How Lives Change
Palanpur, India and Development Economics

February 2019

Himanshu
Jawaharlal Nehru University

Nicholas Stern
London School of Economics

The Palanpur research has been funded by the UK’s Department for International Development (DfID), Centre de Sciences Humaines (CSH), Delhi, and India Observatory/STICERD (LSE). We are grateful to these institutions and to JNU and LSE for support. Peter Lanjouw is professor at Free University, Amsterdam. The book (the third on Palanpur) with the same title was published by OUP in August 2018, authors Himanshu, Lanjouw and Stern and the earlier two were reissued as paperbacks.
Development economics is about understanding how and why lives change. *How Lives Change: Palanpur, India, and Development Economics* studies a single village in a crucially important country to illuminate the drivers of these changes, why some people do better or worse than others, and what influences mobility and inequality.

*How Lives Change* draws on seven decades of detailed data collection by a team of dedicated development economists to describe the evolution of Palanpur’s economy, its society, and its politics. The emerging story of the integration of the village economy with the outside world is placed against the backdrop of a rapidly transforming India and, in turn, helps in understanding this transformation. It puts development economics into practice to assess its performance and potential in a unique and powerful way, and to show how the development of one village since India’s independence can be set in the context of the entire country’s story.
Outline

• Ideas and Issues
  ◦ Development economics should be about how lives change
  ◦ Returning the classical issues of growth, distribution and structural change to centre stage
  ◦ Importance of institutions

• Palanpur Surveys: the village and the study

• Seven Decades of Palanpur
  ◦ Economic development and structural change in Palanpur
  ◦ Poverty, inequality, and mobility
  ◦ Human development, institutions and society

• Lessons for Development Economics
IDEAS, ISSUES AND CHALLENGES
Changing development economics

- The central issue: *how do lives and livelihoods change* in the process of growth?
- Core concern since early classical economists: they examined growth and distribution together.
- Growth and distribution at heart of work of Kuznets and Lewis who were interested in the processes of transformation (and reflected in current discussions on inequality, e.g. Piketty on developed countries but also in India and China).
- Structural perspectives are vital to understanding economic transformations, to what drives them and to policy.
- Development economics should bring the understanding of *structural change, growth and distribution* back to centre stage.
Understanding development, structural change and institutions

- Understanding the major driving forces requires both a macro/structural perspective and focus on the underlying processes at micro level.
- Institutions - rules, organisations, social and political structures - are crucial.
- So too is an understanding of behaviour including within families, towards risk and in social situations.
- The big stories of development are about the processes of growth and distribution and their interactions (two-way) with the more micro and institutional processes.
- Village studies allow us to put these together.
What can village studies tell us about processes of development?

- Institutions shape development and are also shaped by development.
- Qualitative data offer insights on behaviour of agents and the functioning of markets.
- Closeness to subjects offers insights on individual behaviour and mobility unlikely to be observed in secondary data; a household consists of real people with histories and relationships, not just a data point.
- Longitudinal surveys (covering more than 3 generations) can help understand the processes of structural transformation and drivers of change.
- Understand the village, understand the economy.
- Development economics should have strong explanatory power in understanding the growth of a village like Palanpur; and the story of Palanpur can help us understand development economics.
“Village studies are out of fashion, but Palanpur keeps the flame alive with a unique research trail spanning seventy years and counting. It was my privilege to join this trail from time to time and I hope to do it again. While no single village is a microcosm of India, Palanpur certainly tells us a lot about the economy and society of Uttar Pradesh. The future of the country depends in no small measure on what happens in that vast, chaotic plain.”

Jean Drèze
PALANPUR SURVEYS: THE VILLAGE AND THE STUDY
Palanpur: The village and the study

- A small village in Moradabad District, Uttar Pradesh
  - Small holder agriculture (wheat, paddy, sugarcane…)
  - Diverse caste structure.

