



**ANNUAL BIDS CONFERENCE ON DEVELOPMENT (ABCD) 2024**

**How much Income Gap persists across Gender  
Dimensions due to Climate Change?  
New Evidence from Bangladesh**

**Azreen Karim, Ph.D.**

**Bangladesh Institute of Development Studies**

***December 9, 2024***

# OUTLINE

- ❑ Introduction
- ❑ Research Question/Objective
- ❑ Definition and Conceptualization
- ❑ Data and Methodology
- ❑ Empirical Results/The Gaps
- ❑ Addressing the Gaps – Key Recommendation(s)
- ❑ Conclusion – Challenges & Way Forward



# RESEARCH GAP IN THE EXISTING LITERATURE

- A growing cross-country literature recognizes the differential effects of climate change on gender issues, particularly on women.
- These include effects on women's economic empowerment and female labor force participation, on voice and agency, and on gender-based violence.
- There has also been an emerging literature on the impacts of migration due to climate change and their regional implications on gender-oriented norms and issues. These include effects on gender norms and women, effects on poverty, food security and livelihoods and on displacement.
- However, the studies have explored these **differential impacts** in an isolated manner. That means literatures have explored impacts of climate change on gender indicators e.g., women's empowerment, voice and agency, gender-based violence separately.
- There are **extremely few context-specific studies** which have explored **gender gap dimensions** among varying degrees of climate-induced migrated households; and quantitative data gap exists in the climate change induced migration-gender nexus dimensions to analyze the socio-economic narratives of these households in rural and urban settings.
- This study, therefore, fulfills this gap and looks at climate change-gender nexus issues with having a focus on climate-induced migration under a **single framework** contributing to this research gap in the '**Climate-Development**' literature.

# THE QUESTION WE ASK & THE PILLARS WE EXAMINE

- *How much income gap persists across gender dimensions due to climate change?*
- We examine **three (3) dimensions of gender parity**: *economic participation and opportunity, educational attainment and women's voice and agency.*
- We identify gender gaps, as defined by the disparities in indicators between male and female, primarily in three (3) categories/pillars:
  - ***Gender gap in employment and sectoral livelihoods;***
  - ***Gender gap in income;***
  - ***Gender gap in educational attainment.***

We further looked at the gaps in our fourth (4<sup>th</sup>) pillar i.e., ***women's economic empowerment, social decision-making, voice and agency, and gender-based violence (GBV)*** from the disparities among females between migrated and non-migrated households.

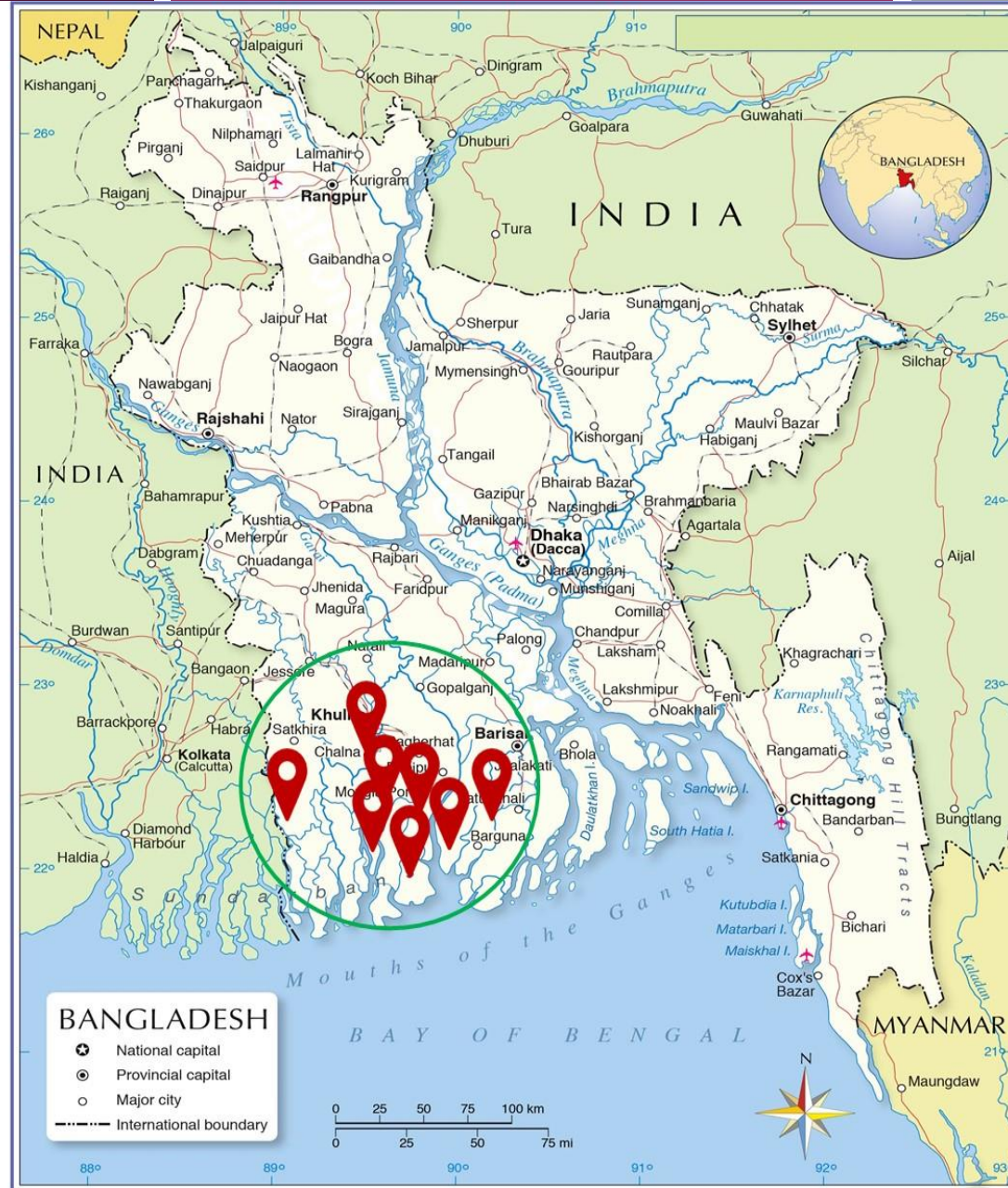
- This paper, therefore, aims to investigate the impacts of climate change on gender gap across economic development dimensions (i.e., income, education, employment and livelihoods, asset ownership etc.), understand the patterns of economic opportunities and challenges after climate migration and examine the gaps in empowerment, women's voice, agency and gender-based violence indicators.

