

**Does changing the narrative
improve host community attitudes to climate migrants?
Experimental evidence from Bangladesh**

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Annual BIDS Conference on Development Decmber 1-3 , 2021, Dhaka

Research question and approach

Do host community attitudes to migrants improve if we shift responsibility for climate migrants' situation away from the migrants themselves and towards other forces and parties?

Randomized field experiment in Satkhira district of Bangladesh.

Sample: 1253 long term residents of host communities.

Dependent variable: Attitude to migrants

Three video treatments (+placebo)

Include narratives that shift responsibility for climate migration towards:

1. Natural forces
2. Industrialized countries
3. Local authorities

Preview of results

The narrative interventions had no significant effect on attitudes to migrants,
... and one treatment had a marginally significant negative effect in some specifications

Any reduction in in the perceived responsibility of migrants for their own situation in treated groups is countered by two opposing effects:

1. Blaming outside forces or third parties may also reduce host community perceptions of their *own* responsibility to welcome climate migrants.
2. Blaming a third party may strengthen social identification with the narrow group of one's own host community members, rather than a wider group of fellow nationals which includes migrants.

Additional explorative results:

Day labourers initially more critical to migrants, and their attitudes affected positively by treatments.

Attitudes towards migrants more critical among the wealthy and educated.

Background

Qualitative studies suggest that political and social narratives on migration affect attitudes towards migrants (Gale, 2004).

Experimental evidence suggests that in distributive situations, people will allocate money according to the extent they perceive others as being responsible for their own situation (Konow, 2000; List and Cherry, 2008).

Conflict literature suggests attribution of responsibility to a third party can lessen intergroup conflict by emphasizing a shared identity (Gaertner and Dovidio, 2000; Licata et al., 2011).

Hypothesis:

Shifting blame away from climate migrants will improve host community attitudes towards them.

Complement experimental studies of the effects of providing information about the extent of immigration and the characteristics of immigrants on attitudes to migration (Hainmueller and Hopkins, 2014; Grigorieff et al., 2016; Alesina et al., 2018).

Setting and sampling

Satkhira district, March and April 2019

Selected 13 unions from the seven upazilas in this district, based on their history or potential for climate related in-migration.

Number of respondents in each union reflects their population size.

Sample consists of long-term residents:

- Born in community
- ...or lived there at least 20 years
- ...or having a spouse born in community and having lived there at least 5 years