- Has been surveyed seven times, once in each decade since Independence.

- Choice of village in 1974/5: Criteria
  - Had been studied previously
  - Ability to live independently of a caste or household.
  - Proximity to Delhi (not too close, not too far).
  - Wheat and tenancy strongly present.
  - Nothing ‘particularly unusual’ about the village.

- 1957-58, 1974-75, 1993 and 2008-09 were normal or good agricultural years whereas 1962-63, 1983 and 2015 were monsoon deficient.
Palanpur village in Moradabad, UP
Earlier surveys; earlier books

- The Initial AERC Surveys: Ansari Report (AERC)
  - First two surveys were by the AERC of University in Delhi in 1957-58 and 1963-64.
  - Palanpur chosen to study the impact of “Cooperatives”.
  - Surveyed by same investigators (led by SS Tyagi Sr).

  - Was led by Christopher Bliss and Nicholas Stern. Spread over nine months. Senior investigator SS Tyagi Jr.
  - Primarily focused on agricultural production, including “green revolution” and tenancy practices.

- 1983-84 Survey
  - Jean Dreze and Naresh Sharma stayed in the village for 15 months.
  - Extensive data on agricultural practices were collected.
  - Lots of qualitative information including diaries.

- 1993 Survey
  - A quick survey (Jean Dreze/Naresh Sharma).
  - Basic updating of land and population profile. No effort to collect data on agricultural production (and hence no income data) but tenancy information collected.
The last two surveys

• 2008-10 Survey
  ◦ Most comprehensive and longest (Himanshu, Nicholas Stern and Dipa Sinha).
  ◦ Team of researchers stayed in the village for two years. More women were part of team. Also diverse social science background with geographers, anthropologists, and sociologists as team members. Earlier researchers stayed connected.
  ◦ Data on agricultural practices, production and non-farm were collected.
  ◦ Scope was expanded to include health, education, gender, consumption.
  ◦ Extensive qualitative data as well as diaries.

• 2015 Survey
  ◦ Quick follow up using tablets; thinner but not sparse.
  ◦ Basic demographic data, occupational data: cropping pattern, tenancy and assets.

• Data sets for the seven surveys established on a common basis (substantial work because not originally designed as longitudinal study).
• This book covers these and the whole seven decades.
SEVEN DECADES OF PALANPUR
ECONOMIC DEVELOPMENT AND STRUCTURAL CHANGE
Key features of change over seven decades: Growth and distribution

