duration, the earnings of the migrants increase which will be spent on the houses that improve the quality of housing of migrant households.

#### 4.2.26. Distribution Based on Migration Duration and the Remittances of Respondents' Husbands

The association of the migration duration of respondents' husbands and the remittances they send to the households are presented in Table 4.20.

**Table 4.20. Distribution Based on Migration Duration and the Remittances of Respondents' Husbands.**

Migration Duration of Husbands	Monthly Foreign Remittances of Husbands						Total
	0-20,000	20000-40000	40,000-60,000	60,000-80,000	80,000-1,00,000	Above 1 lakh	
1-5	64 (15.1)	65 (15.4)	12 (2.8)	0	0	0	141 (33.3)
6-10	4 (0.9)	36 (8.5)	31 (7.3)	1 (0.2)	0	0	72 (17.0)
11-15	0	42 (9.9)	26 (6.1)	7 (1.7)	2 (0.5)	0	77 (18.2)
16-20	0	5 (1.2)	24 (5.7)	21 (5.0)	5 (1.2)	1 (0.2)	56 (13.2)
21-25	0	6 (1.4)	8 (1.9)	26 (6.1)	3 (0.7)	1 (0.2)	44 (10.4)
26-30	0	0	3 (0.7)	9 (2.1)	5 (1.2)	0	17 (4.0)
31-35	0	0	0	2 (0.5)	0	0	2 (0.5)

36-40	0	5 (1.2)	9 (2.1)	0	0	0	14 (3.3)
Total	68 (16.1)	159 (37.6)	113 (26.7)	66 (15.6)	15 (3.5)	2 (0.5)	423 (100)
Pearson's Correlation			Pearson's R = 0.799		p<0.001		
Source: Primary Survey			* Percentage is given in brackets				

The association between the migration duration of the respondents' husbands and the remittances sent by them to the households indicates that generally, with an increase in the migration duration of the husbands, the remittances sent by them also increase. The analysis of data in Table 4.20 indicates that among the respondents with less than 5 years of migration duration, 15.1 percent of them received monthly remittances of less than Rs. 20,000 while 15.4 percent of them received remittances between Rs. 20,000 and Rs. 40,000 and about 3 percent of them received remittances between Rs. 40,000 and Rs. 60,000. Of the respondents whose husbands' migration duration is between 6 to 10 years and 11 to 15 years, more respondents are receiving remittances between Rs. 20,000 and Rs. 40,000, while the respondents' husbands whose migration duration is between 21 to 25 years and 26 to 30 years, more respondents are receiving remittances between Rs. 60,000 and Rs. 80,000. Those respondents whose husbands with longest overseas stay between 36 to 40 years received monthly remittances between Rs. 20,000 and Rs. 60,000.

The Karl Pearson's Correlation coefficient of 0.799 between the husbands' migration duration and monthly foreign remittances received shows that there is a strong positive correlation between these two variables and the p-value ( $p < 0.001$ ) indicates that the relation is statistically significant. Hence it can be inferred that with the increase in the husbands' migration duration, the monthly foreign remittances also increase.

#### **4.2.27. Distribution Based on Migration Duration of Respondents' Husbands across the Destinations**

The association between the migration duration of the respondents' husbands across the destinations in the gulf countries to which they migrated is given in Table 4.21 indicating that the migration duration of the respondents' husbands and their migrated nations in various gulf countries are positively associated. The data shows that the largest number of migrants with the longest migration durations is in UAE

with 1.4 percent while the majority of the respondents' husbands migrated to UAE (39.2 percent) and the least number of them migrated to Bahrain (2.1 percent). The migrant nation with the shortest migration duration is Qatar (12.3 percent). It is hypothesized that the respondents' husbands' destinations in gulf countries and the length of their migration period are positively associated.

**Table 4.21. Distribution Based on the Migration Duration of Respondents' Husbands across the Destinations**

Migration Duration of Husbands	Destinations of Husbands						Total
	UAE	Kuwait	Qatar	Saudi Arabia	Bahrain	Oman	
0-5	50 (11.8)	5 (1.2)	52 (12.3)	27 (6.4)	3 (0.7)	4 (0.9)	141 (33.3)
6-10	50 (11.8)	2 (0.5)	1 (0.2)	16 (3.8)	1 (0.2)	2 (0.5)	72 (17.0)
11-15	29 (6.9)	1 (0.2)	26 (6.1)	16 (3.8)	2 (0.5)	3 (0.7)	77 (18.2)
16-20	11 (2.6)	1 (0.2)	21 (5.0)	14 (3.3)	1 (0.2)	8 (1.9)	56 (13.2)
21-25	17 (4.0)	0	11 (2.6)	8 (1.9)	2 (0.5)	6 (1.4)	44 (10.4)
26-30	2 (0.5)	10 (2.4)	0	4 (0.9)	0	1 (0.2)	17 (4.0)
31-35	1 (0.2)	0	0	1 (0.2)	0	0	2 (0.5)
36-40	6 (1.4)	1 (0.2)	0	5 (1.2)	0	2 (0.5)	14 (3.3)
Total	166 (39.2)	20 (4.7)	111 (26.2)	91 (21.5)	9 (2.1)	26 (6.1)	423 (100)
N= 423, Chi-Square =195.252 d.f.=35 p<0.001 Cramer's V= 0.304 p<0.001							

Source: Primary Survey

\* Percentage is given in brackets

Table 4.21 indicates a significant association between the migration duration and the migrant nation, with a Chi-Square value of 195.252 and a Cramer's V value of 0.304, with p-values less than 0.001, suggesting a strong relationship between the migrant's destination and migration duration. Therefore, the length of the stay of migrants in their destination country varies greatly depending on the country to which they have migrated, highlighting the relevance of the unique circumstances and favourable migration policies of the destination countries.

#### 4.2.28. Distribution Based on Migration Duration of Respondents' Husbands across the Taluks

The migration duration of respondents' husbands across the taluks that they are residing in, is given in Table 4.22. It is hypothesised that there are significant differences in the migration duration of respondents' husbands across different taluks.

**Table 4.22. Migration Duration of Respondents' Husbands across the Taluks**

<b>Grouping Variable - Taluks</b>					
<b>Taluks</b>	<b>Number of Respondents</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
Eranad	78	10.54	7.514	2	32
Nilambur	50	9.54	6.944	1	28
Perinthalmanna	64	11.62	7.467	2	25
Tirur	112	12.93	8.391	1	30
Tirurangadi	76	11.11	8.051	1	35
Ponnani	43	10.49	7.239	2	28
Total	423	11.31	7.794	1	35
<b>ANOVA Test Result</b>		F- value = 1.778		d.f. =5	p=0.116

Source: Primary Survey

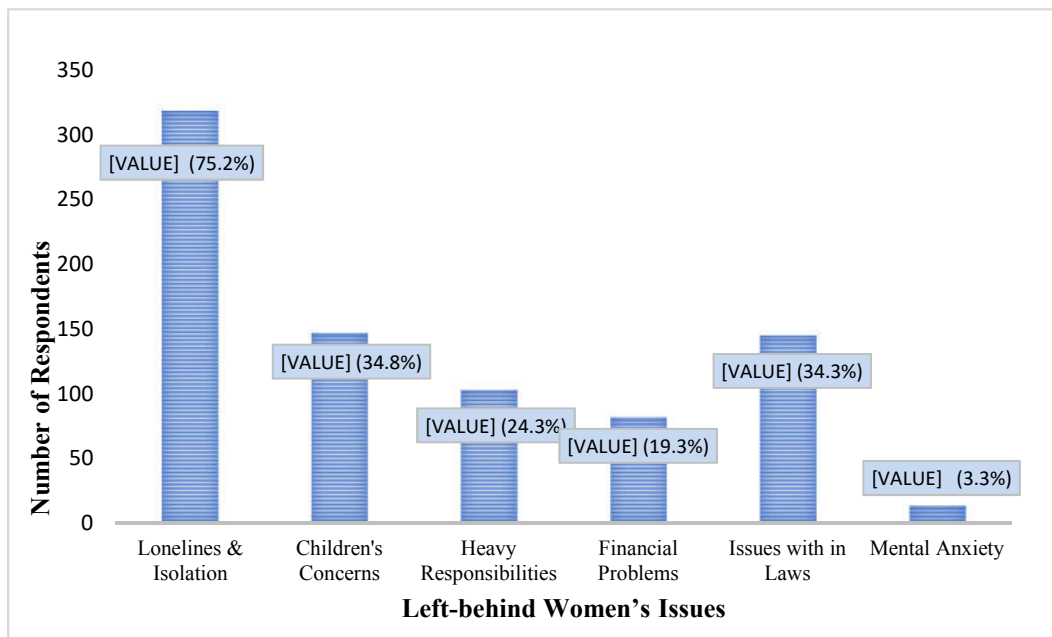
The ANOVA Test result in Table 4.22 compares the husbands' migration duration across the taluks. The results indicate that the mean migration duration of the respondents from Tirur taluk is the highest at 12.93, followed by Perinthalmanna (11.62) indicating that the migrants from these taluks have lengthy migration duration and the respondents from Nilambur taluk have the lowest mean migration

duration (9.54). The F value of 1.778 is the test statistic with 5 degrees of freedom, measuring the difference in the mean migration duration among the taluks. Since the p-value of 0.116 is greater than the significance level, fails to reject the null hypothesis that there is no significant difference in the duration of migrants across the different taluks. Therefore, it is concluded that the taluks to which the migrants belong do not influence the migration duration.

#### 4.2.29. Distribution Based on the Issues of Left-Behind Women

Male out-migration can have certain disadvantages to left-behind women such as an increase in workload, loneliness, emotional discomfort and to some extent financial concerns. The issues faced by the respondents in the absence of their husbands are collected as multiple responses and the analysis is given in Table 4.7.

**Fig. 4.7. Issues of Left-Behind Women**



Source Primary Survey

Table 4.7 depicts the issues or problems of the left-behind women in the absence of their husbands which shows that 75.2 percent of the respondents have loneliness and isolation and 34.8 percent and 34.2 percent of the respondents have issues connected with their children and issues with in-law parents respectively.

About 19 percent of them have financial problems due to the management of debts incurred in connection with the emigration expenses of their husbands, marriage of children, house construction, etc. Only 14 percent of them have mental anxiety and 24.3 percent of them have the burden of heavy responsibility. Hence it is concluded that the major issues of left-behind women due to the migration of their husbands are loneliness and isolation. The findings are consistent with the results of Zachariah and Rajan (2018a).

#### **4.2.30. Focus Group Discussion with the Left-behind Muslim Women in the Study Area.**

To discuss the concerns of left-behind Muslim women due to male migration in the study area, a focus group discussion was conducted using pre-structured questions among them, highlighting unique aspects of their issues and coping strategies and creating a record of the situation. The left-behind Muslim women are residing in the Malappuram district with their in-laws parents, parents, or as de facto heads of the family with children. Their issues and coping strategies due to the absence of husbands are different based on living arrangements.

The focus group discussion was conducted in a convention hall at Tirur, where a get-together of the Tirur Pravasi families took place. The focus group discussion comprised 11 left-behind Muslim women from Tirur taluk, aged between 25 and 51. Participants were selected based on their willingness to share their experiences and they represented both semi-urban and rural origin. The discussion lasted for 90 minutes and discussed the economic, social and emotional impacts of male migration. The first relevant question asked by the researcher was: What are the major issues faced by the left-behind women when their husbands migrated abroad? This question was raised by the researcher in recognition of the fact that left-behind women face many problems when they are living separated from their husbands such as loneliness, feelings of insecurity, problems related to children, issues with in-law parents, financial problems, etc. Mrs. Ayesha, a 38-year-old resident of Tirur taluk said,

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*“My husband has been working in Dubai for 20 years. My husband left me after just one month of our marriage. Initially, I had a very hard time adjusting to the scenario because of issues with my husband’s family in his absence”.*

Mrs. Ayesha’s response gives a comprehensive picture of the situation faced by the left-behind Muslim woman while adjusting to her in-law parents and other members of the family in her husband’s absence. Mrs. Salha and Mrs. Salja are twin sisters aged 30, whose husbands are working in UAE and both are qualified MSc Chemistry with B Ed. Mrs. Salha said,

*“My crucial issue was loneliness and feeling of insecurity when my husband left me after two months of our marriage. I had a very bad time then, feeling the tension of separation. When I started to work as a guest lecturer in a college, I could relax myself.”*

Mrs. Salha’s words illustrate the emotional struggles faced by many left-behind women. However, she disclosed that engagement in employment provided relaxation. While her husband worked in the Gulf for over six years, she had to manage the household while raising two children. *‘Sometimes I feel like I’m both mother and father,’* she said, describing the emotional toll of migration. When the left-behind women shoulder additional responsibilities when their husbands migrate, it will be burdensome for them. Mrs. Salja said,

*My husband was working in Kerala and we were residing together after our marriage and he left me after 6 months of our marriage to work in UAE. I feel overwhelmed by the increased responsibilities that were previously done by my husband like taking the family members to the hospital, purchasing daily necessities, financial and property management.*

Mrs. Salja’s experience reveals the increased burden of responsibilities of left-behind women due to their husbands’ absence. The next question the researcher asked was: What is the major adjustment mechanism to cope with the situation? The question was raised with the recognition of the fact that though at the beginning of

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the separation from their husbands, the left-behind women would face hard times, later to fulfill their needs and to satisfy the demands of the family, the situation would become a part of their routine and they will realise and practice coping strategies to overcome the situation. Mrs. Mufeedha, 36 years old woman said,

*“My husband is working in Saudi Arabia, earlier it was hard to manage everything but, now I learned to manage all household affairs, including the education of children and purchases of all household items. My husband extends timely support as we are contacting and discussing the matters over the mobile phone”.*

Mrs. Mufeedha’s experience shows that with the improvement in technology, the left-behind woman could keep in touch with her husband and she added that *“we feel that we are no longer living in distance, as we are always texting messages and sharing snaps through social media. We discuss the whole lot such as our children’s education, financial plans and even small decisions”.*

Hence the advanced technology improved the communication between the husbands and the wives which helped to overcome loneliness and ensured consensus management. Such an opportunity avoids conflicts and controversies in the administration of home affairs which provides confidence and courage to the left-behind women to manage the situations. Digital literacy has caused material social changes among women, especially in the orthodox backward Muslim community in the Malappuram district. Mrs. Suhara said,

*“I had not been experienced in using a mobile phone, especially a smartphone. Nowadays I use to purchase groceries and vegetables by placing orders through my smartphone.”*

The above illustration reveals digital literacy and the resultant capabilities of left-behind women. Moreover, the remittances sent by their husbands provide financial support, which is a major concern for the left-behind women to manage the

situation. Mrs. Shahidha, a 51-year woman whose husband has been working in Qatar for 28 years said,

*“Now, my social network has increased and I am confidently handling every home task. I could deal with all the bank transactions that I had previously been reluctant to handle and now with the money I receive from my husband, I am financially sound to offer a good living to the family”.*

Mrs. Shahidha’s comments illustrate that the left-behind scenario caused to improve her social contacts and public awareness. Regular remittances from their husbands give the left-behind women confidence to manage household expenses. Mrs. Shafna, a 32-year-old mother of two, shared,

*“ At first, it was overwhelming, but now I feel more confident and my husband is regularly sending money and extending support if needed. Last year my son had a severe fever and was hospitalized for three weeks that incurred huge medical expenses which could be managed without much stringency due to my husband’s earnings”.*

Mrs. Shafna’s words reveal that if the remittances are regularly received the left-behind women could manage the expenses of children’s fees, medical expenses, household expenses, etc. Apart from these factors the support from the family also enables the left-behind women to manage the situation. Mrs. Salha said,

*“My mother-in-law is very supportive and caring of my children and she looks after my one-year-old daughter while I go to work at an Academic institute in town”.*

Mrs. Salha’s words revealed that rural women in Malappuram often depend on extended family networks for physical and emotional support, a factor that significantly mitigates the hardships of husband’s migration. Another important question the researcher asked was: Does the long-term migration of males change the role of left-behind women in the family? The researcher asked the question on the recognition that when accustomed to performing duties in the absence of

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husbands for a long period, the left-behind women become more confident and capable of performing more responsibilities at ease. Mrs. Saira, aged 46 is from a rich family and the wife of a long-term migrant said,

*“Without requesting permission, I am going for the daily trip to the city to buy groceries and vegetables and go farther on my own and with a lot of independence. I used to ride my car alone to my friends' and relatives' houses, as well as to hospitals. Neither my mother-in-law nor my spouse restricts my ability to move around to accomplish the demands of the family”.*

Mrs. Saira's experiences show that when their husbands are working abroad for long periods the left-behind women gain more autonomy to go outside and perform their responsibilities without any restriction on their mobility. Mrs. Rukhsana, a 38-year-old woman, whose husband has been working in Bahrain for 20 years has actively participated in local governance as part of her coping strategy. She said,

*“I never thought I would be part of the panchayath meetings, but now I speak up for our needs. My husband visits our family once a year and he encourages me to take part in local administration.”*

Mrs. Rukhsana's experiences reveal the choice of left-behind women to enter into local administration due to the long duration of their husbands abroad. Another question the researcher asked was: Do they have major decision-making autonomy? The decision-making ability of the left-behind women depends on family arrangements, such as in a nuclear family the left-behind women have to make all the decisions. Mrs. Zainaba, a 36-year-old mother of two, shared,

*“My husband went abroad in 2011 and till then we have been together with my husband's parents for four years. I never made decisions before my husband left. Now I am living with my children alone in our house and handling everything very easily. At first, it was overwhelming, but now I feel more confident.”*

Mrs. Zainaba's experiences indicate that when she was with her husband and living in an extended family, she could not make decisions and shifting to live with

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their children gave them greater autonomy in making decisions. The decision-making autonomy that emerges from male migration can also depend on the financial capacity of households. Mrs. Fathima, aged 38 years resides with her 3 children said,

*“My husband is working in Kuwait. Regular remittances from my husband allowed me to manage household expenses including my children's education. Now I am making all the decisions regarding the family including the children's academics and inform my husband later”.*

Fathima's words reveal that when the left-behind women receive regular remittances from their husbands their decision-making power increases. Hence it is concluded that the Focus Group Discussion highlighted the issues and variety of coping mechanisms, left-behind Muslim women utilise, which include independent home administration, family management and confidence to take part in family, social, economic, political and local administration. Further, the left-behind women reported feeling greater autonomy, decision-making power and participation freedom, which enabled them to develop economically, educationally and socially.

To conclude, the socio-economic profile of the respondents signifies the characteristics of the population under study and provides insightful information that can help to comprehend the study. The socio-economic profile of the respondents includes the analysis of the respondent's age, education, occupation, husbands' education and occupation, number of children, size of the family, possession of household assets, characteristics of husbands' migration such as the migrant nation of husband, duration of migration, monthly remittance received, etc. The analysis of the destination of the respondents' husbands indicates the way the male Muslims in the Malappuram district have become accustomed to migrating to the Gulf countries.

Contextualizing the age, education and family structure of respondents helps to rationalise their behaviours and decisions. Information on the education and employment status of the respondents and their husbands helps to understand the framework against which the respondents make decisions. Understanding the pattern

of migration and remittances facilitated comprehension of the background of the respondents, which helped to realise the major objectives of the study. Various statistical tools are used to test the validity of the data and to compare the results with the authentic study findings. The analysis of the socio-economic profile of respondents in the thesis enhances and provides an insight into the context of the study environment that is essential for defensible findings and useful suggestions.

### **4.3. The Women's Capability Index**

The Capability Approach, primarily propounded by Amartya Sen, focuses on enhancing individual well-being and autonomy, highlighting abilities that people have, to realize various valuable states of being and doing. This approach analyses whether individuals have the real ability to pursue their life goals, rather than just the resources they possess. Nussbaum (2000) extended Sen's capabilities and identified ten essential human abilities and argued that while appealing for many reasons. The capabilities approach has particular advantages when addressing the unique issues women face and that women possess the potential for central human capabilities if they have adequate nourishment, education and support. Capability Approach appeals to the issues of women as 'women are often considered as providing support to the ends of others, rather than as ends in their own right' (Nussbaum, 2010).

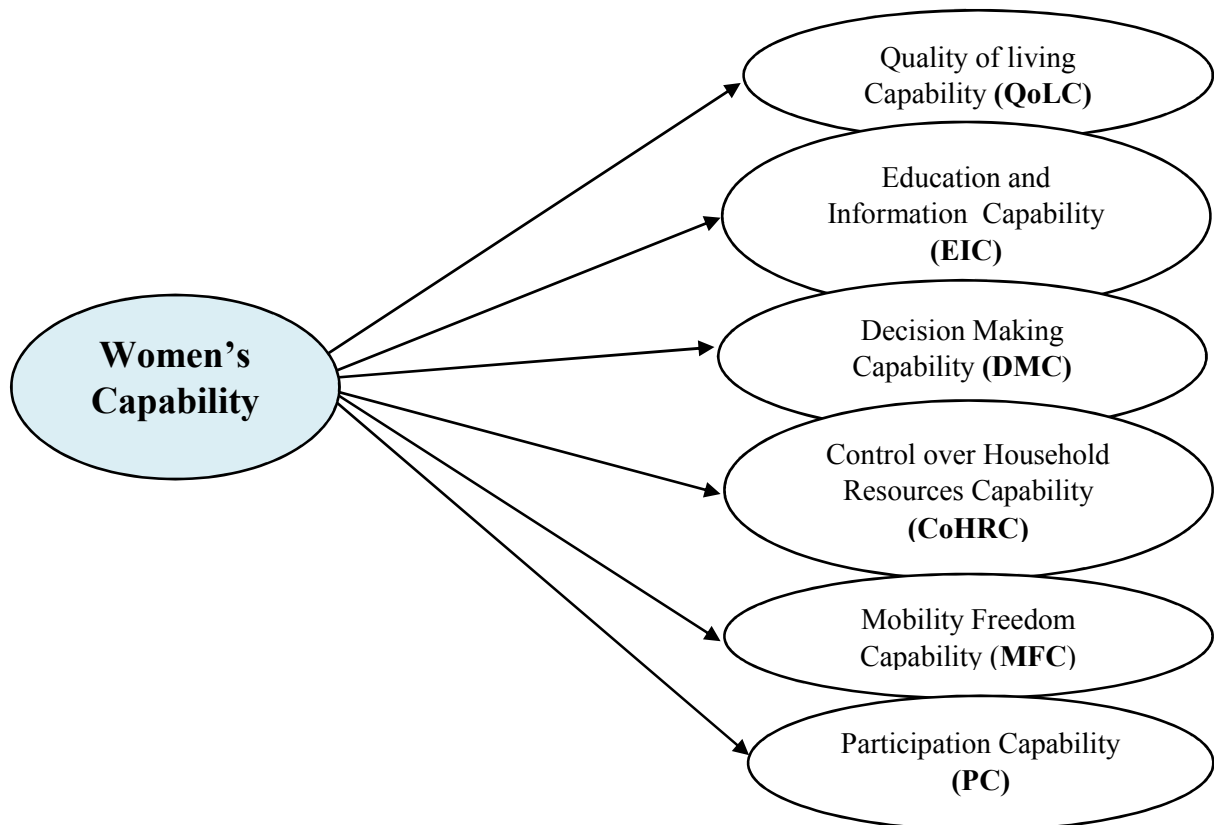
Robeyns (2003) observed that when the Capability Approach is applied to empirical studies there are methodological issues in selecting capabilities that the list of capabilities needs to be context-dependent, where context refers to the kind of evaluation that is to be done as well as the location to which it applies. In the present study considering the intention of constructing the Women's Capability Index, the research environment of male migration and the living arrangement of the left-behind women, reviews of previous studies on the capability approach and the pilot study experiences, those capabilities of women were selected and the Women's Capability Index was constructed based on the theoretical framework offered by Greco (2016).

Greco (2016) observed that Sen's capabilities approach provides a potential foundation for the development of a multidimensional outcome measure. Hence by

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using Sen's capability framework, a Women's Capability Index, a multidimensional indicator of left-behind Muslim women in the study area was constructed. The indicators and the sub-dimensions selected, based on reviews of previous studies, were modified as per the revelations of the pilot study. These indicators are aggregated into a composite index by assigning equal weightage to different indicators as well as the sub-dimensions. As the Women's Capability Index (WCI) is the major construct throughout the study, considerable care was taken throughout the formulation of the index to ensure that the Women's Capability Index (WCI) appropriately reflects the diverse characteristics of the potential of women and the socio-economic factors that affect them. Accordingly, six capability indicators were identified as shown in Figure 4.8.

**Fig. 4.8. The Capability Indicators**



Source: Derived by the Researcher from Primary Survey

Figure 4.8 depicts the capability indicators of left-behind Muslim women identified to formulate the Women's Capability Index. Accordingly, six indicators

are identified namely, quality of living Capability (QoLC), Education and information Capability (EIC), Decision-making Capability (DMC), Control over Household Resources Capability (CoHRC), Mobility Freedom Capability (MC) and Participation Capability (PC). Each 'being and doing' valued by the respondents in their lives in the given environment of husbands' absence and consequent circumstances were included in the capability list and is included under each indicator which is self-explanatory with a set of 24 sub-dimensions as given in Table 4.23.

**Table 4.23. Descriptive Statistics of Capability Indicators with Sub-dimensions**

Capability Indicators	Sub-dimensions	Mean	Std. Deviation	Maximum	Minimum
Quality of living Capability (QoLC)	Being able to have adequate nutritious food	4.29	0.87	5	1
	Being able to have suitable accommodation	4.35	0.87	5	1
	Being able to have money that they can decide how to use	4.25	0.88	5	1
	Being able to allocate time as they wish and engage in recreation.	3.84	1.11	5	1
Education and Information Capability (EIC)	Being able to make rational decisions	4.02	0.94	5	1
	Being able to use the internet and social media	3.6	1.35	5	1
	Being able to attain better education as desired	3.18	1.4	5	1
	Being able to acquire a good job	2.31	1.49	5	1
Decision-Making Capability (DMC)	Being able to decide on the health of self and family members	3.55	1.12	5	1
	Being able to decide on the education of children	4.4	0.86	5	1
	Being able to decide about visiting friends and families	3.62	1.29	5	1
	Being able to decide food habits and dress Style	3.92	1.29	5	1
Control over Household Resources Capability (CoHRC)	Being able to spend their husbands' income	3.81	1.28	5	1
	Being able to purchase daily necessities	3.6	1.2	5	1
	Being able to purchase major household consumer goods	3.34	1.11	5	1
	Being able to manage family property	3.63	1.31	5	1
Mobility Freedom Capability (MC)	Being able to go to the hospital or clinic	1.53	0.52	3	1
	Being able to go to the bank and perform transactions	1.63	0.71	3	1
	Being able to participate in social events and festivals	1.65	0.6	3	1
	Being able to visit public offices	1.48	0.51	3	1
Participation Capability (PC)	Being able to participate in the social and religious organisation	4.16	0.88	5	1
	Being able to be involved in local politics	3.24	1.21	5	1
	Being able to participate in business	3.52	1.46	5	1
	Being able to participate in household management	4.32	1.02	5	1

Source: Primary Survey

Table 4.23 indicates the descriptive statistics of capability indicators with their sub-dimensions. The maximum and minimum values of all the variables are 5 and 1 respectively except the sub-dimensions of Mobility Freedom Capability (MFC) for which the maximum and minimum values are 3 and 1 only. The mean value of the sub-dimension of Decision Making Capability (DMC) of ‘being able to decide on the education of children’ is the highest (4.4) followed by ‘being able to have suitable accommodation’ (4.35) and ‘being able to visit public offices’ sub-dimension of Mobility Freedom Capability (MFC) has the lowest mean value (1.48). The standard deviation shows variability in responses, with scores ranging from 1 to 5. The standard deviation is highest in the case of ‘being able to acquire a good job’ sub-dimension of Education and Information Capability (EIC) and lowest in the case of ‘being able to visit public offices’ sub-dimension of Mobility Freedom Capability (MFC) which is equal to 0.51.

#### **4.3.1. The Relationships of the Dimensions with Key Socio-economic Characteristics of the Respondents**

The relationship between the socio-economic characteristics of the respondents and the sub-dimensions of Women’s Capability was examined and found that the majority of proposed associations were found to be statistically significant. The statistically significant relationship between the socio-economic characteristics of the respondents and the sub-dimensions demonstrates that the sub-dimensions are sufficient for evaluating the capabilities as intended (Greco et al., 2018). Hence the relationships of the sub-dimensions with key socio-economic characteristics of the respondents are examined to assess the statistically significant relationship between the variables.

##### **4.3.1.1. Association between Quality of Living Capability and Socio-economic Characteristics**

Table 4.24 presents statistical associations between achieved functioning under the Quality of Living sub-dimension and various socio-economic characteristics.

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**Table 4.24. Association between Quality of Living Capability and Socio-Economic Characteristics**

Socio-Economic Characteristics	Quality of living Capability (QoLC)			
	Access to Adequate Nutritious Food	Suitable Accommodation	Have money that they can Decide how to Use	Time Spending Autonomy
Quality of Housing	20.572*	21.852*	58.408***	25.258*
Possession of Assets	54.603**	64.943***	63.550*	77.647***
Education	58.716**	53.972***	40.197***	44.021***
Occupation	21.187*	16.91+	23.584*	27.307*
Husbands' Occupation	51.22***	23.522**	22.607**	41.421***
Family Type	13.469**	11.998**	27.815***	29.722***

Source: Primary Survey

Notes: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , +  $p < 0.1$ . Asterisks are based on Chi-square tests comparing the sub-dimensions of capabilities with the socio-economic characteristics of the respondents.

The chi-square test result of the association between 'access to adequate nutritious food' and various socio-economic characteristics indicates that there is a statistically significant positive association with all the variables. The access to adequate nutritious food has a positive highly statistically significant ( $p < 0.001$ ) association with the occupation of respondents' husbands whereas low statistically significant association with respondents' occupation ( $p < 0.05$ ). The 'suitable accommodation' of the respondents, has a highly positive statistically significant association with the possession of assets and education status of the respondents ( $p < 0.001$ ), whereas low, but statistically significant association with the quality of housing ( $p < 0.05$ ) and husbands' occupation ( $p < 0.01$ ). The association between 'suitable accommodation' and respondents' occupation is negative and the p-value ( $p > 0.05$ ) reflects no association between the variables.

The sub-dimension of 'have the money that you can decide how to use' has a highly statistically significant positive association with education, quality of housing and family type ( $p < 0.001$ ). However, the association with the occupation of

husbands is moderate ( $p < 0.01$ ) and has a low statistically significant association with the education and property possession status of the respondents ( $p < 0.05$ ).

The ‘time spending autonomy’ has a strong statistically significant positive association with socioeconomic characteristics ( $p < 0.001$ ), except the occupation and quality of housing ( $p < 0.05$ ). Overall, the results suggest that socio-economic characteristics such as quality of housing, possession of assets, education, occupation, husbands’ occupation and family type are significantly associated with different sub-dimensions of the Quality of Living Capability (QoLC), including access to nutritious food, suitable accommodation, satisfy wants and the time spending autonomy and engagement in recreational activities except for the negative association of ‘suitable accommodation’ with the occupation of respondents.