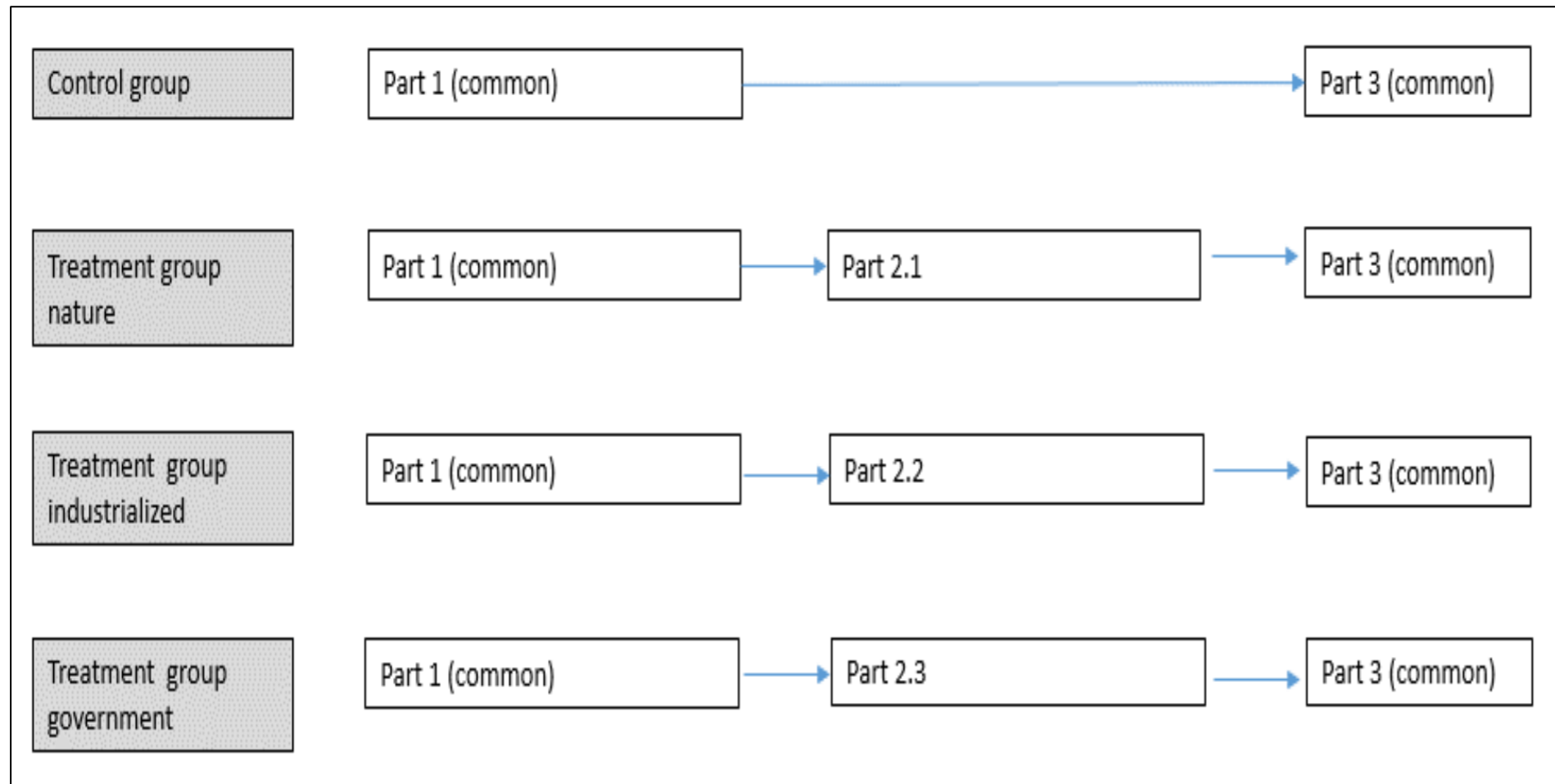
Outcome variable

Attitude to migrants:

“To what extent do you agree with the following statement: ‘It is a good thing that new migrants settle permanently in my home community.’”

(5 – Agree very strongly, 4 – Agree, 3 – Neither agree nor disagree, 2 – Disagree, 1 – Disagree very strongly).

Structure of treatment (and placebo) videos



Voiceover part 1 (all groups):

“A lot of people migrate from one place to another in Bangladesh. Some of them for shorter periods, others for longer, and some migrate permanently. Some households send a member to another village or city, in other cases the whole household may move. People migrate for many different reasons, and to different places. You probably have some migrants in your neighbourhood, village or town?”

“One reason people are moving in Bangladesh is that the climate is changing. This leads to more extreme weather events and worse living conditions in areas where people live. You probably remember the cyclone Ayla, which brought devastation to many communities. And you may have noticed or have heard that rising sea levels and increased salinity are making land less useful for growing food. And finding drinking water more difficult. Many families have also lost their homes or land through river erosion and flooding. Some say that the mangrove forest is dying.”

“The problems created by a changing climate are likely to get worse. More people will have to move as a result. Perhaps to the place where you live? Some of these people will not have a job or a place to live waiting for them in the new location. The poor and landless will also be forced to move. Where will they all go? Where will they live? What will they do for work?”

Voiceover part 2.1 (treatment nature)

“The climate is changing due to a build up of certain gases in the air around us.
This is a powerful natural phenomenon.
And these natural forces do not discriminate, but affect everyone.
There is little you can do if these powerful forces come your way.

Sometimes things happen to us that are not our own fault.
There is little people in affected areas of Bangladesh can do about the natural forces that bring extreme weather and damage to homes and land.
But their lives and livelihoods are affected by them.
And they may have no other choice than to move.”

Voiceover part 2.2 (treatment industrialized)

“The climate is changing due to a build up of certain gases in the air around us. Gas emissions from rich, Western countries are a major factor in causing climate change. People in rich, Western countries enjoy a high standard of living, and their lifestyle and consumption result in large emissions of damaging gases. While people in poorer countries like Bangladesh suffer the negative consequences of rich countries’ gas emissions.

Sometimes things happen to us that are not our own fault. People living in affected areas of Bangladesh have not contributed much to the climate problems bringing extreme weather and damage to homes and land. But their lives and livelihoods are affected by them. And they may have no other choice than to move.”

Voiceover part 2.3 (treatment government)

“The climate is changing due to a build up of certain gases in the air around us. To cope with the problems created by climate change, the authorities have to play an active role. The authorities need to protect and assist people so they can stay in their homes. The authorities must assist in finding housing and livelihood opportunities for those who need to move. If the living and housing situation turns out to be really bad, this may be because the authorities have not done enough.