- Income per capita growth a little above 2% p.a. across period; similar to India in first part; slower in second.
- Asset ownership, both for production and consumption, has risen strongly. But Palanpur remains a poor village.
- In first part of period, growth driven by agricultural change (irrigation, capital, “green revolution”) but by growth of non-farm income in second part.
- Greater capital intensity in agriculture has released labour.
- Non-farm activities have been mostly services, construction and agricultural-related. Mostly informal and not manufacturing.
- Muraos (cultivating caste) did relatively better in first part of period but less so in second. Dalit group (Jatabs) began to take some outside opportunities in second (largely unskilled manual but higher wages than village).
- Role of wealth and entrepreneurship; Telis took advantage of the opening up of opportunities outside village and also within village. Amongst the richest now.
## Basic population indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>528</td>
<td>585</td>
<td>790</td>
<td>960</td>
<td>1133</td>
<td>1255</td>
<td>1299</td>
</tr>
<tr>
<td>Number of households</td>
<td>100</td>
<td>106</td>
<td>117</td>
<td>143</td>
<td>193</td>
<td>233</td>
<td>224</td>
</tr>
<tr>
<td>Average household size</td>
<td>5.3</td>
<td>5.5</td>
<td>6.8</td>
<td>6.7</td>
<td>5.9</td>
<td>5.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Female–male ratio</td>
<td>0.87</td>
<td>0.87</td>
<td>0.85</td>
<td>0.93</td>
<td>0.85</td>
<td>0.98</td>
<td>0.94</td>
</tr>
<tr>
<td>Annual growth rate of population</td>
<td>–</td>
<td>2.2</td>
<td>2.5</td>
<td>2.2</td>
<td>1.7</td>
<td>0.74</td>
<td>0.58</td>
</tr>
<tr>
<td>Migration-adjusted growth rate</td>
<td>2.3</td>
<td>2.7</td>
<td>1.9</td>
<td>2.2</td>
<td>1.9</td>
<td>1.8</td>
<td></td>
</tr>
</tbody>
</table>
Selected Income and Output Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income per capita</td>
<td>5774</td>
<td>6010</td>
<td>8954</td>
<td>8309</td>
<td>13628</td>
</tr>
<tr>
<td>Poverty HCR</td>
<td>85.1</td>
<td>83.6</td>
<td>56.7</td>
<td>58.3</td>
<td>38.3</td>
</tr>
<tr>
<td>Gini (Income)</td>
<td>0.336</td>
<td>0.353</td>
<td>0.272</td>
<td>0.310</td>
<td>0.379</td>
</tr>
<tr>
<td>Wheat yield (Tonnes/Hect)</td>
<td>0.65</td>
<td>0.65</td>
<td>1.81</td>
<td>1.60</td>
<td>4.25</td>
</tr>
<tr>
<td>Price index (CPIAL)</td>
<td>1.07</td>
<td>0.98</td>
<td>3.78</td>
<td>5.28</td>
<td>30.95</td>
</tr>
<tr>
<td>Daily product wages</td>
<td>2.5</td>
<td>2.25</td>
<td>3.1</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

**Annual growth rate**

<table>
<thead>
<tr>
<th></th>
<th>57-62</th>
<th>62-74</th>
<th>74-83</th>
<th>83-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita income</td>
<td>0.80</td>
<td>3.38</td>
<td>-0.83</td>
<td>2.00</td>
</tr>
<tr>
<td>Wheat yield</td>
<td>0.0</td>
<td>8.9</td>
<td>-1.4</td>
<td>4.0</td>
</tr>
<tr>
<td>Prices (CPIAL)</td>
<td>-1.74</td>
<td>11.91</td>
<td>3.78</td>
<td>7.33</td>
</tr>
<tr>
<td>Product wages</td>
<td>-2.09</td>
<td>2.71</td>
<td>5.46</td>
<td>2.38</td>
</tr>
</tbody>
</table>
Productivity per hectare has gone up but agriculture still vulnerable to monsoon/price volatility

![Graph showing yield (tonnes/hectare) for Wheat, Paddy, and Bajra from 1957 to 2008.](image)

- **Wheat**
  - 1957: 1.00
  - 1962: 0.50
  - 1974: 1.59
  - 1983: 2.97
  - 2008: 4.25

- **Paddy**
  - 1957: 0.00
  - 1962: 0.50
  - 1974: 1.00
  - 1983: 1.59
  - 2008: 2.97

- **Bajra**
  - 1957: 1.00
  - 1962: 0.50
  - 1974: 1.59
  - 1983: 2.97
  - 2008: 4.25
Cropping intensity has increased from increasing mechanisation and irrigation

Note. Cropping intensity is the number of crops on a piece of land per year.
Mechanisation in Palanpur over seven decades.