**4.3.1.2. Association between Education and Information Capability (EIC) and Socio-economic Characteristics**

Table 4.25 shows the association between sub-dimensions of the Education and information Capability dimension and various socio-economic characteristics:

**Table 4.25. Association between Education and Information Capability (EIC) and Socio-Economic Characteristics**

Socio-Economic Characteristics	Education and Information Capability (EIC)			
	Rational Decision	Use of the Internet and Social Media	Attain Education as Desired	Acquired a Good Job
Education	53.499***	58.496***	53.000***	100.100**
Occupation	24.562*	27.071**	35.859***	78.732***
Husbands’ Education	71.982**	64.082**	133.335***	92.285***
Husbands’ Occupation	9.847+	12.155+	51.669***	21.831**
Number of Members in the Family	113.922***	182.120***	6.600+	130.782**
Region	4.057+	11.100*	3.698+	19.524**

Source: Primary Survey

Notes: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , +  $p < 0.1$ . Asterisks are based on Chi-square tests comparing the sub-dimensions of capabilities with the socio-economic characteristics of the respondents

The association between rational decision and Education and Information Capability (EIC) is highly positive and statistically significant ( $p < 0.001$ ) indicating that higher education levels seem to correlate with higher rational decision scores. Also, with the number of members in the family the rational decision has a highly positive significant association ( $p < 0.001$ ). But, with the husbands' education ( $p < 0.01$ ) and respondents' occupation ( $p < 0.05$ ), the rational decision' dimension has a moderate, positive and low significant association. Unexpectedly, the association between rational decision and the husbands' occupation is statistically insignificant ( $p > 0.05$ ) indicating no association between the rational decision of the respondent and the husbands' occupation. The region also has no association with this sub-dimension ( $p > 0.05$ ).

The association between the 'use of the internet and social media' of EIC and the education of the respondent is also highly positive and statistically significant ( $p < 0.001$ ) indicating that higher education levels seem to correlate with higher 'use of the internet and social media' scores. Also, with the number of members in the family, this sub-dimension has a highly positive statistically significant association ( $p < 0.001$ ), but with the husbands' education and respondents' occupation ( $p < 0.01$ ) the dimension has a moderately significant association. The association between 'use of the internet and social media' and the husbands' occupation was statistically insignificant ( $p > 0.05$ ) indicating no association between the use of the internet and social media of the respondents' and the husbands' occupation. The region also has a low significant association with this sub-dimension ( $p < 0.05$ ).

The chi-square test result of the association between 'attain better education' and the education and occupation of the respondents and husbands shows significantly positive relationship ( $p < 0.001$ ). The association between attaining better education and the number of members in the family and region is statistically insignificant ( $p > 0.05$ ) indicating no association between the variables. The association between acquiring a good job, education, occupation of the respondents, husbands' education and the number of members in the family are highly positively significant ( $p < 0.001$ ). Whereas, with the husbands' occupation and region, the

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‘attain better education’ sub-dimension has a moderate statistically significant association ( $p < 0.01$ )

#### 4.3.1.3 Association between Decision-making Capability (DMC) and Socio-Economic Characteristics

Table 4.26 indicates the association between the sub-dimensions of Decision Making Capability (DMC) and various socio-economic characteristics.

**Table 4.26. Association between Decision Making Capability (DMC) and Socio-Economic Characteristics**

Socio-Economic Characteristics	Decision-Making Capability (DMCI)			
	Health Care of Self and Family Members	Education of Children	Visit Friends and Families	Food Habit/ Dress Style
Age	52.164***	54.200***	32.598***	40.996***
Education	47.185***	41.195***	83.053***	54.769**
Family type	10.867*	12.034*	24.308***	28.097**
Age at Marriage	7.611+	8.416+	23.362**	29.956**
Monthly Household Income	70.784***	72.180***	52.573***	46.542**
To whom the Foreign Remittance is Sent	19.673*	20.244**	11.310+	10.896+

Source: Primary Survey

Notes: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , +  $p < 0.1$ . Asterisks are based on Chi-square tests comparing the sub-dimensions of capabilities with the socioeconomic characteristics of the respondents

The chi-square test result of the association between the decision-making dimension of ‘health care of self and family members’ and various socio-economic characteristics indicates that there is a highly statistically significant positive association with age, education and monthly household income ( $p < 0.001$ ). It indicates that as age, education, and monthly household income increase, the score for ‘health care of self and family members’ also increases. The relationship between ‘health care of self and family members’ and the family type and ‘to whom the foreign remittance sent’ is low but statistically significant.

The association of 'health care of self and family members' with age at marriage is not statistically significant ( $p > 0.05$ ). Regarding the Decision Making Capability concerning the 'education of children', there is a highly positive significant association with age, education and monthly household income ( $p < 0.001$ ) whereas moderate association with 'to whom the foreign remittance sent' ( $p < 0.01$ ) and low, but significant association with the family type ( $p < 0.05$ ). The association between the 'education of children' sub-dimension of DMC and respondents' age at marriage is negative.

'Visit Friends and Families' sub-dimension of Decision Making Capability has a high positive statistically significant association with age, education, family type and monthly household income ( $p < 0.001$ ). However, the association with the age at marriage is moderate ( $p < 0.01$ ) and there is no association between the 'visit friends and families' sub-dimension of DMC and 'whom the foreign remittance sent' ( $p > 0.05$ ).

The association between the sub-dimension 'food habit/ dress style' with age shows a highly positive significant association whereas there is a moderate positive significant association with education, age at marriage, family type and monthly household income ( $p < 0.01$ ). The relationship with whom the foreign remittance is sent is negative and not statistically significant. Overall, the results suggest that socio-economic characteristics such as age, education, age at marriage, family type and monthly household income are statistically significant and associated with different sub-dimensions of Decision Making Capability.

#### **4.3.1.4. Association between Control over Household Resources Capability (CoFC) and Socio-Economic Characteristics**

Table 4.27 shows the association between various sub-dimensions of the Control Over Household Resources Capability and various socio-economic characteristics based on Chi-square test results.

**Table 4.27. Association between Control over Household Resources Capability (CoFC) and Socio-Economic Characteristics**

Socio-Economic Characteristics	Control over Household Resources Capability (CoFC)			
	Spending Husbands' Income	Purchase Daily Necessities	Purchase Major Household Consumer Goods	Manage Family Property
House Ownership	27.308**	31.105**	13.423+	24.677*
Age at Marriage	17.656*	15.432*	11.677+	15.036*
Family Type	24.917***	41.640***	24.480***	25.984***
Education	70.184***	98.061***	55.610***	72.781***
Occupation	44.830***	68.767***	25.522*	59.916**
Property Possession	45.749***	21.116*	19.428*	32.273**
Years of Family Life	172.973***	127.508***	148.528***	114.634***

Source: Primary Survey

Notes: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , +  $p < 0.1$ . Asterisks are based on Chi-square tests comparing the sub-dimensions of capabilities with the socio-economic characteristics of the respondents.

The association between the 'spending husbands' income' and various socio-economic characteristics indicates that there is a highly statistically significant positive association with education, occupation, family type, property possession and years of family life ( $p < 0.001$ ). It indicates that as these variables value raises, the score of the 'spending husbands' income' dimension of CoHRC also increases. The association between 'spending husbands' income' and age at marriage ( $p < 0.05$ ) and ownership of the house ( $p < 0.01$ ) are moderately statistically significant.

The 'purchase daily necessities' has a highly statistically significant positive association with education, occupation, family type and years of family life ( $p < 0.001$ ). With the property possession and age at marriage, this dimension has a low but statistically significant association ( $p < 0.05$ ). Concerning the CoHRC regarding the 'purchase major household consumer goods' there is a highly positive significant association with education, family type and years of family life ( $p < 0.001$ ) whereas a low but significant association with occupation and property possession ( $p < 0.05$ ).

The association between the ‘purchase major household consumer goods’ with respondents’ age at marriage and house ownership is negative. ( $p > 0.05$ ).

The chi-square test result of the association between the ‘manage family property’ dimension of CoHRC has a highly positive statistically significant association with education, family type and years of family life ( $p < 0.001$ ). Whereas, there is a moderate positive statistically significant association between occupation and property possession ( $p < 0.01$ ). The association between the ‘manage family property’ and house ownership and age at marriage is positive and statistically significant ( $p < 0.05$ ). Overall, the results suggest that socio-economic characteristics have a positive statistically significant association with different sub-dimensions of CoHRC.

**4.3.1.5. Association Between Mobility Freedom Capability (MFC) and Socio-Economic Characteristics**

Table 4.28 indicates statistical associations between the Mobility Freedom Capability sub-dimensions and various socio-economic characteristics.

**Table 4.28. Association Between Mobility Freedom Capability (MFC) and Socio-Economic Characteristics**

Socio-Economic Characteristics	Mobility Freedom Capability (MFC)			
	Go to the Hospital or Clinic	Go to Bank	Participation in Social Events and Festivals	Visit Public Offices
Region	3.258+	21.954***	3.596+	8.631*
Age	33.291***	12.894*	24.734***	13.592*
Occupation	21.593**	29.533***	20.432**	20.972**
Years of Family Life	64.956***	38.858***	58.889***	31.517**
House Ownership	28.827***	9.728+	19.612**	55.938**
Monthly Household Income	10.756+	21.907*	31.814**	15.955+
Family Headship	74.957***	58.194***	47.800***	66.998**

Source: Primary Survey

Notes: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , +  $p < 0.1$ . Asterisks are based on Chi-square tests comparing the sub-dimensions of capabilities with the socio-economic characteristics of the respondents.

The association between the ‘go to hospital or clinic’ and various socio-economic characteristics indicates that there is a highly statistically significant

positive association with age, house ownership, years of family life and family headship ( $p < 0.001$ ) The association between ‘go to hospital or clinic’ with region and monthly household income is negative, indicating that these variables are not associated with ‘go to the hospital or clinic’ sub-dimension ( $p > 0.05$ ).

The mobility to the bank has a highly statistically significant positive association with region, family headship, and occupation ( $p < 0.001$ ), indicating that having a good job, family headship, and living in an urban region increases the mobility for financial control (MFC). Additionally, there is a lower but statistically significant association with age and monthly household income ( $p < 0.05$ ), suggesting that as age and income increase, MFC also rises. With house ownership, this dimension has a negative association ( $p > 0.05$ ).

Concerning the association of ‘participation in social events and festivals’ with age, years of family life and family headship there is a highly positive statistically significant association ( $p < 0.001$ ) whereas a moderately significant association with occupation and house ownership and monthly household income ( $p < 0.01$ ). The association with the region is negative and statistically insignificant ( $p > 0.05$ ). The chi-square test result of the association between mobility to public offices with occupation, years of family life, family headship and house ownership are moderate positive statistically significant ( $p < 0.01$ ). Whereas there is a low positive significant association with age and region ( $p < 0.05$ ). The association between ‘mobility to public offices’ and monthly household income is negative and statistically insignificant ( $p > 0.05$ ). Overall, the results suggest that socio-economic characteristics have a positive statistically significant association with different dimensions of ‘Mobility Freedom Capability’.

#### **4.3.1.6 Association between Participation Capability (PC) and Socio-Economic Characteristics**

Table 4.29 shows the association between Participation Capability and various socio-economic characteristics.

**Table 4.29. Association between Participation Capability (PC) and Socio-Economic Characteristics**

Socio-Economic Characteristics	Participation Capability (PC)			
	Participation in Social Organisation	Participation in Household Management	Participation in Business	Involvement in Local Politics
Education	35.072***	59.883***	91.077***	44,033***
Occupation	21.163*	19.198*	770.490***	26.629***
Number of Children	63.438***	20.285+	6.087+	7.896+
House Ownership	36.433***	36.151***	11.105+	28.781**
Monthly Household Income	86.317***	63.792***	48.986*	53.170**
Family Type	11.375*	28.399***	2.606+	25.927***

Source: Primary Survey

Notes: \*\*\*p &lt; 0.001, \*\*p &lt; 0.01, \*p &lt; 0.05, + p &lt; 0.1. Asterisks are based on Chi-square tests

The association between the ‘participation in social organisation’ and various socio-economic characteristics indicates that there is a highly statistically significant positive association with education, number of children, house ownership and monthly household income ( $p < 0.001$ ). The relationship between ‘participation in social organisation’ with occupation and family type is low but statistically significant ( $p < 0.05$ ). Concerning the sub-dimensions of PC regarding ‘participation in household management’ there is a highly positive statistically significant association with education, family type, house ownership and monthly household income ( $p < 0.001$ ). Whereas a low but significant association with occupation ( $p < 0.05$ ) and statistically insignificant association with the number of children. The association between the respondents’ age at marriage and house ownership is negative ( $p > 0.05$ ). The ‘participation in business’ sub-dimension of PC has a highly statistically significant positive association with education and

occupation ( $p < 0.001$ ) indicating that higher education and better jobs improve participation in business of left-behind women. With the monthly household income, this dimension has a low but significant association ( $p < 0.05$ ). The association with the number of children, house ownership and family type is negative, indicating a statistically insignificant association with the sub-dimensions ( $p > 0.05$ ).

The chi-square test result of the association between the ‘involvement in local politics’ sub-dimension has a highly positive statistically significant association with education, occupation and family type ( $p < 0.001$ ) whereas there is a moderate positive statistically significant association between house ownership and monthly household income ( $p < 0.01$ ). The association between the ‘involvement in local politics and the number of children is insignificant ( $p > 0.05$ ). Overall, the results suggest that ‘participation capability’ has a positive statistically significant association with different aspects of socio-economic characteristics.

The association of the sub-dimensions of capability indicators with various socio-economic characteristics of the respondents shows that most of the associations between the variables are positive and statistically significant. Hence it can be concluded that the sub-dimensions of capability indicators are sufficient for evaluating the capabilities as intended.

#### **4.3.3. Measure of Women’s Capability Indices**

The mean score of six indicators is measured for each individual by aggregating the subdimensions under each indicator. The indices are calculated for each indicator by using the standard formula and women’s capability indices for each individual are thus measured by converting into a scale ranging from 0 to 100, where 100 represents the highest level of capability indices and 0 represents the lowest score of capability indices. The descriptive statistics of the women’s capability indices are given in Table 4.30.

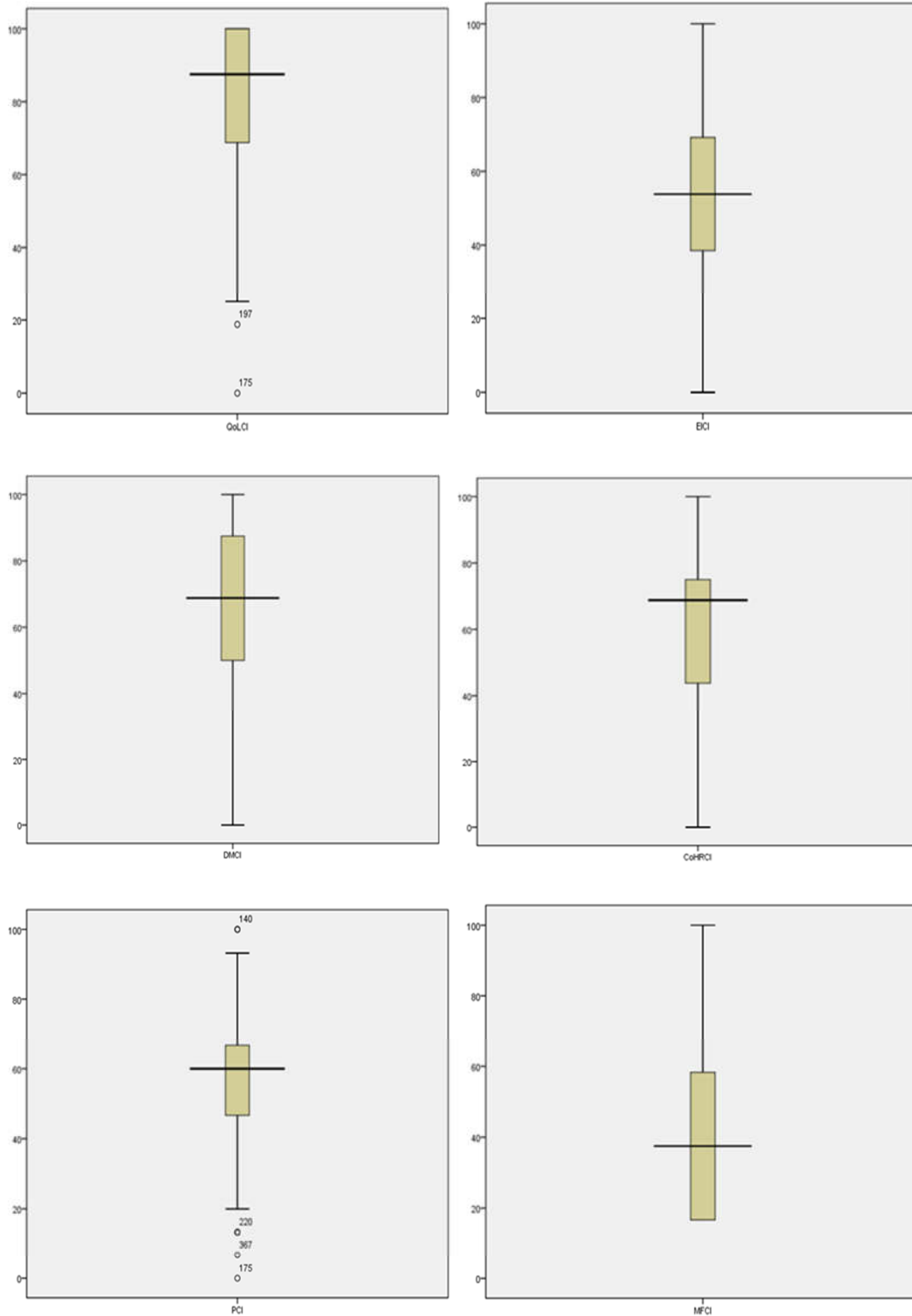
**Table 4.30. Descriptive Statistics of the Women's Capability Indices**

Statistics	Women's Capability Indices					
	QoLCI	EICI	DMCI	CoHRCI	PCI	MFCI
Number of Respondents	423	423	423	423	423	423
Mean	78.828	52.4293	63.4266	60.1328	55.1469	36.9289
Median	81.3	53.8	68.8	68.8	60	37.5
Mode	100	61.5	75	75	60	16.7
Std. Deviation	20.3969	22.1483	25.2844	22.6621	16.0301	18.2968
Skewness	-0.89	-0.106	-0.584	-0.346	-0.37	0.237
Kurtosis	0.083	-0.612	-0.613	-0.753	0.516	-1.233
Range	100	100	100	100	100	83.3
Minimum	0	0	0	0	0	16.7
Maximum	100	100	100	100	100	100

Source: Primary Survey

Table 4.30 indicates that the mean (78.83), median (81.3) and mode (100) values of the QoLCI are the highest and lowest in the case of MFCI with a mean (36.92), median (37.5) and mode (16.7). The standard deviation indicates a considerable amount of variation or dispersion in the various capabilities. The standard deviation ranges from 16.0301(PCI) to 25.2844 (DMCI). The skewness value of all the capability indicators is negative, indicating moderate to negative skewness. The kurtosis values of EICI (-0.612), DMCI (-0.613), CoHRCI (-0.753) and MFCI (-1.233) are negative, indicating a distribution with flatter tails and fewer extreme values compared to a normal distribution. The minimum capability index score is 0 for QoLCI, EICI, DMCI, CoHRCI and PCI and 16.7 for MFCI and the maximum capability Index score is 100 for all the capability indices. The range is highest and equal to 100 for QoLCI, EICI, DMCI, CoHRCI and PCI and 83.3 for MFCI. The differences in each Capability Indices are examined in Figure 4.9

**Fig. 4.9. Women’s Capability Indices- Box Plot Diagrams**



Source: Primary Survey

Figure 4.9 indicates that DMCI and EICI are approximately normally distributed. The QoLCI, CoHRCI, MFCI and PCI are a bit skewed. The QoLCI and PCI have outliers while other indices do not have outliers.

#### 4.3.4. Aggregation of Indices into Single Composite Index of Women’s Capability

The single composite Index of Women’s Capability was calculated by aggregating the six indices of QoLCI, EICI, DMCI, CoHRCI, PCI and MFCI and finding the mean score. Thus, the Women’s Capability Index was calculated for each individual. The descriptive statistics of the Women’s Capability Index (WCI) score are given in Table 4.31.

**Table 4.31. Descriptive Statistics of the Women’s Capability Index ( WCI)**

WCI	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
20-30	3	0.71	0.71	Mean	58.21
30-40	9	2.13	2.84	Median	59.28
40-50	88	20.80	23.64	Mode	52.47
50-60	133	31.44	55.08	Std. Deviation	10.15
60-70	135	31.91	86.99	Skewness	-0.21
70-80	52	12.29	99.29	Std. Error of Skewness	0.12
80-90	3	0.71	100	Kurtosis	-0.32
Total	423	100		Std. Error of Kurtosis	0.24
Minimum		28.58		Maximum	80.63

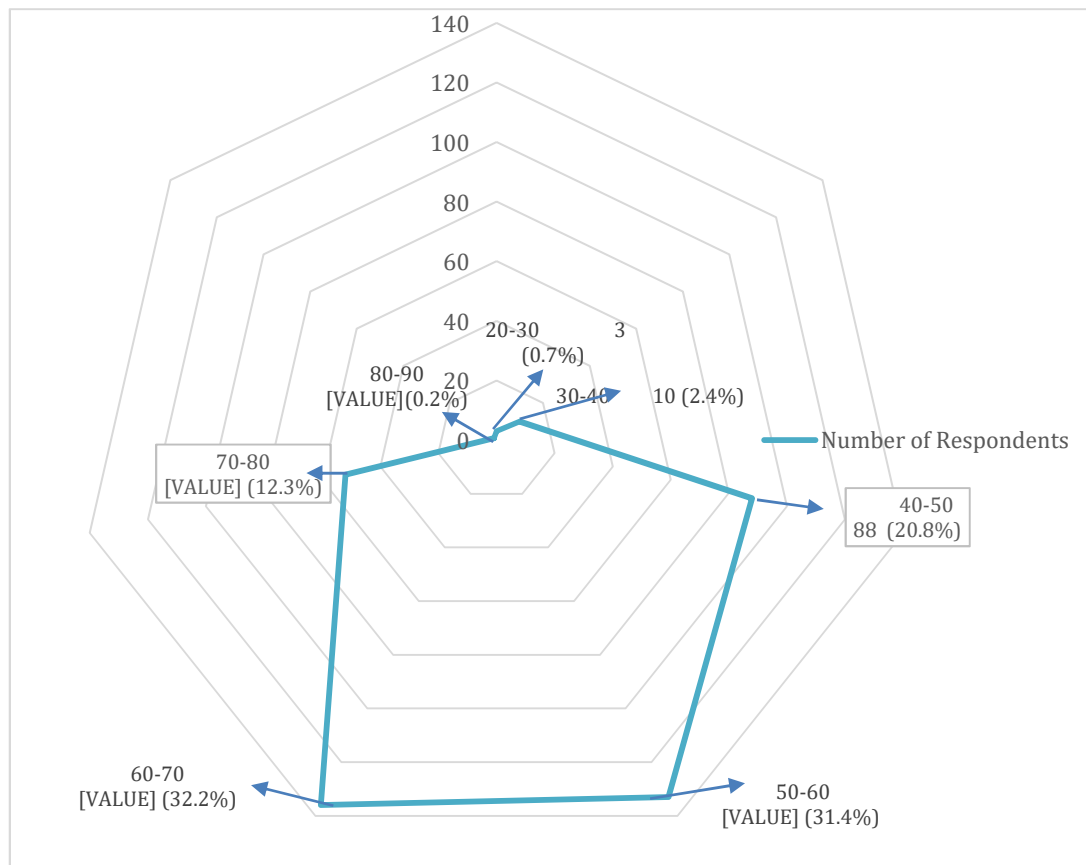
Source: Primary Survey

Table 4.31 shows that about 24 percent of the respondents have a WCI score below 50 and a greater number of respondents have a WCI score between 50 to 70. About 87 percent of them have a WCI score below 70. The average WCI score across all respondents is 58.12 and the median and mode value of the WCI scores are 59.18 and 52.47 respectively. The standard deviation which shows the dispersion of WCI scores from the mean is 10.15. A negative skewness (-0.21) suggests that the distribution is slightly skewed to the left and the standard error associated with the

skewness value is 0.12 and the Z value is -1.75 (between -1.96 and +1.96) hence the WCI score data is symmetric and normally distributed. Kurtosis with a negative value (-0.32) suggests a slightly flatter distribution. The standard error associated with the kurtosis value is 0.24 and the Z value is -1.33 (between -1.96 and +1.96) hence it is concluded that the WCI score data is symmetric and normally distributed. The minimum and maximum WCI scores observed among the respondents are 28.58 and 80.63 respectively.

The Women Capability Index (WCI) is illustrated in Figure 4.10.

**Fig. 4.10 Women’s Capability Index (WCI)**



Source: Primary Survey

Figure 4.10 visualises the Women’s Capability Index (WCI) score across seven ranges. Each point on the radar chart represents a value for each range and the

points are connected to form a polygon. The figure shows that the majority of the respondents have WCI scores between 50-60 (31.4 percent) and 60-70 (32.2 percent). The respondents with the lowest WCI score values are in the range of 20-30 and 80-90, with 0.7 percent and 0.2 percent respectively and there are no respondents with WCI less than 10 and greater than 90.

#### **4.3.5 Validation of the WCI**

The intention of the validity tests is to determine the degree to which the instrument truly measures women's capability. The Women's Capability Index was validated by criteria of reliability, construct validity and content validity (Greco, 2013). Hence the content validity, construct validity and reliability criteria were used to validate the Women's Capability Index in the study.

##### **4.3.5.1. Content Validity**

The content validity test requires that the concepts of the questions meant to measure the capability were communicated correctly. In the questionnaire meant for the research, the questions intended to measure the capability of the women were asked in a simple local language and all the questions were ordinal. Overall, the respondents comprehended and interpreted the questions in the manner that the research had anticipated and hence the content validity is satisfied.

##### **4.3.5.2 Construct Validity**

To examine the construct validity of the measure, the relationship between the socio-economic characteristics and the women's capability indices was examined. The univariate associations between various dimensions of WCI and socio-economic characteristics are given in Table 4.32.

**Table 4.32. WCIs and Socio-Economic Characteristics**

Socio-economic characteristics	Spearman's rho					
	QoLCI	EICI	DMCI	CoHRCI	PCI	MFCI
Age	0.064*	-0.140**	0.208**	0.179**	0.166**	-0.175**
Education	-0.008	0.388**	0.283**	-0.303**	0.101*	0.006
Occupation	0.098*	0.098*	0.900	0.188**	0.338**	0.238**
Husbands' Education	0.071	0.280**	0.201**	0.193**	0.0526	0.079
Husbands' Occupation	0.024	0.088	-0.260**	0.126**	0.433	0.108*
Family Type	0.117*	0.041*	-0.126**	0.214**	0.162**	0.032
Age at Marriage	0.016	0.033	0.108*	-0.075	0.177**	-0.054
Family Headship	0.153**	0.033*	0.160**	0.124*	0.263**	0.332**

Source: Primary Survey

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 4.32 presents Spearman's Rank Correlation coefficients between various socio-economic characteristics and different indices of WCI. The Quality of Living Index (QoLCI) has a positive correlation with family type, family headship and age and occupation of the respondents indicating that with the increase in these variables quality of living capability increases but has a negative correlation with education and an insignificant association with the education and occupation of husbands.

The Education and Information Capability Index (EICI) has a positive significant correlation with the education and occupation of the respondents, the husbands' education, family type and family headship, but has an insignificant association with the husbands' occupation and age at marriage and with the age of the respondents. The EICI has a negative significant correlation with age, indicating that the Education and Information Capability does not increase with age.

The Decision-Making Capability Index (DMCI) has a positive significant correlation with all socio-economic characteristics except the husbands' occupation

and family type. Control over Household Resources Index (CoHRCI) has a positive correlation with all the socio-economic characteristics except age at marriage indicating that Control over Household Resources Capability Index enhances with the improvements in the socio-economic characteristics.

The Participation Capability Index (PCI) is positively correlated with all the variables, but the correlation is insignificant with the husbands' education and occupation indicating that these variables are not associated with participation capability.

The Mobility Freedom Capability Index (MFCI) has a positive significant correlation with the occupation of the respondents and their husbands and family headship but has a negative correlation with age and age at marriage. Overall, the capability indicators have a positive significant correlation with most of the socio-economic characteristics and hence construct validity is satisfied.

#### **4.3.5.3 Reliability**

To test the reliability of the WCI, the internal consistency was examined with each dimension and across the sub-dimensions. The Spearman's Rank correlation coefficient was used to determine the correlation between each dimension and sub-dimension to test the consistency. To examine the indications within each dimension (consistency within dimensions), Cronbach's alpha test ( $\alpha$ ) was employed. The correlation matrix of dimensions and sub-dimensions of the WCI showing the magnitude of correlation coefficients and statistical significance of the relationship with Cronbach's alpha test ( $\alpha$ ) results are given in Table 4.33.