Sometimes things happen to us that are not our own fault. People living in affected areas can only do so much to protect themselves from extreme weather and damage to homes and land. But their lives and livelihoods are affected by them. And they may have no other choice than to move.”

Voiceover part 3 (all groups)

“It is important that you are well informed about future events that may affect your life. The people of Bangladesh deserve good and useful information. We have attempted to make the message of this video as clear and relevant to you as we can. We hope we have succeeded in this.”

“And we are also interested in how we can provide the information in even better ways. How this video can be improved. You probably have some ideas on how this can be done. What do you think? How can the video be made more informative, clear, and interesting? Your view matters. Thank you for your attention.”

Empirical strategy

Pre-analysis plan registered in the AEA RCT registry.

OLS estimation (with robust standard errors) of the following equation (with and without covariates):

$$y_i = \alpha + \beta_{T1}T1_i + \beta_{T2}T2_i + \beta_{T3}T3_i + X_i\gamma + \varepsilon_i$$

With imperfect treatment, captures **intention-to-treat effects**.

Use IV strategy to estimate effect of treatment on the treated.

Ordinal probit and ordinal logit for robustness

Analyses of **heterogeneous effects and mechanisms** not pre-registered, hence explorative.

Descriptive statistics

	Obs	Mean	Std. Dev.	Min	Max
Attitude to migrants	1253	3.134	1.217	1	5
Age	1253	41.449	13.851	18	89
Male	1253	0.504	0.500	0	1
Head of household	1253	0.454	0.498	0	1
Education primary	1253	0.297	0.457	0	1
Education higher secondary	1253	0.237	0.425	0	1
Education secondary	1253	0.116	0.320	0	1
Education tertiary	1253	0.121	0.326	0	1
Occupation farmer	1253	0.069	0.254	0	1
Occupation farm labourer	1253	0.019	0.137	0	1
Occupation gatherer	1253	0.004	0.063	0	1
Occupation self-employed	1253	0.151	0.358	0	1
Occupation employer	1253	0.045	0.207	0	1
Occupation day labourer	1253	0.072	0.258	0	1
Occupation high skilled employee	1253	0.034	0.180	0	1
Occupation low skilled employee	1253	0.042	0.200	0	1
Occupation housewife	1253	0.421	0.494	0	1
Occupation student	1253	0.063	0.243	0	1
Asset index	1252	0.024	1.025	-1.841	6.611
Land owner	1252	0.764	0.425	0	1
Household size	1253	4.939	2.007	1	21
Born in host community	1253	0.591	0.492	0	1
Years lived in host community	1253	33.698	16.133	5	89
Migration history	1253	0.253	0.800	0	10

Take-up of treatments

Based on correspondence between treatment and response to the following question:

“According to the video, if people in Bangladesh need to move due to climate change, who bears the main responsibility for this? Please note that we want you to say who the video said is responsible, not who you think is to blame.” (1. Natural forces, 2. Western countries, 3. Bangladeshi authorities, 4. The migrants themselves, 5. Others, 6. Don't know)

	Number of respondents	Take-up number	Take-up proportion
Treatment nature	310	224	0.72
Treatment industrialized	313	119	0.38
Treatment government	312	64	0.21

Main results (abridged)

	(1)	(2)	(3)	(4)
<i>Dependent variable</i>	<i>Attitude to migrants</i>	<i>Attitude to migrants</i>	<i>Attitude to migrants</i>	<i>Attitude to migrants</i>
<i>Effect</i>	<i>Intention to treat</i>	<i>Intention to treat</i>	<i>Treatment on treated</i>	<i>Treatment on treated</i>
Treatment nature	-0.111 (0.10)	-0.077 (0.09)		
Treatment industrialized	0.048 (0.10)	0.071 (0.09)		
Treatment government	-0.131 (0.10)	-0.149* (0.09)		
Take-up nature (predicted)			-0.154 (0.14)	-0.103 (0.12)
Take-up industrialized (predicted)			0.125 (0.25)	0.196 (0.22)
Take-up government (predicted)			-0.639 (0.47)	-0.718* (0.43)
Age		0.008 (0.01)		0.007 (0.01)
Male		-0.007 (0.14)		0.011 (0.14)

No (or negative) treatment effects.
 Government treatment significantly worse effect than industrialized treatment (p=.012).

