

Cities as Transient Destinations: Implications of Climate Change on Seasonal Internal Migrants

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Introduction

Every year millions of workers in India migrate for a few months within the country looking for work. A push factor driving this migration is rural economic distress (Bremman 1978). Whereas pull factors include the desire to experience a more urban lifestyle (Deshingkar 2017). Keshri and Bhagat show that seasonal migrants are more likely to belong to marginalized groups (2012).

Why Do I Care?

- 1. Marginalized & more vulnerable to effects of Climate Change
- 2. Drivers economic growth of destination cities
- 3. Severely under-counted & absent from policy discourse

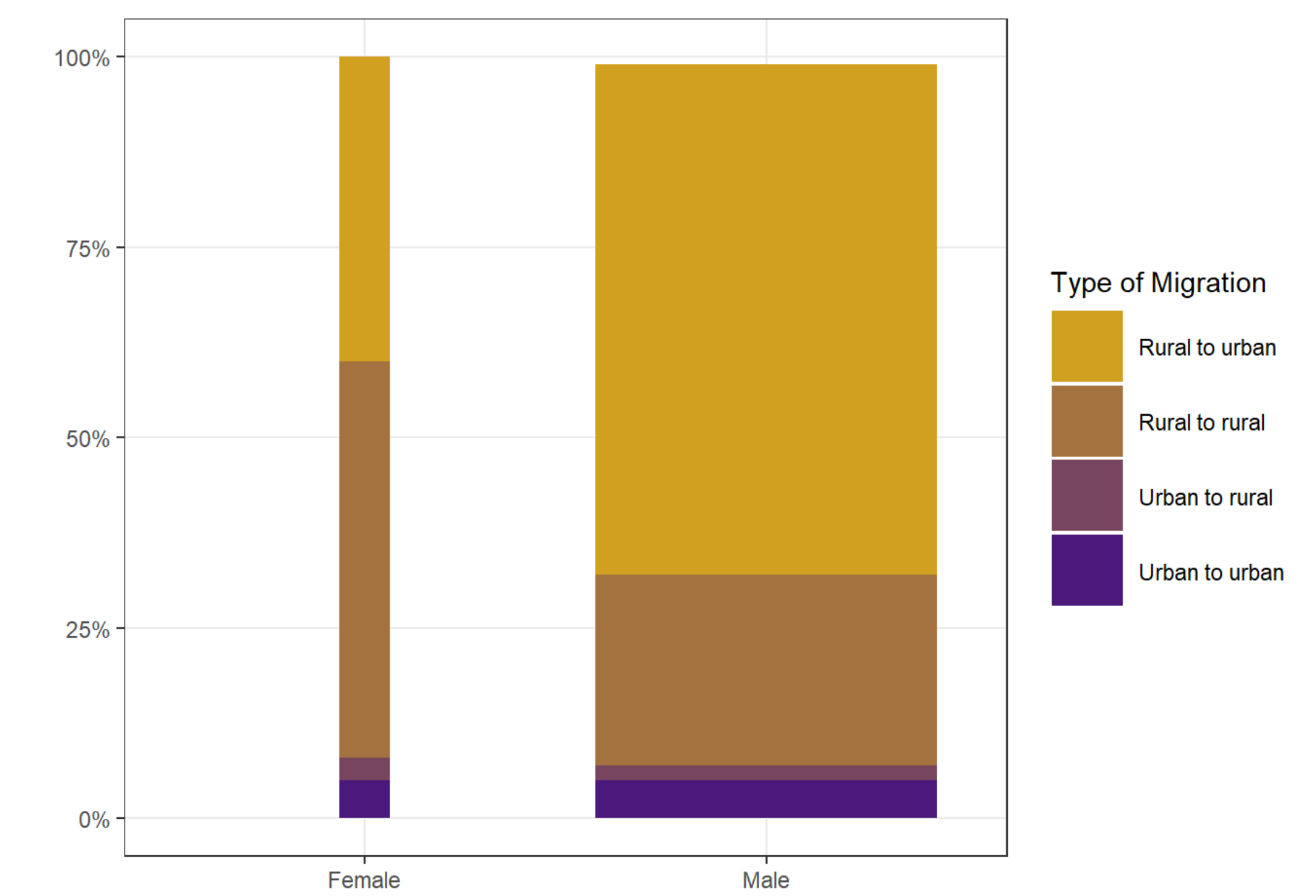


Figure 1: Majority of Seasonal Migrants are men migrating from rural areas to urban areas.