# HOW WE DEFINE GENDER GAP?

- We define **gender gap or gender disparities** as the percentage differences across selected indicators between men and women.
- It needs to be noted here that the disparities between male and female directs to widening up or narrowing down the gaps across various socio-economic, socio-demographic and gender-specific indicators.
- A **positive (+) gap** indicates the disparities between male and female is wider (higher) and a **negative (-) gap** denotes that the differences has been narrower (lower) i.e., inequalities has been lessened showing progress across the gender parity dimensions.
- In each of the pillars, we identify the evidences where the gender gap is found to be wider (higher) i.e., positive (+) and also highlight the indicators in which gender gap had showcased to be narrower (lower) i.e., negative (-).



FIGURE 1: MAP SHOWING THE SELECTED UPAZILAS (SUB-DISTRICTS) IN THE STUDY

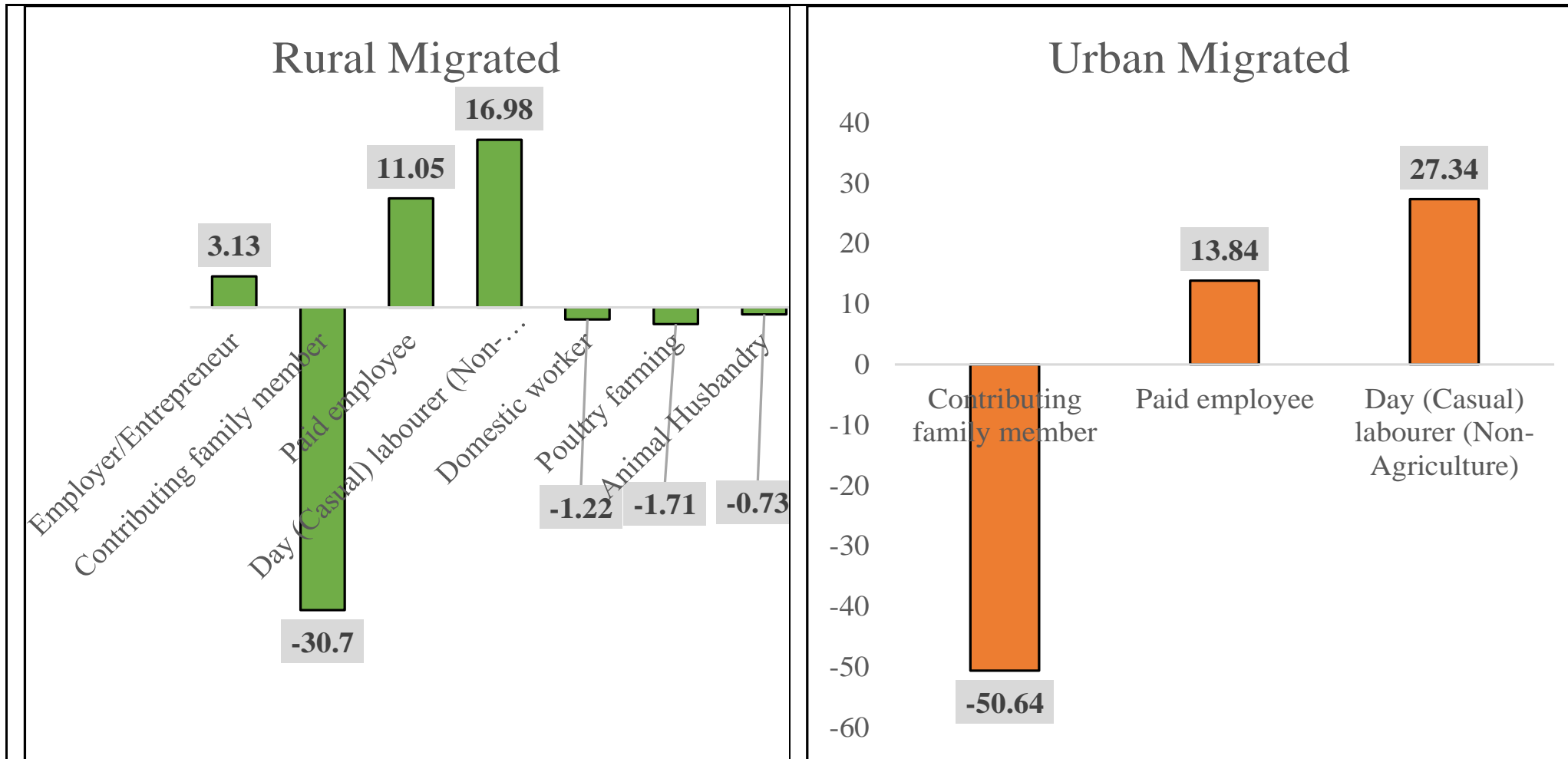


Source: Authors' elaborations using BIDS Climate-induced Migration and Gender Survey 2023.