Table. 4.33. Correlation Matrix of Dimensions and Sub-Dimensions of the WCIs

Sub-dimensions	Dimensions or Indicators						Cronbach's alpha ( $\alpha$ )
	QoLCI	EICI	DMCI	CoHRCI	PCI	MFCI	
<b>QoLCI</b>							
Adequate Nutritious Food	<b>0.884**</b>	0.362**	-0.032	0.007	<b>0.555**</b>	-0.172**	<b>0.891</b>
Suitable accommodation	<b>0.859**</b>	0.373**	-0.024	-0.004	<b>0.569**</b>	-0.129**	
Spending Autonomy	<b>0.905**</b>	0.388**	0.101*	0.005	<b>0.584**</b>	-0.007	
Time Autonomy	<b>0.851**</b>	<b>0.405**</b>	-0.032	0.067	<b>0.413**</b>	-0.073	
<b>EICI</b>							
Rational Decision	0.264**	<b>0.571**</b>	-0.140**	-0.128**	0.231**	-0.118*	0.703
Social media Internet use	-0.056	0.260**	<b>0.791**</b>	0.298**	-0.169**	-0.043	
Pursue better education	0.432**	<b>0.692**</b>	-0.260**	-0.124*	0.330**	0.018	
Acquired a Good job	0.345**	<b>0.719**</b>	-0.141**	-0.116*	0.402**	-0.138**	
<b>DMCI</b>							
Health care	-0.102*	0.130**	<b>0.726**</b>	0.312**	-0.041	-0.062	<b>0.847</b>
Education of children	-0.005	0.089	<b>0.767**</b>	<b>0.437**</b>	-0.022	-0.139**	
Friends and Family visit	-0.035	0.124*	<b>0.903**</b>	0.330**	-0.158**	-0.097*	
Food Habits/ Dress style	-0.035	0.124*	<b>0.903**</b>	0.330**	-0.158**	-0.097*	
<b>CoHRCI</b>							
Spending husband's income	0.086	0.02	0.344**	<b>0.696**</b>	-0.005	0.003	0.706
Purchase daily necessities	0.032	-0.007	<b>0.487**</b>	<b>0.805**</b>	-0.089	-0.051	
Purchase Major Consumer Goods	-0.048	0.016	0.288**	<b>0.811**</b>	-0.077	0.119*	
Manage family property	-0.003	-0.066	0.127**	<b>0.628**</b>	-0.098*	0.118*	
							0.633

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<b>PCI</b>						
Social organisation participation	<b>0.727**</b>	0.346**	-0.102*	-0.018	<b>0.736**</b>	-0.018
Household management	<b>0.695**</b>	0.302**	-0.079	0.017	<b>0.734**</b>	-0.005
Business Involvement	0.034	0.170**	-0.164**	-0.204**	<b>0.551**</b>	-0.130**
Involvement in local politics	0.287**	0.002	-0.005	0.063	0.393**	-0.179**
<b>MFCI</b>						
Hospital/Clinic Visit	-0.05	-0.079	-0.169**	0.019	-0.092	<b>0.850**</b>
Visit Bank	-0.048	-0.132**	-0.132**	0.084	-0.073	<b>0.864**</b>
Participation in events or festivals	-0.221**	-0.198**	-0.077	0.025	-0.212**	<b>0.602**</b>
Visit public office	-0.0177**	-0.114*	-0.028	0.107*	-0.220**	<b>0.773**</b>

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Source: Primary Survey

Notes: \*\*\*Correlation is significant at the 0.001 level (2-tailed).

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

Asterisks are based on Spearman's Rank Correlation

Table 4.33 indicates the sub-dimension with the highest correlation coefficient across all dimensions is bolded. All sub-dimensions except two - 'social media internet use' (0.260) and 'involvement in local politics' (0.393) - are found to be highly correlated to the dimension that they were assigned to, with correlation coefficients of 0.4 to 0.9. The 'social media internet use' variable appeared to be more closely linked to the DMCI component than the EICI. Likewise, 'recreational activities' has an unexpectedly strong association with the respondents' EICI and 'social organisation participation' and 'household management' have a high association with the QoLCI. All the sub-dimensions of QoLCI have a moderate correlation with PCI.

The 'education of children' has a moderate association with CoHRCI and the 'purchase daily necessities' sub-dimension of CoHRCI has a moderate association with DMCI. The involvement in local politics of the respondents have no association with any dimension of capability indices. The MFCI dimension has a negative correlation with most of the sub-dimension of DMCI components and with the sub-dimensions of PCI .

The Cronbach's alpha ( $\alpha$ ) test is a measure of internal consistency or reliability. The value of Cronbach's alpha above 0.80 indicates excellent internal consistency. The sub-dimensions of QoLCI, DMCI and MFCI having Cronbach's alpha ( $\alpha$ ) above 0.80 indicate excellent internal consistency. The sub-dimensions of EICI, PCI and CoHRCI have acceptable internal consistency (0.6 to 0.8).

#### **4.4 Male Migration and Capability Expansion of Muslim Women**

While analyzing the relationship between migration and the family left-behind, the duration of the migration and the remittances that they send to the family are given crucial consideration. The ways by which migration affects the empowerment of women depends on several factors, including the type of migration, the length of the migration and the kind, frequency and volume of remittances (Lenoel, 2017). The anticipated impact of migration duration is different in the short run and long run. Short-term migration can be disruptive to the family because by

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supporting the migrants in getting a job at the destination, the finance of the family is drained as it may not necessarily lead to a job right away at the destination. Long-term migrants are able to send more money to their relatives as they are more likely to be earning more money. It is unlikely that monetary transfers rise or fall in proportion to the duration of migration because, as time passes, their commitment to their families may diminish, leading to lower financial remittances (Demurger, 2015).

Ordinal logistic regression is applied to analyse the role of migration on the capability expansion of left-behind women considering WCI as the dependent variable which is ordinal and categorical. The migration duration and foreign remittance are selected as the major independent variables. Ordinal logistic regression analysis is used to determine the cause-effect relationship of the independent variable with the dependent variable controlling for various individual migration characteristics of the duration of remittances, to whom the remittances are sent, age, education and occupation of the respondents, occupation of the respondents' husbands and family type. Ordinal logistic regression does not require the normality of the dependent variable (which is ordinal) or the independent variables (predictors). Instead, ordinal logistic regression makes assumptions related to the proportional odds and linearity of the log odds.

#### **4.4.1. Assumptions of Ordinal Logistic Regression Model**

Since the Ordinal Logistic Regression model has been fitted, the assumptions are to be checked to ensure that it is a valid model. The assumptions of the Ordinal Logistic Regression Model are

1. The dependent variable is ordered.
  2. The independent variables are continuous, categorical, or ordinal
  3. There is no multicollinearity.
  4. Assumption of Proportional odds
-

The first assumption of the dependent variable ordinal is satisfied as the WCI score is constructed based on the categorical or ordinal variables and hence it is ordinal. The WCI score is the composite index of six indicators which are constructed based on the subjective variables. The second assumption that one or more of the independent variables are either continuous, categorical, or ordinal is also satisfied as the independent variables used in the analysis are monthly remittances and the duration of migrants which are continuous variables and age, education, husbands' education, occupation, husbands' occupation and family type are categorical variables. The third assumption of 'no multicollinearity' is tested with the Variance Inflation Factor (VIF) which is presented in Table 4.34.

**Table 4.34. Test of Multicollinearity**

S No.	Coefficients	Collinearity Statistics	
		Tolerance	VIF
1	WCI (Constant)		
2	Monthly Remittances	0.551	1.816
3	Migrants Duration	0.547	1.829
4	Age	0.562	1.779
5	Education	0.411	2.433
6	Husbands Education	0.538	1.859
7	Occupation	0.861	1.163
8	Husbands Occupation	0.916	1.091
9	Family Type	0.751	1.332

Source: Primary Survey

The Tolerance and Variance Inflation Factor (VIF) are two metrics used to detect multicollinearity. VIF (Variance Inflation Factor) quantifies how much the variance of an estimated regression coefficient increases due to collinearity. A VIF above 10 generally indicates high multicollinearity. Data in Table 4.34 reveals that none of the variables have VIF values above 10 and all the variables have VIF values below 3, indicating a low multicollinearity. The 'Tolerance' indicates the amount of variability of the selected independent variable not explained by the other independent variables with values closer to 1 indicating less multicollinearity. In this

case, the tolerance value is above 0.5, indicating moderate to less multicollinearity. Hence no severe or high multicollinearity is detected in the data.

The fourth assumption of the proportional odds is tested with the ‘test of parallel lines’ and is presented in Table 4.35. As per the proportional odds assumption, there is a constant relationship between every pair of outcome groups. In other words, it assumes that the coefficients that describe the relationship between the predictors and the outcome are the same across all threshold points of the ordinal dependent variable.

**Table 4.35. Test of Parallel Lines**

<b>Model</b>	<b>-2 Log Likelihood</b>	<b>Chi-Square</b>	<b>df</b>	<b>Sig.</b>
Null Hypothesis	1166.344	403.574	115	0.606
General	762.77			

Source: Primary Survey

Link function: Logit.

Table 4.35 indicates the different models being compared - the null hypothesis Model and the general model. The general model has a much lower -2 Log Likelihood (762.77) compared to the null hypothesis model (1166.344), indicating a better fit. The Chi-Square value is 403.574 with 115 degrees of freedom is the test statistic for the difference in -2 Log Likelihood between the null hypothesis model and the general model. The p-value is 0.606, which is greater than the typical alpha level of 0.05 which shows that there is no statistically significant difference between the null hypothesis model and the general model which indicates that the proportional odds assumption holds for this model. This result suggests that the ordinal regression model with the proportional odds assumption is appropriate for the data.

#### **4.4.2. Hypothesis 1**

The study hypothesises the following:

H<sub>1</sub>: The foreign remittances sent by the husbands have a positive effect on the capabilities of left-behind Muslim women.

$H_0$ : The foreign remittances sent by the husbands do not have a positive effect on the capabilities of left-behind Muslim women.

#### 4.4.3. Hypothesis 2

$H_1$ : The capability of left-behind Muslim women is positively related to the duration of their husbands' stay overseas.

$H_0$ : The capability of left-behind Muslim women is not positively related to the duration of their husbands' stay overseas.

#### 4.4.4. Model Fitting Information of Ordinal Logistic Regression Model

Table 4.36 is used to assess the overall fit of an Ordinal logistic regression model by comparing the fit of a model with only an intercept (baseline model) to the fit of the model with predictors (final model).

**Table 4.36. Model Fitting Information**

Model	-2 Log Likelihood	Chi-Square	d.f.	Sig.
Intercept Only	1218.289			
Final	1176.17	42.12	18	0.001

Source: Primary Survey

Link function: Logit.

The model compares the intercept only model (baseline) and the final model (with predictors). The -2 Log Likelihood is a measure of model fit. Lower values indicate a better fit to the data. The Chi-Square value is 42.12 with 18 degrees of freedom.

Since the p-value (0.001) is less than the alpha level of 0.05, reject the null hypothesis that the predictors do not improve the model fit. This means that adding the predictors to the model significantly improves the fit compared to the model with only intercept. Therefore, the model with the predictors provides a significantly

better fit to the data than the model with only intercept, indicating that the predictors have a meaningful impact on the outcome variable.

#### 4.4.5 The Goodness of Fit Test of Ordinal Logistic Regression Model

The ‘goodness-of-fit test’ is used to evaluate how well the ordinal logistic regression model fits the observed data. This assessment is typically done using the Pearson Chi-Square and Deviance tests.

**Table 4.37. Ordinal Logistic Regression Model- Goodness-of-Fit**

Statistics	Chi-Square	d.f.	Sig.
Pearson	2786.068	2214	0.138
Deviance	1168.663	2214	1.000

Source: Primary Survey

Link function: Logit.

Both the Pearson Chi-Square test and the Deviance test show that the p-values are greater than the typical alpha level of 0.05. This means that the model does not show a significant lack of fit according to the Pearson Chi-Square test ( $p = 0.138$ ) and the model fits the data exceptionally well according to the Deviance test ( $p = 1.00$ ). Both the Pearson Chi-Square and Deviance tests suggest that the logistic regression model fits the data well. The high p-values; 0.138 for Pearson and 1.00 for Deviance indicate that the discrepancies between the observed and expected values are not statistically significant. Hence the model is a good fit for the data, indicating it adequately describes the relationship between the predictors and the outcome variable.

#### 4.4.6. Pseudo R-Square Statistic of Ordinal Logistic Regression Model

The Pseudo R-Square values from the ordinal logistic regression model provide an indication of how well the model explains the variability in the outcome variable.  $R^2$  in the ordinal regression model indicates the proportion of variance

explained by the model. Table 4.38 presents the pseudo  $R^2$  values from a logistic regression model, using three measures: Cox and Snell, Nagelkerke and McFadden.

**Table 4.38. Ordinal Logistic Regression Model- Pseudo R-Square**

Cox and Snell	0.262
Nagelkerke	0.277
McFadden	0.124

Source: Primary Survey

Link function: Logit.

Cox and Snell's Pseudo  $R^2$  value of 0.262 suggests that approximately 26.2 percent of the variance in the dependent variable is explained by the model indicating a reasonable fit. The Nagelkerke  $R^2$ , an adjusted version of the Cox and Snell  $R^2$  specifies a moderate fit with a value of 0.277 suggesting that the model explains about 27.7 percent of the variance in the dependent variable. While this is higher than Cox and Snell, it still indicates a moderate explanatory power of the model. McFadden's pseudo  $R^2$  is based on the likelihood function. While lower than the other two, a value of 0.124 means the model explains 12.4 percent of the variance, which is modest but not unusual for logistic regression models. McFadden's  $R^2$  is the most widely used measure of the proportion of variance explained by the model in Ordinal Logistic Regression.

#### 4.4.7. Parameter Estimates of Ordinal Logistic Regression Model

The parameter estimates provide information about the effect of each predictor variable on the log odds of the ordinal outcome variable. These values represent the estimated coefficients for each category or level of the variables in the model. As the variables have different distinct scales, it is desirable to normalise each variable before fitting the Ordinal Logistic Regression Model. In essence, normalizing a variable means giving it a mean value of 0 and a standard deviation of 1 (Lee,2019). Hence every variable is transformed to align with the same scale. Hence the variables are normalized in this study, which made the interpretation very easy.

The parameter estimates of the variables of the Ordinal Logistic Regression model are given in Table 4.39

**Table 4.39. Parameter Estimates of Ordinal Logistic Regression Model**

Parameters (Z score)		Estimate	Std. Error	Odds ratio	df	Sig.
WCI Score	20-30	-5.392	1.116		1	0.000
	30-40	3.894	0.995		1	0.000
	40-50	1.545	0.961		1	0.108
	50-60	0.073	0.958		1	0.939
	60-70	1.775	0.963		1	0.055
	70-80	5.933	1.381		1	0.000
Husbands' Migrants Duration		0.088	0.158	1.292	1	0.157
Foreign Remittances		0.555	0.129	1.741	1	0.002
Age of the Respondents		-0.075	0.089	1.078	1	0.398
Remittance Duration:	Monthly	0.482	0.271	1.619	1	0.004
	Quarterly	0.256	0.509	1.292	1	0.718
	No pattern Ref.	0	.		0	.
Whom the Money Sent: Respondents		0.869	0.406	1.985	1	0.032

	Parents		-0.102	0.411	0.903	1	0.203
	Others	Ref.	0			0	.
Education:	Primary/Secondary		0.329	0.416	1.190	1	0.428
	Higher Secondary		0.06	0.348	1.062	1	0.862
	Graduation		0.373	0.315	1.252	1	0.035
	Post Graduation or Above	Ref.	0	.		0	.
Occupation:	Salaried		-1.248	0.611	0.287	1	0.041
	Self-employed		-0.746	0.656	0.474	1	0.255
	Unemployed	Ref.	0				
Husbands' Occupation:	Professionally Employed		0.495	0.292	1.240	1	0.009
	Salaried		-0.418	0.216	0.658	1	0.143
	Self-employed	Ref.	0	.		0	.
Family Type:	Nuclear Family		0.647	0.227	1.910	1	0.004
	Joint Family	Ref.	0	.		0	.

Source: Primary Survey      Link function: Logit.

Table 4.39 depicts the Ordered Logistic Regression coefficients of the effects of migration duration, foreign remittances and other factors on the capability of left-behind women. Parameter estimates indicate whether the independent variables of men's migration duration, foreign remittances from abroad and other factors have a significant impact on the dependent variable - Women's Capability Index (WCI). The sign of the parameter is interpreted with linear regression. A positive sign is associated with an increased likelihood of a case falling into a higher category that is, with a higher impact of the predictors on the outcome variables and a negative sign is associated with an increased likelihood of a case falling into a lower category that is, with the lower or negative impact of the independent variables on the outcome variables. In this model factors like the duration of remittances, to whom the remittances are sent and the respondents' education, occupation, husbands' occupation and family type are added as other factors in the relationship between the dependent and independent variables.

The WCI Score ranges represent the thresholds, which show the cut-off points between categories of the dependent variable of the WCI score. They are not directly interpretable in terms of the predictors but indicate where the cut-offs are in the latent variable scale. The WCI score 20-30 is negative and highly significant, indicating a significant cut-off point between WCI score ranges, whereas the WCI score 30-40 is positive and statistically significant. The WCI score ranges 40-50 and 50-60 are positive and not statistically significant. The WCI score of 60-70 is positive but marginally significant and the WCI score of 70-80 is also positive and highly statistically significant. These estimates represent the log odds of being in a higher category of the dependent variable (WCI score) for a one-unit increase in the predictors.

The predictor estimates represent the log odds of being in a higher or lower category of the dependent variable of the WCI score for a one-unit increase in the predictor. The husbands' 'migration duration' has an estimate of 0.088 but with an insignificant p-value of 0.157 ( $p > 0.05$ ) indicating that the husbands' migrant duration does not have a statistically significant effect on the WCI score. Another

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major predictor is 'foreign remittances' sent to the left-behind women by their husbands from abroad. The foreign remittances have an estimate of 0.555 with a significant p-value of 0.002 ( $p < 0.05$ ) implying that foreign remittances have a positive statistically significant effect on the WCI score indicating that with the increase in the foreign remittances sent by their husbands, the capability of left-behind women also increases. This supports the study findings of Hassan & Jebin (2019).

The parameter estimate of the age of the respondents shows that with a coefficient of -0.075 and an insignificant p-value, the ages of the respondents do not have a statistically significant effect on the women's capability. The parameter estimates of 'the remittances duration' show that when the remittances are sent by the respondents' husbands monthly, with a parameter estimate of 0.482 and a significant p-value ( $p < 0.05$ ) there is a statistically significant impact on the Women's Capability Index whereas if the remittances are sent quarterly, with a parameter estimate of 0.256 and an insignificant p-value, do not affect the capability of women. The duration of remittances without a pattern is taken as the reference category.

The parameter estimate of the predictor 'to whom the remittances are sent' shows that when the remittances are received by the respondents on their behalf from their husbands abroad, with an estimate of 0.869 and a significant p-value of 0.032 ( $p < 0.05$ ) there is a statistically significant impact on the Women's Capability Index whereas if the remittances are received on behalf of their parents, with a parameter estimate of -0.102 and an insignificant p-value  $p = 0.203$  ( $p > 0.05$ ), the remittances received on behalf of the parents do not affect the capability of the left-behind women under study. The remittances from abroad received by others are taken as the reference category.

The parameter estimates of education categories show that the parameter estimates of 0.373 for the graduation level of education and a significant p-value ( $p < 0.05$ ) specifies a statistically significant effect on the women's capability score

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representing that the graduated women have added capabilities. The parameter estimates of 0.329 for primary/secondary education and 0.06 for the higher Secondary education level with an insignificant p-value imply that these categories do not significantly affect the WCI score compared to postgraduate education. Likewise, the parameter estimates of occupation categories of the respondents show that salaried (-1.248) and self-employed (-0.746) categories have negative estimates that are not statistically significant and hence do not significantly affect the WCI score compared to the unemployed group of the respondents. The work participation rate among the left-behind women, surveyed is about 10 percent which is very low and supports the Census 2011 report that the female work participation rate in Malappuram district is 7.6 percent which is the lowest in the state (Census, 2011). Hence the employment categories of the respondents do not affect their capabilities.

The parameter estimates of the occupation categories of husbands show that the salaried employed category has a negative parameter estimate of -0.418 and a statistically significant p-value ( $p < 0.05$ ) which indicates that there is a negative statistically significant effect of the salaried employee category of the respondents' husbands on their WCI score of the respondents compared to self-employed category whereas with a parameter estimate of 0.495 and a significant p-value ( $p < 0.05$ ) indicates that the professionally employed category of respondents' husbands have positive statistically significant effects on the women's capability compared to self-employed category. The parameter estimates of family type (nuclear family vs. joint family) shows that with an estimate of 0.647 and p-value of 0.004 living in a nuclear family positively affects the WCI score compared to living in a joint family indicating that the respondents staying in the nuclear families have added capability score than staying in joint families. This supports the research findings of Matz & Mbaye (2022) & Hass & Rooij (2010).

In Ordinal Logistic Regression, the odds ratio (OR) quantifies the change in the odds of being in a higher category of the dependent variable for a one-unit increase in the predictor variable. The monthly remittances from abroad have an odds ratio of 1.741 indicating that a one-unit increase in the monthly remittances

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from abroad is associated with a 74.1 percent increase in the odds of being in a higher category of the capability of women.

The husbands' monthly remittance duration has an odd ratio of 1.619 indicating a one-unit increase in the migrants' monthly remittance duration is associated with a 61.9 percent increase in the odds of being in a higher category of the capability of women. Likewise, if the husbands are sending the remittance to the respondents, with an odds ratio of 1.985, it implies that a one-unit increase in the chance of sending remittances on behalf of the respondents is associated with a 98.5 percent increase in the odds of being in a higher category of the capability of women. An odds ratio of 1.240 for the professionally employed category of respondents' husbands indicates a 24 percent increase in the odds of being in a higher category of the capability of women and the family type with an odds ratio of 1.910 indicates staying in nuclear families follows 91 percent increase in the odds of being in a higher category of the capability of women.

To conclude, among the predictors, remittances sent on behalf of the respondents, monthly duration of remittances, the husbands' professional employment, and living in a nuclear family have statistically significant positive effects on the WCI score indicating that when the possibility of these variables increases the capability of women also improves. In contrast, the age of the respondents, remittances sent on behalf of the respondent's parents and respondents' occupation categories have statistically insignificant negative effects on the WCI score. In contrast, the husbands' salaried occupation has statistically significant negative effects on the WCI score. The positive non-significant predictors include the husbands' migrant duration, quarterly duration of remittances and education categories except 'graduation level of education'.

#### **4.4.8 Hypothesis Testing -1**

The foreign remittances have an estimate of 0.555 with a p-value of 0.002 ( $p < 0.05$ ) signifies that foreign remittances have a positive statistically significant effect on the WCI score. Hence the null hypothesis is rejected and the alternate

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hypothesis exists that the monthly remittance impacts the WCI score. Migration and remittance sent by the husbands have a positive impact on the capability expansion of the left-behind women.

#### 4.4.9 Hypothesis Testing- 2

The migration duration of husbands has an estimate of 0.088 but with a p-value of 0.157 ( $p > 0.05$ ) indicating that the migration duration does not have a statistically significant effect on the WCI score. Hence accept the null hypothesis that the duration of a husband's stay overseas does not have a positive relationship with the left-behind women's capability.

#### 4.4.10 Regression Model for the WCI

In an ordinal regression equation, the Women's Capability Index (WCI) is the dependent variable, while the migration duration and the foreign remittances are the major independent variables. The age, education and occupation of the respondents, occupation of their husbands, remittances duration and to whom the remittances are sent and family type are the factors that affect the women's capability

Let  $Y$  (Women's Capability Index) be an ordinal outcome with  $J$  categories. Then  $(Y \leq j)$  is the cumulative probability of  $Y$  less than or equal to a specific category  $j=1, j=2, \dots, j=9$ . Note that  $(Y \leq J)=1$ . The odds of being less than or equal to a particular category can be defined as

$$\frac{P(Y \leq j)}{P(Y > j)} \text{ for } j=1, j=2, \dots, j=9 \text{ since } P(Y > J)=0,$$

The logit is  $\log \frac{P(Y \leq j)}{P(Y > j)} = \text{logit}(P(Y \leq j))$ .

$$\text{logit}(P(Y \leq j)) = \beta_{j0} + \beta_{j1}X_1 + \beta_{j2}X_2 + \dots + \beta_{j9}X_9 + \varepsilon$$

where  $Y$  = Women's Capability Index (WCI) score; the score of WCI ranges from 0 to 100 where 0 indicates the lowest WCI score and 100 indicates the highest

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WCI score. WCI is the multi-dimensional, composite ordinal dependent variable.  $\beta_{j0}$  represents the intercept or constant term in the regression equation which signifies the baseline value of Y when all other predictors are absent or have a value of zero.  $\beta_{j1}, \beta_{j2}, \beta_{j3}, \dots, \beta_{j9}$  are the estimated coefficients of independent variables.

$X_1$  = migration duration,  $X_2$ = monthly foreign remittances.  $X_3$  = age and  $X_1$ ,  $X_2$ , and  $X_3$  are continuous independent variables. The categorical independent variables are;  $X_4$ = remittances duration; 1= monthly, 2=quarterly and 3= no pattern (the reference group),  $X_5$ = to whom the remittances are sent; 1=the respondents, 2= in-law parents and 3= others (the reference group),  $X_6$ = education of the respondents; 1=primary/secondary, 2= higher secondary, 3=graduation, 4=post-graduation or above (the reference group),  $X_7$ = occupation of the respondents; 1= salaried, 2=self-employed and 3= unemployed, (the reference group),  $X_8$ = husbands' occupation; 1= professionally employed, 2= salaried job and 3=self-employed (the reference group),  $X_9$ =family type; a dummy variable, 1 = nuclear family type and 0= joint family, (the reference group) and  $\beta_9$  shows the effect of being in a nuclear family on y, compared to a joint family.  $\epsilon$  represents the error term. The coefficients  $\beta_{j1}, \beta_{j2}, \beta_{j3}, \dots, \beta_{j9}$  quantify the impact of each independent variable and factors on the women's capability.

#### 4.4.11 WCI Indices Scores across Age Groups

Muslim women in Malabar, especially in the Malappuram district, have traditionally followed conventional responsibilities that were significantly influenced by Islamic beliefs and customs. In Malabar, Muslim women's access to education gradually increased, with numerous socio-religious reforms playing a major role. Economic improvements brought forth by migration to Gulf countries in the 1970s had an impact on the roles of women and family arrangements.

Better living conditions, access to healthcare and education for women were made possible by remittances. With the increase in migration and remittance in Malappuram district, Muslim women have become modest people and have the

highest socio-economic mobility (Khan, 2014). The women's capability indices are compared across the younger and older age groups in Table 4.40.

**Table 4.40. Women's Capability Indices Scores across Age Groups- Kruskal-Wallis Test**

WCI Indicators	Age category	Number of Respondents	Mean Rank
QoLCI	20-40	289	211.00
	40-60	134	214.15
EICI	20-40	289	224.48
	40-60	134	185.07
DMCI	20-40	289	202.87
	40-60	134	231.68
CoHRCI	20-40	289	197.72
	40-60	134	242.79
PCI	20-40	289	202.11
	40-60	134	233.33
MFCI	20-40	289	219.11
	40-60	134	196.66

Source: Primary Survey

Table 4.40 displays the result of the Kruskal-Wallis Test for the differences in the WCI (Women's Capability Index) indicators for two age categories; 20-40 and 40-60. The younger respondents; 20-40 have a significantly higher mean rank for the indices of EICI and MFCI indicating that in the study area with the increase in educational institutions, the girls have more access to higher education which increases their mobility freedom. The mean ranking of QoLCI, DMCI, CoHRCI and PCI is higher in the case of the age category 40-60 indicating that the transition in the perception of Muslim left-behind women in the utilization of opportunities and freedom created by migration and remittances of husbands started since some years

back. Hence it is concluded that in the absence of the husband, the left-behind women in the older group exhibit greater improvements in their capabilities of quality of living, decision-making, control over household resources and participation in the political social and economic spheres compared to those in the younger generation. The study findings correspond to the findings of Das & Prasad (2023).

**Table 4.41. Test Statistics-Kruskal Wallis Test**

<b>Women's Capability Indices</b>	<b>Chi-Square</b>	<b>d.f.</b>	<b>Asymp. Sig.</b>
QoLCI	0.063	1	0.802
EICI	9.628	1	0.002
DMCI	5.139	1	0.023
CoHRCI	12.588	1	0.000
PCI	6.136	1	0.013
MFCI	3.353	1	0.067

Source: Primary Survey

Grouping Variable: Age category

Table 4.41 indicates whether there are statistically significant differences in the Women's capability indices between the two age categories; 20-40 and 40-60. The p-values of EICI, DMCI, CoHRCI and PCI are much less than 0.05, indicating a strong statistically significant difference in the mean ranking of these indicators between the two age categories whereas the p-value is greater than the typical significance level of 0.05 in the case of QoLCI and MFCI indicating statistically insignificant difference in the mean ranking of these indicators between the two age categories. So it is concluded that the migration of husbands and consequent factors impact the older age group more than younger age groups.

#### **4.4.12 Women's Capability Indices Scores across Taluks**

The Women's Capability Indices scores across Taluks are examined and the results of an ANOVA test for comparing means across different taluks are given in Table 4.42.

**Table 4.42. Women's Capability Index Scores across Taluks - ANOVA**

<b>Index</b>	<b>Taluks</b>	<b>Number of Respondents</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
	Eranad	78	57.10	9.782	32.47	84.92
	Nilambur	50	57.72	9.739	29.7	80.63
	Perinthalmanna	64	56.33	11.183	31.78	79.1
WCI	Tirur	112	61.02	9.783	37.27	79
	Tirurangadi	76	59.45	10.517	28.58	73.17
	Ponnani	43	54.39	8.041	45.02	77.88
	Total	423	58.24	10.152	28.58	84.92
<b>Test of Homogeneity of Variances</b>		<b>Levene Statistic</b>		<b>d.f.1</b>	<b>d.f.2</b>	<b>Sig.</b>
		2.284		5	417	0.042

Source: Primary Survey

The mean score of the WCI score measured across taluks shows that the men ranking of Tirur and Trurangadi taluks are the highest indicating the respondents from these taluks have more Capability scores whereas the mean value of Ponnani is low compared to other taluks implying that the women's capability score is comparatively low in the taluk. The Std. Deviation measures the dispersion or spread of the data around the mean within each taluk. The maximum WCI mean score is noted in Eranad taluk at 84.92 and the minimum in Tirurangadi at 28.58. Levene's test is used to assess whether there are statistically significant differences in the WCI mean score among the taluks. The p-value of 0.042 suggests that there is statistically significant evidence to reject the null hypothesis of equal variances across the taluks. In other words, the variances of the WCI score being measured are not the same across all taluks and there are significant differences in the WCI scores across taluks.

Table 4.43 summarizes the results of the test to assess whether there are statistically significant differences in the mean values of WCI Score between taluks.

**Table 4.43. WCI Score - The ANOVA Table**

ANOVA					
WCI Score	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	1960.403	5	392.081	3.937	
Within Groups	41529.958	417	99.592		0.002
Total	43490.361	422			

Source: Primary Survey

Table 4.43 indicates the sum of squares between groups which measures the variability or spread in WCI scores between different taluks and within groups which measures the variability within each taluk. The mean square represents the average variability after accounting for individual differences. The F-ratio is the test statistic for ANOVA; 3.937 and the p-value associated with the F-ratio is 0.002, which is less than the typical significance level of 0.05 indicating that there is a significant amount of variability in WCI scores between the taluks and within each taluk. So there are significant differences in mean WCI scores between the taluks. The results of a post hoc test, specifically Tukey's Honestly Significant Difference (HSD) test to determine which means among a set of groups are significantly different from each other. The specific context here is the Women's Capability Index (WCI) score for different taluks.

**Table 4.44. WCI Score - Tukey B**

Taluk	Number of Respondents	Subset for alpha = 0.05	
		1	2
Ponnani	43	54.3919	
Perinthalmanna	64	56.331	56.331
Eranad	78	57.1	57.1
Nilambur	50	57.7206	57.7206
Tirurangadi	76		59.4507
Tirur	112		61.0177

Source: Primary Survey

Table 4.44 indicates that the taluks that appear in the same subset have significantly different WCI scores. The Ponnani and Perinthalmanna taluks are in subset 1, indicating their WCI scores are similar and not significantly different at the 0.05 level. Taluks appearing in subsets 1 and 2; Perinthalmanna, Eranad, Nilambur and Tirurangadi have WCI scores that are not significantly different from other taluks in those subsets.