Figures 1 & 2 show the characteristics of the seasonal migrant population based on National Sample Survey Office data collected in 2007-08

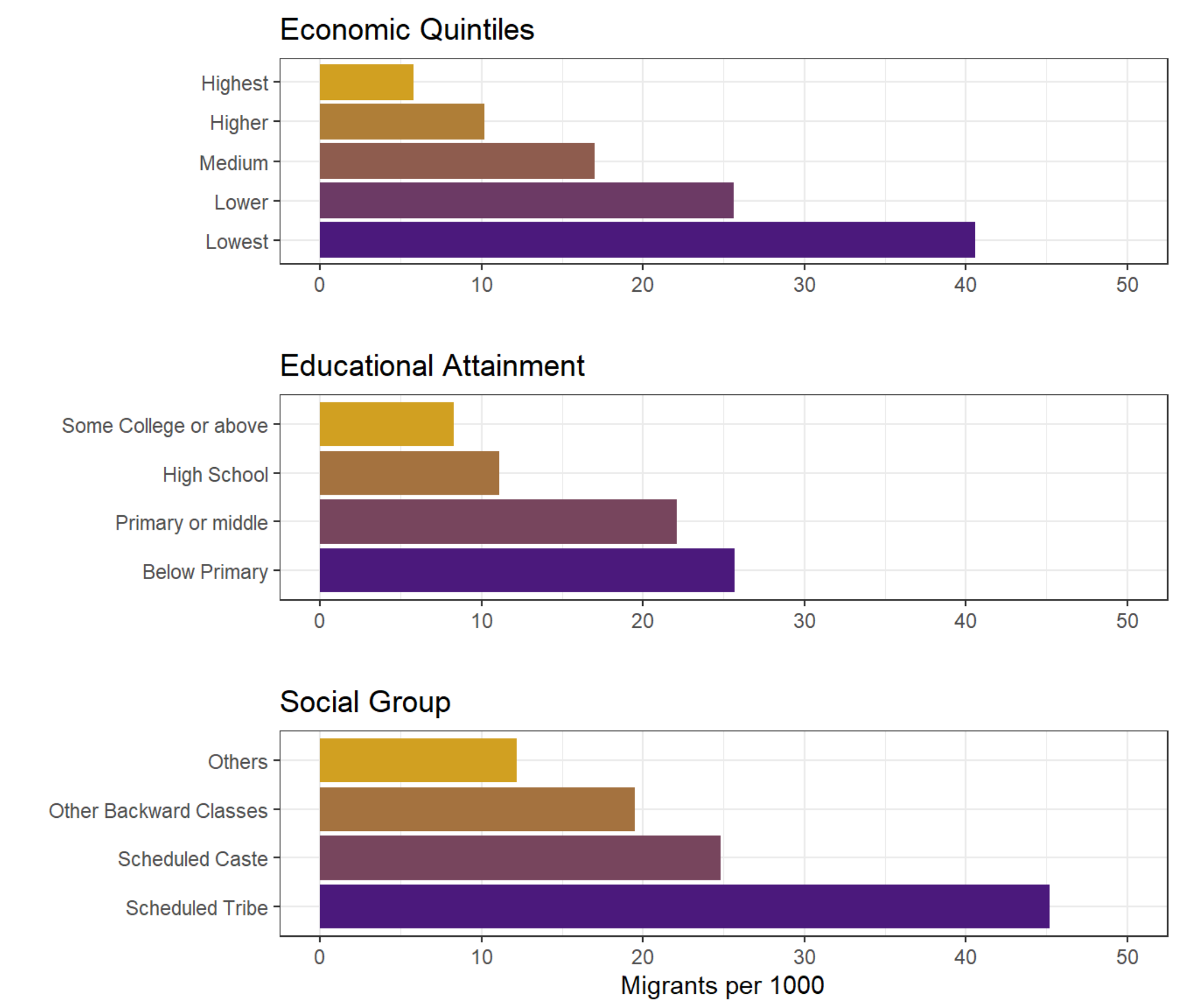
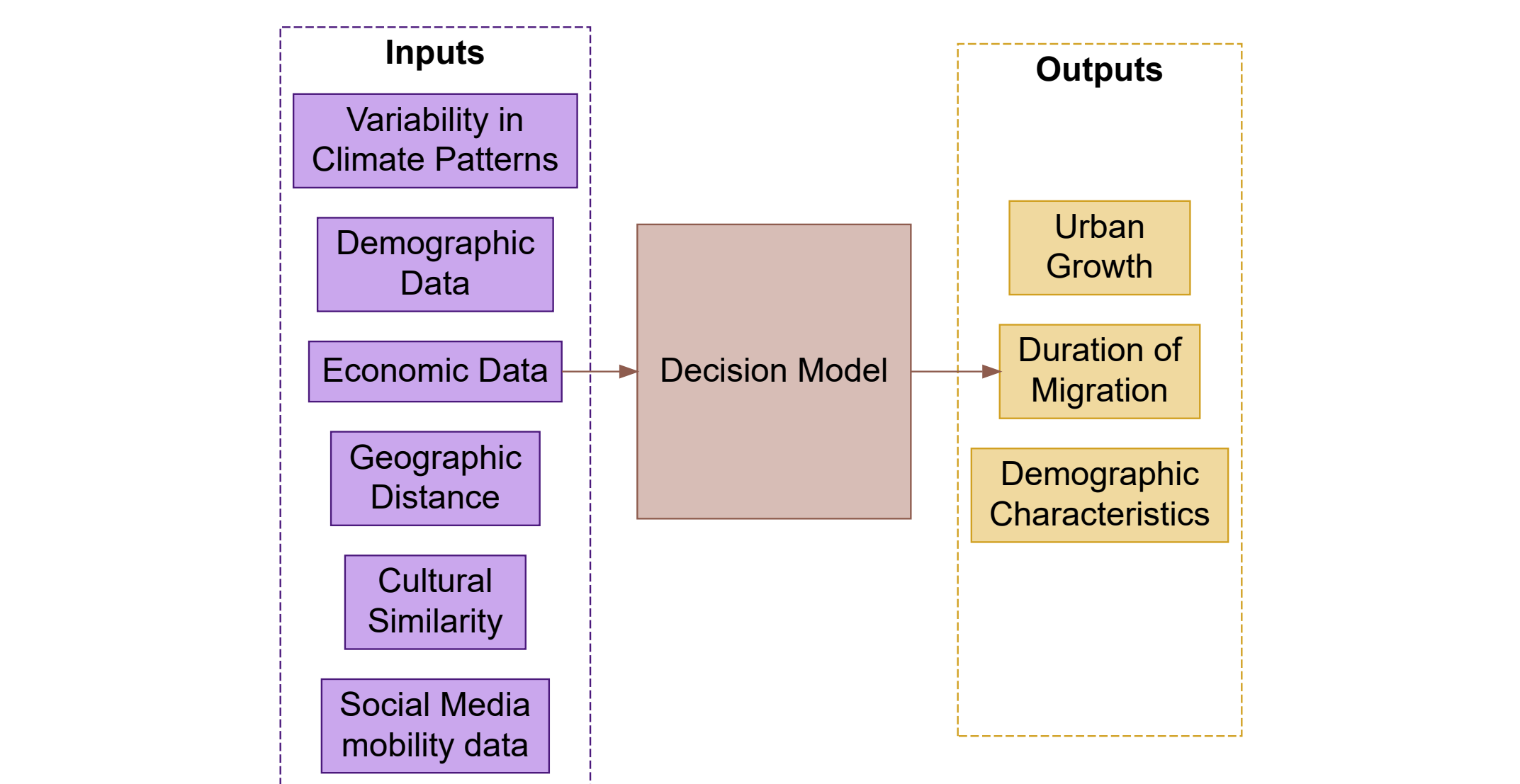