# THE DATA

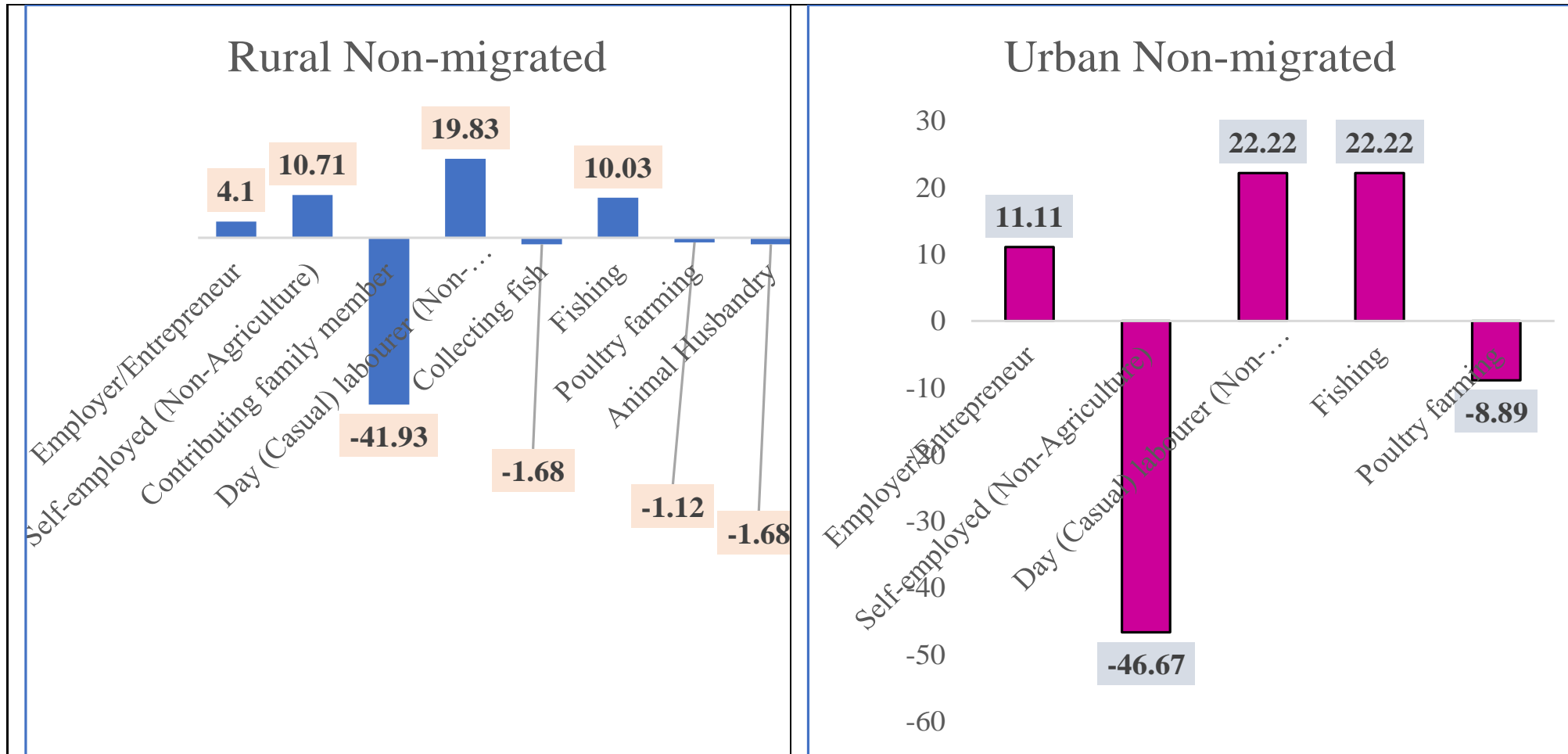
Division	District	Upazila	Location	Number	Total
<b>Barishal</b>	BARGUNA	Pathorghata	Rural	21	34
			Urban	13	
		Taltoli	Rural	39	66
			Urban	27	
<b>Khulna</b>	BAGERHAT	Mongla	Rural	28	28
			Urban	0	
		Shoronkhola	Rural	50	72
			Urban	22	
	KHULNA	Dacope	Rural	22	39
			Urban	17	
		Koyra	Rural	47	64
			Urban	17	
	SATKHIRA	Assassuni	Rural	30	36
			Urban	6	
		Shyamnagar	Rural	29	64
			Urban	35	
<b>N=2</b>	<b>N=4</b>	<b>N=8</b>			<b>403</b>