The taluks that do not appear in the same subset have significantly different WCI scores; Ponnani and Tirur do not appear in the same subset, indicating a significant difference in their WCI scores. The WCI scores can be ranked in ascending order: Ponnani (54.3919), Perinthalmanna (56.331), Eranad (57.1), Nilambur (57.7206), Tirurangadi (59.4507) and Tirur (61.0177). Taluks with overlapping subsets have similar WCI scores, while those in different subsets have significantly different scores. Hence there are significant differences in the WCI scores across the taluks and the Muslim left-behind women in Ponnani have the lowest average WCI score, while those in Tirur have the highest average WCI score.

#### **4.5 Conclusion**

The circumstances experienced by the left-behind women due to the migration of their husbands will alter their living conditions. When the women utilise the opportunities positively, they can expand their capabilities to address the negative impacts of male out-migration and ensure that women can benefit from the opportunities that male out-migration offers. The socio-economic characteristics of women offer a unique potential to explore the effects of men's international emigration on gender roles, family dynamics and aspects of women's empowerment.

To analyse the impact of migration on left-behind women, the Women Capability Index was constructed by selecting those indicators and sub-dimensions of left-behind women that would be influenced by the migration of husbands and consequent changes in their living situations. The Women Capability Index satisfied content, construct and reliability criteria and is hence reliable for further analysis. The ordinal logistic regression was used to identify the role of migration in the

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capability expansion of left-behind Muslim women in the study area. It is concluded that the capability of the women who are left-behind has increased due to the remittances of the male migrants, ensuring their access to the resources, decision-making authority and quality of living conditions required to support themselves and their families. The professional qualification of the husband could produce substantial benefits to left-behind women and their households. The increasing foreign remittances and control over household financial assets would help left-behind wives to become more financially independent and able to support themselves and their families in a better way. Increased participation of left-behind wives in social networks, local politics, economic ventures, household management and the freedom of mobility also increases with migration and consequent factors.

After analysing the socio-economic profile of the respondents and the migration patterns of their husbands, this chapter focuses on constructing the Women's Capability Index, based on selected variables that reflect the capabilities of left-behind Muslim women in the study area. The role of migration in expanding these women's capabilities is also examined. In the next chapter, the study will assess the overall factors that contribute to the capability expansion of left-behind Muslim women, including the influence of migration and related factors.

## **Chapter 5**

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# **Factors Contributing to the Capability Expansion of Left-behind Muslim Women**



### **5.1 Introduction**

The present chapter assesses the factors contributing to the capability expansion of left-behind Muslim women in the study area by identifying the factors based on the research context, research reviews and pilot survey experiences. Accordingly, 9 factors with 40 sub-dimensions were identified and by using Crocbanch's Alpha the reliability of the factors was tested.

Exploratory Factor Analysis with Principal Component Analysis was used to analyse and reduce the number of variables by highlighting the principal components. Since the Principal Component Analysis does not take into account the dependent variable of the Women's Capability Index, the association of the factors with the indices of WCI was analysed by using the Chi-Square test, Mann-Whitney Test, Kruskal Wallis Test, Spearman's rho, ANOVA and MANCOVA.

The analysis of the factors contributing to the capability of left-behind women is detailed in three sections.

### **5.2. Factors Contributing to the Capability of Left-behind Muslim Women**

### **5.3. Exploratory Factor Analysis of the Factors of the Women's Capability**

### **5.4. Association of the Factors with the Indices of WCI**

### **5.2 Factors Contributing to the Capability of Left-behind Muslim Women**

The factors contributing to the capability expansion of left-behind Muslim women in the study area include health conditions, education conditions, availability of social infrastructure, political and religious conditions, possession of consumer durables, conversion factors, financial stability, living arrangements and migration of husbands and supports. Considering the reviews of previous literature and research environment, the sub-dimensions of each factor were identified and the number of sub-dimensions ranges from 2 to 8. The sub-dimensions of education condition are education level and pursuance of higher education after marriage and the sub-dimensions of availability of social infrastructure are recreation facilities, public health, transport and communication system, public education and banking. The descriptive statistics of the factors with sub-dimensions that contribute to the capability expansion of left-behind Muslim women are given in Table 5.1.

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**Table 5.1 Summary Statistics of Factors Contributing to the Capability of Left-behind Women**

S No.	Factors with Sub-dimensions	Mean	Std. Deviation	Minimum	Maximum	Cronbach's Alpha
I	<b>Health Conditions</b>					
1	Frequent Health Checkup	3.99	0.92	1	5	0.702
2	Immediate Treatment when sick	4.2	0.88	1	5	
3	Sufficient Finance for Treatment	4.15	0.81	1	5	
4	Consulting in Super Specialty Hospital	3.3	1.1	1	5	
II	<b>Education Conditions</b>					
5	Education Level	2.18	1.09	1	4	0.700
6	Pursuance of Higher Education after Marriage	3.18	1.39	1	5	
III	<b>Availability of Social Infrastructure</b>					
7	Recreation Facilities	3.84	0.83	1	5	0.848
8	Public Health	3.91	0.87	1	5	
9	Transport and Communication System	4.18	0.75	1	5	
10	Public Education	4.13	0.89	1	5	
11	Banking	4.18	0.73	1	5	
IV	<b>Political and Religious Conditions</b>					
12	Caste Vote	4.43	0.98	1	5	0.779
13	Contest Election	3.0	1.33	1	5	
14	Political Administrative Leadership	2.88	1.21	1	5	

15	Practice Religion without Restraints	4.03	1.09	1	5	
<b>V</b>	<b>Possession of Consumer Durables</b>					
16	Motor Car/ Scooter	3.96	1.21	1	5	
17	Mobile Phone	4.66	0.90	1	5	
18	Computer	3.32	2.13	1	5	
19	AC	3.71	1.46	1	5	0.827
20	Inverter	3.14	1.57	1	5	
21	Washing Machine	4.38	0.83	1	5	
22	Refrigerator	4.42	0.92	1	5	
23	LPG/Electric Stove	4.57	0.72	1	5	
<b>VI</b>	<b>Conversion Factors</b>					
24	Health Level	1.34	0.50	1	3	
25	Education Level	1.69	0.61	1	3	
26	Occupation Level	2.23	0.71	1	3	0.773
27	Financial Level	1.74	0.65	1	3	
28	Living Situation	1.51	0.59	1	3	
<b>VII</b>	<b>Financial Stability</b>					
29	Saving Balance	1.62	0.98	1	5	
30	Property Possession	1.72	1.22	1	4	
31	Monthly Income	2.87	1.26	1	6	0.031
32	Bank Account	1.46	1.07	1	6	

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<b>VIII</b>	<b>Living Arrangements</b>					
33	Family Type	1.33	0.47	1	2	
34	Nature of Relationship with In-laws	1.41	0.58	1	3	0.583
35	Family Headship	2.71	1.30	1	5	
<b>IX</b>	<b>Husbands' Migration and Support</b>					
36	Increased Responsibility	3.35	2.04	1	5	
37	Mobility Decisions	4.01	2.05	1	5	
38	Self-reliance and Autonomy	3.68	2.11	1	5	0.870
39	Household Management	4.13	1.83	1	5	
40	Improvement in Financial status and Freedom	4.28	1.23	1	5	

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Source: Primary Survey

Table 5.1 presents summary statistics and Cronbach's Alpha statistics for each set of factors contributing to the capability of left-behind Muslim women. Each factor is categorized into different domains such as health conditions, education conditions, availability of social infrastructure, political and religious situations, possession of consumer durables, conversion factors, financial stability, migration of husbands and support and living arrangements. The responses on health, education, availability of social infrastructure, technological factors, political and religious conditions and the migration of husbands and supports are recorded on a Likert scale with ordinal responses.

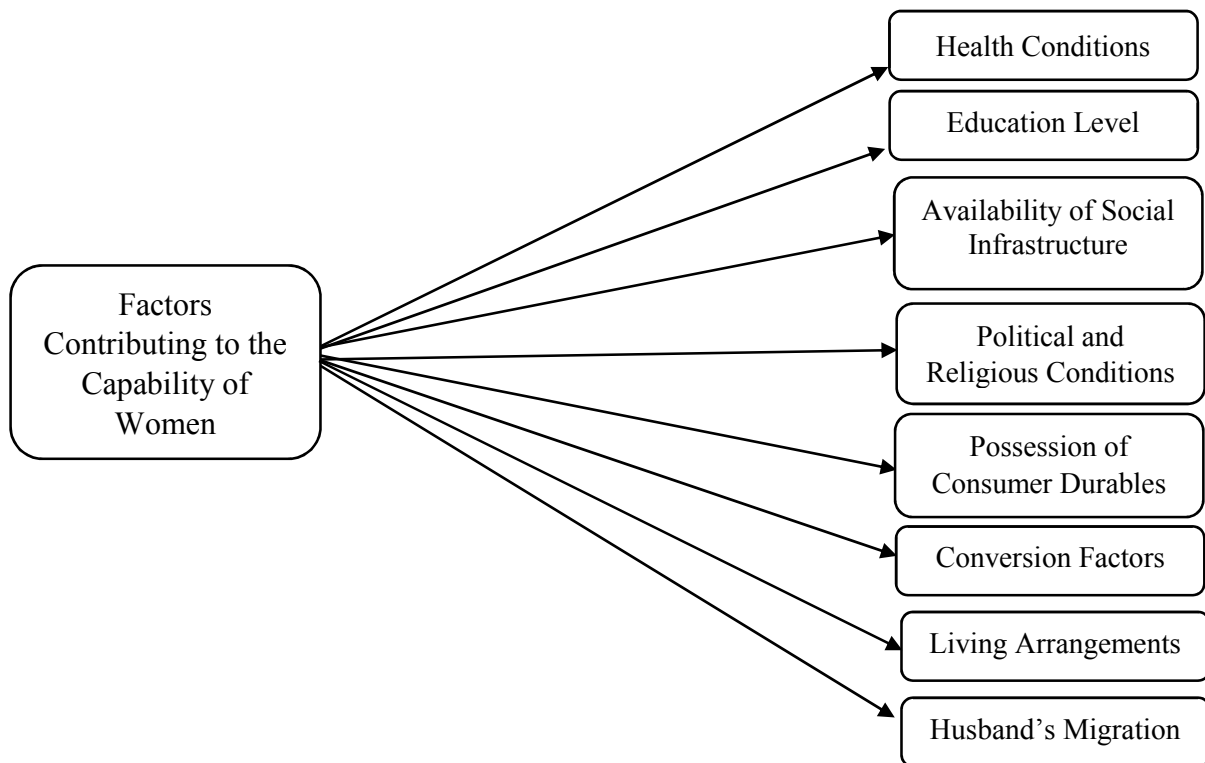
The responses on conversion factors include three responses such as good, moderate and poor. The responses on property ownership include four categories such as own, jointly with husband, jointly with other members of the household and no property, monthly remittances and bank accounts of the financial stability factor include six categories whereas monthly foreign remittances include 4 categories. The mean value of the health level of conversion factors is the lowest while the possession of mobile phones of possession of consumer durables has the highest mean score.

The standard deviation ranges from 0.61 for monthly remittances to 2.13 for possession of computer. The Cronbach's Alpha indicates the reliability of the data. The factors of husbands' migration and support have the highest Cronbach's Alpha with 0.870 and the availability of social infrastructure and possession of consumer durables also have high Cronbach's Alpha ( $\alpha > 0.8$ ). The variables of health conditions, education conditions, conversion factors and political and religious factors also have high Cronbach's Alpha ( $\alpha > 0.7$ ). However, the sub-dimensions of financial stability have a very low Cronbach's Alpha of  $\alpha = 0.031$  hence the factor is less reliable and it was not considered for further analysis. The factors of living arrangement have a moderate Cronbach's Alpha equal to 0.583, though small compared to other factors, included in the further analysis

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From the factors contributing to the capability of the left-behind Muslim women identified, after estimating Cronbach's Alpha it is observed that the sub-dimensions of financial stability have low reliability with Cronbach's Alpha equal to 0.031 and hence not included for further analysis. So, 8 factors with 36 sub-dimensions were selected for Exploratory Factor Analysis. The factors included in the Exploratory Factor Analysis are given in Figure 5.1.

**Fig 5.1. Factors Contributing to the Capability of Left-behind Women**



Source: Derived by the Researcher from Primary Survey

The factors contributing to the capability of left-behind Muslim women in the study area include health conditions, education conditions, availability of social infrastructure, political and religious conditions, possession of consumer durables, conversion factors, living arrangements and husband's migration and support. The variables of these factors have Cronbach's Alpha above 0.7 except for living arrangements (0.583). These factors are included in the Exploratory Factor Analysis.

### **5.3 Factors Contributing to the Capability Expansion of Left-behind Women- Exploratory Factor Analysis**

An Exploratory Factor Analysis was performed using a Principal Component Analysis and Varimax rotation to determine the strength of the correlation between factors contributing to left-behind women's capability. The minimum factor loading criteria was set to 0.50. The commonality of the scale, which indicates the extent of variance in each dimension was also assessed. Table 5.2 represents component loadings from a factor analysis. Component loadings represent the correlation between the variables and the components extracted from the data. The data shows that all commonalities were over 0.50. Though Principal Component Analysis does not take into account the outcome variable, it considers the variance of the independent variables.

Out of the eight factors and 36 sub-dimensions or variables Exploratory Factor Analysis identified seven components with 25 factors. Factor 1 denotes migration of husbands and foreign remittances which includes increased responsibility, self-reliance and autonomy, household management and financial status and freedom and mobility decisions. Factor 2 includes the availability of social infrastructure such as banking, transport and public education, recreation facilities and public health. Factor 3 includes education conditions such as education level and pursuance of higher education after marriage.

Factor 4 includes conversion factors such as financial level, health condition, occupation and living situation. Possession of consumer durables such as mobile phones, ACs, washing machines and LPG/Electric Stoves are included in the fifth factor. The sixth factor includes political and religious conditions such as holding administrative posts, contesting elections and practicing religion without restraints. The seventh factor is health conditions which includes proper treatment when sick and frequent health check-ups.

**Table 5.2 Component Loadings**

S No.	Factors	Components						
		1	2	3	4	5	6	7
1	Increased Responsibility	0.897						
2	Self-reliance and Autonomy	0.865						
3	Household Management	0.837						
4	Financial Status and Freedom	0.821						
5	Mobility Decisions	0.779						
6	Banking		0.832					
7	Transport and Communication System		0.816					
8	Public Education		0.745					
9	Recreation facilities		0.739					
10	Public Health		0.681					
11	Education Level			0.748				
12	Pursuance of Higher Education after Marriage			0.689				
13	Financial Level				0.741			
14	Health Condition				0.694			
15	Occupation				0.677			
16	Living Situation				0.616			
17	Mobile Phone					0.735		
18	AC					0.636		
19	Washing Machine					0.688		
20	LPG/Electric Stove					0.671		
21	Administrative Post						0.726	
22	Contest Election						0.656	
23	Practice Religion without restraints						0.613	
24	Health Check-up							0.721
25	Proper treatment when sick							0.717

Source: Primary Survey                      Extraction Method: Principal Component Analysis  
 Rotation Method: Varimax with Kaiser Normalisation

Table 5.2 presents the component loadings from the factor analysis. In the factor analysis, component loadings represent the correlations between the variables and the factors extracted from the data. Higher loadings indicate a stronger relationship between the variable and the factor. The factors such as increased responsibility with a factor loading of 0.897, self-reliance and autonomy with a factor loading of 0.865, household management with a factor loading of 0.837 and financial status and freedom with a factor loading of 0.821, banking with a factor loading of 0.832, transport and communication system with a factor loading of 0.816 have strong factor loadings suggest that these factors are the major factors (factor loading  $>0.800$ ) determining the dependent variable in the study area.

Table 5.2 also indicates that the mobility decisions with a factor loading of 0.779, public education with a factor loading of 0.745, recreation facilities with a factor loading of 0.739, education level with a factor loading of 0.748, financial level with a factor loading of 0.741, mobile phone with a factor loading of 0.735, holding administrative post with a factor loading of 0.726, proper treatment when sick with a factor loading of 0.721 and frequent health check-up with a factor loading of 0.717 also show strong loadings (factor loading  $>0.700$ ), indicating that these factors are also important factors determining the outcome factor. Table 5.2 further demonstrates that public health, health condition, pursuance of higher education after marriage, living situation, AC, washing machine and LPG / electric stove also have notable loadings on this factor, suggesting that they are also the chief determinants of the outcome variable (factor loading  $>0.600$ ).

The analysis revealed that several factors, including the political condition for free and fair elections, possession of consumer durables such as the possession of scooters, motor cars, computers and refrigerators, as well as the conversion factors of education level and health conditions, did not load in the factor pattern matrix. Consequently, eleven items were removed from further analysis, indicating that these factors lack a significant correlation with the extracted factors. Additionally, factors related to living arrangements, such as family type and relationships with in-law parents, also demonstrated no significant correlation.

### **5.3.1 KMO and Bartlett's Test for Sample Adequacy**

The KMO and Bartlett's are instrumented to find evidence of the relationship among all variables supposed to be investigated. These two tests have provided the

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standards that must be accepted before carrying out a factor or principal component analysis.

**Table 5.3 KMO and Bartlett's Test**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>	<b>0.832</b>	
	Approx. Chi-Square	6140.070
Bartlett's Test of Sphericity	d.f.	378
	Sig.	<0.001

Source: Primary Survey

Bartlett's Test of Sphericity is used to weigh the overall significance of the correlation matrix, which provides a measure of the statistical probability that the correlation matrix has significant correlations among some of its components. The results of the KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy and Bartlett's test of sphericity indicate that the data set is suitable for Principal Component Analysis. The KMO with higher values (0.832) indicates better suitability for factor analysis. A value of 0.832 suggests that the variables have a high degree of correlation, which is favourable for factor analysis. Bartlett's test of sphericity assesses whether the correlation matrix is an identity matrix. The chi-square value of 6140.070 with 378 degrees of freedom and a significance value of  $p < 0.001$  indicate that the correlation matrix is significantly different from an identity matrix, supporting the presence of correlations among variables and justifying the use of factor analysis.

### 5.3.2 Results of Factor Analysis

Table 5.4 displays the total variance explained by each component according to Principal Component Analysis which shows the initial Eigen values and sums of squared loadings for each component, along with the percentage of variance explained and cumulative percentages. The initial Eigenvalues represent the total variance explained by each factor before extraction. The factors having Eigenvalues over 1 are major components. The percentage of variance explained by each component is calculated based on the extraction sums of squared loadings. Higher Eigenvalues indicate that the factor explains more variance in the data. Accordingly, 7 components are retained having an Eigenvalue greater than 1. These components account for 67.1 percent of the total variance in the data. The cumulative percentage of variance shows the total variance explained by the components up to a certain point.

**Table 5.4 Results of Factor Analysis**

<b>S No.</b>	<b>Factors</b>	<b>Eigenvalue</b>	<b>Difference</b>	<b>Percent of Variance</b>	<b>Cumulative Percentage</b>
1	Increased Responsibility	6.892	3.801	23.797	23.8
2	Self-reliance and Autonomy	3.091	0.928	10.853	34.6
3	Household Management	2.163	0.264	9.881	44.5
4	Financial Status and Freedom	1.899	0.527	7.245	51.8
5	Mobility Decisions	1.372	0.183	6.083	57.9
6	Banking	1.189	0.066	5.006	62.9
7	Transport and Communication System	1.123	0.128	4.246	67.1
8	Public Education	0.965	0.158	3.86	71.0
9	Recreation Facilities	0.948	0.017	3.791	74.8
10	Public Health	0.767	0.181	3.068	77.8
11	Education Level	0.765	0.102	2.66	80.5
12	Pursuance of Higher education after Marriage	0.638	0.027	2.551	83
13	Financial Level	0.622	0.016	2.488	85.5
14	Health Condition	0.531	0.091	2.126	87.7
15	Occupation	0.481	0.05	1.925	89.6
16	Living Situation	0.429	0.052	1.716	91.3
17	Mobile Phone	0.356	0.073	1.426	92.7
18	AC	0.334	0.022	1.337	94.1

19	Washing Machine	0.304	0.03	1.218	95.3
20	LPG/Electric Stove	0.282	0.022	1.128	96.4
21	Administrative Post	0.268	0.014	1.07	97.5
22	Contest Election	0.231	0.037	0.923	98.4
23	Practice Religion without restraints	0.202	0.004	0.807	99.2
24	Health Check-up	0.198	0.07	0.793	99.5
25	Proper treatment when sick	0.128		0.429	100

Source: Primary Survey

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Table 5.4 exhibits that increased responsibility of women with an Eigenvalue of 6.892, self-reliance and autonomy with an eigenvalue of 3.091, household management with an Eigenvalue of 2.163, financial status and freedom with an Eigenvalue of 1.899 and mobility decision with an Eigenvalue of 1.372 accounts for more than half, that is, 51.8 percent of the variance explained which indicates that husbands' migration and utilization of the opportunities thus created are a significant and influential factor in the determination of outcome variable of women's capability.

Table 5.4 indicates that the husbands' migration and remittances and the availability of social infrastructure together account for 77.8 percent of the total variance. With the decrease in the Eigen values for other factors the relative value of variance explained by the factor is also decreasing. The difference reflects the gap in Eigenvalues between successive factors, representing how much variation in eigenvalue each new factor adds. The biggest difference is between the first and second factors signifying the first factor of increased responsibility accounts for 3.801, a large amount of variation, the second factor of self-reliance and autonomy accounts for 0.928 and the fourth factor accounts for 0.527 variations in eigenvalue.

The percent of variance shows the percentage or proportion of the total variance explained by each factor. The increased responsibility accounts for 23.8 percent of the variance showing that the largest proportion of total variance is explained by this factor, while self-reliance and autonomy account for 10.85 percent and the variance explained by the succeeding factors is decreasing. The lowest proportion of the variance is explained by the proper treatment when sick (0.43 percent).

Cumulative Percentage is the running total of the variance explained by the factors. The first five factors together explain 57.9 percent of the variance, indicating that they contribute significantly to the overall data structure. The first eleven factors together explain 80.5 percent of the variance and 16 factors together explain 91.3 percent out of 25 factors. To conclude, the most significant factors contributing to the capability of left-behind women are increased responsibility, self-reliance, autonomy and household management. Other factors, like mobility decisions and public education, also play a role, but with decreasing significance as reflected in their lower Eigenvalues and percentages.

### **5.3.3. Component Score Coefficient Matrix**

Component Score Coefficient Matrix showing the coefficients or loadings of each factor on the principal components extracted during Principal Component Analysis is given in Table 5.5.

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**Table 5.5 Component Score Coefficient Matrix**

S No.	Factors	Components						
		1	2	3	4	5	6	7
1	Increased Responsibility	0.424	0.053	0.011	0.017	0.028	0.433	0.097
2	Self-reliance and Autonomy	0.128	0.133	0.009	0.133	0.112	0.207	-0.22
3	Household Management	0.037	0.065	0.045	-0.036	0.474	0.013	0.039
4	Financial status and Freedom	0.019	0.007	0.087	0.034	0.493	0.015	-0.072
5	Mobility Decisions	0.279	0.026	0.052	0.006	-0.11	-0.148	-0.167
6	Banking	0.273	0.092	-0.005	-0.033	0.034	0.08	-0.028
7	Transport and Communication System	0.249	-0.081	-0.036	0.044	0.022	0.003	-0.159
8	Public Education	0.245	-0.029	0.011	-0.079	-0.161	-0.043	0.052
9	Recreation facilities	0.219	0.114	-0.019	0.012	0.112	0.075	0.128
10	Public Health	0.012	0.335	0.068	0.038	-0.055	0.043	0.035
11	Education Level	-0.061	0.381	0.02	0.181	0.192	0.114	-0.112
12	Pursuance of Higher education after Marriage	0.098	0.292	-0.034	-0.042	-0.029	-0.096	0.009
13	Financial Level	0.042	0.221	0.058	0.016	-0.052	0.011	-0.01
14	Health Condition	-0.004	0.351	0.441	-0.002	-0.043	-0.077	0.02
15	Occupation	0.021	-0.001	0.497	-0.012	-0.16	-0.132	-0.026
16	Living Situation	-0.018	0.036	0.144	-0.04	0.027	0.071	-0.038
17	Mobile Phone	-0.014	0.082	0.145	-0.131	0.054	0.078	0.114
18	AC	-0.03	0.02	0.01	0.473	-0.048	-0.098	-0.074
19	Washing Machine	0.005	0.057	-0.024	0.409	-0.012	-0.047	-0.015
20	LPG/Electric Stove	0.033	0.116	-0.049	0.244	0.178	0.119	0.007
21	Administrative Post	0.015	-0.053	-0.019	-0.106	-0.138	-0.045	0.414
22	Contest Election	-0.083	0.111	-0.045	0.05	0.008	0.105	0.389
23	Practice Religion without restraints	-0.048	-0.097	0.064	-0.039	0.068	-0.054	0.422
24	Health Check-up	0.044	0.11	-0.114	-0.153	0.085	0.504	0.230
25	Proper treatment when sick	0.052	-0.021	0.123	0.135	0.086	0.116	0.341

Source: Primary Survey

Table 5.5 indicates that each principal component is represented by a number 1 to 7, the factors whose Eigenvalues are greater than 1. Each value in the matrix represents the strength and direction of the relationship between a factor and the principal component. The factor increased responsibility has a high loading (0.424) on component 1 and component 6 with 0.433 factor loading, suggesting that it contributes significantly to the variance explained by components 1 and 6. Self-reliance and autonomy have a relatively strong loading on component 1 (0.128), component 2 (0.133) component 4 (0.133), component 5(0.112) and component 6 (0.207) indicating a strong relationship with these components and an inverse relation with component 7. Monthly Remittances(0.279), banking (0.273), transport (0.249), public education (0.245) and recreation facilities (0.219), have relatively high loading on component 1, indicating a strong positive relationship. All the indicators of possession of consumer durables have notable negative loading on component 1, suggesting a strong inverse relationship with the component.

All the factors of male migration and remittances have a positive relationship with components 2,5 and 6. Likewise, the factors of public health (0.335), education level (0.381), pursuance of higher education after marriage (0.292), financial level (0.221) and health condition ( 0.351) have a strong positive relationship with component 2. The factors of possession of washing machine (-0.024), LPG or electric stove (-0.019) and administration post (-0.053) also have negative loading on component 3, suggesting an inverse relationship with the component. The factors of health check-up (0.230) and proper treatment when sick (0.341) have high loading with component 7 suggesting that they contribute significantly to the variance explained by component 7. To conclude, this matrix helps in understanding how different factors contribute to the overall variance and structure of the data as captured by the principal components derived from the Principal Component Analysis.

#### **5.3.4. Correlation Matrix**

This correlation matrix showing the pairwise correlations between different variables or factors in the Principal Component Analysis (F1 to F25) is given in Table 5.6.

