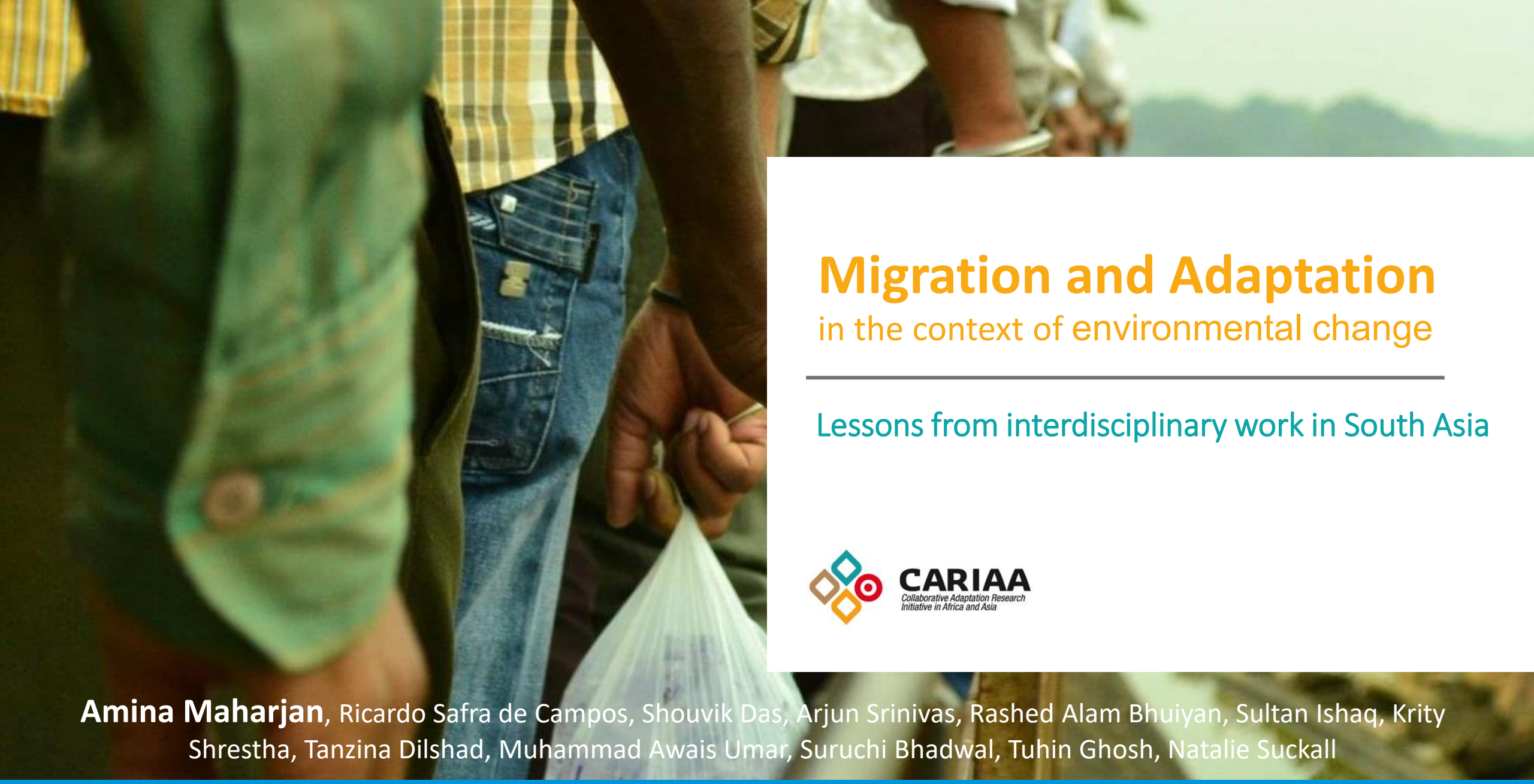

Migration and Adaptation

in the context of environmental change

Lessons from interdisciplinary work in South Asia

CARIAA
Collaborative Adaptation Research Initiative in Africa and Asia

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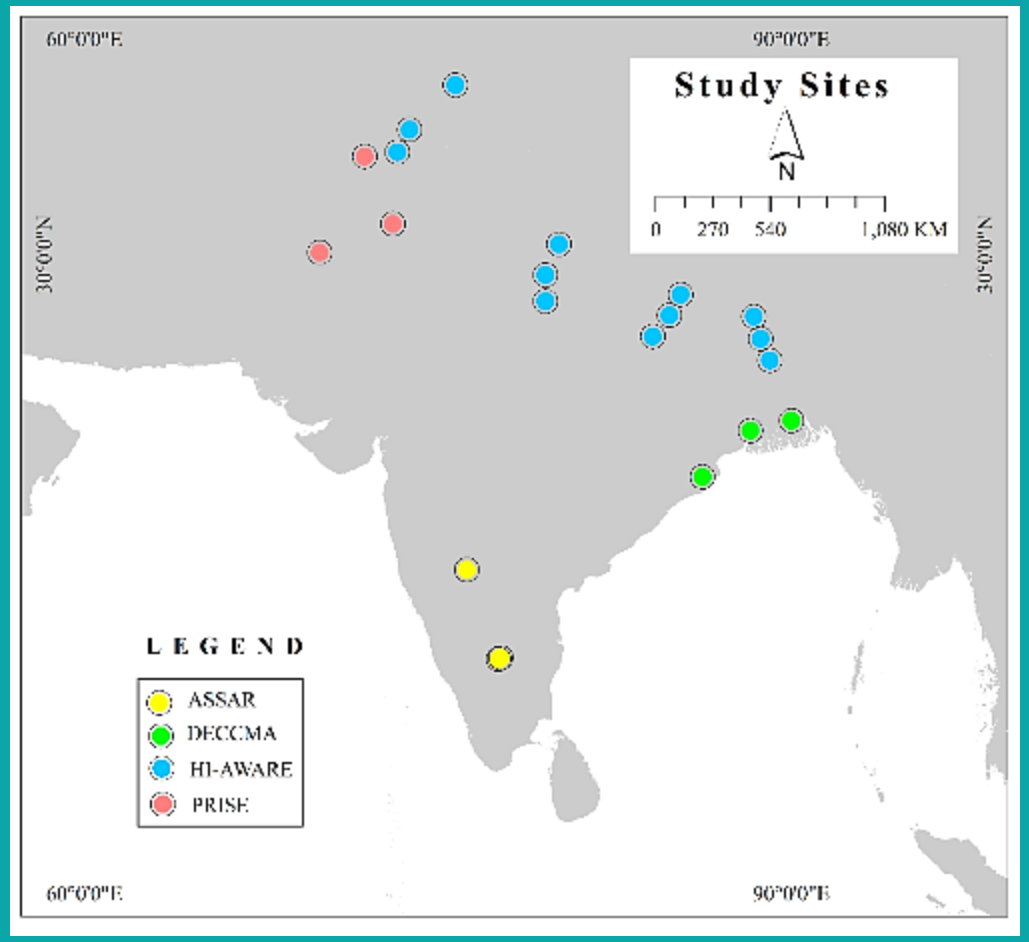
Background

Migration and climate change adaptation nexus is highly debated

Migration still perceived as a challenge & the policy continues to focus on reducing migration

Empirical quantitative studies limited

Methodology



Climate hotspots approach

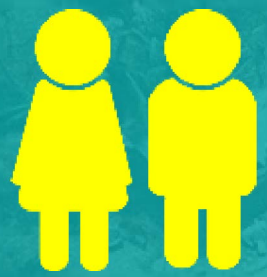
…regions where the impact of climate change are well pronounced and is likely to be more severe because of increased vulnerability and comparatively lower adaptive capacity

Total Households = 9427

Deltas	River Basins	Semi-arid plains	Semi-arid plateau
4115	1987	600	2725

ICIMOD

Who migrates?



Mostly young married men aged between 20 -30 years and moderate education

BUT

Women migration is increasing

Men - 92% in semi-arid regions, **84%** in deltas & **74%** in semi-arid plateau

69% with 10+ years of schooling in deltas, **64%** in semi-arid plains & **48%** in semi-arid plateau

Where does migrants go?