# GENDER GAP IN EMPLOYMENT AND SECTORAL LIVELIHOODS: MIGRATED HOUSEHOLDS

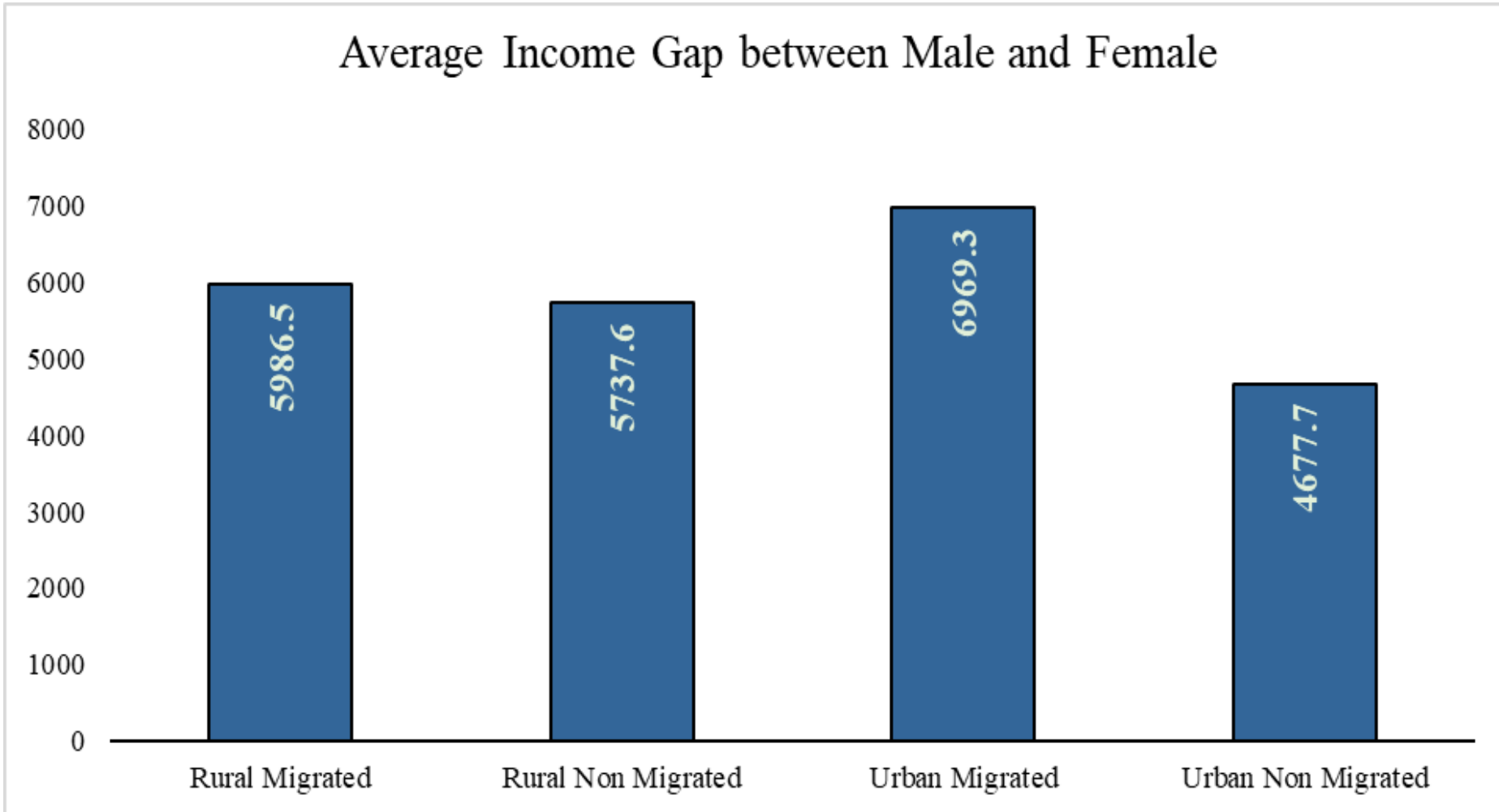




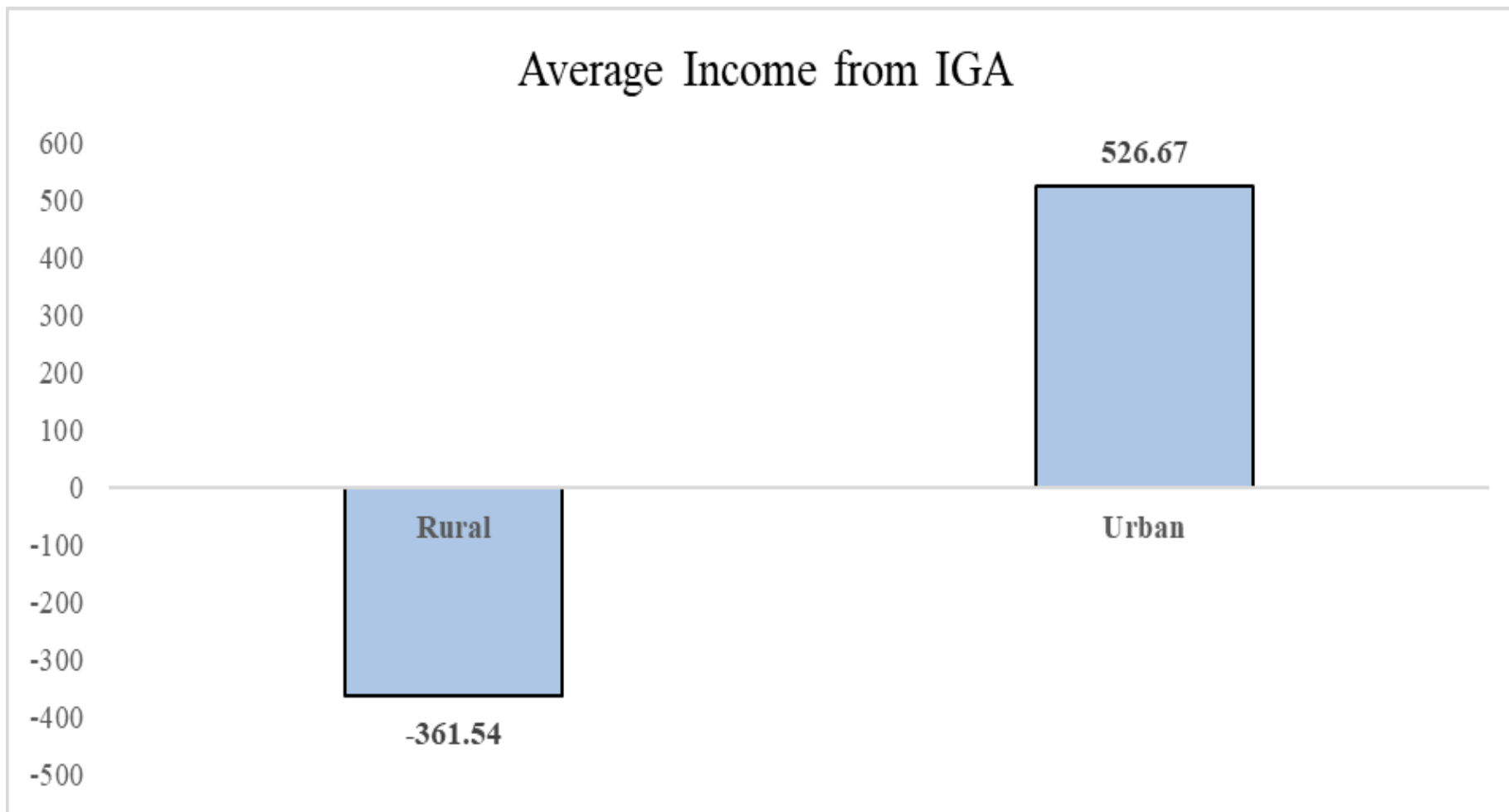