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Table 5.6 Correlation Matrix

Correlation Matrix																										
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	
F1	1																									
F2	<b>0.21</b>	1																								
F3	<b>0.21</b>	<b>0.77</b>	1																							
F4	<b>0.20</b>	<b>0.73</b>	<b>0.81</b>	1																						
F5	<b>0.29</b>	<b>0.73</b>	<b>0.71</b>	<b>0.66</b>	1																					
F6	0.05	<b>0.10</b>	0.13	<b>0.08</b>	<b>0.14</b>	1																				
F7	<b>0.12</b>	<b>0.22</b>	0.18	<b>0.15</b>	<b>0.24</b>	<b>0.49</b>	1																			
F8	<b>0.19</b>	<b>0.25</b>	0.23	<b>0.25</b>	<b>0.28</b>	<b>0.34</b>	<b>0.30</b>	1																		
F9	-0.02	-0.01	0.00	-0.06	0.06	<b>0.19</b>	<b>0.24</b>	<b>0.40</b>	1																	
F10	<b>-0.10</b>	-0.07	-0.07	<b>-0.10</b>	0.00	<b>0.08</b>	<b>0.14</b>	<b>0.12</b>	<b>0.71</b>	1																
F11	<b>0.18</b>	<b>0.18</b>	0.22	<b>0.17</b>	<b>0.22</b>	<b>0.27</b>	<b>0.44</b>	<b>0.67</b>	<b>0.54</b>	<b>0.36</b>	1															
F12	<b>0.13</b>	<b>0.18</b>	0.22	<b>0.12</b>	<b>0.24</b>	<b>0.51</b>	<b>0.42</b>	<b>0.19</b>	<b>0.11</b>	<b>0.09</b>	<b>0.16</b>	1														
F13	<b>0.26</b>	<b>0.22</b>	0.22	<b>0.14</b>	<b>0.28</b>	<b>0.18</b>	<b>0.16</b>	<b>0.35</b>	<b>0.21</b>	<b>0.08</b>	<b>0.33</b>	<b>0.18</b>	1													
F14	<b>0.17</b>	<b>0.13</b>	0.21	<b>0.17</b>	<b>0.13</b>	<b>0.23</b>	<b>0.14</b>	<b>0.47</b>	<b>0.18</b>	-0.06	<b>0.38</b>	<b>0.17</b>	<b>0.48</b>	1												
F15	<b>0.35</b>	<b>0.25</b>	0.23	<b>0.14</b>	<b>0.31</b>	<b>0.20</b>	<b>0.24</b>	<b>0.37</b>	<b>0.18</b>	<b>0.10</b>	<b>0.37</b>	<b>0.16</b>	<b>0.59</b>	<b>0.43</b>	1											
F16	<b>0.32</b>	<b>0.14</b>	0.24	<b>0.16</b>	<b>0.22</b>	<b>0.21</b>	<b>0.21</b>	<b>0.38</b>	<b>0.10</b>	-0.06	<b>0.35</b>	<b>0.21</b>	<b>0.45</b>	<b>0.58</b>	<b>0.57</b>	1										
F17	<b>0.25</b>	<b>0.22</b>	0.33	<b>0.28</b>	<b>0.26</b>	<b>0.18</b>	<b>0.21</b>	<b>0.38</b>	<b>0.12</b>	0.01	<b>0.42</b>	<b>0.20</b>	<b>0.39</b>	<b>0.62</b>	<b>0.55</b>	<b>0.69</b>	1									
F18	-0.04	-0.06	-0.12	-0.01	<b>-0.10</b>	<b>-0.24</b>	<b>-0.13</b>	<b>-0.27</b>	<b>-0.15</b>	-0.03	<b>-0.15</b>	<b>-0.12</b>	<b>-0.27</b>	<b>-0.24</b>	<b>-0.16</b>	<b>-0.09</b>	<b>-0.11</b>	1								
F19	<b>0.11</b>	<b>0.15</b>	0.03	0.04	<b>0.10</b>	-0.04	-0.02	<b>-0.23</b>	<b>-0.18</b>	<b>-0.10</b>	<b>-0.25</b>	-0.05	<b>-0.20</b>	<b>-0.37</b>	<b>-0.09</b>	-0.06	<b>-0.07</b>	<b>0.37</b>	1							
F20	<b>-0.13</b>	-0.02	-0.05	-0.05	-0.06	-0.03	0.03	<b>-0.21</b>	<b>-0.16</b>	<b>-0.22</b>	<b>-0.20</b>	0.03	<b>-0.31</b>	<b>-0.26</b>	<b>-0.33</b>	<b>-0.18</b>	<b>-0.21</b>	<b>0.25</b>	<b>0.48</b>	1						
F21	<b>-0.24</b>	<b>-0.19</b>	<b>-0.20</b>	<b>-0.18</b>	<b>-0.30</b>	<b>-0.15</b>	<b>-0.17</b>	<b>-0.32</b>	<b>-0.20</b>	<b>-0.09</b>	<b>-0.31</b>	<b>-0.16</b>	<b>-0.47</b>	<b>-0.34</b>	<b>-0.53</b>	<b>-0.23</b>	<b>-0.34</b>	<b>0.48</b>	<b>0.35</b>	<b>0.50</b>	1					
F22	<b>-0.26</b>	<b>-0.26</b>	<b>-0.28</b>	<b>-0.25</b>	<b>-0.31</b>	<b>-0.17</b>	<b>-0.27</b>	<b>-0.31</b>	<b>-0.22</b>	<b>-0.14</b>	<b>-0.37</b>	<b>-0.16</b>	<b>-0.40</b>	<b>-0.30</b>	<b>-0.46</b>	<b>-0.36</b>	<b>-0.40</b>	<b>0.39</b>	<b>0.24</b>	<b>0.41</b>	<b>0.60</b>	1				
F23	<b>-0.19</b>	<b>-0.21</b>	<b>-0.17</b>	<b>-0.20</b>	<b>-0.25</b>	<b>-0.07</b>	-0.05	0.05	0.02	0.03	<b>0.11</b>	-0.06	0.06	<b>0.26</b>	0.01	<b>0.08</b>	<b>0.18</b>	-0.02	<b>-0.44</b>	<b>-0.36</b>	-0.07	<b>-0.09</b>	1			
F24	-0.01	-0.01	0.02	0.01	0.02	<b>0.17</b>	0.02	<b>0.37</b>	<b>0.20</b>	<b>0.26</b>	<b>0.30</b>	<b>0.11</b>	<b>0.25</b>	<b>0.37</b>	<b>0.32</b>	<b>0.27</b>	<b>0.36</b>	<b>-0.14</b>	<b>-0.40</b>	<b>-0.49</b>	<b>-0.32</b>	<b>-0.33</b>	<b>0.55</b>	1		
F25	0.01	<b>0.09</b>	0.06	0.05	<b>0.14</b>	<b>0.10</b>	<b>0.21</b>	<b>0.23</b>	<b>0.30</b>	<b>0.28</b>	<b>0.30</b>	0.00	<b>0.16</b>	<b>0.02</b>	<b>0.14</b>	<b>0.17</b>	<b>0.12</b>	-0.04	0.06	<b>-0.12</b>	-0.03	<b>-0.18</b>	0.04	<b>0.15</b>	1	

Source: Primary Survey

Note: Bold indicates significance at the 5 percent level

Correlation matrices indicate the relationships between variables in a dataset. They can help to identify patterns, dependencies and potential multicollinearity issues in statistical analysis. Each cell in the correlation matrix in Table 5.6 contains the correlation coefficient between two variables. The correlation coefficient ranges from -1 to 1. A correlation coefficient of 1 indicates a perfect positive correlation, meaning when one variable increases, the other variable also increases linearly. A correlation of -1 indicates a perfect negative correlation, meaning when one variable increases, the other variable decreases linearly. A correlation of 0 indicates no linear relationship between the variables.

The correlation between F1 with F2 and F3 is 0.21, indicating a low positive statistically significant correlation between these two variables. The correlation between F3 with F4 and F5 is 0.81 and 0.71 respectively, indicating a high positive statistically significant correlation between these two variables. The correlation between F11 with F8 is 0.67 and F9 is 0.54, indicating a moderate positive correlation. The correlation between F23 and F24 is 0.55, indicating a moderate positive correlation. Hence the correlation between most of the variables is positive and statistically significant indicating that the factors considered contributing to the capability expansion of left-behind Muslim women in the study have a positive statistically significant association.

Since the Exploratory Factor Analysis, applied to assess the factors contributing to the capability expansion of left-behind Muslim women, does not take into account the dependent variable of the Women's Capability Index, the association of all the factors with the dependent variable is analysed in the following section.

#### **5.4 The Association of the Factors with the Indices of WCI**

This section details the association of factors with the WCI indices using various statistical tools such as Spearman's rho, Kendall's tau-b, Kruskal Wallis Test, ANOVA, MANCOVA, etc.

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### 5.4.1.1 Association between Health Conditions and WCI

Health is an important factor influencing a person's physical and mental well-being. As one of the essential aspects of human well-being, health is typically regarded as one of the dimensions that satisfy certain fundamental and critical functioning up to a particular level (Sen, 1992). Remittances sent by male migrants from abroad are used to sustain better health outcomes for women left-behind (Lei & Sonalde, 2021). Health status depends on lifestyle choices, health care and periodic check-ups. The respondents are asked to rate the arrangements made for the upkeep of their health condition on a Likert scale such as frequent health checkups, immediate availability of treatment when they are sick, having sufficient finances for maintaining health and consulting doctors in super specialty hospitals. An Index of Health (HI) for each respondent was estimated by finding the mean score of the health condition variables and standardizing the score and the descriptive statistics of the Health Index are given in Table 5.7.

**Table 5.7 Descriptive Statistics of Health Index**

Health Index Score	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
0-20	4	0.94	0.94	Mean	68.03
20-40	17	4.02	4.96	Median	68.75
40-60	109	25.77	30.73	Mode	68.75
60-80	179	42.32	73.05	Std. Deviation	17.222
80-100	114	26.95	100	Minimum	0.00
Total	423	100		Maximum	100.00
<b>Kolmogorov-Smirnov</b>					
Statistic	d.f.	Sig.	Statistic	d.f.	Sig.
0.109	422	0.000	0.974	423	0.000

Source: Primary Survey

Table 5.7 displays the frequency distribution of respondents across different Health Index scores, from 0 to 100. About 26 percent of the respondents have a

Health Index score below 60 (HI<60) and 27 percent of them have an HI above 80 (HI>80). The average Health Index score across all respondents is 68.03. The median and mode Health Index score is 68.75. The standard deviation is 17.222, indicating variability in the Health Index scores. The range, which is the difference between the maximum and minimum scores, is 100 which means the Health Index scores range from 0 to 100 among the respondents. The Kolmogorov-Smirnov and Shapiro-Wilk tests of normality for the Health Index Score with p-value ( $P < 0.001$ ) indicate that the data significantly deviates from a normal distribution. Since HI scores are not normally distributed to assess the association between the WCI score (dependent variable) and HI score (independent variable) of the respondents, non-parametric tests of Kendall's Tau-b and Spearman's Rank Correlation are used.

**Table 5.8 Rank Correlation between WCI and HI**

Kendall's Tau-b		Spearman's rho		N
Correlation Coefficient	Sig. (2-tailed)	Correlation Coefficient	Sig. (2-tailed)	
0.162**	0.000	0.221**	0.000	423

Source: Primary Survey

The value of Kendall's Tau-b correlation coefficient is 0.162, which indicates a weak positive association between the WCI score and the HI score. The correlation coefficient is statistically significant,  $p < 0.001$ . Spearman's rho also shows a positive weak correlation between the variables, with a coefficient of 0.22. The p-value of 0.000 reinforces that this correlation is statistically significant, similar to Kendall's tau-b. Hence there is a positive statistically significant association between the health conditions and the capabilities of the respondents indicating that health conditions are one of the determinants of the capability of left-behind women.

#### **5.4.1.2. Distribution based on Expected Life Span**

An estimate of the expected life span of the respondents was recorded, based on their family history, dietary habits, standard of life and state of health and the descriptive statistics of expected life span are given in Table 5.9.



**Table 5.9 Distribution based on Expected Life Span**

Age	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
25-50	12	2.8	2.8	Mean	79.43
50-75	117	27.6	30.5	Median	87.5
75-100	288	68.0	98.6	Mode	87.5
100-125	7	1.6	100	Std. Deviation	14.3584
Total	423	100		Variance	206.164

Source: Primary Survey

Table 5.9 demonstrates that 68 percent of the respondents' expected life span is between 75 years to 100 years considering their diets, way of lifestyles, family background and current physical condition and 1.6 percent of the respondents expect their life span above 100 years. About 31 percent of the respondents expect their life span below 75 years. The average expected age according to the survey response was 79.43 years. The Median and Mode of the expected age of the respondents is 87.5 years and Std. Deviation is 14.36. Hence the left-behind Muslim women expect a high life span considering their diets, way of lifestyles, family background and current physical condition.

#### 5.4.1.3. Association Between Frequent Health Check-ups and Life Expectancy

The association between the frequent health check-ups and the expected life expectancy of the respondents was analysed and given in Table .5.10

**Table 5.10 Association Between Frequent Health Check-ups and Life Expectancy**

Frequent Health Checkup	Life Expectancy				
	25-50	50-75	75-100	100-125	Total
Strongly Disagree	0	2 (0.5)	4 (0.9)	0	6 (1.4)
Disagree	0	7 (1.7)	15 (3.6)	1 (0.2)	23 (5.4)
Neither Agree nor Disagree	2 (0.5)	20 (4.7)	54 (12.8)	0	76 (18.0)
Agree	10 (2.4)	101 (23.9)	69 (16.3)	3 (0.7)	183 (43.3)
Strongly Agree	7 (1.7)	58 (13.7)	67 (15.8)	3 (0.7)	135 (31.9)
Total	19 (4.5)	188 (44.4)	209 (49.4)	7 (1.7)	423 (100)
<b>Chi-Square Test Results</b>	Chi-Square =30.476 d.f.=12 p= 0.002 Crammer's V= .155 p= 0.002				

Source: Primary Survey Percentage is given in brackets

Table 5.10 presents data on the distribution of the respondents' health check-ups and their corresponding expected life span. The data shows that those respondents who strongly agree about having frequent health check-ups (15.8 percent) have an expected life span of 75-100 years, 0.7 percent of the respondents have an expected life span of 100-125 years and so on. The Chi-Square test was applied to examine the association between the frequency of health check-ups and expected life expectancy.

It is hypothesized that women who are taking frequent health check-ups have a high life expectancy. The test statistics show that the Chi-Square Value is (d.f.,12) 30.476 with p-value (p) = 0.002 indicating a statistically significant relationship between the frequency of health check-ups and expected life expectancy. Cramer's V value is 0.155, which suggests a weak to moderate association between the frequency of health check-ups and expected life span with a p-value of 0.002, confirming the statistical significance of this association. Specifically, the left-behind Muslim women in Malappuram district who are taking frequent health check-ups have a high expected life span.

#### **5.4.2 Association Between Level of Education and EICI Dimension of WCI**

According to Sen and Nussbaum, education is a fundamental ability that influences the advancement and progress of other capabilities as well as the potential for leading a better life (Sen,1992; Nussbaum, 2000). Human freedoms are enhanced when individuals have an opportunity to acquire knowledge and develop education capabilities (Walker & Unterhalter, 2007). The Capability Approach emphasises how instrumentality and intrinsic values of education can enhance the freedoms of well-being and initiative of people, among other things (Clark, 2006). The women in Malappuram district have increasing access to higher levels of education ( Jafer, 2015).

To evaluate the association between the educational level of the respondents and their education and Information Capabilities Index score (EICI) the hypothesis tests if the EICI score of the respondents increases with higher educational level. Since the EICI score is normally distributed, to analyse the association between EICI and the education level of the respondents, a one-way ANOVA test is used. Table

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5.11 presents the results of the one-way ANOVA test, with respondents' education levels as the grouping variable.

**Table 5.11 Association Between Education Level and EICI**

Education Level	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Primary/ Secondary	156	44.283	16.14559	1.29268	0	92.3
Higher Secondary	101	49.428	20.71454	2.06117	7.7	100
Graduation	99	58.188	24.70732	2.48318	0	100
Post Graduation or Above	67	66.809	17.90913	2.18795	15.4	100
Total	423	52.334	21.36917	1.039	0	100
<b>Homogeneity of Variances Test</b>		<b>Levene Statistic</b>	<b>d.f.1</b>	<b>d.f.2</b>	<b>p</b>	
		10.98	3	419	0.134	
<b>ANOVA</b>						
<b>EICI</b>		<b>Sum of Squares</b>	<b>d.f.</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
Between Groups		28395.197	3	9465.07	24.137	0.000
Within Groups		164307.536	419	392.142		
Total		192702.733	422			
Source: Primary Survey			Grouping Variable: Education Level			

Table 5.11 displays the results of the one-way ANOVA test, highlighting the average EICI scores of respondents at different education levels. Table 5.11 indicates that the respondents with post-graduation or above have a higher mean EICI of 66.809. The mean EICI of the respondents with graduation is 58.188 which is higher than respondents with the higher secondary level (49.428) and the primary/secondary group have the lowest mean at 44.28. This suggests a positive relationship between education level and EICI, indicating that individuals with higher education levels tend to have higher EICI scores. Levene statistic of the test of homogeneity of variances with the p-value, equal to 0.134 ( $p > 0.05$ ) indicating that there is a statistically significant difference in EICI mean across the education groups.

Hence the ANOVA test result suggests that there is a statistically significant difference in the education and Information Index (EICI) across the different education levels. The high F-statistic (24.137) and the low p-value ( $p < 0.001$ ) suggest that education level has a significant influence on the EICI. The sum of squares between the education levels of the respondents with 28,395.197 indicates the variability in EICI explained by differences between the education levels. The sum of squares within the education levels of the respondents is 164,307.536 which represents the variability in EICI within each education level. Hence the ANOVA test result shows that the mean EICI scores differ significantly across different education levels. Hence it is concluded that the respondents with higher education levels have higher mean education and information capability suggesting that respondents with higher education levels tend to have higher EICI scores.

#### **5.4.3 Association Between Availability of Social Infrastructure and PCI Dimension of WCI**

Social or cultural activities, social structures, social institutions, public goods, customs, social conventions and behaviours are some of the inputs for the expansion of some of the capabilities. (Robeyns 2005). People are socially embedded agents who engage with their surrounding societies and can be developed completely by taking part in social and political activities inside those cultures (Sen, 2002). Availability of social infrastructure represents characteristics of households, such as income, wealth, educational attainment, safe places for living, etc. and characteristics of communities include the presence of good schools, public health facilities, safe places to play and exercise, conveyance for a proper transport and communication system and financial services. The association between the availability of social infrastructure and the capabilities of women is examined. Since the Participation Capability Index (PCI) of the Women's Capability Index (WCI) is more influenced by the availability of social infrastructure the association is analysed between the PCI and the availability of social infrastructure. Since the PCI is not normally distributed the Kruskal-Wallis's test is used to determine if there are differences between the mean rankings Participation Capability Index by the availability of social infrastructure.

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Table 5.12 Association Between PCI and Availability of Social Infrastructure

PCI score	PCI by Recreation facilities		PCI by Public Health		PCI by Transport & Communication		PCI by Education		PCI by Banking	
	Number of Respondents	Mean Ranks	Number of Respondents	Mean Ranks	Number of Respondents	Mean Ranks	Number of Respondents	Mean Ranks	Number of Respondents	Mean Ranks
Strongly Disagree	4	47.75	3	37.33	3	58.67	4	61.25	5	66.4
Disagree	21	189.24	20	141.88	15	159.47	20	159.58	12	127.5
Neither Agree nor Disagree	98	185.3	103	244.73	24	277.65	57	246.3	51	237.4
Agree	216	223.85	183	189.75	243	202.37	176	188.73	206	192.4
Strongly Agree	84	226.2	114	235.05	138	226.58	166	234.84	143	238.7
Total	423	174.47	423	169.74	423	184.948	423	178.14	423	172.5
<b>Chi-Square Test Results</b>	Chi-Square =15.786 d.f.=4 p= 0.003		Chi-Square =30.208 d.f.=4 p= 0.000		Chi-Square =17.883 d.f.=4 p= 0.001		Chi-Square =26.422 d.f.=4 p= 0.000		Chi-Square =21.878 d.f.=3 p= 0.000	

Source: Primary Survey

Table 5.12 shows the Kruskal-Wallis's test result indicating the mean ranks of PCI scores by different response categories of social conditions. Kruskal-Wallis Test statistics for each scale are PCI by Recreation facilities: Chi-Square = 15.786, d.f. = 4,  $p = 0.003$ , PCI by Public Health: Chi-Square = 30.208, d.f. = 4,  $p = 0.000$ , PCI by Transport & Communication: Chi-Square = 17.883, d.f. = 4,  $p = 0.001$ , PCI by Education: Chi-Square = 26.422, d.f. = 4,  $p = 0.000$  and PCI by Banking: Chi-Square = 21.878, d.f. = 3,  $p = 0.000$

The mean ranking of PCI indices by the different availability of social infrastructure variables shows that generally, the mean rankings increase with the higher rating of availability of social infrastructure variables with exceptions in some cases which implies that with better availability of social infrastructure the women's participation capability also increases. In all cases, the  $p$ -values are less than 0.05 ( $p < 0.05$ ), indicating statistically significant differences in mean ranks of PCI scores across the response categories, suggesting that there are statistically significant differences in the ranking of PCI scores according to the availability of social infrastructure. These results suggest that with the improvements in the availability of social infrastructure, the women's participation capability also increases which indicates that the availability of social infrastructure of the respondents under the study is a major determinant of women's capability in the study area.

#### **5.4.4 Association Between Political and Religious Practices and WCI**

According to Robeyns (2005), political practices and institutions and political involvement are the major inputs for some of the capabilities (Robeyns, 2005). Political participation denotes the active involvement of people in political processes that have an impact on their lives regardless of gender. To study the relationship between the political and religious practices and the WCI Score, a chi-square was calculated between the women's capability indices and WCI score and the variables of the political and religious practices.

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**Table 5.13 Association Between WCI and Women's Capability Indices and Political and Religious Conditions**

S No	Political and Religious Factors	QoLCI	EICI	DMCI	CoHRCI	PCI	MFCI	WCI
1	Caste Vote	37.86***	21.92***	15.98***	15.40***	25.08***	83.25***	94.49***
	<b>Crammer's V</b>	0.473***	0.360***	0.307***	0.302***	0.385***	0.222***	0.236***
2	Contest Election	21.55***	17.1***	25.28**	18.57***	12.71***	98.91***	10.31***
	<b>Crammer's V</b>	0.357***	0.318**	0.387**	0.331***	0.247***	0.242***	0.247***
3	Political Administrative Leadership	18.77**	18.15**	16.96***	19.26**	13.38***	70.32***	75.11***
	<b>Crammer's V</b>	0.333**	0.327**	0.313***	0.337**	0.281***	0.204***	0.211***
4	Practice Religion without Restraints	41.01***	20.61**	26.66**	20.37***	30.25***	10.82**	14.97***
	<b>Crammer's V</b>	0.492***	0.349**	0.395**	0.347***	0.423***	0.253**	0.297***

Source: Primary Survey

\*\*\*Correlation is significant at the 0.001 level.

\*\*Correlation is significant at the 0.01 level.

Table 5.13 indicates the association between the women's capability indices and WCI score and political and religious practices. The Chi-Square values exhibit a statistically significant positive relationship between the variables. This means that as political and religious practices improve, the WCI score tends to increase as well and vice versa. In most cases, the significance level ( $p < 0.001$ ) indicates that the association is statistically significant at the 0.001 level, which is a strong indication that when the respondents have better political and religious practices their capability also improves. The Cramer's V statistic ranges from 0.204 to 0.492 with a p-value of less than 0.05 indicating a moderate to high association between the WCI and women's capability indices and the political and religious practices. Thus, the political and religious practices are a major determinant of the capability of the left-behind women in the study area.

#### **5.4.5 Association Between Possession of Consumer Durables and WCI**

In the Capability Approach, technology is often viewed as a tool that helps create opportunities for people to expand their capabilities (Alkire, 2005). There are complex relationships between technology, culture and values, which in turn affect the capabilities of people (Nussbaum, 2000). For instance, the distinguishing feature of an emigrant from Kerala is conspicuous consumption, as their higher spending power enables them to purchase consumer durables more frequently and with greater ease compared to non-migrant households (Zachariah et al., 1999).

The respondents were asked, to what extent the possession of consumer durables such as motor cars, scooters, computers, mobile phones, refrigerators, inverters, AC, washing machines and LPG /Electric stoves made their life easy by indicating their response in the Likert scale 1=not at all to 5=very easy. A Household Consumer Durable Index (HCDI) was calculated for each respondent to measure how household durables made life easier. This was done by calculating the mean score of household durables and standardizing it. The index varies from 0 to 100, where a score of 0 indicates no possession of household durables and no improvement in quality of life, while a score of 100 signifies possession of household durables that make life more comfortable.

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**Table 5.14 Distribution Based on Household Consumer Durable Index (HCDI)**

HCDI Score	Number of Respondents	Percentage	Cumulative Percentage	Statistics	Value
0 – 20	12	2.84	2.84	Mean	79.5444
20 - 40	25	5.91	8.75	Median	89.47
40 - 60	38	8.98	17.73	Mode	100
60 - 80	109	25.76	43.49	Std. Deviation	2.179
80 - 100	239	56.51	100	Minimum	0
Total	423	100		Maximum	100

Source: Primary Survey

Table 5.14 shows that about 57 percent of the respondents have their HCDI score within the range of 80 to 100, 25.76 percent of the respondents' HCDI is between 60 and 80 and only 18 percent of them have an HCDI score below 60. The mean score of 79.54 suggests that, on average, respondents have high possession of consumer durables and making their life comfortable and the most frequently occurring score in the data set is 100. Hence it is concluded that the majority of the emigrant households possess most of the household consumer durables that made their life easy.

The Multivariate Analysis of Covariance (MANCOVA) test was used to examine the effect of the possession of household consumer durables on the multiple dependent variables of women's capability indices. Box's test of equality of covariance matrices evaluates whether the observed covariance matrices of the dependent variables are equal across groups defined by the independent variable (HCDI).

**Table 5.15 MANCOVA - Box's Test of Equality of Covariance Matrices**

Box's M	489.974
F	2.002
d.f.1	210
d.f.2	1.245
Sig.	0.100

Source: Primary Survey

In the table, the non-significant result ( $p = 0.100$ ) suggests that the assumption of equal covariance matrices is not violated. This supports the validity of the MANCOVA results under this assumption. Hence the Box's Test indicates that the covariance matrices do not significantly differ across the groups defined by HCIDI, supporting the validity of the MANCOVA.

**Table 5.16 Multivariate Test**

Effect	Test statistics	Value	F	Hypothesis d.f.	Error d.f.	Sig.
<b>Intercept</b>	Pillai's Trace	0.927	8.490	6	403	0.000
	Wilks' Lambda	0.073	8.490	6	403	0.000
	Hotelling's Trace	12.64	8.490	6	403	0.000
	Roy's Largest Root	12.64	8.490	6	403	0.000
<b>HCIDI</b>	Pillai's Trace	0.962	5.563	84	2.448	0.000
	Wilks' Lambda	0.323	6.036	84	2.253	0.000
	Hotelling's Trace	1.36	6.499	84	2.408	0.000
	Roy's Largest Root	0.713	20.79	14	408	0.000

Source: Primary Survey

For assessing the impact of the independent variables (HCIDI) on the dependent variable of women's capability indices, the MANCOVA technique employs multiple types of multivariate test statistics. Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root are the primary statistics that are employed. Each test statistic offers a somewhat different observation of the multivariate relationships. The statistics of intercepts indicate that the combined dependent variables of women's capability indices change significantly from zero when the HCIDI is taken into account, indicating that the model as a whole is statistically significant. The statistics of HCIDI indicate that HCIDI has a significant effect on the combined dependent variables of women's capability indices. Each test shows a highly significant p-value ( $p < 0.001$ ), meaning that the effect of the HCIDI on the dependent variables is statistically significant.

Pillai's Trace measures how much variance in the dependent variables is explained by the independent variables, and a value of 0.962 for HCDI indicates a strong impact. Wilks' Lambda represents the proportion of unexplained variance, and a lower value (0.323 for HCDI) indicates a strong effect of the independent variable. Hotelling's Trace and Roy's Largest Root also show strong effects with high F-values, indicating significant impacts of the HCDI on the dependent variable of women's capability indices.

The MANCOVA results demonstrate that the HCDI significantly affects the multiple dependent variables in the model. The test statistics confirm that this effect is not due to random chance, indicating that variations in the HCDI are associated with significant differences in the dependent variables, even after accounting for the covariates. This suggests that the HCDI is a strong predictor of the combined outcomes measured by the dependent variables in the study.

Levene's Test of Equality of Error Variances provides p-values for each dependent variable, which assess whether the variances of the errors (residuals) are equal across different groups defined by the independent variable (HCDI).

**Table 5.17 Levene's Test of Equality of Error Variances**

<b>WCIs</b>	<b>F</b>	<b>df.1</b>	<b>df.2</b>	<b>Sig.</b>
QoLCI	3.623	14	408	0.126
EICI	4.582	14	408	0.214
DMCI	5.603	14	408	0.061
CoHRCI	3.792	14	408	0.128
PCI	1.265	14	408	0.226
MFCI	5.958	14	408	0.000

Source: Primary Survey

Levene's Test shows that for QoLCI, EICI, DMCI, CoHRCI and PCI, the assumption of equal error variances holds, supporting the validity of the MANCOVA results for these dependent variables. Hence the assumption of equal error variances is generally met for most dependent variables except MFCI. Since the assumption holds for most variables, the overall MANCOVA results can still be interpreted confidently for those variables.

Table 5.18 displays descriptive statistics and model fit indices (R Squared and Adjusted R Squared) for a MANCOVA analysis.

**Table 5.18 Descriptive Statistics of MANCOVA & Model Fit Indices**

WCIs	Descriptive Statistics		R Squared	Adjusted R Squared
	Mean	Std. Deviation		
QoLCI	79.5775	20.32629	0.349	0.327
EICI	52.3343	21.36917	0.216	0.189
DMCI	63.7435	24.87563	0.127	0.097
CoHRCI	61.1941	22.32905	0.166	0.137
PCI	55.6239	16.30086	0.234	0.208
MFCI	36.2475	18.19248	0.166	0.138

Source: Primary Survey

Table 5.18 provides the mean and standard deviation of HCDI for each dependent variable. The highest mean of HCDI among the WCI indices is for the QoLCI with 79.58 and the lowest mean of HCDI is for the MFCI with 36.25 and the standard deviation ranges from 16.301 to 24.875. The model fit information of  $R^2$  explains the proportion of the variance in the dependent variable and adjusted  $R^2$  provides a more accurate measure of the goodness of fit, especially when multiple predictors are involved. With an  $R^2$  of 0.349 and an adjusted  $R^2$  of 0.327, the model explains 34.9 percent of the variance in QoLCI scores and after adjusting for the number of predictors, the model explains 32.7 percent of the variance. QoLCI has the best explanatory power and can account for around one-third of the variance. With an adjusted  $R^2$  of 0.097, the DMCI model has the lowest explanatory power and explains less than 10 percent of the variance. The explanatory power of the remaining indices of EICI, CoHRCI, PCI and MFCI is moderate, with adjusted  $R^2$  values ranging from 0.137 to 0.208. Table 5.19 shows the results of between-subjects effects tests for multiple dependent variables, including the Corrected Model, Intercept and HCDI for each dependent variable: QoLCI, EICI, DMCI, CoHRCI, PCI and MFCI.

**Table 5.19 Tests of Between-Subjects Effects**

<b>Tests of Between-Subjects Effects</b>						
<b>Source</b>	<b>Dependent Variable</b>	<b>Type III Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Corrected Model	QoLCI	60826.27	14	4344.7	15.61	0.000
	EICI	41603.08	14	2971.6	8.02	0.000
	DMCI	33188.50	14	2370.6	4.24	0.000
	CoHRCI	34853.61	14	2489.5	5.79	0.000
	PCI	26248.84	14	1874.9	8.91	0.000
	MFCI	23242.41	14	1660.2	5.82	0.000
Intercept	QoLCI	633100.89	1	633101	2275.29	0.000
	EICI	269249.96	1	269250	727.03	0.000
	DMCI	517554.71	1	517555	926.38	0.000
	CoHRCI	455941.94	1	455942	1059.67	0.000
	PCI	367858.00	1	367858	1747.54	0.000
	MFCI	144403.07	1	144403	506.04	0.000
HCDI	QoLCI	60826.27	14	4344.7	15.61	0.000
	EICI	41603.08	14	2971.6	8.02	0.000
	DMCI	33188.50	14	2370.6	4.24	0.000
	CoHRCI	34853.61	14	2489.5	5.79	0.000
	PCI	26248.84	14	1874.9	8.91	0.000
	MFCI	23242.41	14	1660.2	5.82	0.000

Source: Primary Survey

Table 5.19 indicates that all the dependent variables show significant F-values, with p-values equal to 0.000, demonstrating that the model explains a significant portion of the variance in these indices. The intercepts for all dependent variables are highly significant ( $p = 0.000$ ), indicating that the overall means are significantly different from zero. The HCDI also has significant F-values (all p-values are 0.000) for all dependent variables which suggests that this model explains a significant portion of the variance. The explanatory power of the model is strong with the high F-values and low p-values for each dependent variable. The findings show a substantial relationship between all the dependent variables of QoLCI, EICI, DMCI, CoHRCI, PCI and MFCI and the model's included parameters. Given the

high F-values and low p-values for each dependent variable, the model has good explanatory power, indicating that the effects are statistically significant. Hence HCIDI has a statistically significant effect on the capability indices and the possession of consumer goods is a major factor determining the capability of the left-behind Muslim women in the study area.

#### **5.4.6 Association Between Conversion Factors and WCI**

According to the capability approach, resources and conversion factors can support or obstruct the ability to transform capabilities into functionings (Robeyns, 2005). Sen (2010) argued that since mobile phones generally serve to enhance freedom, there are resources that are influenced by conversion factors such as computer knowledge and the infrastructure in which they are used (Sen, 2010). People differ in how well they can convert resources into favourable probabilities (capabilities) or outcomes (functionings) (Sen, 1992).

The focal point of the capability approach is the freedom that people have to lead the lives they choose. This depends on their health, education, occupation, financial condition and living situation. These factors determine the proper exercise of choice to transform capabilities into functionings. Hence the respondents are asked to specify the condition of conversion factors by indicating their responses as good, moderate and poor.