Mechanisation in Palanpur


- Tractors
- Persian Wheels
- Pumping Set
Mechanisation has increased productivity and released labour.
Tenancy patterns have changed significantly between 1957-8 and 2008-9

- A variety of contractual arrangements co-exist.
- Sharecropping (Batai) is still dominant (47% of leased-in land) in 2008/9.
- Fixed-rent tenancy (Peshgi - 27%) and labour contract (Chauthai-16%) are growing in importance.
- Dynamics of participation in land markets and leasing decision. Increasing land ownership by ‘Outsiders’ and Jatabs ‘leasing-in’ for Chauthai; Thakurs more likely to ‘lease-out’ and Muraos less likely to ‘lease-out’.
- Tendency towards same caste/kin leasing still dominant.
- Reflects structural changes in the rural land and labour markets.
- Endogeneity of institutions.
PROCESSES OF GROWTH, CHANGING STRUCTURE AND NEW OCCUPATIONS
The changing village economy

- Growing significance of **non-farm activities** and outside jobs.
- Greatly increased connectivity.
- Most non-farm jobs *casual* with little growth in regular non-farm jobs.
- *Commuting* is the dominant form of accessing non-farm jobs.
- Increase in involvement in **outside jobs** - strengthened bargaining power of Jatabs in the village labour market.
- Has made supervision of agricultural activity more costly.
- Poverty reduction and increased social mobility.
- Rising non-farm incomes have contributed to rising inequality.
Most households have more than one source of incomes: Increase in pluriactivity

![Number of income sources (% of households)](#)

- **Up to 2**
- **3 and above**

<table>
<thead>
<tr>
<th>Year</th>
<th>Up to 2</th>
<th>3 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957/8</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>1962/3</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>1974/5</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>1983/4</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>2008/9</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

- **Legend:**
  - Dark blue: Up to 2
  - Orange: 3 and above
**Non-farm has emerged as new driver of change in the village.**

### Share of various income sources

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivation</td>
<td>58.47</td>
<td>56.67</td>
<td>58.41</td>
<td>50.16</td>
<td>30.01</td>
</tr>
<tr>
<td>Livestock income</td>
<td>19.8</td>
<td>21.54</td>
<td>22.02</td>
<td>13.68</td>
<td>10.43</td>
</tr>
<tr>
<td>Non-cultivation farm</td>
<td>8.5</td>
<td>4.27</td>
<td>2.5</td>
<td>4.25</td>
<td>13.2</td>
</tr>
<tr>
<td>Non-farm income</td>
<td>13.23</td>
<td>17.52</td>
<td>17.08</td>
<td>31.19</td>
<td>46.36</td>
</tr>
<tr>
<td>Casual labour-non farm</td>
<td>1.11</td>
<td>0.97</td>
<td>0</td>
<td>7</td>
<td>6.14</td>
</tr>
<tr>
<td>Self employment</td>
<td>1.31</td>
<td>3.51</td>
<td>1.03</td>
<td>3</td>
<td>19.79</td>
</tr>
<tr>
<td>Regular employment</td>
<td>7.5</td>
<td>8.85</td>
<td>15.66</td>
<td>20</td>
<td>16.12</td>
</tr>
<tr>
<td>Other non-farm</td>
<td>3.31</td>
<td>4.19</td>
<td>0.38</td>
<td>1.36</td>
<td>4.31</td>
</tr>
<tr>
<td>Total income</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Increase in non-farm employment (male adult)
## Occupation patterns in Palanpur: 1958-2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>None</td>
<td>7</td>
<td>19</td>
<td>23</td>
<td>20</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>Cultivation &amp; Livestock</td>
<td>130</td>
<td>135</td>
<td>137</td>
<td>141</td>
<td>188</td>
<td>128</td>
</tr>
<tr>
<td>Casual labour (Farm)</td>
<td>21</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Casual labour (Non-farm)</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>24</td>
<td>28</td>
<td>85</td>
</tr>
<tr>
<td>Regular Employment</td>
<td>7</td>
<td>13</td>
<td>44</td>
<td>60</td>
<td>33</td>
<td>49</td>
</tr>
<tr>
<td>Self-Employment (Non-Farm)</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>23</td>
<td>21</td>
<td>67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>172</strong></td>
<td><strong>185</strong></td>
<td><strong>220</strong></td>
<td><strong>289</strong></td>
<td><strong>346</strong></td>
<td><strong>395</strong></td>
</tr>
</tbody>
</table>