# GENDER GAP IN EMPLOYMENT AND SECTORAL LIVELIHOODS: NON-MIGRATED HOUSEHOLDS



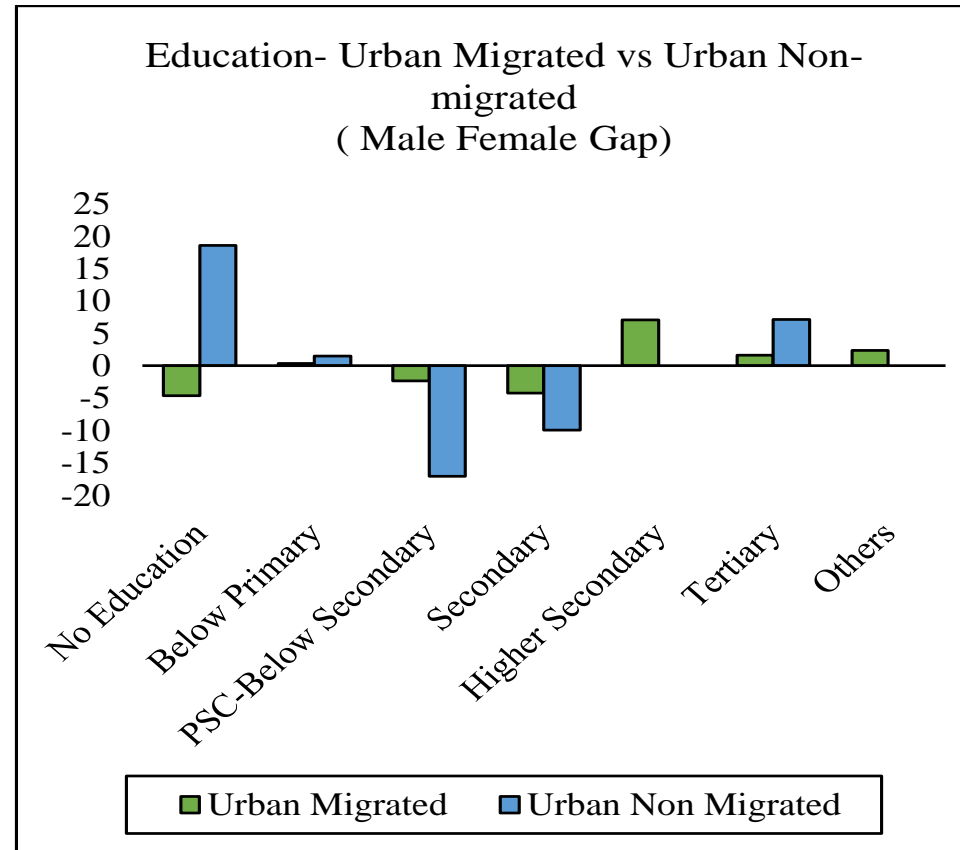
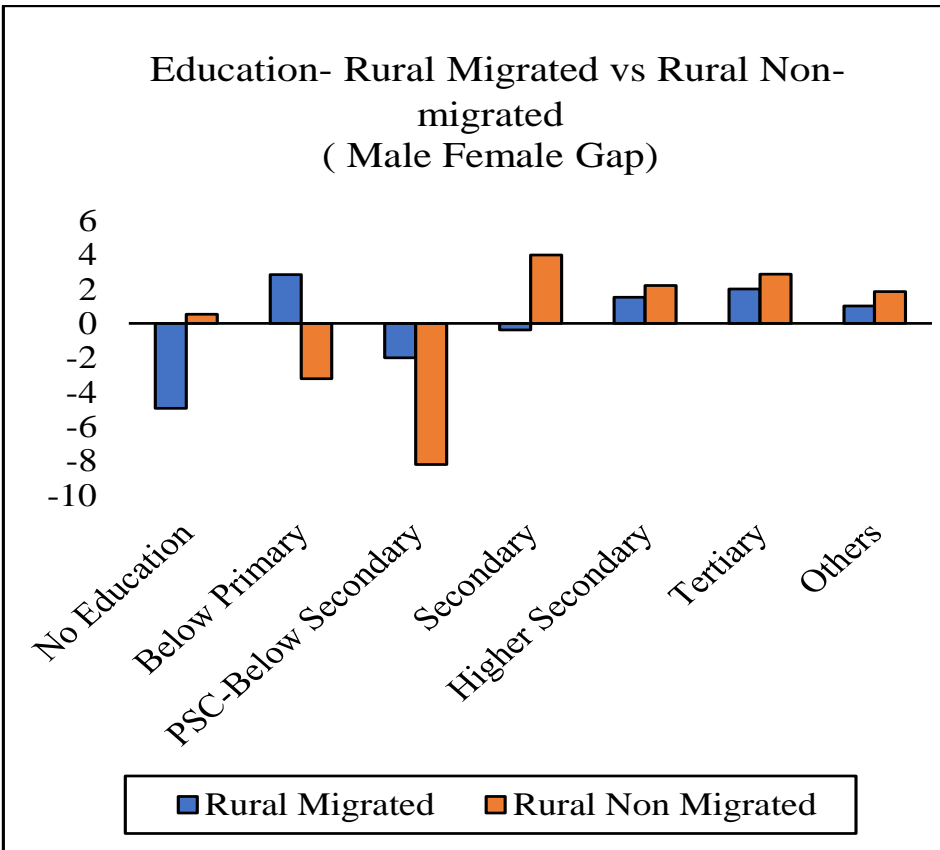
# GENDER GAP IN INCOME