Table 5.20 presents the summary of ANOVA results, comparing the means of different levels of poor, moderate and good conditions across several conversion factors of health, education, occupation, financial and living situation. The table shows the ANOVA test results, which determine whether there are statistically significant differences between the means of three independent groups of conversion factors. The test of homogeneity of variance shows that for all the five types of conversion factors, there is a moderate to high Levene's test value and  $p > 0.05$ , suggesting that the assumption of homogeneity of variances is not violated indicating that the ANOVA results are reliable in all the cases.

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**Table 5.20 Association Between WCI and Conversion Factors**

Conversion factors	Poor			Moderate			Good		
	Number of Respondents	Mean	Std. Deviation	Number of Respondents	Mean	Std. Deviation	Number of Respondents	Mean	Std. Deviation
Health Level	5	55.901	8.801	135	56.220	8.025	283	59.394	10.60515
	Levene Statistic = 7.350			(d.f.1) = 2	(d.f.2) = 420		p=0.061		
Education Level	32	51.817	8.336	227	58.719	10.187	164	58.695	10.04606
	Levene Statistic=1.955			(d.f.1) = 2	(d.f.2) = 420		p=0.143		
Occupation Level	166	54.227	9.832	187	60.865	9.556	70	60.670	9.43785
	Levene Statistic = 0.642			(d.f.1) = 2	(d.f.2) = 420		p=0.527		
Financial Level	48	52.286	8.827	215	54.724	9.118	160	63.554	9.60634
	Levene Statistic=1.835			(d.f.1) = 2	(d.f.2) = 420		p=0.161		
Living Situation	20	48.676	6.569	175	54.991	9.250	228	61.575	9.74793
	Levene Statistic=4.860			(d.f.1) = 2	(d.f.2) = 420		p=0.081		
Test of Homogeneity of Variance									
Health Level		Education Level		Occupation Level		Financial Level		Living Situation	
F	p-value	F	p-value	F	p-value	F	p-value	F	p-value
5.631	0.004	7.141	0.001	23.666	0.000	42.784	0.000	34.996	0.000

Source: Primary Survey

Table 5.20 shows that the mean WCI of respondents with good health levels (59.394) is higher than the moderate (56.220) or poor (55.901) health level. Similarly, the mean WCI of respondents with a good financial level (63.554) and good living conditions (61.575) is higher than that of those with a moderate financial level (54.724) and moderate living conditions (54.991), as well as those with a poor financial level (52.286) and poor living conditions (48.676). The mean WCI of respondents with a good education level is 58.695, which is slightly lower than the respondents with a moderate mean WCI (58.719). Conversely, the mean WCI score of the respondents with poor education levels (51.817) is lower than the respondents with good and moderate education levels. Similarly, the mean WCI of respondents with a good occupation level is 60.670, which is slightly lower than the respondents with a moderate mean WCI (60.670). However, the mean WCI score of the respondents with poor occupation levels (54.227) is lower than the respondents with good and moderate occupation levels.

The p-value is less than 0.05 in all the conversion factors indicating that there is a statistically significant difference in the mean health level, education level, occupation level, financial level and living condition between the three groups of poor, moderate and good. Therefore, respondents with good conversion factors have higher capabilities than those with moderate or poor conversion factors. This highlights that conversion factors significantly impact the capabilities of left-behind Muslim women in the study area.

#### **5.4.7 Association Between Living Arrangement and WCI**

In patriarchal and traditional families, married couples frequently reside with the parents of their husbands. A major factor that influences how women's lives may be affected by the absence of their husbands is their living arrangements (Lei & Sonalde, 2021). One of the key determinants of women's capabilities in the absence of their husbands is their decision-making ability regarding household responsibilities, particularly whether they reside with in-laws (Kaur, 2018). The association between WCI score and living arrangements is analysed by using an Independent Sample T Test.

**Table 5.21 Association Between Family Type and WCI- Independent Sample T Test**

<b>Group Statistics</b>									
<b>Family Type</b>	<b>Number of Respondents</b>		<b>Mean</b>		<b>Std. Deviation</b>		<b>Std. Error Mean</b>		
Nuclear Family	284 (67.13 percent)		59.639		10.157		0.603		
Joint Family	139 (32.86 percent)		55.386		9.558		0.811		
<b>Levene's Test for Equality of Variances</b>					<b>t-test for Equality of Means</b>				
<b>WCI Score</b>	<b>F</b>	<b>Sig.</b>	<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>	<b>Mean Difference</b>	<b>Std. Error Difference</b>	<b>95% Confidence Interval</b>	
Equal Variances Assumed	1.567	0.211	4.123	421	0.000	4.25331	1.03148	2.22581	6.2808
Equal Variances not Assumed			4.21	289.56	0.000	4.25331	1.0102	2.26504	6.24158

Source: Primary Survey

Table 5.21 indicates the results of the Independent Sample T-Test, testing the hypothesis of whether the WCI score of respondents differs across the family type to which they belong. The mean WCI score for respondents in nuclear families (59.639) is higher than that of respondents in joint families (55.386). The standard deviation of 10.157 for the nuclear family and 9.558 for the joint family indicates a smaller spread of scores. The standard error value of the nuclear family with 0.603 indicates more precision of the mean estimates due to the larger sample size than the standard error score of 0.811 for the joint family.

Levene's Test for Equality of Variances compares the WCI scores of the respondents between the nuclear family and the joint family,  $F = 1.567$ ,  $p = 0.211$ . Since  $p > 0.05$ , we fail to reject the null hypothesis, hence it is assumed that the variances are equal. Therefore, the assumption of equal variances is used to compare the mean WCI scores of respondents from nuclear and joint families. The t-test for equality of means demonstrates that  $t = 4.123$ ,  $d.f. = 421$ , and  $p = 0.000$ , indicating that since the p-value (0.000) is less than 0.05, there is a statistically significant difference between the WCI scores of respondents in nuclear and joint families. The difference in mean scores of 4.253 indicates that the respondents in nuclear families score 4.25 points higher on the WCI score than those in joint families and the family type has a statistically significant impact on the WCI score. Similarly, the mean difference of WCI between the respondents of nuclear and joint families is also statistically significant even when assuming unequal variances.

The WCI scores of women from nuclear families are significantly higher than those from joint families, with a mean difference of approximately 4.25 points. The p-value is less than 0.05 in both cases, whether equal variances are assumed or not, confirming that the difference is statistically significant. This suggests that women from nuclear families have better opportunities to take advantage of the situation of being left behind. The study's outcomes align with those reported by Mahapatro (2019) and Lei & Sonalde (2021). Thus, the family type is a significant factor in determining the capability of left-behind Muslim women in the study area. Women who live with extended families face greater responsibility as well as

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guidance from the older adults of the household, particularly from in-law parents. As a result, after their husbands migrated, wives who lived with extended families did not acquire the same independence and decision-making ability as women in nuclear households (Desai & Banerji, 2008).

#### 5.4.8 Association Between Husbands' Migration and Support and Women's Capabilities

When the husbands migrate to other countries, leaving their spouses in the country of origin, women increasingly assume roles and responsibilities that were formerly reserved for men (Maharjan, 2012; Kaspar, 2005; Ghimire, 2021). Effects of migration on gender relations show that when men migrate, women assume power and responsibility within the family and a rise in autonomy (Hadi 2001; Yabiku et al. 2010). Migration tends to improve the financial situation of families (Mahapatro, 2018). When men migrate, women become more capable of managing financial matters independently and are increasingly taking on challenges. These new responsibilities may bring increased spending power, greater financial decision-making authority, and enhanced freedom of mobility (Shwe et al. 2019).

The relationship between capability indices and the dimensions of husbands' migration and support was analyzed, as shown in Table 5.22.

**Table 5.22 Association Between the WCI Indices and Husbands' Migration and Support**

WCIs	Increased Responsibility	Financial Freedom	Social & Economic Involvement	Mobility Decisions
QoLCI	1.164***	1.731***	1.451**	2.323***
EICI	82.725*	92.807***	77.990***	49.328**
DMCI	65.948***	87.845**	50.786***	87.741***
CoHRCI	40.687*	60/804***	65.332***	90.673***
PCI	55.774***	91.116***	61.431**	86.133**
MFCI	38.708*	63.715**	40.551**	99.972***

Source: Primary Survey

The indices in Table 5.22 show significant associations with the dimensions of husbands' migration and support. Higher Chi-square values and lower p-values (indicated by the number of asterisks) indicate a stronger association and greater statistical significance. Most indices show very high levels of significance ( $p < 0.001$ ) with all dimensions, particularly with mobility decisions, indicating a strong relationship. Notable exceptions are the QoLCI with increased responsibility and financial freedom. Although it is significant at  $p < 0.001$ , it has much lower Chi-square values compared to the other indices.

### **5.5 Conclusion**

The principal component analysis of the factors contributing to the capability of left-behind Muslim women in the study area reveals that the dimensions of husbands' migration and foreign remittances such as increased responsibility, self-reliance, increased mobility, socio-economic involvement, and monthly remittances exhibit strong loadings. Additionally, the availability of social infrastructure dimensions, including recreation facilities, public education, and public health, plays a significant role in determining their capabilities. Together, these factors are identified as major determinants of the outcome variable, with factor loadings greater than 0.800. The analysis identified seven components with Eigen values greater than 1, which collectively account for 67.1 percent of the total variance in the data. These findings indicate that migration and foreign remittances, along with the availability of social infrastructure and the possession of consumer durables, are key factors contributing to the capabilities of left-behind Muslim women in the study area.

The positive statistically significant association between health conditions and the capabilities of the respondents indicates that health is a determinant of the capabilities of left-behind women. The association between the education and information capability index and the education level of the respondents, as assessed using Kruskal-Wallis's test, shows that the education index score increases with higher levels of education. Similarly, the association between the participation

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capability index and the availability of social infrastructure also yields significant p-values, indicating that respondents with greater access to social infrastructure have higher participation capability scores.

The relationship between the possession of consumer durables and the women's capability index was explored using MANCOVA, and the results indicate that possession of more consumer durables corresponds with an increase in the women's capability index score. Furthermore, the association between conversion factors and the women's capability index demonstrates that improvements in conversion factors lead to higher capability scores.

The Chi-Square test results indicate a positive statistically significant association between political and religious factors and the women's capability index. Additionally, the analysis of the association between husbands' migration and support factors and the women's capability index shows that significant p-values confirm the statistical significance of this relationship. Lastly, the association between living arrangements-whether women reside in nuclear or joint families and the women's capability index has a significant impact, as evidenced by the comparison of mean scores using an independent T-test.

After analysing the factors that contribute to the capability expansion of left-behind Muslim women in the study area, the next chapter deals with the role of these expanded capabilities in enhancing the socio-economic participation of the respondents.



## Chapter 6

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### **Capability Expansion and the Socio-Economic Participation of Left-behind Muslim Women**



## **6.1 Introduction**

Having attempted to assess the factors contributing to the capability expansion of left-behind Muslim women by using the Exploratory Factor Analysis and analysing the association of factors with the capability index of women in the previous chapter, the current chapter investigates the role of capability expansion in the socio-economic participation of left-behind Muslim women in the study area. The male migration and consequent changes in the family structure have made the left-behind women assume more responsibilities which enhanced their decision-making authority and management of the household finances. To accomplish their increased responsibilities, they are forced to perform a variety of tasks and experience expansion in their capabilities. Remittance influx and the ensuing rise in living standards have been the main effects of the migration on the families. Utilising these opportunities the women may be more able to control family decisions, mobility and access to material resources which enhances their social and economic participation. The Structural Equation Modeling was used to analyse the role of capability expansion in the socio-economic participation of left-behind Muslim women by taking social participation (SOC1, SOC2, SOC3....., SOC14) and economic participation (ECO1, ECO2, ECO3..... ECO13) as endogenous variables and capability indices of women as exogenous variables.

The Chapter is divided into two sections:

### **6.2. Economic and Social Participation Dimensions**

### **6.3. Structural Equation Modeling**

#### **6.2.1. Social Participation**

Social participation indicators for the left-behind women focus on assessing their involvement in various social activities, organisations, networks and support services, including social services, health care, physical and emotional support and emergency support for individuals and families in need.

**Table 6.1 Descriptive Statistics of Social Participation**

S No.	Items	Labels	Mean	Median	Mode	Minimum	Maximum	Cronbach's Alpha
1	Visit Neighbourhood	SOC1	5.68	5	7	1	7	0.786
2	Social Club	SOC2	2.67	2	1	1	7	
3	Recreational Trips	SOC3	5.50	5	6	1	7	
4	Support Services	SOC4	5.08	4	4	1	7	
5	Share Creative ideas through Social Media	SOC5	3.98	2	3	1	7	
6	Religious Organisations	SOC6	3.64	3	2	1	7	
7	Political Organisations	SOC7	2.36	3	3	1	7	
8	Colleagues / Friends Gathering	SOC8	3.03	3	2	1	7	
9	Religious /Awareness Classes	SOC9	4.33	4	3	1	7	
10	Functions / Parties	SOC10	6.46	5	7	1	7	
11	Yoga / Gym / Training Classes	SOC11	1.85	1	2	1	7	
12	Virtual Social Meets	SOC12	1.40	1	2	1	7	
13	Alumni Meets	SOC13	3.05	3	4	1	7	
14	Children's Academic Meets	SOC14	4.01	4	4	1	7	

Source: Primary Survey

Table 6.1 indicates the avenues of social participation in the study area which includes indicators such as participation in the regional fest, visiting colleagues, neighbours and acquaintances, social club participation, involvement in recreational programmes, support services, emotional support, caregiving responsibilities and mutual assistance in times to the family members, sharing creative ideas in social media, participation in religious organisations, political organisation, colleagues/friends gathering, attending religious classes, attending function/ party, yoga/gym/training class, virtual social meet, alumni meet and the academic meet of their children. Table 6.1 indicates the simple statistical measures for each item of social participation to understand the distribution and central tendency of the data. The data shows that the mean value is highest in the case of attending a function or party and lowest in the case of a virtual social meeting. The median ranges from 1 to 5 and the Mode ranges from 1 to 7. The maximum and minimum values for all the items are 7 and 1 respectively. The Cronbach's Alpha calculated for the variables is equal to 0.786 which is high showing the data reliable for further calculations. The above 14 items are selected as the variables for the Structural Equation Modeling as social participation indicators.

### **6.2.2 Economic Participation**

The economic participation of women as per the current study comprises economic participation at home as well as in society. The economic participation at home encompasses a wide array of domestic economic activities that contribute significantly to the household which involves the purchase of gold and land, payment of various household bills, online and offline shopping, financial help to relatives, small home-based businesses and bank transactions by the respondents. The economic participation of women in society is a multifaceted concept covering various roles and activities that women engage in, to contribute to the society or economy. The economic participation in society includes doing a formal job, making business investments, making charity contributions and participating in SHGs (Self Help Groups), business organisations and kudumbashree.

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**Table 6.2 Descriptive Statistics of Economic Participation**

S No.	Items	Labels	Mean	Median	Mode	Minimum	Maximum	Cronbach's Alpha
1	Online & Offline Shopping	ECO1	5.92	5	5	1	7	0.724
2	Paying Bills	ECO2	5.33	5	5	1	7	
3	Bought Gold	ECO3	4.35	5	5	1	7	
4	Financial Help to Relatives	ECO4	4.48	5	6	1	7	
5	Bought Lands	ECO5	3.96	3	3	1	7	
6	Home Based Businesses	ECO6	3.05	4	3	1	7	
7	Bank Transactions	ECO7	5.73	5	6	1	7	
8	Formal Job	ECO8	2.82	3	1	1	7	
9	Business Investments	ECO9	2.64	3	1	1	7	
10	Charity Contributions	ECO10	4.02	4	6	1	7	
11	Self Help Groups	ECO11	1.38	3	1	1	7	
12	Business Organisations	ECO12	2.59	3	1	1	7	
13	Kudumbashree	ECO13	3.32	5	4	1	7	

Source: Primary Survey

Table 6.2 indicates the simple statistical measures for each item of economic participation to understand the distribution and central tendency of the data. The respondents were asked to indicate their involvement in various areas of economic participation at home and society as 1 for least participation and 7 for very active participation (1. Never, 2. Only once in life, 3. Once in a year 4. Once in six months, 5. Once in a month, 6. Once a week and 7. Daily). The descriptive statistics of economic participation are given in Table 6.2. The data shows that the mean value is highest in the case of online & offline shopping and lowest in the case of Self Help Groups and Median ranges from 3 to 5 and the Mode ranges from 1 to 6. The maximum and minimum values for all the items are 7 and 1 respectively. The Cronbach's Alpha calculated for the variables is equal to 0.724 which is moderately high showing the data reliable for further calculations. These 13 items are selected as the variables for the Structural Equation Modeling as economic participation indicators.

### 6.2.3 Hypotheses

H<sub>0</sub>: The capability expansion of left-behind Muslim women influences their socio-economic participation positively.

H<sub>1</sub>: The capability expansion of left-behind Muslim women does not influence their socio-economic participation positively.

### 6.3 Structural Equation Modeling

Structural Equation Modeling (SEM) was used to explore the relationship between the exogenous variable 'Women's Capability Indices' and the endogenous variables 'Social Participation' and 'Economic Participation.' The economic participation, illustrated by the labels; ECO1, ECO2, ECO3,....., ECO13 and social participation: SOC1, SOC2, SOC3, .....SOC14 are dependent or endogenous variables; those constructs that are being explained in the model. Women's capability indices (WCI ) are the exogenous or independent variable; those constructs that only explain other constructs in the model, measured by the

following indicators: QoLCI,(Quality of Living Capability Index) EICI (Education and Information Capability Index), DMCI (Decision-Making Capability Index), CoHRCI (Control over Household Resources Capability Index), PCI (Participation Capability Index) and MFI (Mobility Freedom Capability Index). The hypothesized relationships between the constructs are defined as

WCI → Social Participation and

WCI → Economic Participation

**Table 6.3 Structural Equation Model- Models Information**

Estimation Method	ML
Optimisation Method	NLMINB
Number of observations	423
Free parameters	102
Standard errors	Standard
Scaled test	None
Converged	TRUE
Iterations	1035
Model	$WCI \sim QoLCI + EICI + DMCI + CoHRCI + PCI + MFI$ $EconomicParticipation \sim ECO1 + ECO2 + ECO3 + ECO4 + ECO5 + ECO6 + ECO7 + ECO8 + ECO9 + ECO10 + ECO11 + ECO12 + ECO13$ $SocialParticipation \sim SOC1 + SOC2 + SOC3 + SOC4 + SOC5 + SOC6 + SOC7 + SOC8 + SOC9 + SOC10 + SOC11 + SOC12 + SOC13 + SOC14$ <p>Economic Participation~ Women's Capability Social Participation~ Women's Capability</p>

Source: Primary Survey

Table 6.3 provides details on the estimation method, optimisation process and the specifics of the model's convergence and parameters information of the Structural Equation Modeling (SEM). Maximum Likelihood method is used for estimating the parameters of the model. Non-linear minimization using the Broyden–Fletcher–Goldfarb–Shanno (BFGS) algorithm (NLMINB) was used to find the maximum likelihood estimates. The sample size used for the analysis is 423

observations and the parameters estimated in the model is 102. The type of standard errors reported is standard and no scaled test was used in the analysis. The model has successfully converged, meaning the algorithm has reached a solution where the estimates are stable. ‘Economic Participation’ is regressed on ‘Women’s Capability Index’ (WCI) which implies that the model is testing the effect of women's capability expansion on their economic participation and ‘Social Participation’ is regressed on ‘Women’s Capability Index’ which implies that the model is testing the effect of women's capability expansion on their social participation. In short, the model is structured to assess how women's capability, as measured by various indices, influences their economic and social participation.

**Table 6.4 Structural Equation Model- Model Tests**

<b>Label</b>	<b>Chi-Square</b>	<b>d.f.</b>	<b>p</b>
User Model	4344	492	<□0.001
Baseline Model	5980	528	<□0.001

Source: Primary Survey

Table 6.4 presents the results of a chi-square test for Structural Equation Modeling (SEM). The chi-square value for the user model is 4344 with degrees of freedom 492. The p-value is less than 0.001, indicating a better fit of the model to the data. The chi-square value for the baseline model is 5980 with degrees of freedom; 528. The p-value for the baseline model is also less than .001, indicating a highly significant result. A lower Chi-Square value indicates a better fit to the data. The user model has a significantly lower Chi-Square value (4344) compared to the baseline model (5980), suggesting that the user model provides a significantly better fit to the data than the baseline model, with statistically significant p-value. Hence the model fits the data.

**Table 6.5 Structural Equation Model- Model Fit Indices**

<b>SRMR</b>	<b>RMSEA</b>	<b>95 percent Confidence Intervals</b>		<b>RMSEA p</b>
		<b>Lower</b>	<b>Upper</b>	
0.046	0.076	0.032	0.048	<0.082

Source: Primary Survey

Table 6.5 presents several fit indices used to evaluate the quality of the Structural Equation Modeling (SEM). The SRMR (Standardised Root Mean Square Residual) is an absolute measure of fit. It represents the standardized difference between observed and predicted correlations. The SRMR of 0.046 indicates a good fit, as lower values indicate a better fit. The RMSEA (Root Mean Square Error of Approximation) values between 0.06 and 0.08 indicate a reasonable fit. The RMSEA value of 0.076 indicates a reasonable fit and the p-value for RMSEA,  $p < 0.082$  indicates that the hypothesis of close fit ( $RMSEA > 0.05$ ) is accepted. Overall, the model fits the data reasonably well.

### 6.3.1. Structural Equation Model- Parameter Estimates

Table 6.6 indicates the parameter estimates of two dependent variables (Economic Participation and Social Participation) and the predictor (Women's Capability Index). Table 6.6 includes the parameter estimate, standard error (SE), 95 percent confidence intervals, standardised estimate ( $\beta$ ), z-value and p-value. The estimate shows that for every one-unit increase in the predictor, the endogenous variables are expected to increase, holding other factors constant.

**Table 6.6 Structural Equation Model- Parameters Estimates**

Dependent Variable	Predictor	Estimate	SE	95 percent Confidence Intervals		$\beta$	z	P
				Lower	Upper			
Economic Participation	WCI	0.227	1.85	-0.48	1.15	0.1984	4.123	< 0.002
Social Participation	WCI	0.314	2.56	-0.06	1.03	0.2434	5.416	< 0.002

Source: Primary Survey

The parameter estimate indicates that for every one unit increase in WCI, economic participation is expected to increase by 0.227 units and social participation is expected to increase by 0.314 units, holding other factors constant. The Standard

Error of the estimate is 1.85 indicating the variability of the estimate. The 95 percent Confidence Intervals is between -0.48 to 1.15 for economic participation and -0.06 to 1.03 for social participation, indicating certainty around the estimate. The Standardized Estimate ( $\beta$ ) of economic participation, 0.1984 and  $\beta$  value of 0.2434 for social participation indicates a small to moderate positive standardized effect of WCI on economic and social Participation. The z-value with 4.123 for economic participation and 5.416 for social participation indicates that there are statistically significant effects of the predictor on socio-economic participation. The p-value indicates that the relationship between WCI and economic participation and WCI and social participation are statistically significant.

### 6.3.2. Structural Equation Model- The Fit Indices

Table 6.7 shows various fit indices of the Structural Equation Model

**Table 6.7 User model versus baseline model**

<b>Indices</b>	<b>Model</b>
Comparative Fit Index (CFI)	0.923
Tucker-Lewis Index (TLI)	0.842
Bentler-Bonett Non-normed Fit Index (NNFI)	0.842
Relative Non-centrality Index (RNI)	0.793
Bentler-Bonett Normed Fit Index (NFI)	0.974
Parsimony Normed Fit Index (PNFI)	0.655
Goodness of Fit Index (GFI)	0.9261
Adjusted Goodness of Fit Index (AGFI)	0.9108

Source: Primary Survey

Table 6.7 presents various fit indices for evaluating the fit of the user model compared to the baseline model in Structural Equation Modeling (SEM). A comparative Fit Index (CFI) with a value of 0.92 is generally considered indicative of a good fit. A Tucker-Lewis Index (TLI) and Bentler-Bonett Non-normed Fit Index (NNFI) of 0.842 indicate a reasonable fit, suggesting the model moderately fits the data. Relative Non-centrality Index (RNI) compares the non-centrality

parameters of the user model and the baseline model with a value of 0.793 indicating a moderate fit. The NFI (0.974) which compares the chi-square value of the user model to that of the baseline model also is indicative of a good fit. Parsimony Normed Fit Index (PNFI) with a relatively moderate value of 0.655 suggests the model fits the data. The Goodness of Fit Index (GFI) with 0.9261 and Adjusted Goodness of Fit Index (AGFI) with 0.9108 also show a good fit.

### 6.3.3 Structural Equation Model- R<sup>2</sup> Values of Endogenous Variables

The R<sup>2</sup> values in Structural Equation Modeling (SEM) represent the proportion of variance in the observed variables that can be explained by the latent variables.

**Table 6.8 Structural Equation Model- R<sup>2</sup> Value**

Variable	R <sup>2</sup>
Economic Participation	0.3168
Social Participation	0.4056

Source: Primary Survey

An R<sup>2</sup> value of 0.3168 indicates that the latent variable ‘Economic Participation’ explains approximately 31.68 percent of the variance in the observed variables associated with it, suggesting that the Economic Participation accounts for a moderate amount of the variance in the indicators used. An R<sup>2</sup> value of 0.4056 indicates that the latent variable ‘Social Participation’ explains approximately 40.56 percent of the variance in the observed variables associated with it. This is a significant proportion compared to Economic Participation, indicating that the model's latent construct of Social Participation accounts for a significant amount of the variance in its indicators.

### 6.3.4 Structural Equation Model- Measurement model

Table 6.9 provides the measurement model results focusing on the estimation, standard errors, confidence intervals and p-value of the observed variables about their respective latent constructs indicating the relationships between latent variables and their observed indicators.

**Table 6.9** Structural Equation Model- Measurement Model

Observed	Estimate	Standard Error	95 Percent Confidence Intervals				
			Lower	Upper	$\beta$	z	p
QoLCI	1	0	1	1	0.00717		
EICI	22.204	18.69	-11.942	76.35	0.15048	4.123	0.002
DMCI	136.357	118.9	-7.0507	239.765	0.80256	5.416	0.002
CoHRCI	83.1209	67.724	-12.2736	107.515	0.53647	0.123	0.002
PCI	15.872	29.185	-2.0696	17.325	0.1414	-0.123	0.002
MFI	13.253	17.964	-4.8571	18.352	0.1072	-0.123	0.002
ECO1	1	0	1	1	0.27224		
ECO2	2.8294	0.5418	1.7675	3.891	0.70482	5.222	<□0.001
ECO3	3.9105	0.7318	2.4762	5.345	0.88223	5.344	<□0.001
ECO4	3.6831	0.6932	2.3244	5.042	0.80998	5.313	<□0.001
ECO5	0.9119	0.3059	0.3124	1.511	0.18217	2.981	0.003
ECO6	1.8069	0.3983	1.0263	2.587	0.3941	4.537	<□.001
ECO7	1.0098	0.3827	0.2598	1.76	0.15495	2.639	0.008
ECO8	0.3680	0.3255	-0.2699	1.006	0.05994	1.131	0.258
ECO9	1.0698	0.3762	0.3324	1.807	0.17082	2.844	0.004
ECO10	2.1022	0.4761	1.169	3.035	0.3665	4.415	<□0.001

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ECO11	-0.4454	0.3215	-1.0755	0.185	-0.0742	-1.386	0.166
ECO12	0.0371	0.1586	-0.2738	0.348	0.01217	0.234	0.815
ECO13	1.5562	0.3655	0.8399	2.273	0.33563	4.258	<□0.001
SOC1	1	0	1	1	0.14428		
SOC2	2.8524	1.0926	0.7109	4.994	0.46929	2.611	0.009
SOC3	3.0795	1.1727	0.781	5.378	0.50316	2.626	0.009
SOC4	2.742	1.0491	0.6857	4.798	0.4753	2.614	0.009
SOC5	0.4362	0.206	0.0325	0.84	0.17978	2.118	0.034
SOC6	0.0552	0.0984	-0.1377	0.248	0.03083	0.561	0.575
SOC7	0.6691	0.2712	0.1376	1.201	0.30682	2.467	0.014
SOC8	0.7429	0.2924	0.1698	1.316	0.368	2.541	0.011
SOC9	2.9164	1.0909	0.7783	5.055	0.68126	2.673	0.008
SOC10	2.4326	0.9304	0.609	4.256	0.47726	2.615	0.009
SOC11	0.9864	0.4456	0.1131	1.86	0.20254	2.214	0.027
SOC12	3.1501	1.1802	0.8369	5.463	0.65678	2.669	0.008
SOC13	3.5185	1.3148	0.9416	6.096	0.69849	2.676	0.007
SOC14	2.4903	0.9509	0.6265	4.354	0.48659	2.619	0.009

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Source: Primary Survey

Table 6.9 shows that the z-value associated with the estimate is used to determine statistical significance with p-values. The QoLCI (Quality of Life Capability Index) is the reference indicator for the Women's Capability latent variable; hence the estimate is fixed at 1. This is common practice in SEM for model identification purposes.

The estimate of the Education and Information Capability Index (EICI) is 22.204, Standard Error of 18.69, a z value of 4.123 and a p-value of 0.002, indicating that EICI is a strong indicator and has a significant positive relationship with the WCI. Similarly, the statistics of the Decision-Making Capability Index (DMCI) and Control over Household Resources Capability Index (CoHRCI) also indicate that these predictors are strong indicators and have a significant positive relationship with WCI. Likewise, PCI and MFCI show a significant positive relationship with Women's Capability, though not as strong indicators as DMCI and EICI.

The analysis of endogenous variables shows that the indicators of Economic Participation; ECO1 estimate equal to 1 is the reference indicator with its path coefficient fixed at 1. ECO2 with an estimate of 2.8294, Standard Error of 0.5418, 95 percent Confidence Interval of 1.7675 to 3.891 and z value of 5.222 and  $p < 0.001$  indicates that ECO2 is a strong and significant positive indicator of Economic Participation and ECO3 with an estimate of 3.9105, Standard Error of 0.7318, 95 percent Confidence Interval of 2.4762 to 5.345 and z value of 5.344 and  $p < 0.001$  also shows that ECO3 is also a strong and significant positive indicator of Economic Participation. Similarly, ECO4 (Estimate: 3.6831), ECO5 (Estimate: 0.9119) ECO6 (Estimate: 1.8069), ECO9 (Estimate: 1.0698) and ECO10 (Estimate: 2.1022) also shows a significant positive relationship with Economic Participation whereas ECO8 (Estimate: 0.3680) ECO11 (Estimate: -0.4454) and ECO12 (Estimate: 0.0371) exhibits insignificant and even negative association with Economic Participation.

