Implications of India’s Demographic Change on Families

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Motivation

- The major motivation for talk:
  1. Demographic Transition and its impact on Family particularly in India (Whether family changes take place, like in SDT, owing to deep cultural roots in India with unique experience of demo. change?)
  2. Household vs Family and its relevance for the demographic analysis
  3. The Drivers of Family Change
  4. Why (not) SDT Led Family Change? (What are the possible explanations?)
Content of the Talk

1. Demographic Transition Specificities in India
2. Evidence of Family Change based on the Available Data
3. The Major Drivers of Family Change
4. Conclusions on the Prospects of Major Family Change in India
India’s Demographic Transition
Demographic Changes

- India’s rapid demographic changes in recent decades
- Most states are now at or below replacement level but with a wide variation across states
- Demographic patterns are now viewed more optimistically than a few decades back
- However, the implications of demographic change in India could be varied due to its very nature of the transition
Total Population (in 000’s) and Total Fertility Rate, India, 1950-2100

Population in 000

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (in 000's)</th>
<th>TFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>376325</td>
<td>5.9</td>
</tr>
<tr>
<td>1960</td>
<td>450548</td>
<td>5.9</td>
</tr>
<tr>
<td>1970</td>
<td>555190</td>
<td>5.4</td>
</tr>
<tr>
<td>1980</td>
<td>698953</td>
<td>4.7</td>
</tr>
<tr>
<td>1990</td>
<td>873278</td>
<td>3.8</td>
</tr>
<tr>
<td>2000</td>
<td>1056576</td>
<td>3.1</td>
</tr>
<tr>
<td>2010</td>
<td>1234281</td>
<td>2.4</td>
</tr>
<tr>
<td>2020</td>
<td>1380004</td>
<td>2.1</td>
</tr>
<tr>
<td>2030</td>
<td>1503642</td>
<td>2.0</td>
</tr>
<tr>
<td>2040</td>
<td>1592692</td>
<td>1.9</td>
</tr>
<tr>
<td>2050</td>
<td>1639176</td>
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<tr>
<td>2060</td>
<td>1651019</td>
<td>1.7</td>
</tr>
<tr>
<td>2070</td>
<td>1629326</td>
<td>1.7</td>
</tr>
<tr>
<td>2080</td>
<td>1580044</td>
<td>1.7</td>
</tr>
<tr>
<td>2090</td>
<td>1516335</td>
<td>1.7</td>
</tr>
<tr>
<td>2100</td>
<td>1447026</td>
<td>1.7</td>
</tr>
</tbody>
</table>
Total Fertility Rate (TFR) across States in India, 2020
The Conventional Wisdom

- The demographic changes are often associated with improvement in living standard and/or rise in the levels of education particularly among women.
- But socio-economic change does not precede the fertility transition in India.
- Majority of the females were illiterate.
- Overall, the development indicators were considerably demographic changes.
Kerala, Tamil Nadu and Andhra Pradesh achieved replacement level fertility when their Per Capita NSDP less Rs. 20 thousand while Gujarat and Haryana achieved the same Per Capita NSDP around 150 thousand.
### Total Fertility Rate among Illiterate Women in Different States, 2020

<table>
<thead>
<tr>
<th>State</th>
<th>Fertility Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerala</td>
<td>0.2</td>
</tr>
<tr>
<td>West Bengal</td>
<td>1.3</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>1.6</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>1.7</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>1.7</td>
</tr>
<tr>
<td>Punjab</td>
<td>1.8</td>
</tr>
<tr>
<td>Karnataka</td>
<td>2.0</td>
</tr>
<tr>
<td>Delhi</td>
<td>2.1</td>
</tr>
<tr>
<td>Odisha</td>
<td>2.1</td>
</tr>
<tr>
<td>Assam</td>
<td>2.2</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2.2</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>2.3</td>
</tr>
<tr>
<td>Telangana</td>
<td>2.3</td>
</tr>
<tr>
<td>Haryana</td>
<td>2.7</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>2.8</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2.9</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>2.9</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>3.0</td>
</tr>
<tr>
<td>India</td>
<td>3.1</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>3.2</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>3.6</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>3.6</td>
</tr>
<tr>
<td>Bihar</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Note: The fertility rates are hypothetical values for demonstration purposes.
Causes of the Fertility Transition

- Undoubtedly, India’s fertility transition does not fall strictly under the conventional understanding.
- The factors responsible for the transition are considerably contested in many parts of India.
- Socio-economic improvement are not the sole reason for the fertility change.
- Therefore, the implications of fertility changes (whether economic/social/family etc) are expected to be different.
Demographic Change and the Family
Implications of Demographic Change

- The economic implications of demographic changes are often discussed in recent times - Demographic Dividend
- But much less is known on its impact on family
- Family is believed to be a strong within the cultural context of India
- It is assumed that family in India is not easily amenable to change
- Therefore, investigation on the family change within the context of demographic change is rare
The Demography of Family