# GAP IN INCOME-GENERATING ACTIVITIES (IGA) INCOME



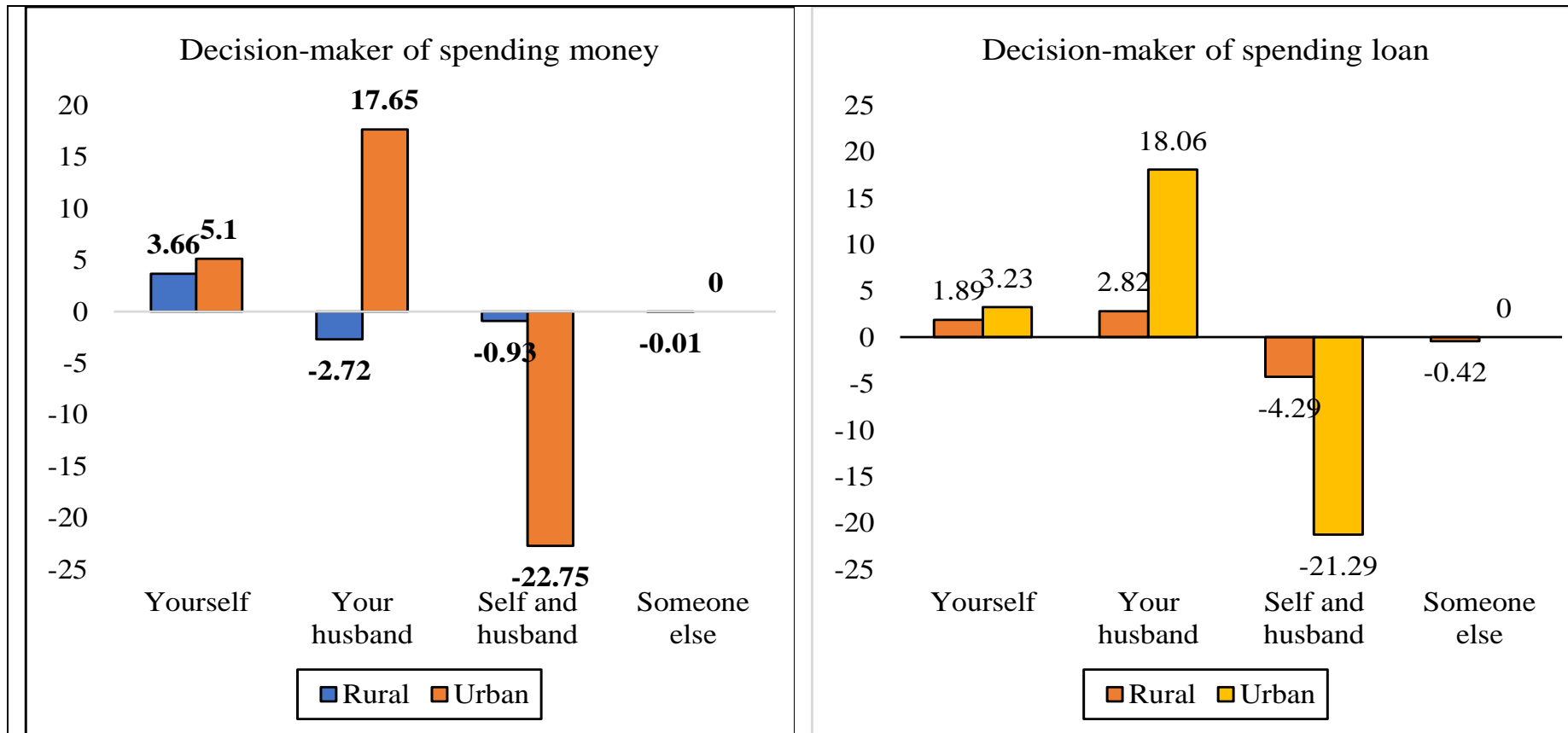
# GENDER GAP IN EDUCATIONAL ATTAINMENT



# SUMMARY OF THE GENDER GAPS

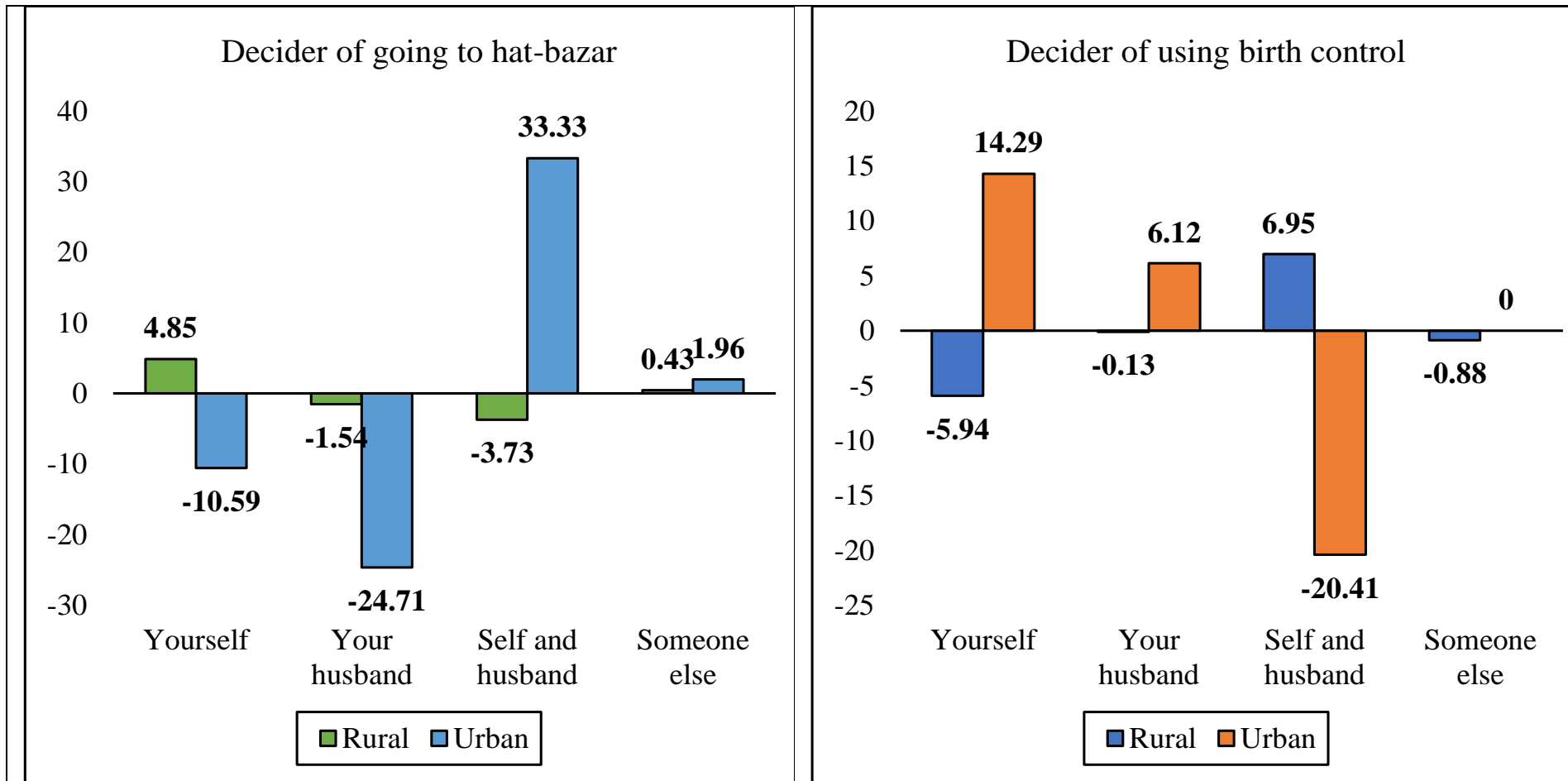
GENDER PARITY DIMENSION(S)	INDICATOR(S)	GENDER GAP (Migrated)		GENDER GAP (Non-Migrated)	
		Rural	Urban	Rural	Urban
ECONOMIC PARTICIPATION & OPPORTUNITY	Estimated Earned Income [BDT]	5986.5***	6969.3***	5737.6	4677.7
	Paid Employee	11.05*** (++)	13.84** (++)		
	Day (Casual) laborer (Non-agriculture)	16.98*** (++)	27.34*** (+++)	19.83	22.22
	Contributing Family Member	-30.7***	-50.64***	-41.93***	
	Self-employed (Non-agriculture)			10.71** (++)	-46.67*
	Employer/Entrepreneur	3.13** (+)		4.1*** (+)	11.11
	Fishing			10.03*** (++)	22.22
Poultry Farming	-1.71***		-1.12	-8.89	
INTERSECTIONALITY (EDUCATIONAL ATTAINMENT)	No Education	-4.96*	-4.64	0.54	18.57
	Below Primary	2.83	0.34	-3.23	1.43
	PSC-Below Secondary	-2.02	-2.41	-8.22**	-17.14
	Secondary	-0.39	-4.24	3.98* (+)	-10.00
	Higher Secondary	1.53	7.05** (+)	2.21	
	Tertiary	2.01* (+)	1.57	2.87** (+)	7.14
	Others	1.01** (+)	2.34	1.85** (+)	