Social Participation indicators show that SOC1 with an estimate equal to 1 is the reference indicator with its path coefficient fixed at 1. The SOC2 with an

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estimate of 2.8524, Standard Error of 1.0926, 95 percent Confidence Interval of 0.7109 to 4.994, and z value of 2.611,  $p=0.009$  shows that SOC2 has a significant positive relationship with social participation. The SOC3 (Estimate: 3.0795), SOC4 (Estimate: 2.742) SOC9 (Estimate: 2.9164), SOC12 (Estimate: 3.1501), SOC13 (Estimate: 3.5185) have also a significant positive relationship with Social Participation whereas SOC6 (Estimate: 0.0552) exhibits insignificant relationship with social participation.

To summarise, most of the indicators for Economic Participation and Social Participation show significant positive relationships with their respective latent variables, indicated by high z-values and significant p-values. Overall, the model suggests strong support for the indicators of Economic and Social Participation and predictors in the Structural Equation Modeling (SEM).

#### **6.2.4 Variances and Covariances**

Table 6.10 represents the variances and covariances between different variables including estimates, standard errors (SE), confidence intervals, and statistical significance of z and p-values. The Variable 1 and 2 columns in Table 6.10 present the pairs of variables compared in the Structural Equation Model. The variables can be compared to measure their variances and covariances. The variance of QoLCI - QoLCI shows the variance of the QoLCI variable which indicates, how much the values of this variable spread out or deviate from the mean. Similarly, the variances of exogenous variables of women's capability indices and the variances of endogenous variables of economic participation and social participation represent the extent to which values deviate from the mean for that variable.

The estimates of economic participation from ECO1 to ECO13 range from 0.4881 to 4.6458, with several indicators like ECO1, ECO5, and ECO7 showing significant relationships ( $p < .001$ ). The estimates of economic participation from SOC1 to SOC14 variables generally show positive estimates with significant p-values, particularly SOC1 (4.7551) and SOC2 (2.9121). The aggregate variable of Economic Participation has a significant estimate (0.111) and a p-value of 0.008,

indicating a meaningful variance while Social Participation does not show a significant variance ( $p = 0.177$ ).

## 6.10. Variances and Covariances

Variable 1	Variable 2	Estimate	SE	95% Confidence Intervals		$\beta$	$\beta$ 95% Confidence Intervals		z	p
				Lower	Upper		Lower	Upper		
QoLCI	QoLCI	410.598	28.2339	355.26	465.935	1	0.9983	1.002	14.5427	<0□.001
EICI	EICI	448.981	31.247	387.738	510.224	0.977	0.9426	1.012	14.3688	<□0.001
DMCI	DMCI	216.768	119.436	-17.322	450.858	0.356	-0.0293	0.741	1.8149	0.070
CoHRCI	CoHRCI	360.755	50.6786	261.427	460.083	0.712	0.5263	0.898	7.1185	<0□.001
PCI	PCI	260.401	18.093	224.94	295.863	0.98	0.9474	1.013	14.3924	<□0.001
MFI	MFI	318.711	22.0372	275.519	361.903	0.989	0.9639	1.013	14.4624	<□0.001
ECO1	ECO1	1.4001	0.09738	1.20924	1.591	0.926	0.8742	0.978	14.3776	<0□.001
ECO2	ECO2	0.9089	0.07358	0.76469	1.0531	0.503	0.4236	0.583	12.3526	<□0.001
ECO3	ECO3	0.4881	0.0724	0.34619	0.63	0.222	0.1535	0.29	6.7417	<□0.001
ECO4	ECO4	0.797	0.08056	0.63907	0.9549	0.344	0.271	0.417	9.893	<□0.001
ECO5	ECO5	2.7153	0.18762	2.34757	3.083	0.967	0.9309	1.003	14.4723	<□0.001
ECO6	ECO6	1.9899	0.14053	1.71449	2.2654	0.845	0.7759	0.914	14.1601	<□0.001
ECO7	ECO7	4.6458	0.32057	4.01752	5.2741	0.976	0.9451	1.007	14.4924	<□0.001
ECO8	ECO8	4.2091	0.28957	3.64157	4.7767	0.996	0.9842	1.009	14.5356	<□0.001
ECO9	ECO9	4.2668	0.29464	3.68927	4.8443	0.971	0.937	1.005	14.4811	<□0.001
ECO10	ECO10	3.1919	0.22445	2.75194	3.6318	0.866	0.8002	0.931	14.2206	<□0.001
ECO11	ECO11	4.0125	0.27612	3.47134	4.5537	0.994	0.9794	1.01	14.5316	<0.001
ECO12	ECO12	1.043	0.07172	0.90239	1.1835	1	0.9974	1.002	14.5427	<□0.001
ECO13	ECO13	2.1381	0.14973	1.84467	2.4316	0.887	0.8261	0.949	14.2797	<□0.001
SOC1	SOC1	4.7551	0.32852	4.11119	5.399	0.979	0.9493	1.009	14.4741	<□0.001

SOC2	SOC2	2.9121	0.21377	2.49312	3.3311	0.78	0.6997	0.86	13.6225	<0.001
SOC3	SOC3	2.828	0.21046	2.41546	3.2405	0.747	0.664	0.83	13.4368	<□0.001
SOC4	SOC4	2.6042	0.19161	2.22868	2.9798	0.774	0.6935	0.855	13.5916	<□0.001
SOC5	SOC5	0.5757	0.03988	0.49754	0.6539	0.968	0.9309	1.004	14.4347	<□0.001
SOC6	SOC6	0.3242	0.0223	0.28052	0.3679	0.999	0.9926	1.006	14.54	<□0.001
SOC7	SOC7	0.4355	0.03066	0.37545	0.4956	0.906	0.8465	0.965	14.2055	<□0.001
SOC8	SOC8	0.3562	0.02538	0.30645	0.4059	0.865	0.7962	0.933	14.0338	<□0.001
SOC9	SOC9	0.9928	0.08491	0.82637	1.1592	0.536	0.4482	0.624	11.6923	<□0.001
SOC10	SOC10	2.0281	0.14933	1.73542	2.3208	0.772	0.6915	0.853	13.5814	<□0.001
SOC11	SOC11	2.2995	0.15964	1.98665	2.6124	0.959	0.9178	1	14.4043	<□0.001
SOC12	SOC12	1.3223	0.10975	1.10723	1.5374	0.569	0.4806	0.657	12.0486	<□0.001
SOC13	SOC13	1.3136	0.11516	1.08789	1.5393	0.512	0.4248	0.599	11.4067	<□0.001
SOC14	SOC14	2.0207	0.14934	1.72805	2.3134	0.763	0.6817	0.845	13.5313	<□0.001
WCI	WCI	0.0211	0.34305	-0.6513	0.6935	1	1	1	0.0615	0.951
Economic Participation	Economic Participation	0.111	0.04153	0.02959	0.1924	0.99	0.9662	1.014	2.6725	0.008
Social Participation	Social Participation	0.099	0.0734	-0.0449	0.2429	0.979	0.9429	1.016	1.3489	0.177
Economic Participation	Social Participation	0.0145	0.00855	-0.0023	0.0312	0.138	0.0264	0.25	1.6951	0.040

Source: Primary Survey

Table 6.10 indicates a high estimate of 410.598, and a significant p-value ( $< 0.001$ ) of QoLCI indicating a strong variance in QoLCI. The exogenous variable EICI with a variance of 448.981, and the endogenous variables ECO7 with a variance of 4.6458 and SOC1 with a variance of 4.7551 have demonstrated the highest variances indicating that the values of this variable are highly deviating from the mean. The exogenous variable DMCI with a variance of 216.768, the endogenous variables ECO3 with a variance of 0.4881 and SOC6 with a variance of 0.3242 exhibited the lowest variance indicating that the values of this variable are slightly deviating from the mean.

When two variables are paired or compared the covariance between the two variables is represented indicating how much the two variables vary together. Economic Participation is paired with Social Participation, signifying whether the variables increase or decrease together, or move in opposite directions. The covariance between Economic Participation and Social Participation is 0.0145 signifying positive relation between the variables. The standard Error of the estimate shows the precision of the estimate and signifies the reliability of the estimate in which the smaller standard error specifies more precision. Standard Error is directly related to the 95 percentage confidence interval. The confidence interval provides a range within which the true value of the estimate is likely to fall, and this range is determined using the Standard Error. A smaller Standard Error leads to a narrow confidence interval, implying more precision. For QoLCI, the standard error is 28.234. The relatively small Standard Error indicates that the estimate is fairly precise, and there is less variability in the data. This is further supported by the 95 percentage confidence interval for QoLCI (355.260 to 465.935), which shows a relatively narrow range.

The Standardized Beta Coefficient  $\beta$  provides a measure of the strength and direction of the association between two variables but expressed in standard deviation units. The  $\beta$  coefficient indicates how much the exogenous variable changes, in terms of its standard deviation, for a one-standard-deviation change in the endogenous variable. When comparing the same variable (e.g., QoLCI-QoLCI)

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The standardized beta coefficient is always 1, because the variance of a variable with itself is always 1.

A positive  $\beta$  means that as the exogenous variable increases, the endogenous variable also increases or a negative  $\beta$  means that as the exogenous increases, the endogenous variable decreases showing the inverse relationship. The closer the value of  $\beta$  is to 1 or -1, the stronger the association between the two variables. Values closer to 0 indicate a weak or no association between the variables. For Economic Participation-Social Participation, the standardized beta coefficient ( $\beta$ ) is 0.138 indicating that there is a positive relationship between Economic Participation and Social Participation, indicating that as Economic Participation increases Social Participation tends to increase as well. However, the strength of this relationship is relatively weak (since the  $\beta$  is close to 0.1), suggesting that changes in Economic Participation have a relatively small impact on Social Participation.

The  $\beta$  95 percentage Confidence Intervals provide a range of values within which the true standardized beta coefficient ( $\beta$ ) is likely to fall, with 95 percentage confidence. The confidence interval gives us an idea of the reliability or certainty of the standardized beta coefficient estimate. A narrower confidence interval indicates a more precise estimate of the beta coefficient, while a wider interval suggests more uncertainty. Social Participation, the  $\beta$  coefficient is 0.138, and the 95 percentage confidence interval is 0.026 to 0.25 indicating that there is 95 percentage confidence that the true beta coefficient lies between 0.026 and 0.25. Since both the lower and upper bounds are positive, this confirms with 95 percentage confidence that there is a positive relationship between Economic Participation and Social Participation.

The z-value represents how far standard deviations of the estimated coefficient such as variance, covariance, or beta coefficient are deviated from the expected value. The null hypothesis typically assumes there is no association between the variables being tested i.e., the estimate is zero. A z-value above 1.96 or below -1.96 corresponds to a p-value of less than 0.05, which is commonly used to declare that the result is statistically significant. The z-value of QoLCI is 14.54

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signifying that there is significant variability in QoLCI. For all the exogenous and endogenous variables, the z-values are above 1.96 or below -1.96 except for DMCI (1.8149), which is approaching the significance level of 1.96. For the pair Economic Participation-Social Participation, the z-value is 1.695, which is less than 1.96 and can be considered marginally significant at the 10 percentage level.

A p-value of  $< 0.001$  indicates the association is highly significant. Since the p-value is less than 0.05 in the cases of all variables, we typically reject the null hypothesis and conclude that the relationship between the variables is statistically significant. Hence to conclude, QoLCI, EICI, PCI, and MFI have high estimates and low p-values, indicating they have significant variances and are important to the model, and DMCI with a p-value of 0.07, suggesting that their variance is not statistically significant and Social Participation has a positive but weak standardized relationship with Economic Participation ( $\beta = 0.138$ ,  $p = 0.09$ ), indicating marginal significance.

### 6.3.5 Structural Equation Model- Intercepts

Table 6.11 indicates the intercepts representing the expected value of the observed variables when the latent variables are set to zero. They provide baseline information about the levels of the observed variables.

**Table 6.11 Structural Equation Model- Intercepts**

Variable	Intercept	SE	95 Percent Confidence Intervals		z	P
			Lower	Upper		
QoLCI	79.723	0.985	77.792	81.654	80.916	$< \square 0.001$
EICI	52.484	1.042	50.441	54.526	50.362	$< \square 0.001$
DMCI	63.879	1.206	61.527	66.231	53.234	$< \square 0.001$
CoHRCI	61.255	1.094	59.11	63.4	55.977	$< \square 0.001$
PCI	55.67	0.793	54.117	57.224	70.24	$< \square 0.001$
MFI	36.329	0.873	34.618	38.04	41.611	$< 0.001$

ECO1	2.485	0.06	2.367	2.602	41.556	<□0.001
ECO2	3.005	0.065	2.877	3.133	45.984	<□0.001
ECO3	2.962	0.072	2.821	3.104	41.057	<□0.001
ECO4	2.726	0.074	2.581	2.871	36.828	<□0.001
ECO5	4.333	0.081	4.174	4.493	53.181	<□0.001
ECO6	4.352	0.075	4.206	4.499	58.319	<□0.001
ECO7	4.478	0.106	4.27	4.685	42.209	<□0.001
ECO8	4.017	0.1	3.821	4.212	40.193	<□0.001
ECO9	3.643	0.102	3.443	3.843	35.74	<□0.001
ECO10	2.669	0.093	2.486	2.852	28.588	<□0.001
ECO11	2.026	0.098	1.835	2.217	20.744	<□0.001
ECO12	1.376	0.05	1.279	1.473	27.707	<□0.001
ECO13	2.466	0.075	2.318	2.614	32.67	<□0.001
SOC1	3.083	0.107	2.873	3.293	28.771	<□0.001
SOC2	4.504	0.094	4.319	4.688	47.93	<□0.001
SOC3	2.976	0.095	2.791	3.162	31.458	<□0.001
SOC4	2.643	0.089	2.468	2.818	29.637	<□0.001
SOC5	2.362	0.038	2.288	2.435	62.974	<□0.001
SOC6	2.73	0.028	2.676	2.785	98.579	<□0.001
SOC7	2.47	0.034	2.404	2.537	73.276	<□0.001
SOC8	2.678	0.031	2.617	2.74	85.825	<□0.001
SOC9	3.331	0.066	3.201	3.461	50.333	<□0.001
SOC10	3.456	0.079	3.302	3.611	43.864	<□0.001
SOC11	1.849	0.075	1.701	1.996	24.554	<□0.001
SOC12	4.402	0.074	4.257	4.547	59.369	<□0.001
SOC13	4.047	0.078	3.895	4.2	51.974	<□0.001
SOC14	3.05	0.079	2.895	3.205	38.547	<□0.001
Women's Capability Index	0	0	0	0		
Economic Participation	0	0	0	0		
Social Participation	0	0	0	0		

Source: Primary Survey

Table 6.11 indicates that for predictor QoLCI, the intercept is estimated to be 79.723 with a standard error of 0.985; 95 percent confidence interval for the intercept is between 77.792 and 81.654 suggests that when all other variables in the model are held constant at zero, the predicted value of QoLCI is estimated to be between 77.792 and 81.654 with 95 percent confidence. Likewise, the expected baseline value for EICI is 52.484, indicating a significant and well-defined intercept. The DMCI with intercept: 63.879, CoHRCI with intercept: 61.255, PCI with intercept; 55.67 and MFI with intercept: 36.329 also indicate strong statistical significance and precision in the estimate.

The intercepts of Economic Participation Indicators range from 1.376 (ECO12) to 4.478 (ECO7). All standard errors are relatively small, indicating precise estimates and all 95 percent confidence intervals are narrow, reinforcing the precision of the estimates. All the z-values are significantly high e.g., 41.556 for ECO1, 58.319 for ECO6 and p-values are less than 0.001, indicating very strong statistical significance.

The intercepts of Social Participation Indicators (SOC1 to SOC14) range from 1.849 (SOC11) to 4.504 (SOC2), standard errors are small, ensuring precise estimates, all 95 percent confidence intervals are narrow, ensuring precision and all the z-values are significantly high; 98.579 for SOC6, 62.974 for SOC5 and p values are less than 0.001, indicating strong statistical significance. Among the social Participation indicators, ECO7 -Bank Transactions has the highest intercept.

For the ‘Women’s Capability’, ‘Economic Participation and ‘Social Participation’ the intercepts are set to 0 by default for these latent variables, as their scales are standardized or the model specifies them without intercepts to identify the model. To summarise, all the observed variables have intercepts with high precision and statistical significance, as indicated by the small standard errors, narrow confidence intervals, and high z-values. The intercepts provide a clear understanding of the baseline levels of observed variables, which is crucial for interpreting the model's results and understanding the underlying data structure. The consistently

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high z-values and significant intercepts indicate a robust model with reliable measurements of the observed variables.

### 6.3.6 Structural Equation Model- Reliability Indices

Reliability indices in Structural Equation Modeling (SEM) assess the consistency and quality of the latent variable measurements. These indices include Cronbach's alpha ( $\alpha$ ), McDonald's omega ( $\omega_1$ ,  $\omega_2$ ,  $\omega_3$ ), and Average Variance Extracted (AVE).

**Table 6.12 Structural Equation Model- Reliability Indices**

Variable	$\alpha$	$\omega_1$	$\omega_2$	$\omega_3$	AVE
Women's Capability Index	0.766	0.823	0.623	0.626	0.517
Economic Participation	0.684	0.781	0.581	0.617	0.425
Social Participation	0.726	0.749	0.749	0.755	0.653

Source: Primary Survey

Table 6.11 indicates that in the case of the exogenous variable women's capability Index,  $\alpha$  (Cronbach's Alpha) 0.766 indicates good internal consistency among the items measuring Women's Capability. McDonald's omega  $\omega_1$  (Omega 1)= 0.823,  $\omega_2$  (Omega 2)= 0.623 and  $\omega_3$  (Omega 3)= 0.626 indicate the reliability of the scale.  $\omega_1$  indicates excellent reliability, while  $\omega_2$  and  $\omega_3$  are lower but still acceptable, indicating moderate reliability. The variability between these indices might suggest some multidimensionality in the items. The average variance extracted is equal to 0.517 indicating that over half of the variance in the observed variables is explained by the latent variable suggesting good convergent validity.

The  $\alpha$  (Cronbach's Alpha) in the case of Economic Participation is 0.684 indicating marginal internal consistency. The McDonald's omega  $\omega_1$  (Omega 1)=0.781 shows good reliability, while  $\omega_2$  (Omega 2)= 0.581 and  $\omega_3$  (Omega 3)= 0.617 are lower indicating moderate reliability. The higher  $\omega_1$  compared to  $\alpha$  suggests that the latent construct is measured more reliably when considering the contributions of all items. The average variance extracted is equal to 0.425 indicating that less than half of the variance in the observed variables is explained by

the latent variable. This suggests issues with convergent validity, probably due to heterogeneous items.

For the social participation dimension  $\alpha$  (Cronbach's Alpha) is 0.726 indicating good internal consistency among the items measuring social participation. The McDonald's omega  $\omega_1$  (Omega 1) = 0.749,  $\omega_2$  (Omega 2) = 0.749 and  $\omega_3$  (Omega 3) = 0.755 indicate better reliability than in the case of economic participation. The AVE (Average Variance Extracted) is equal to 0.653 indicating that a significant portion of the variance in the observed variables is explained by the latent variable, suggesting strong convergent validity.

To summarise, there is good internal consistency and reliability, with acceptable convergent validity in the case of women's capability. The indices suggest a well-constructed measurement model, though some moderate ' $\omega$ ' values hint at possible multidimensionality. In the case of endogenous variables of Economic Participation and social participation, there is marginal internal consistency but good reliability and strong convergent validity.

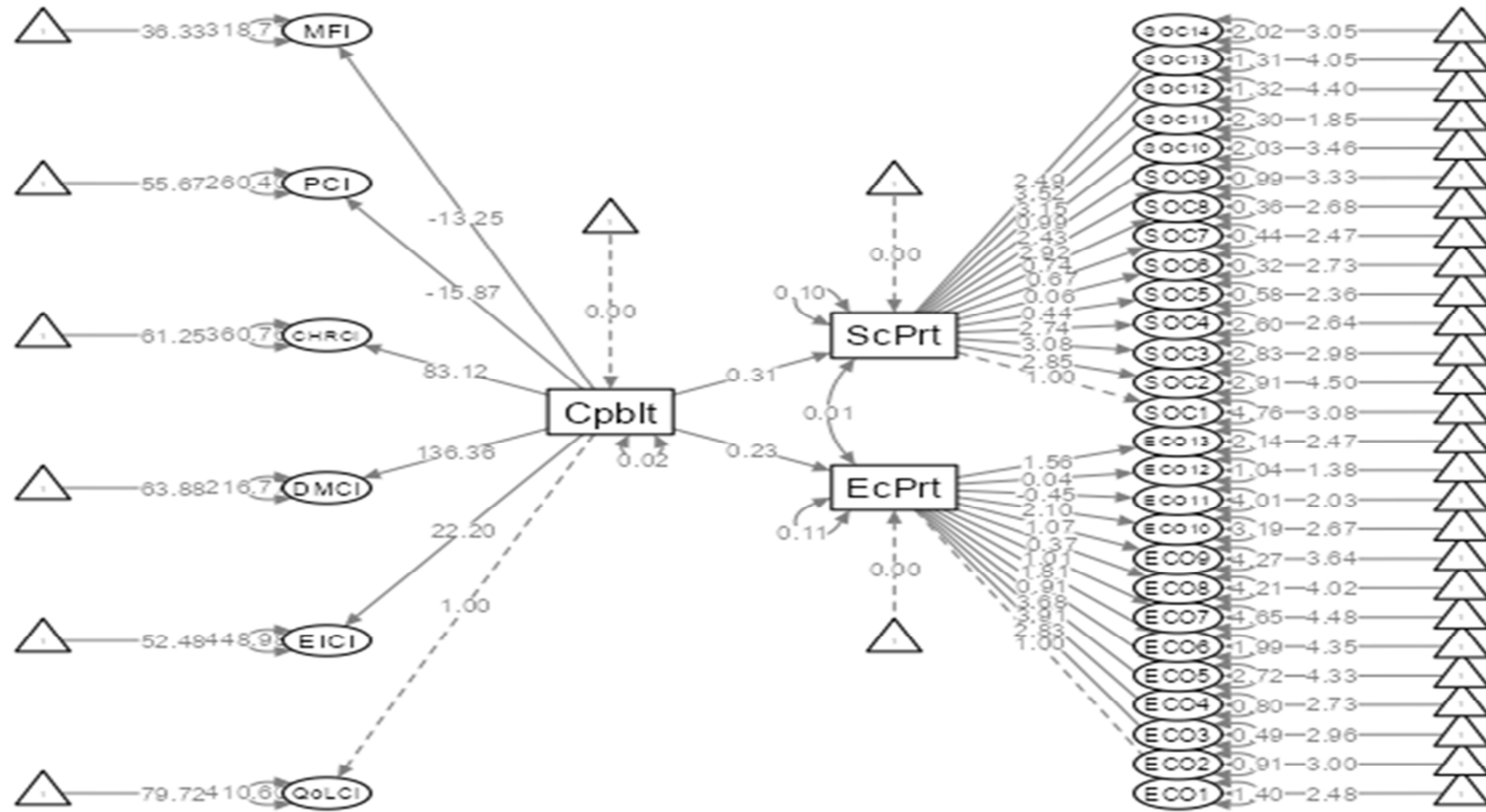
### **6.3.7 Structural Equation Model- Path Diagram**

In Structural Equation Modeling (SEM), a path diagram involves comprehending the associations between latent components and observed variables and indicating the direction of hypothesized relationships. The path diagram illustrates how women's capabilities (Cpblt) affect their social and economic participation by linking these categories and their indicators. The path diagram helps to clarify the theoretical framework of the model and the hypothesized relationships, making it easier to communicate complex relationships visually. The path diagram indicates that:

- WCI is explained by QoLCI, EICI, DMCI, CoHRCI, PCI and MFI.
- Economic Participation is explained by ECO1 to ECO13.
- Social Participation is explained by SOC1 to SOC14.
- Women's Capability (WCI) influences Economic Participation.
- Women's Capability (WCI) influences Social Participation.

The arrows in the path diagram indicate causal relationships or hypothesized paths between variables. The parameters are shown on the path coefficients, which quantify the strength and direction of relationships. The Path diagram representing Structural equation Modeling is given in Figure 6.1.

Fig 6.1 Structural Equation Model- Path Diagram



Source: Derived by the Researcher from Primary Survey

The path diagram 6.1 identifies the relationships and dependencies among the exogenous variables and endogenous variables. The women's capability indices are the exogenous variable and social and economic participation are the endogenous variables with many associated variables. The CpbIt is the women's capability index formed by combining six indices of WCI; QoLCI, (Quality of Living Index) EICI (Education and Information Index), DMCI (Decision-Making Capability Index), CoHRCI (Control over Household Resources Capability Index), PCI (Participation Capability Index) and MFI (Mobility Freedom Index). ScPrt is the abbreviation for Social Participation with its subdimensions SOC1, SOC2,....., SOC14 and EcPrt is the abbreviation for Economic Participation with its subdimensions ECO1, ECO2,....., ECO13. The arrows pointing from CpbIt to QoLCI, EICI, DMCI, CoHRCI, PCI and MFI indicate that these observed variables are indicators of the latent variable CpbIt; Women's Capability Index (WCI).

The arrows pointing from ECO1 to ECO13 to Economic Participation and the arrows pointing from SOC1 to SOC14 to Social Participation are the dimensions of Economic Participation and Social Participation respectively. The arrows from the observed variables (MFI, PCI, CHRCI, DMCI, EICI, QoLCI) to the latent variable CpbIt indicate factor loadings. These values reflect how strongly each observed variable loads onto the latent construct. Similarly, the arrows from SOC1 to SOC14 to ScPrt and from ECO1 to ECO13 to EcPrt show the factor loadings for these indicators. The arrows from CpbIt to ScPrt and from CpbIt to EcPrt represent the structural paths in the model. These indicate the relationships between the latent variables. Triangles pointing to latent variables and indicators represent error terms. These capture the variance in each observed variable not explained by the latent constructs.

Path Coefficients are the numbers on the arrows. They represent the strength and direction of the relationships between variables. The path coefficient of 0.23 from women's capability to economic participation and 0.31 from women's capability to social participation indicates a positive relationship with a moderate

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effect size. It also indicates the direct effect of women's capability on economic and social participation.

The following simplified path coefficients can be assumed from the model

Women's Capability → Social Participation: 0.31

Women's Capability → Economic Participation: 0.23

The path coefficient of Economic participation with 0.23 indicates that for every one unit increase in WCI, economic participation is expected to increase by 0.23 units and the path coefficient of Social participation with 0.31 indicates that for every one unit increase in WCI, social participation is expected to increase by 0.31 units, holding other factors constant. Hence it is concluded that the expansion of the capabilities of left-behind women has a positive statistically significant moderate effect on socio-economic participation indicating that when the left-behind women utilise the opportunities of the situation and expand their capabilities, that may enhance their socio-economic participation.

### **6.3.8 Hypothesis Testing**

The result of Structural Equation Modeling highlights that an increase in WCI is associated with an increase in Economic Participation with an estimate of 0.227, the coefficient ( $\beta = 0.2314$ ) indicates a moderately strong relationship. The z-value (4.123) and the very low p-value ( $< 0.002$ ) indicate that this relationship is statistically significant. Similarly, the relationship between WCI and Social Participation is also positive, with an estimate of 0.314, indicating that an increase in WCI is associated with an increase in Social Participation. The standardized coefficient ( $\beta = 0.3148$ ) indicates a stronger relationship compared to Economic Participation. The z-value (5.416) and the very low p-value ( $< 0.002$ ) indicate strong statistical significance. So, the null hypothesis is rejected and the alternate hypothesis of the left-behind Muslim women's capability influences their socio-economic participation positively, is accepted. Hence it is concluded that the expansion of the capabilities of left-behind women is likely to lead to better economic and social participation outcomes.

#### 6.4 Conclusion

The Structural Equation Modeling analysis specified the direction and strength of the relationship between the capabilities and socio-economic participation of women. This model helps in understanding the direct effects and the interrelationship between women's capabilities and the social and economic dimensions of women's participation. The model test indicates that the model is testing the effect of women's capability expansion on their economic participation and 'Social Participation'. The parameter estimate indicates that for every one unit increase in WCI, economic participation is expected to increase by 0.227 units and for every one unit increase in WCI, social participation is expected to increase by 0.314 units, holding other factors constant. The Standardised Estimate ( $\beta$ ) indicates a small to moderate positive standardized effect of WCI on economic and social Participation. The z-value indicates that there are statistically significant effects of the predictor on socio-economic participation. The p-value indicates that the relationship between WCI and economic participation and WCI and social participation are statistically significant.

The  $R^2$  value explains that Economic Participation accounts for a moderate amount of the variance in the indicators used whereas Social Participation explains a significant proportion of the variance in the indicators used. The reliability indices show that there is good internal consistency and reliability, with acceptable convergent validity in the case of women's capability. In the case of the endogenous variable of Economic Participation and social participation, there is marginal internal consistency but good reliability and strong convergent validity. The result indicates the direct effect of women's capability on economic and social participation. The path coefficient shows  $WCI \rightarrow ECO: \beta = 0.23, p < 0.01$  indicates a significant positive effect of women's capabilities on economic participation and  $WCI \rightarrow SOC: \beta = 0.31, p < 0.01$  from women's capability to social participation indicates significant positive effects of women's capabilities on the economic participation. The capability of women in the study area has a significant positive effect on the economic and social participation of women. Hence it is concluded that

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enhancing women's capabilities can positively impact their economic and social participation. Having discussed the role of capability expansion of the left-behind Muslim women in their socio-economic participation in this chapter, the next chapter summarises the major findings, suggestions, future research prospects and conclusion of the study.



## **CHAPTER 7**

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### **FINDINGS AND CONCLUSION**



## **7.1 Introduction**

The present study titled ‘A Study on Emigration and Capability Expansion of Left-Behind Muslim Women in Kerala’ aims at analysing the role of male emigration in the capability expansion of left-behind Muslim women in Kerala with special reference to Malappuram district. The study identifies the factors contributing to their capability expansion and assesses the role of capability expansion of left-behind Muslim women in their socio-economic participation. The study applied both empirical and analytical methods and incorporated primary and secondary data. For the primary survey, the study used the Stratified Multi-stage Random Sampling method and the study fixed the sample size as 423 based on the Kerala Migration Survey, 2018.

The socio-economic profile of the respondents is analysed by using appropriate statistical tools in the study to ensure the validity of the data, compare the findings with authentic information from the Kerala Migration Survey and Census data and provide evidence to support the research setting for the main hypothesis. To measure the capability of left-behind Muslim women in the study area, the Women Capability Index was calculated and by using appropriate statistical tools, the hypothesis of the study is tested.