Mostly internal

AND

When international it's South-South

sectorIN

SEMI SKILLED SECTOR

Internal migration: **100%** in semi-arid plateau, **84%** in deltas, **80%** in river basins, & **61%** in semi-arid plains

Sector: 81% in river basins & semi-arid plateau, **68%** in deltas and **60%** in semi-arid plains

Drivers of migration

Major driver is economic

48% in Deltas
44% in river basins
55% in semi-arid plateaus
82% in semi-arid plains

Environment drivers have low attribution

6% in Deltas
12% in semi-arid plains

Not everyone can migrate

24% in Deltas
29% in river basins
39% semi-arid plateau
41% semi-arid plains

Immobile households – 59% in Semi-arid plains and 35% in Deltas

River Basins:

Migration & Household adaptive capacity

90%

Perceived change in climate

Sector	Non Migrant Households	Migrant Households	Difference
Agriculture	27.2	34.44	7.23***
Livestock	14.97	15.9	0.93
Forest	6.45	9.26	2.80**
Water	35.41	34.79	- 0.06

Semi-Arid Plains: Resilience Index

Livelihood Resilience/ Determinants	Migrant's Score	Non-Migrant's Score
Adaptive Capacity		
Assets, Access, Income and Food security	0.526	0.462
Strengthening and Adapting livelihoods	0.467	0.401
Anticipatory Capacity		
Preparedness and planning	0.526	0.452
Capacity, Information, and mobilization	0.589	0.536
Absorptive Capacity		
Saving and safety nets	0.504	0.470
Substitutable and diverse assets and resources	0.211	0.146
Resilience Index Score (Sum of Adaptive, Anticipatory and Absorptive capacities)	**2.822**	**2.467**

Semi-Arid Plateau:
Life Histories Approach

Code	Household Description and migration type	Implications of migration	Enabler/barriers to improved wellbeing	Well-being at source	Well-being at destination
U3: Possibly adaptive Male, 58	• Permanent migrant (30 years), shopkeeper, election officer	• Improved material well-being, differences in subjective well-being bet husband and wife	• Education and political patronage/contacts		
G29: Surviving Male, 28	• Semi-permanent migrant (16 yrs). Painter (earlier low skilled labourer), works as agricultural labourer during harvest season	• More income but risky. • Health problem	• Small landholding in village/ lack of appropriate skills & education		
G12: Positive coping Male, 26	• Semi-permanent migrant (5 yrs). Formal salaried job	• Stable employment & income,send remittance	• Technical education that enabled employment		
U11 : Surviving Male, 33	• Permanent migrant (10 yrs); petty shopkeeper. • Extended family reside at origin	• Precarious employment • Series of informal sector jobs	• Lack of appropriate education and skills, insecurity of housing tenure adversely affecting quality of life		
U 12 : Surviving Female, 45	• Permanent migrant (25 yrs); tailor Extended family reside at origin	• Long unemployed leading to debt, living in informal settlement with little facilities. • Learning tailoring has given her a livelihood opportunity	• Lack of appropriate skill and education • Engagement with NGO and vocational training has enabled gainful employment		

Deltas:
Difference in adaptation measures

Adaptation	Non-migrant household (%)			Migrant household (%)			p-value		
	IBD	MD	BD	IBD	MD	BD	IBD	MD	BD
Taking out a loan	47.2	43.5	70.2	63.6	51.0	72.5	0.001***	0.020*	0.375
Modifications to the house	39.9	33.2	60.3	51.7	41.3	62.6	0.001***	0.008**	0.423
Work outside the village	8.2	16.0	5.0	61.0	51.6	71.6	0.001***	0.001***	0.001***
*** p < 0.001, ** p < 0.01, *p < 0.05									
IBD = Indian Bengal Delta, MD = Mahanadi Delta, BD = Bangladesh GBM Delta									

From response to adaptation

Migration as response

- Low remittances
- Informal work
- Short term migration
- Autonomous adaptation with short term benefits

Government driven coherent adaptation & migration policy

Migration as adaptation

- High remittances
- Formal employment
- Strengthening translocal ties
- Access to planned in-situ options

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