29
Different trajectories of employment diversification: Thakurs

![Graph showing employment diversification over time for Thakurs. The graph displays the percentage of Thakur adult males engaged in various employment categories from 1957/8 to 2015, including Cultivation & Livestock, Casual labour (Farm), Regular Employment, Self Employment (Non-farm), and Casual labour (Non-farm).]
Jatab: from cultivation to non-farm casual
Murao: continued preference for cultivation
POVERTY, INEQUALITY, AND MOBILITY
Poverty, inequality and mobility: 1957/8-2008/9

- Growth in average incomes has contributed to notable poverty decline.
- Evidence of falling income inequality in first period, then rising.
  - Attributable to expansion of irrigation then expansion of non-farm incomes.
- Substantial income mobility.
  - Catching up of disadvantaged castes in recent decades.
  - Scrutiny of inter-generational mobility nuances this positive message.
- Within caste variation in mobility and inequality still a dominant feature but recent decades have seen decline in between caste inequality.
- Two way relationship between inequality and mobility.
Understanding poverty: Observed means

- In Palanpur, income is one indicator of wellbeing
- Lanjouw and Stern (1998) introduce notion of “observed means”.
  - Households are ranked by “apparent prosperity” - living standards are assessed on the basis of a spectrum of dimensions and criteria.
    - Wealth, health, education, etc.
  - Judgements derive from close knowledge and familiarity with villagers’ circumstances.
  - Rankings based on independent assessments across multiple investigators and then reconciled.
- Modest correlation between different measures but they measure different things. Incomes have strong transitory component.
Modest correlation between ranking by different measures

<table>
<thead>
<tr>
<th></th>
<th>Income</th>
<th>Consumption</th>
<th>Asset Scores</th>
<th>Observed Means</th>
<th>PRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>0.364</td>
<td>1</td>
<td>0.229</td>
<td>0.153</td>
<td></td>
</tr>
<tr>
<td>Asset scores</td>
<td>0.407</td>
<td>0.229</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed Means</td>
<td>0.464</td>
<td>0.153</td>
<td>0.695</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PRA</td>
<td>0.409</td>
<td>0.134</td>
<td>0.582</td>
<td>0.709</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: PRA refers to Participatory Rural Appraisal

Learn from differences, particularly in relation to transience of income/consumption
Inequality trends: Flat or down and then up

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini Coefficient</td>
<td>0.336</td>
<td>0.353</td>
<td>0.272</td>
<td><strong>0.310</strong></td>
<td>0.379</td>
</tr>
<tr>
<td>Coefficient of Variation</td>
<td>0.650</td>
<td>0.755</td>
<td>0.530</td>
<td>0.578</td>
<td>0.769</td>
</tr>
<tr>
<td>Atkinson Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e=1</td>
<td>0.173</td>
<td>0.191</td>
<td>0.137</td>
<td>0.170</td>
<td>0.229</td>
</tr>
<tr>
<td>e=2</td>
<td>0.319</td>
<td>0.344</td>
<td>0.206</td>
<td>0.366</td>
<td>0.444</td>
</tr>
<tr>
<td>No. of observations</td>
<td>529</td>
<td>585</td>
<td>750</td>
<td>977</td>
<td>1255</td>
</tr>
<tr>
<td>No. of households</td>
<td>100</td>
<td>106</td>
<td>112</td>
<td>143</td>
<td>233</td>
</tr>
</tbody>
</table>

Catching up in agriculture contributed to flat or declining inequality in the first period; differential taking of opportunities outside agriculture contributed to rising inequality in the recent period.
## Observed Means Classification of Palanpur Households by Caste in 1983/4