- The first attempt is to find out the compositional changes in the Family
- Compositional Changes are natural with fertility transition
- Therefore, not merely the size but who constitute the members are very important to understand the family change
Mortality as determinant of HH Size earlier

Fertility determined HH Size Later

Household may be smaller than family

Source: Authors plotted the figure using estimates based on successive Census of India (Various years) and National Family Health Survey (5)
Household Size Change in Kerala

- HH Size is shrinking drastically
- Migration within the HH has become very common
- HH & Family are significantly different

Trends in average household size in Kerala, 1991 to 2021

Source: Authors plotted the figure using estimates based on successive Census of India (Various years) and National Family Health Survey (5)
Family change in India

- **2019-21**
  - Single person households: 4,62
  - Adult Male & Female: 18,48
  - Adult Male & Female with Male children: 13,19
  - Adult Male & Female with Female Children: 11,56
  - Adult Male & Female with Male & Female: 14,99
  - Adult Male & Female with Male Older Person: 17,9
  - Adult Male & Female with Female Older Person: 12,3
  - Adult Male & Female with Male Older Person and Children: 14,4
  - Only Male Older Person: 14,4

- **2015-16**
  - Single person households: 3,86
  - Adult Male & Female: 17,9
  - Adult Male & Female with Male children: 14,56
  - Adult Male & Female with Female Children: 12,18
  - Adult Male & Female with Male & Female: 14,99
  - Adult Male & Female with Male Older Person: 14,9
  - Adult Male & Female with Female Older Person: 12,55
  - Adult Male & Female with Male Older Person and Children: 12,3
  - Only Male Older Person: 11,56

- **2005-06**
  - Single person households: 4,84
  - Adult Male & Female: 14,99
  - Adult Male & Female with Male children: 14,4
  - Adult Male & Female with Female Children: 12,55
  - Adult Male & Female with Male & Female: 14,99
  - Adult Male & Female with Male Older Person: 12,3
  - Adult Male & Female with Female Older Person: 12,53
  - Adult Male & Female with Male Older Person and Children: 12,3
  - Only Male Older Person: 12,18

- **1998-99**
  - Single person households: 2,86
  - Adult Male & Female: 12,32
  - Adult Male & Female with Male children: 15,32
  - Adult Male & Female with Female Children: 12,53
  - Adult Male & Female with Male & Female: 12,3
  - Adult Male & Female with Male Older Person: 12,9
  - Adult Male & Female with Female Older Person: 12,53
  - Adult Male & Female with Male Older Person and Children: 12,3
  - Only Male Older Person: 12,18

- **1992-93**
  - Single person households: 2,6
  - Adult Male & Female: 10,6
  - Adult Male & Female with Male children: 14,9
  - Adult Male & Female with Female Children: 12,3
  - Adult Male & Female with Male & Female: 12,9
  - Adult Male & Female with Male Older Person: 12,9
  - Adult Male & Female with Female Older Person: 12,53
  - Adult Male & Female with Male Older Person and Children: 12,3
  - Only Male Older Person: 12,18
Family change in India

- **Nuclear**: The largest category, representing a significant portion of family structures across different years.
- **Broken Nuclear**: A smaller category, showing slight variations over the years.
- **Supplemented Nuclear**: Another smaller category, also showing minor fluctuations.
- **Stem**: A very small category, almost negligible in comparison.
- **Joint or Extended**: A medium-sized category, slightly lower than Nuclear but higher than the others.

**Data in percentages for selected years**:

- **1992-93**
  - Nuclear: 91.0%
  - Broken Nuclear: 2.7%
  - Supplemented Nuclear: 5.2%
  - Stem: 0.0%
  - Joint or Extended: 0.7%

- **1998-99**
  - Nuclear: 91.0%
  - Broken Nuclear: 4.3%
  - Supplemented Nuclear: 10.0%
  - Stem: 0.8%
  - Joint or Extended: 4.9%

- **2005-06**
  - Nuclear: 80.1%
  - Broken Nuclear: 6.4%
  - Supplemented Nuclear: 18.3%
  - Stem: 1.7%
  - Joint or Extended: 5.4%

- **2015-16**
  - Nuclear: 70.0%
  - Broken Nuclear: 9.7%
  - Supplemented Nuclear: 23.5%
  - Stem: 2.3%
  - Joint or Extended: 5.9%

- **2019-21**
  - Nuclear: 58.3%
  - Broken Nuclear: 10.7%
  - Supplemented Nuclear: 23.4%
  - Stem: 2.0%
  - Joint or Extended: 5.7%

**Legend**:
- Nuclear
- Broken Nuclear
- Supplemented Nuclear
- Stem
- Joint or Extended
Family change in Kerala

Source: Authors estimation using successive rounds of National Family Health Survey (NFHS 1-5).
Changing Composition of Family