## **7.2 Major Findings**

Based on the analysis of primary and secondary data and testing the hypothesis, the study presents the following findings:

Migration is one of the most dynamic factors in the development scenario of Kerala. Malappuram district has the distinction of sending the largest number of people abroad and receiving the largest share of foreign remittances among the districts of Kerala. People are mostly migrating to Gulf countries and the Muslim community dominates among the migrants in Kerala and they receive the largest share of the remittances compared to other communities. Among the migrating Muslims, the male dominates and most of the males migrating from Kerala are low-educated and low-skilled but secured fair jobs in gulf countries. Most of these

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migrants with less-paid jobs cannot afford family visas and thus leave their families in their place of origin. Among the household members left-behind by the male migrants, their wives are mostly affected by the absence of their husbands as they are loaded with additional household obligations to which they were not familiar while their husbands were present. When these women receive foreign remittances and access to advanced levels of education, they become capable of managing the designated tasks.

The maximum and minimum ages of the respondents are 57 and 22 respectively and the mean age is 33. About 36 percent of the respondents have graduation and above as their highest level of education and 63.1 percent of them have higher secondary and above as their highest level of education. There is a statistically significant difference in the educational qualification of younger and older age groups (Chi-Square= 1.877, d.f.=3,  $p < 0.001$ ) that the women from the age category 20-40 are more educated than those from the age category 40-60. Compared to the education attainment of the respondents, the work participation rate among the respondents is low (10.1 percent). There is a statistically significant association between the occupations of the respondents and their educational attainment (Chi-Square= 1.164, d.f.= 9),  $p < 0.001$ ) indicating that with the improvement in the education level, women tend to go for paid work in the Malappuram district.

About 71 percent of the respondents' husbands who migrated to gulf countries have primary/secondary or higher secondary education but are employed as self-employed or secured salaried jobs (90 percent). There is a moderately significant association between the occupations of the husbands of the respondents and educational attainment (Chi-Square= 35.350, d.f.=6,  $p < 0.001$ ). Results also show a statistically significant association between the education levels of respondents and their husbands (Chi-Square test statistic, 2.233 with 9 degrees of freedom and a p-value of 0.000) indicating that the respondents with higher educational qualifications have their husbands having higher educational qualifications and vice versa.

Among the respondents, 32 percent of the respondents are residing in urban regions and 68 percent of respondents are residing in rural regions, while 67 percent of the respondents belong to the nuclear family and only 33 percent of the respondents belong to the joint family. Most of the respondents, being in emigrant families, are living in good or very good houses. The average number of children of the respondents is 2.24 and the average number of family members is 5.97. The mean years of family life among the respondents is 13 years and the mean age at which respondents got married is 19.38 years. There are statistically significant differences in the mean age at marriage between the two age groups of 20-40 and 40-60 (Mann-Whitney  $U= 15174.5$ ,  $Z= -3.62$ ,  $p<0.001$ ) indicating that the women in the age group 40-60 got married at a lower age compared to the age group 20-40.

The majority have migrated to UAE ( 39.2 percent ) followed by Qatar (26.2 percent ) and Saudi Arabia (22.5 percent) and the least number of them migrated to Bahrain (2.1 percent). The number of migrants to UAE (9.9 percent) and Qatar (11.3 percent) from Tirur taluk is the highest. There are statistically significant differences between (Chi-Square (d.f=30)= 1.523,  $p<0.001$ ) the respondents' husbands' destinations across different taluks. About 51 percent left them and migrated within 10 months of their marriage and 18.9 percent of their husbands started their out-migration before their marriage. About 85 percent have a migration duration below 20 years and the maximum duration of migration of their husbands is 35 years.

The average monthly remittances across all respondents is Rs. 42507. About 54 percent of the respondents are receiving foreign remittances below Rs. 40000 and 96 percent of the respondents received monthly remittances below Rs.80000. The migrant households are likely to under-report remittances, willingly or otherwise.

There are statistically significant differences in the mean differences of monthly remittances across different age groups (One-way ANOVA,  $F(3)=44.252$ ,  $d.f=3$ ,  $p<0.001$ ) indicating that the monthly average remittances increase with the higher age group. About 59 percent of the respondents are receiving remittances from their husbands to their accounts and others are receiving the amount through their in-law parents or others. There are significant differences in receiving the

remittances between the age categories of the respondents (Chi-Square = 74.909,  $p < .001$ ) signifying that the younger respondents (20-30) are more unlikely to receive money on their behalf and older age categories are receiving money mostly from their husbands on their behalf.

The length of the husbands' migration duration has a positive statistically significant association with the monthly remittance, the number of children and the cost of housing [ F-value of 4.342 ( $p > 0.05$ ) with d.f. (1) = 55 (for the numerator) and d.f. (2) = 367 (for the denominator) with the R-squared value (0.798)]. It indicates that approximately 79.8 percent of the variability in the dependent variable of migrant's duration is explained by the independent variables in the model. There are significant differences in the housing types of the respondents across the emigration durations of their husbands. ANOVA Test result ( $F = 6.892$ ,  $d.f. = 3$ ,  $p < 0.001$ ) indicates that there are statistically significant differences between the average migration duration of the husbands across different housing types suggesting that an increase in the duration of emigration, housing quality of the emigrant households increases.

There is a strong positive correlation (Pearson's Correlation Coefficient of .799,  $p < 0.001$ ) between the migration duration and monthly foreign remittances sent by husbands. It implies that with the increase in the migration duration, monthly foreign remittances sent by husbands also increase. There is a statistically significant association between the migration duration and the migrant nation where the respondents' husbands are working (Chi-Square=195.252,  $d.f.=35$ ,  $p < .001$ ). The average expected age of life of the respondents based on their family history, dietary habits, standard of life and state of health is 79.43 years. The major issue of the left-behind women due to the migration of husbands is loneliness and isolation followed by issues of children and in-law parents. The focus group discussion indicates that left-behind women in the study area have learned to cope with the situation which enabled them to be equipped economically, educationally and socially.

The statistically significant association between the socio-economic characteristics of the respondents and the sub-dimensions of women's capability

indicates that the sub-dimensions selected to measure the capability of women are sufficient for evaluating the capabilities as intended. The Women's Capability Indices of DMCI, EICI and MFCI are approximately normally distributed and the QoLCI, CoHRCI and PCI are a bit skewed. The WCI score data is symmetric and normally distributed and the minimum and maximum WCI scores observed among the respondents are 28.58 and 80.63 respectively.

The data to assess the role of migration in the capability expansion of left-behind Muslim women satisfy the Ordinal Regression Model assumptions of the ordinal dependent variable, continuous, categorical, or ordinal independent variables, no multicollinearity and the proportional odds assumption. Ordinal Logistic Regression Model with the predictors provides a significantly better fit to the data than the model with only intercept, indicating that the predictors have a meaningful impact on the outcome variable and the high p-values; 0.138 for Pearson and 1.000 for Deviance indicate that the model is a good fit for the data. It also adequately describes the relationship between the predictors and the outcome variable. The Pseudo R-square value of Cox and Snell with 0.262 Nagelkerke with a value of 0.277 and McFadden's pseudo R-squared with a value of 0.124 suggests that approximately 26.2 percent, 27.7 percent and 12.4 percent of the variance of the dependent variable is explained by the model indicating a reasonable fit.

The parameter estimate of the foreign remittances is 0.555 with a statistically significant p-value of 0.002. It implies that foreign remittances have a positive statistically significant effect on the WCI score, which suggests that with the increase in the foreign remittances sent by their husbands, the left-behind women's capability also increases. The odds ratio of foreign remittances sent to the left-behind women is 1.741 indicating that a one-unit increase in monthly remittances is associated with a 74.1 percent increase in the odds of being in a higher category of the capability of women. Migration duration of husbands has an estimate of 0.088 but with an insignificant p-value of 0.157 ( $p > 0.05$ ) indicating that the husbands' migration duration does not have a statistically significant effect on the WCI score.

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The parameter estimate of the remittance's duration shows that when the remittances are sent by the husbands monthly, with a parameter estimate of 0.482 and a significant p-value ( $p=0.004$ ) there is a statistically significant impact on the Women's Capability Index when husbands are sending money from abroad monthly rather than quarterly and an odds ratio of 1.619 indicates that with one unit increase in the chance of sending money from abroad monthly the women's capability increases by 61.9 percent. The parameter estimate for the predictor 'to whom the remittances are sent shows that when the respondents receive remittances on their behalf, there is a statistically significant impact on the Women's Capability Index ( $p=0.032$ ). The parameter estimates of education categories show that the parameter estimate of 0.373 for the graduation level of education and a significant p-value ( $p=0.035$ ) specifies a statistically significant effect on the women's capability score. The parameter estimate of nuclear family type indicates that with an estimate of 0.647 and p-value of 0.004 living in a nuclear family positively affects the WCI score compared to living in a joint family. An odds ratio of 1.910 indicates that staying in a nuclear family follows a 91 percent increase in the odds of being in a higher category of the capability of women.

To assess the factors contributing to the capability expansion of left-behind women in the study area, Principal Component Analysis (PCA) was conducted on 8 factors and 36 sub-dimensions. The analysis identified 7 components with Eigen values over 1 and 25 factors with strong factor loadings, accounting for 67.1% of the total variance in the data. The results of the KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy and Bartlett's test of sphericity indicate that the data set is suitable for Principal Component Analysis and the KMO with higher values (0.832) indicates better suitability for factor analysis. Among the factors contributing to the capability of left-behind Muslim women in the study area, the consequent factors of husbands' migration and remittances- increased responsibility (0.897), self-reliance autonomy (0.865), household Management (0.837), financial status and freedom (0.821) and social factors 'banking' (0.832), transport and communication system (0.816) have strong factor loadings. It suggests that these factors are the major factors (factor loading  $>0.800$ ) determining the capability of women in the study

area. The study shows that migration and foreign remittances, availability of social infrastructure and possession of consumer durables are the major factors contributing to the outcome variable.

The association between the Women's Capability Index (WCI) and the Health Index (HI) score produced a correlation coefficient of 0.22, indicating a mild positive correlation between the variables and suggesting that health is a positive determinant of women's capabilities. There is a statistically significant relationship between the frequency of health check-ups and the life expectancy of women (Chi-Square=30.476,  $p = 0.002$ ). It suggests that women who are taking frequent health check-ups have a high life expectancy. The association between the Education and Information Capability Index (EICI) dimension of the Women's Capability Index (WCI) and the education level of the respondents was analysed using a one-way ANOVA test. The results show a statistically significant difference ( $F=24.137$ ,  $p<0.001$ ) in the mean EICI scores across different education levels, indicating that individuals with higher education levels tend to have higher EICI scores.

The association between the availability of social infrastructure and the PCI dimension of WCI using Kruskal-Wallis's test shows that there are significant differences between the mean rankings of PCI scores by the availability of social infrastructure. It specifies that with the improvements in the availability of social infrastructure, the women's participation capability also increases, which indicates that the availability of social infrastructure of the respondents under the study is a major determinant of women's capability in the study area. The association between the women's capability indices and political and religious practices using the Chi-Square test indicates a highly positive relationship between the variables, which specifies that as political and religious practices improve, the WCI score tends to increase and vice versa.

The Household Consumer Durables Index (HCDD) was constructed to analyse the association between the possession of consumer durables and WCI, an index of possession of consumer durables. The association between HCDD and indices of WCI is analysed using MANCOVA and the result specifies that with high

F-values and low p-values for each dependent variable of QoLCI, EICI, DMCI, CoHRCI, PCI and MFCI, the model has good explanatory power, indicating that the effects are statistically significant. Hence HCDCI as an independent variable has a statistically significant effect on the capability indices and the Possession of Consumer Goods is a major factor determining the left-behind Muslim women's capability in the study area. The association between the conversion factors and WCI is analyzed using the one-way ANOVA test and the result shows that there are statistically significant differences in the mean health, education, occupation, financial level and living situation between the three categories of poor, moderate and good. Hence the respondents with good conversion factors have higher capabilities than the respondents with moderate or poor condition of conversion factors. Therefore, the conversion factor is also one of the major factors affecting the capability of left-behind Muslim women in the study area.

The association between the WCI score and the family types of nuclear and joint families the respondents belong to, using the independent samples t-test shows that the respondents from the nuclear families have higher capability scores than the respondents from the joint families. The p-value is less than 0.05 in both cases of whether equal variances are assumed or not. It confirms that the difference is statistically significant, indicating the left-behind Muslim women from the nuclear family have more capabilities than those of the joint families. The associations between different WCI indices and the migration of husbands and support dimensions using the Chi-square test with  $p < 0.05$  show that there are statistically significant associations between the WCI indices and the husbands' migration. Migration of husbands and support plays a significant role in determining the capabilities of left-behind women.

To analyse the role of capability expansion of the left-behind Muslim women in their socio-economic participation, 13 avenues of economic participation and 14 avenues of social participation of the women could be identified. The Cronbach's Alpha of 0.786 for the sub-dimensions of social participation and 0.724 for the sub-dimensions of economic participation are high, showing the data is reliable for

further calculations. The Structural Equation Modeling Analysis indicates that a comparison of the chi-square value for the user model and the baseline model with a significant p-value suggests that the user model fits the data better than the baseline model which implies that the model is testing the effect of women's capability on their social and economic participation. The Standardized Root Mean Square Residual of 0.046 indicates a good fit, as lower values indicate a better fit. The RMSEA (Root Mean Square Error of Approximation) with 0.076 indicates a reasonable fit.

The Structural Equation Modeling analysis applied to study the role of capability expansion of women in the social and economic participation of left-behind women. The parameter estimates indicate that for every one unit increase in WCI, economic participation is expected to increase by 0.227 units, holding other factors constant. Similarly, social participation is expected to increase by 0.314 units holding other factors constant. The p-value indicates that the relationship between WCI and economic participation, and WCI and social participation are statistically significant. The R-Square value of 0.3168 indicates that the latent variable economic participation explains approximately 31.68 percent of the variance and the R-square value of 0.4056 indicates that the social participation explains approximately 40.56 percent of the variance in the observed variables associated with it. It proposes that the model's latent constructs account for a moderate amount of the variance in the indicators used. The expansion of left-behind women's capabilities has a positive significant moderate effect on socio-economic participation.

### **7.3. Policy Recommendations**

The present study, titled 'Emigration and Capability Expansion of Left-Behind Muslim Women in Kerala,' seeks to explore the impact of male emigration on the capability expansion of left-behind Muslim women in Kerala, with a particular focus on Malappuram district. The study aims to identify the key factors driving their capability expansion and evaluate how this expansion influences their socio-economic participation. The study reveals the conclusion that migration and

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foreign remittances have positive effects on the capability expansion of the left-behind women in the study area and they are capable of attaining functionings while utilising the opportunities in the context of fulfilling the demands of the self and the family in the absence of male migrants which enabled their socio-economic participation.

Based on the findings and discussions of this study, policy recommendations were made emphasizing the urgent need to establish a social policy framework to protect the rights of migrant laborers and their families, including left-behind wives. This framework should ensure access to necessary support for both the laborers and their families. To make sure that the rights of migrants and their families are recognized and respected, an informed approach that includes accountability for the human rights of migration and development can be employed. Expanding educational and awareness opportunities for left-behind wives of migrant husbands, specifically on topics such as financial literacy, entrepreneurship, and job skills, could yield substantial benefits for these women and their households. Promoting the access of left-behind wives to social networks and support systems, such as social clubs and networks of other wives of migrant husbands, can be highly beneficial. Ensuring access to counseling centers can help them cope with the stress of being left behind.

The most significant aspect of migration has been the large annual cash remittances that households in Kerala have been receiving. As households tend to under-report remittances actual amounts could have been much higher. A critical policy issue is how best to make use of this fund for productive channels in the place of origin. Easy access to financial services such as microcredit and microfinance would help left-behind wives become more financially independent and better able to support themselves and their families. Moreover, there should be government projects to persuade the NRIs and return migrants to entrust their money to invest. The development projects in which emigrants have a stake and reasonable assurance of a return could be the key to the success of the utilisation of excess funds of

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emigrants. Thus, migration and development policies must place a priority on the development of skills and opportunities for the utilization of their resources.

The current study shows that left-behind women have silently acquired capability through the phenomenon of migration. So the government should introduce special projects to appreciate and utilise the potential of the left-behind women. The budget should be allocated to the local governing bodies in the Malappuram district to provide gainful ventures to enable the social and economic participation of Muslim women from migrant families, which will increase the work participation rate in the district that constitutes the highest proportion of the community in the district.

#### **7.4. Future Research Prospects**

Potential applications of the capabilities approach within the migration scenario and global migration policy must be given priority for further research. The capability approach of Sen has an extensive range of applications to academics, activists and policymakers (Robeyns, 2003). Hence the Capability Approach can be applied to evaluate the effects of any policy changes, to identify the deprived categories of the society and to address the gender-related issues. By applying the capability approach to migration and left-behind research, future studies can offer greater insights into the multifaceted dimensions of development and well-being that may result in more comprehensive and successful policies and programs. Investigating the well-being of the left-behind women in terms of their capabilities, focusing on access to social interaction and political participation to identify social exclusion and discrimination, legal restrictions, intimidation or violence and socio-economic inequalities are further areas of research. The application of the capability approach to the deprived classes in society is another identified area of research.

Research on migration that incorporates social justice ideologies is possible if the capability approach is used in empirical studies. Studies on how migration affects the social networks and collective capabilities of sending communities can be explored. The application of the capability approach to the issues of return migrants will be useful to perceive their recognition in the family as well as in society. The

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application of the capability approach to analyse the health issues of return migrants has a wider scope. The bargaining power of women in different social, cultural and family environments can be analysed through the lens of the capability approach. Moreover, the capability approach has an enormous scope for studying financial inclusion between genders or any class.

### **7.5. Conclusion**

The present study titled ‘A Study on Emigration and Capability Expansion of Left-behind Muslim Women in Kerala’ analyses the role of male emigration in the capability expansion of left-behind Muslim women. It also investigates the factors contributing to their capability expansion and assesses the role of capability expansion of left-behind Muslim women in their socio-economic participation and comes with the following conclusions.

The study tries to answer the question of how well the migrant households are utilising the expanded resources from migration to attain their capabilities and what are the capabilities relevant to the Muslim left-behind women in the research context. The capability approach, developed by Amartya Sen and further advanced by Martha Nussbaum, provides a valuable framework for analyzing migration and its effects on the women left behind. This approach places more emphasis on improving people’s capabilities; and their real opportunities to attain desirable states of being and doing. Using the capability approach as a framework, this research explores how migration affects women’s abilities to lead lives they value and have reason to value.

When their husbands migrate, the left-behind women are forced to take on new responsibilities, which were unfamiliar to them, to fulfill their own needs and those of their families. The status of these women has positively changed from that of modest housewives to effective managers of household affairs. They are equipped to handle a variety of duties that include caring for the family, managing the

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education of kids, conducting business with banks and interacting with the outside world. The study argues that the migration of husbands has given women greater access to decision-making processes, financial and non-financial resources, social networks and information about services. It further enhanced their mobility and improved their standard of living. To conclude, these developments have boosted women's agency, ability and identity. The introduction chapter highlights the significance, objectives and methodology of the study. The chapter also depicts the main issue of the study concerned and the rationale for selecting the study area and the samples. The issues in the selection of the capability list, the technical difficulty of capability measurement and the methodology of the formation of the Women's Capability Index are detailed. The Chapter also presents and discusses the justification of various statistical tools used to analyse the major hypothesis of the study.

The review of literature on the effect of migration on the left-behind women shows that migration of males and consequent absence and foreign remittances has both positive as well as negative implications on the left-behind women. While highlighting valid concerns about the impact of migration on women, the evaluation shows that migration and foreign remittance streams fundamentally equip left-behind women to utilize new opportunities to meet the demands of family members in the absence of husbands and a better standard of living. The illustration of the status of Muslim women in Malappuram district in the present and past offers the justification for selecting the sample selected for the study by highlighting the advances in their lives brought about by various socio-economic factors. The relative position of the Malappuram district in the migration scenario from Kerala highlights the rationale behind the selection of the study area. The detailed summary of left-behind women in Kerala gives a rich picture of the benefits and challenges they are accustomed to, in the absence of their husbands. The overview of the capability approach entails the extensive application of the capability approach in various areas of research. The theoretical framework presents that when men migrate to the gulf, their wives have access to a variety of previously unknown

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opportunities for enhanced autonomy as they manage their families and engage in work outside their households which increases their capability.

The Women's Capability Index was prepared by aggregating the indicators with their sub-dimensions and standardising the score. The role of migration in the capability expansion of left-behind Muslim women in the Malappuram district is analysed using the Ordinal Logistic Regression Analysis. The result shows that the foreign remittances have a positive statistically significant effect on the WCI score indicating that with the increase in the foreign remittances, the left-behind women's capability also increases and the migration duration of husbands does not have a statistically significant effect on the WCI score. Monthly remittances and the remittances sent on behalf of the respondents have a statistically significant positive impact on the Women's Capability Index.

To assess the factors contributing to the capability expansion of left-behind women in the study area, the Principal Component Analysis identified 7 components with Eigen values over 1 and 25 factors with strong factor loadings and these components account for 67.1 percent of the total variance in the data. Among the factors contributing to the capability of left-behind Muslim women in the study area, the consequent factors of husbands' migration and remittances which include increased responsibility, self-reliance and autonomy, household management, financial status and freedom and social factors such as banking, transport and communication system have strong factor loadings suggesting that these sub-dimensions are the major factors determining the women's capability in the study area. The study shows that migration and foreign remittances, availability of social infrastructure and possession of consumer durables are the major factors contributing to the outcome variable. The association between the factors influencing the capability of left-behind Muslim women and the WCI shows that there are positive statistically significant associations between the variables.

To analyse the role of capability expansion of the left-behind Muslim women in their socio-economic participation, the Structural Equation Modeling was applied. The parameter estimates show that, while other factors remain constant, economic

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participation is predicted to increase by 0.227 units for every unit increase in WCI and social participation to increase by 0.314 units. It implies that the capabilities of women (WCI) have a statistically significant effect on the socio-economic participation of the left-behind Muslim women in the Malappuram district.

The research findings suggest that foreign migration and consequent factors have a significant positive effect on the capabilities of women. The results are relevant for policymakers and researchers working on migration, gender and development issues. The investigation into applying the capabilities approach from a gender perspective provides greater opportunities for realizing real freedom and utilizing new opportunities created by self-fulfillment, particularly as Muslim women in Kerala assume new responsibilities in the absence of their husbands, receive remittances and pursue educational advancement. This is especially relevant in the Malappuram district, where orthodox religious traditions have historically restricted their opportunities and freedom. The control and management of family resources, perception towards higher education securing jobs and involvement in decision-making enable left-behind women to interact more in society. The new scenario of women, with better education and mobility with financial support from abroad helped them to identify the implications of social, economic and political participation, which may change the evaluations and perceptions of mainstream over Muslim women in the Malappuram district. These concerns require further investigation, and more detailed implications of male migration on various aspects of real opportunities for women can be inferred.



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## **APPENDICES**





16. Husband's Higher Educational Qualification: 1. Primary/ Secondary 2. Higher Secondary 3. Graduation 4. Post Graduation and above 16.
17. Your occupation: 1. Self-employed (Specify.....) 2. Salaried /Coolie 3. Unemployed 4. Student
18. Present Occupation of Husband: 1. Self-Employed/Business 2. Professional Employment (Specify.....) 3. Salaried Employment 4. Unemployed
19. When did your husband first migrate? (Number of months after or before marriage)
20. Who is in charge of the Head of the family?  
1. Yourself 2. Husband 3. Your parents 4. Husband's parents 5. Others
21. Do you have a bank account? 1. Yes 2. No
22. How many accounts if you have? 1. One 2. Two 3. Three 4. Four 5. More than four 6. No account
23. Do you have a saving habit? 1. Yes 2. No
24. If yes, method of saving: (Please tick (✓) all that apply

1	Gold	5	Savings account in banks
2	Post Office Savings Account	6	Life insurance policy
3	Property	7	Mutual funds
4	Stocks or bonds	8	Fixed investments

25. Monthly household income of family: 1) 0 - 20,000 2) 20,000 - 40,000 3) 40,000 - 60,000 4) 60,000 - 80,000 5) 80,000 – 1 lakh 6) Above 1 lakh
26. How long has your husband been working abroad (in completed years)?
27. Where does your husband work abroad? 1. UAE 2. Kuwait 3. Qatar  
4. Saudi Arabia 5. Bahrain 6. Oman
28. What was the amount of remittance sent by your husband, (the highest amount sent during the three months?.....)
29. In whose name does your husband send the money? 1. On your behalf 2. On behalf of parents 3. Others
30. Choose the number between 0 and 100 that describes your quality of life: (✓the most applicable)
- 100 Perfect quality of life  
95 Almost perfect quality of life  
85 Very good quality of life

- 70 Good quality of life  
 55 Moderately good quality of life  
 40 Somewhat poor quality of life  
 25 Poor quality of life  
 15 Very poor quality of life  
 5 Extremely poor quality of life  
 0 No quality of life.

31. To what extent do you agree with the statements?

(1. Very Strongly Disagree 2. Strongly Disagree 3. Neither Strongly Agree nor Strongly Disagree 4. Strongly Agree 5. Very Strongly Agree)

S No.	Items	1	2	3	4	5
1	You can eat nutritious and healthy food as per your choice					
2	Your current accommodation is suitable for your current needs					
3	You have money that you can decide how to use					
4	You can allocate your own time and engage in recreation.					
5	You can make rational decisions					
6	You can use the internet and social media as per your choice					
7	You are able to attain a better education as desired					
8	You are able to acquire a good job					

32. Who is making the following decisions in the family

( Choose any number from 1 to 5, with 1 indicating no autonomy in the statement of decisions given below and 5 indicating full autonomy. Tick the correct option applicable to you)

S No.	Items	1	2	3	4	5
1.	Decision on the health of self and family members					
2.	Decision on the education of children					
3.	Decision about visiting friends and families					

4.	Decisions about food habits and dress Style					
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33. To what extent do you have control over these resources?

S No.	Items	Never	Slightly	Partially	Moderately	Fully
1	To spend the husband's income					
2	To purchase daily necessities					
3	To purchase major household consumer goods					
4	To manage family property					

34. To what extent, do you have the freedom to visit these places Tick (✓) your response in the column below

	Items	Never	With others	Alone
1	Go to the Hospital or Clinic			
2	Go to the bank and perform transactions			
3	To participate in social events and festivals			
4	To visit public offices			

35. Indicate your participation by giving numbers from 1= No participation .....to 5= Very Active Participation. Tick (✓) your response in the column below

S No.	Items	1	2	3	4	5
1.	Being able to participate in social organization					
2.	Being able to be involved in local politics					
3.	Being able to participate in Business					
4.	Being able to participate in Household Management					

36. To what extent do you agree with the statements?

(1. Very Strongly Disagree 2. Strongly Disagree 3. Neither Strongly Agree nor Strongly Disagree 4. Strongly Agree 5. Very Strongly Agree)

S No.	Items	1	2	3	4	5
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1	Do frequent health checkups					
2	Getting immediate proper treatment when sick					
3	Have sufficient finances to maintain health					
4	Consulting doctors in Super Specialty Hospital					
5	You can vote freely in elections					
6	You can contest the election					
7	You can hold political Administrative Leadership					
8	You have freedom of expression					

37. To what extent do you find the following social situations satisfactory? 1.

Very Dissatisfied 2. Dissatisfied 3. Neutral 4. Satisfied 5. Extremely Satisfied

	Social factors	1	2	3	4	5
1	Recreation facilities					
2	Public Health Services					
3	Transportation Facilities					
4	Educational facilities					
5	Banking facilities					

38. How far does the following technologies make your life easy? 1. Very easy

2. Fairly easy 3. Neither easy nor uneasy 4. Fairly Uneasy 5. Very uneasy

S No.	Items	1	2	3	4	5
1	Motor Car/ Scooter					
2	Mobile Phone					
3	Computer					
4	AC					
5	Inverter					
6	Washing Machine					
7	Refrigerator					
8	LPG/Electric stove					

39. How do you rate your situation?

1. Health Status 1. Good 2. Moderate 3. Poor

2. Education Level 1. Good 2. Moderate 3. Poor

3. Status of Employment      1. Good      2. Moderate      3. Poor
4. Financial Level      1. Good      2. Moderate      3. Poor
5. Living condition      1. Good      2. Moderate      3. Poor
40. Until what age do you expect to live, given your family history, dietary habits, lifestyle and health status?      1) 0 – 25      2) 25 – 50      3) 50 – 75      4) 75 – 100      5) Above 100 years
41. Do you own any land or any other property in your name?  
1. Yes, in my name 2. Yes, jointly with my husband 3. Yes, jointly with other members of the household 4. No property
42. If yes, what type of property is owned?      1. Land      2. House      3. Others
43. What is the frequency of receiving money from abroad?      1) Every month  
2) Once in three months      3) Twice in a year      4) Once in a year  
5) No fixed pattern.
44. Relationship with in-law parents 1. Uneasy      2. Fair      3. Better
45. To what extent did your spouse's migration-related absence benefit you? Please ✓your response      1. Never      2. Rarely      3. Sometimes      4. Most of the time      5. Always

S No.	Factors	1	2	3	4	5
1	Increased Responsibility					
2	Financial Freedom					
3	Social & Economic Involvement					
4	Mobility Decisions					

46. How will you spend your income? (Tick all that apply)      1. Savings      2. Purchase of jewelery      3. Purchase of durable goods      4. Daily household expenses      5. No freedom to spend.
47. On a scale of 1-7, (1. Never      2. Only once in life      3. Once in a year      4. Once in six months      5. Once in a month      6. Once in a week      7. Daily) how

true is each situation about you?  
below)

(✓any number from 1 to 7

S No.	Items	1	2	3	4	5	6	7
1	Online & Offline shopping							
2	Paying bills							
3	Bought gold							
4	Financial Help to relatives							
5	Bought land							
6	Home Based Businesses							
7	Bank Transactions							
8	Formal job							
9	Business Investment							
10	Charity Contributions							
11	Self Help Group							
12	Business Organisation							
13	Kudumbasree							

48. On a scale of 1-7, (1. Never 2. Only once in life 3. Once in a year 4. Once in six months 5. Once in a month 6. Once in a week 7. Daily) how true is each item of social participation about you? (✓any number from 1 to 7 below)

S No.	Items	1	2	3	4	5	6	7
1	Visit Neighbour Hood							
2	Social Club							
3	Recreational Trips							
4	Support Services							
5	Sharing Creative Ideas through Social Media							
6	Religious Organisation							
7	Political Organisation							
8	Colleagues/ Friends Gathering							
9	Religious Class							
10	Function/ Party							
11	Yoga/Gym/ Training Class							
12	Virtual social Meet							
13	Alumni Meet							
14	Child's Academic Meet							



## **Appendix 2**

### **Questionnaire- Focus Group Discussion**

1. What are the major issues faced by the left-behind women when their husbands migrate abroad?
2. What is the major adjustment mechanism to cope with the situation?
3. Does the long-term migration of males change the role of left-behind women in the family?
4. Do the left-behind women have major decision-making autonomy?