Main results (covariates)

The educated and the wealthy more critical to migrants

		(0.47)	(0.43)
Age	0.008 (0.01)		0.007 (0.01)
Male	-0.007 (0.14)		0.011 (0.14)
Head of household	0.191* (0.11)		0.195* (0.11)
Education primary	-0.183** (0.09)		-0.196** (0.09)
Education higher secondary	-0.354*** (0.10)		-0.390*** (0.10)
Education secondary	-0.396*** (0.13)		-0.417*** (0.13)
Education tertiary	-0.563*** (0.14)		-0.593*** (0.14)
Occupation farmer	-0.076 (0.18)		-0.116 (0.18)
Occupation farm labourer	-0.272 (0.27)		-0.303 (0.27)
Occupation gatherer	0.089 (0.45)		0.217 (0.49)
Occupation self-employed	-0.056 (0.16)		-0.064 (0.15)
Occupation employer	-0.070 (0.20)		-0.068 (0.20)
Occupation day labourer	-0.012 (0.18)		-0.006 (0.17)
Occupation high skilled employee	0.148 (0.22)		0.146 (0.22)
Occupation low skilled employee	0.051 (0.21)		0.040 (0.21)
Occupation housewife	0.261 (0.18)		0.268 (0.18)
Occupation student	0.064 (0.21)		0.055 (0.21)
Asset index	-0.111*** (0.04)		-0.106*** (0.04)
Land owner	-0.087 (0.09)		-0.079 (0.09)
Household size	0.030* (0.02)		0.028 (0.02)
Born in host community	0.274* (0.16)		0.262 (0.16)
Years lived in host community	-0.013* (0.01)		-0.012 (0.01)
Migration history	-0.001 (0.05)		-0.002 (0.05)
Constant	3.182*** (0.07)	3.413*** (0.34)	3.182*** (0.07)
Union fixed effects	No	Yes	No
r2	0.004	0.230	-0.001
N	1253	1250	1253

Mechanisms

- Two first treatments appear to *reduce* obligations host community members believe they have towards migrants
- Third treatment appears to increase identification with other host community members over migrants

	(1)	(2)	(3)	(4)	(5)
<i>Dependent variable</i>	<i>Migrant responsibility</i>	<i>Host community responsibility</i>	<i>Host community identity</i>	<i>Perceived migrant wealth</i>	<i>Perceived scale of migration</i>
Treatment nature	-0.049 (0.08)	-0.114* (0.07)	0.104 (0.07)	-0.048 (0.06)	0.061 (0.05)
Treatment industrialized	-0.004 (0.08)	-0.115* (0.07)	0.035 (0.07)	-0.163** (0.06)	0.079* (0.05)
Treatment government	-0.012 (0.08)	-0.050 (0.07)	0.160** (0.07)	-0.044 (0.06)	0.063 (0.05)
Constant	1.564*** (0.24)	3.291*** (0.31)	4.028*** (0.27)	1.827*** (0.25)	4.458*** (0.18)
Covariates	Yes	Yes	Yes	Yes	Yes
r ²	0.047	0.057	0.150	0.126	0.056
N	1248	1229	1104	1116	1233

Heterogeneous effects

	(1)
<i>Dependent variable</i>	<i>Attitude to migrants</i>
Treatment nature	-0.123 (0.09)
Treatment industrialized	0.000 (0.09)
Treatment government	-0.164* (0.09)
Treatment nature*Occupation day labourer	0.617** (0.29)
Treatment industrialized*Occupation day labourer	0.914*** (0.30)
Treatment government*Occupation day labourer	0.139 (0.35)
Occupation day labourer	-0.457* (0.26)
Constant	3.433*** (0.34)
Covariates	All
r2	0.236
N	1250
p-value (Treatment nature + Treatment nature*Occupation day labourer = 0)	0.075
p-value (Treatment industrialized + Treatment industrialized*Occupation day labourer = 0)	0.002
p-value (Treatment government + Treatment government*Occupation day labourer = 0)	0.941

Day labourers more critical than other occupational groups in control group, but more positively affected by treatments

Concluding remarks

Narratives may influence how we see migrants,
...but socially engineering attitudes to migrants through changes in narratives difficult
...and may have unintended consequences.

A couple of explorative findings that merit further analysis:

- The wealthy and educated more critical, seems contrary to findings from other contexts, implications for the political economy of migration in Bangladesh?
- Groups in direct labour market competition with migrants seem more critical, but also more positively affected by changes in the narrative.