# GAPS IN WOMEN'S ECONOMIC DECISION-MAKING

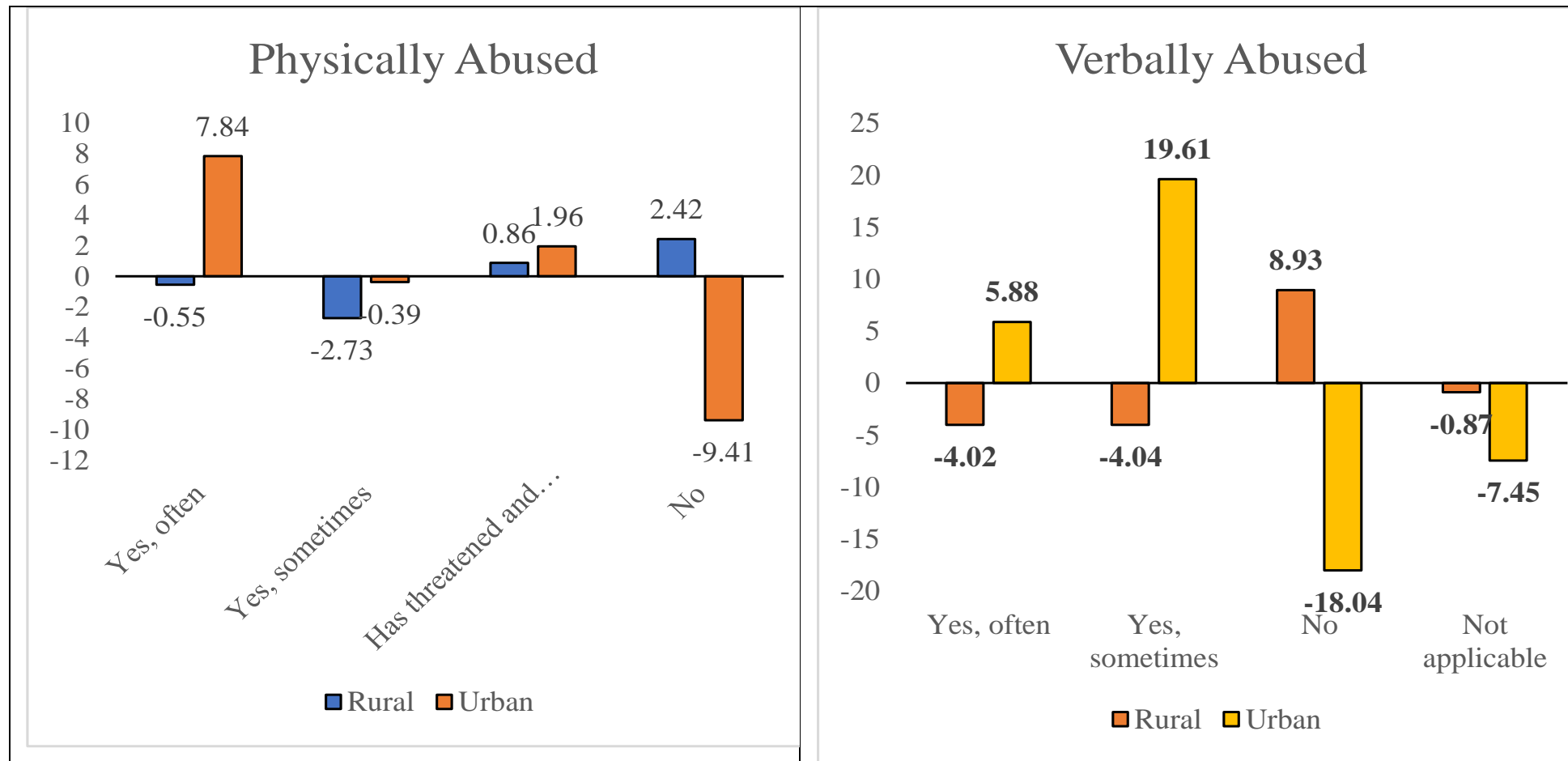




# GAPS IN WOMEN'S SOCIAL DECISION-MAKING



# GAPS IN GENDER-BASED VIOLENCE (GBV)



# VOICE, AGENCY & GBV - THE SUMMARY

GENDER PARITY DIMENSION	INDICATOR(S)	RESPONSE(S)	RURAL (Migrated)	RURAL (Non-Migrated)	R-GAP	URBAN (Migrated)	URBAN (Non-Migrated)	U-GAP
VOICE & AGENCY, GENDER-BASED VIOLENCE (GBV)	Economic Decision (Spending Money)	Self	28.88	25.22	3.66	45.1	40	5.1
		Husband	12.93	15.65	-2.72	17.65	0	17.65
	Economic Decision (Spending Loan)	Self	6.01	4.12	1.89	3.23	0	3.23
		Husband	31.69	28.87	2.82	58.06	40	18.06
	Social Decision (Mobility)	Self	42.24	37.39	4.85	29.41	40	-10.59
		Husband	27.16	28.7	-1.54	35.29	60	-24.71
	Social Decision (Reproductive)	Self	11.65	17.59	-5.94*	14.29	0.00	14.29***
		Husband	7.28	7.41	-0.13	6.12	0.00	6.12***
	Gender-based Violence (Physical)	Yes (often)	13.36	13.91	-0.550	7.84	0	7.84
		Yes (sometimes)	14.66	17.39	-2.73	19.61	20	-0.39
		No	71.12	68.7	2.42	70.59	80	-9.41
	Gender-based Violence (Verbal)	Yes (often)	12.5	16.52	-4.02	5.88	0	5.88
		Yes (sometimes)	14.22	18.26	-4.04	19.61	0	19.61
		No	73.28	64.35	8.93	1.96	20	-18.04

# ADDRESSING THE GENDER GAPS - KEY RECOMMENDATION(S)

## *ECONOMIC PARTICIPATION & OPPORTUNITY*

- **Remove gender specific barriers and address demand and supply constraints** for diversified employment opportunities and promoting job creation in growth sectors (identified as having potential for women) for climate affected migrated and non-migrated households in the rural and urban settings.
- Provide support e.g., **skill-based training and access to finance/credit (via kinship and institutions)** to initiate and implement entrepreneurial activities in the non-agriculture sector to reduce gender gap in high paid jobs for **migrated households in the rural areas**.
- Provide and ensure support to **adopt self-employment in the non-agriculture sector** for **non-migrated households in the urban region** to reduce the gender gaps.
- Design intervention tools such as women-focused locally-led climate livelihoods, empowerment and resilience program to address **women's access to productive resources and credit** towards occupational choice and secure livelihoods, female labor force participation, facilitation in local coping strategies, creation of female-headed group business ventures and **scaling up with economic and social safety net which could act as an informal insurance mechanism for the climate affected gendered communities**. This could also provide access to low cost, affordable, high quality childcare services in nearby distances for both migrated and non-migrated households in the rural and urban locations.
- **Male-dominated sectors should be made more accessible to women** i.e., providing incentives to female entrepreneurs to access markets, enabling women's access to and use of climate-adaptive technologies, establishing links between women producers and retailers to facilitate access to technical and market information, and between producers and private sector firms engaged in marketing and export, and **facilitating women's entry into local community groups, networks and trade associations**.