Figure 2: Migration rates are higher marginalized and/or vulnerable groups

Research Question

- 1. Climate Change will lead to variability in weather patterns. How will seasonal migration patters adapt in response to uncertainty in the agrarian economy?
- 2. How will the pattern of urbanization change with change in migration patterns?
- 3. What are the barriers seasonal migrants face to getting services when they migrate?
- 4. What policy solutions will empower migrants to access their entitlements irrespective of their location?

Methods



The migration model outlined above will incorporate push and pull factors influencing migration. A non-exhaustive list of factors include:

- Geographic and temporal variation in weather patterns
 - Length of dry season
 - Severity of dry season
 - Beginning of monsoon season
 - Distribution of precipitation
- Geographic distribution of demographic data
 - Age of migrant
 - Sex of migrant
 - Economic quintiles
 - Educational Attainment
 - Membership in marginalized social groups
- State-level economic parameters
 - GDP per capita
 - Rural male unemployment rate
 - Size of informal labour force as a proportion of total urban labour force
- Inter-state distance
- Cultural similarity
 - Measured through phylogenic linguistic trees for major state language
- Social media data
 - Build a database by querying Facebook’s marketing API for monthly and daily active users that meet migration criteria.

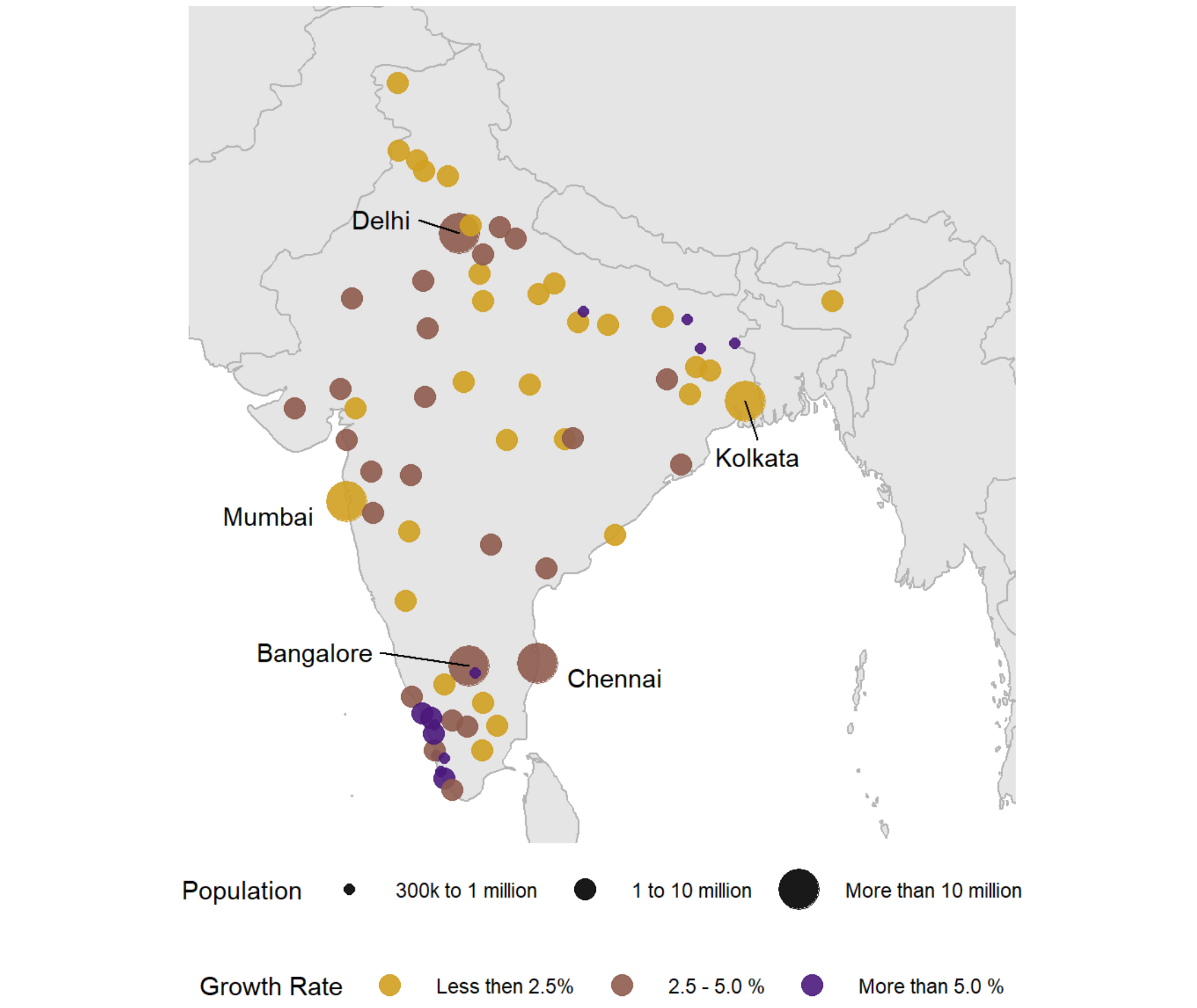


Figure 3: Population Growth in Large Indian Cities, Source United Nations Population Division (2018)

The output will be a dashboard similar to Figure 3 that will visualize urban growth. The model outputs will also include change in migration characteristics like duration and demographic make-up like family characteristics.

Global Implications

- 1. US has a sizable seasonal workforce that works in food production in different parts of the country at different times.
- 2. Climate Change will affect growing seasons and hence, seasonal labor demand everywhere.
- 3. Labor force in cities will be affected by surplus and / or scarcity of migrant workers.

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