- There is significant compositional changes with faster changes in the size
- But more interesting is the significant increase in the adult couples living alone
- This indicate considerable migration of children either for education or employment from the family
- Such transition are likely to create drastic changes in the family in future
• Marriage is the most important institution of family formation
• But it appears to be on a major change most part of the world
• Age at marriage is on the rise but not very high

Source: Authors plotted the figure using estimates based on successive Census of India (Various years) and National Family Health Survey-5.
• Marriage Continues to be Universal

• However, fertility behaviour of the current 40+ was also different

• Therefore, this may not provide much evidence of recent changes

Trends in Never married persons (%) in 40+ population in India, 1992 to 2021

Source: Authors estimation using successive rounds of National Family Health Survey (NFHS 1-5).
• Divorce remains to be at low levels in India as per the data (< 0.5 %)
• But the reasons for divorce is changing (from infertility in the past to other causes)
• Widowhood had been declining in the past (declining age gap in marriage)
• But it started increasing

Source: Authors plotted the figure using estimates based on successive Census of India (Various years) and National Family Health Survey (5).
Work Participation Rate (%) by Usual Status (Principal Status and Subsidiary Status), India, 1983 to 2017-18
Work Participation Rate (%) among Females Age 15 and Above), India, 2017-18 to 2022-23
Sons and Daughters Elsewhere (in %) with Falling Fertility, India, 1998-99 to 2019-21

- Sons Elsewhere
- Daughters Elsewhere
- Total Fertility Rate
Share of Food and Non-food consumption (in %) with Falling Fertility, India 1972-73 to 2011-12

Expenditure Share (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Food</th>
<th>Non food</th>
<th>TFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972-73</td>
<td>60.0</td>
<td>40.0</td>
<td>4.5</td>
</tr>
<tr>
<td>1987-88</td>
<td>55.0</td>
<td>45.0</td>
<td>4.0</td>
</tr>
<tr>
<td>1993-94</td>
<td>50.0</td>
<td>50.0</td>
<td>3.5</td>
</tr>
<tr>
<td>1999-00</td>
<td>45.0</td>
<td>55.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2004-05</td>
<td>40.0</td>
<td>60.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2011-12</td>
<td>35.0</td>
<td>65.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Drivers of Family Change

- There appears to be no major change in the marriage except an increase in the age at marriage.
- Marriage remains universal, divorce rate is considerably low and stagnant for a long time and the births within the marriage is nearly the norm.
- However, major change observed are in the migration of children which changes the nature of the composition of families (This is particularly true with the change in the aspiration for education).
- At the same time, currently, the work participation of females are relatively very low although it is increasing in recent years.
- It is expected that these changes are likely to create drastic changes in the family as well in the future.
Attitude of Current Generation on Family
Live-in relationship rate among higher educated youth in metro-cities of India, 2018-19

Source: Goli (2019)
Preferred union formation among higher educated youth in metro-cities of India, 2018-19

Source: Goli (2019)
Regression-based Decomposition of State-level Variation in Nuclear Families, India, 1992-2021 (Panel data)

- LEB: 40%
- TFR: 23%
- Migration: 3%
- Marriage: 34%
- Residual: 0%
Regression-based Decomposition of State-level Variation in Nuclear Families, India, 1992-2021 (Panel data)
Are family change and SDT likely in India?

- There appears to be significant compositional changes but not in terms of the behaviour patterns.
- Many features of SDT (type of union formation, very late marriage & child bearing, gender symmetry, ideational changes etc) are not present in India currently.
- Small scale surveys provide evidence of clear changes in attitude, in particular among educated groups.
- However, changes in behaviours are not fully visible yet or appears not very immediate.
- Therefore, the family changes in India and similar countries may have to be viewed through a different lens than the SDT route.
The Causes of Family Change in India

- Economic Factors dominated in the past and continue its significance even now (from joint family to nuclearisation)
- Education is fundamental leading to many other changes. However, educational level particularly among women remains low
- Compositional changes in the household, moving away from family etc. are increasingly observed
- Attitudinal changes are more visible with education but stability of marriage and education relationship is still not very clear
Conclusion

- Need for family panel surveys than household surveys
- Even the estimation needs a relook in the context of family change
- The pathways and consequences of SDT for India will possibly be different
- Even with very low fertility, the SDT may remain remote due to the very nature of fertility transition and stability in traditional union formation owing to strong cultural resistance.
Conclusion

- There appears to be different stages:
  - very low fertility $\rightarrow$ Increasing education (with considerable increase in the aspiration) $\rightarrow$ migration of children for edu + job $\rightarrow$ moving towards gender symmetry $\rightarrow$ SDT
- Therefore, the SDT changes may not be immediate.
- Currently, many parts of the country are only in the second stage of the transition
THANK YOU