## ON GENDER GAP IN INCOME

- Enable **women-focused network-based community groups with prioritization of women leadership** to address gender disparities due to the occupational choices, opportunities and their changing patterns for **migrated households in the rural and urban region**.
- Despite the female non-migrants demonstrated keen interests to engage in income-generating activities (IGA) with aspirations encompassing poultry farming, fish cultivation, and vegetable cultivation; however, the scarcity of available land, financial and other support posed a considerable threat to their endeavors. Therefore, **access to productive resources should be provided to non-migrated households** as well from government programs or NGOs aimed to reduce gender gaps in income in the rural and urban contexts.

# ON GENDER GAP IN EDUCATIONAL ATTAINMENT

- Based upon existing evidence on spatial disparities, **targeted infrastructure and institutional capacity building** should be undertaken in the education sector to focus on the climate affected vulnerable communities.
- Develop and initiate intervention programs to **increase enrollment at the tertiary level in the rural areas for both migrated and non-migrated households**. As added incentives, the programs could design **gender specific skill-based training programs focusing on the regional industrial demand** targeting academia-industry interlinkage for the climate vulnerable communities as well. Climate and mainstream development policies should also ensure access to GOB's Technical and Vocational Education and Training (TVET) programs to achieve gender parity in educational attainment for these targeted groups.
- Address and provide incentives to **increase enrollment and ensure completeness at the secondary level for non-migrated households in the rural regions**. For example, providing more scholarships to encourage more girls and women to complete their schooling.
- Provide and ensure support to close the gap at the **higher secondary level for migrated households in the urban locations**. For example, expanding educational incentives for girls' families (i.e., cash, school supplies, food) to encourage families to send and keep their girls at school till their degree completion and discourage child and early marriage accordingly.
- **Educational institutions should be made safer** to encourage and ensure girls to enroll, attain and improve learning outcomes. This will also **complement climate change induced natural disaster preparedness policies** as well, due to the multi-purpose usage of educational institutions for cyclone and flood risk management necessitating the importance to **address gender specific issues during emergencies**.



# ON GAPS IN WOMEN'S EMPOWERMENT, VOICE, AGENCY & GENDER-BASED VIOLENCE (GBV)

- **Address patriarchal norms** through programs and policies to improve women's financial inclusion and financial control and increase women's economic and social decision-making power. These programs should address social norms amidst constraints through behavioral change communication campaigns for targeted females in migrated and non-migrated households in the rural and urban region. For example, counselling services should be provided for migrated females in the rural areas to improve economic decision-making on whether she has money on her own to spend and herself or her husband's decision-making power separately to decide to spend the money on her own in the urban locations to reduce the gap.
- **Design gender specific programs** to improve economic decision-making power for non-migrated females to reduce the gaps in husband's responses and spending loan money **in the rural regions**. These programs should also implement social decision-making action plans to improve joint decision-making i.e., self and husband in the urban locations in mobility decisions (e.g., going to market/hat bazar) with additional focus in self decision-making for non-migrated households in the rural areas. Specific action plans could also be formulated to address reproductive decisions (e.g., birth control method) for non-migrated females to reduce the gap in both rural and urban context.
- Implement programs to **address physical and verbal abuse threats for non-migrated females to reduce the gap in the urban locations**. These programs should also develop action plans to reduce the gap of threatening to divorce/remarry between female members of migrated and non-migrated households in the rural and urban settings.
- Locally-led climate adaptation policies and action plans should **emphasize more on post-migration responsive coping strategies and facilitate to get access to public services, safety nets and legal help** to address gender-based violence threats and risks among migrated households.
- The issue of GBV is multi-dimensional and hence requires multi-dimensional approach towards prevention and response at the regional level. The primary reasons behind early marriages are lack of education and poverty necessitating integrated (i.e., economic, social and legal) responses to gender-based violence indicators at the local level.
- **We place credit or microfinance group as an important intervention for migrated and non-migrated households in the rural and urban settings** to ensure voice and agency in locally-led climate change adaptation programs. This further underscores the need for both demand and supply side interventions i.e., from central to local, households to institutions and so on; and could also increase female sectoral employability (e.g., agriculture and services), decrease the costs of gender burden and provide female leadership role in disaster management as well.

# CONCLUSION – CHALLENGES & WAY FORWARD

- **Gender differences in economic and social empowerment indicators** needs more attention in both rural and urban settings in the Coastal belt.
- **Inclusiveness challenges** is a major issue in climate policy implementation to reduce vulnerability. Interventions should focus on age group-based vulnerability as well. For example, age group 60 plus (+) are expected to be less mobile in terms of migration and possess higher probability in terms of categorizing themselves as left-behinds, particularly in the migration setup. This finding has broader policy implications in the disaster-specific resettlement framework, disaster preparedness (including target group-based cyclone shelter designation), risk management and extension of demographic urban services towards urban development.
- **Women's participation and economic leadership** should be enabled across sectors, especially in urban planning and disaster preparedness to ensure women's engagement in disaster preparedness plans.
- **Women's vulnerability** could further deteriorate without disaster-specific and gender-specific intervention programs in the regional context. Both places of risk origin (particularly the Sundarbans) and internal climate migrant destination belts needs to be adequately taken care of in the relevant policy space to overcome **multiple migration challenges** (in terms of livelihood diversification, women's empowerment, voice and agency) and generating poverty traps.
- ***This study re-emphasizes that gender inequality persists and also matters to address the challenges of climate change necessitating the need for incentive-based gender safety net to protect women from poverty traps and ensure climate and gender well-being in the longer term.***

# WHAT NEXT?

*Programmatic vs. Institutional Approach*

*State Offerings vs. Private Sector Interventions*

*The Role of the NGOs*



***Thank you for your kind attention!!***

*Contact email: [azreen@bids.org.bd](mailto:azreen@bids.org.bd)*