<table>
<thead>
<tr>
<th>Caste</th>
<th>Very Poor %</th>
<th>Poor %</th>
<th>Secure %</th>
<th>Prosperous %</th>
<th>Rich %</th>
<th>% (No. of hhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thakur</td>
<td>0</td>
<td>26.7</td>
<td>23.3</td>
<td>26.7</td>
<td>23.3</td>
<td>1.00</td>
</tr>
<tr>
<td>Murao</td>
<td>0</td>
<td>0</td>
<td>22.2</td>
<td>37</td>
<td>40.7</td>
<td>1.00</td>
</tr>
<tr>
<td>Dhimar</td>
<td>15.4</td>
<td>46.2</td>
<td>30.8</td>
<td>7.7</td>
<td>0</td>
<td>1.00</td>
</tr>
<tr>
<td>Gadariya</td>
<td>0</td>
<td>25</td>
<td>25</td>
<td>16.7</td>
<td>33.3</td>
<td>1.00</td>
</tr>
<tr>
<td>Dhobi</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>25</td>
<td>1.00</td>
</tr>
<tr>
<td>Teli</td>
<td>37.5</td>
<td>31.3</td>
<td>18.8</td>
<td>6.3</td>
<td>6.3</td>
<td>1.00</td>
</tr>
<tr>
<td>Passi</td>
<td>40</td>
<td>6.7</td>
<td>13.3</td>
<td>20</td>
<td>20</td>
<td>1.00</td>
</tr>
<tr>
<td>Jatab</td>
<td>73.7</td>
<td>15.8</td>
<td>10.5</td>
<td>0</td>
<td>0</td>
<td>1.00</td>
</tr>
<tr>
<td>Other</td>
<td>28.6</td>
<td>14.3</td>
<td>0</td>
<td>42.9</td>
<td>14.3</td>
<td>1.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of households</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caste</td>
<td>Very Poor</td>
<td>Poor</td>
<td>Secure</td>
<td>Prosperous</td>
<td>Rich</td>
<td>% (No. of hhs)</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------</td>
<td>------</td>
<td>--------</td>
<td>------------</td>
<td>------</td>
<td>----------------</td>
</tr>
<tr>
<td>Thakur</td>
<td>5.2</td>
<td>12.1</td>
<td>34.5</td>
<td>25.9</td>
<td>22.4</td>
<td>1.00 (56)</td>
</tr>
<tr>
<td>Murao</td>
<td>3.6</td>
<td>20</td>
<td>40</td>
<td>18.2</td>
<td>18.2</td>
<td>1.00 (58)</td>
</tr>
<tr>
<td>Dhimar</td>
<td>13.6</td>
<td>36.4</td>
<td>27.3</td>
<td>9.1</td>
<td>13.6</td>
<td>1.00 (18)</td>
</tr>
<tr>
<td>Gadariya</td>
<td>0</td>
<td>13.3</td>
<td>53.3</td>
<td>26.7</td>
<td>6.7</td>
<td>1.00 (16)</td>
</tr>
<tr>
<td>Dhobi</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>1.00 (8)</td>
</tr>
<tr>
<td>Teli</td>
<td>27.3</td>
<td>18.2</td>
<td>27.3</td>
<td>13.6</td>
<td>13.6</td>
<td>1.00 (21)</td>
</tr>
<tr>
<td>Passi</td>
<td>0</td>
<td>16.7</td>
<td>66.7</td>
<td>0</td>
<td>16.7</td>
<td>1.00 (6)</td>
</tr>
<tr>
<td>Jatab</td>
<td>7.7</td>
<td>43.6</td>
<td>41</td>
<td>7.7</td>
<td>0</td>
<td>1.00 (38)</td>
</tr>
<tr>
<td>Other</td>
<td>18.2</td>
<td>18.2</td>
<td>18.2</td>
<td>45.5</td>
<td>0</td>
<td>1.00 (9)</td>
</tr>
<tr>
<td>% of households</td>
<td>8%</td>
<td>23%</td>
<td>37%</td>
<td>19%</td>
<td>13%</td>
<td>100% (230)</td>
</tr>
</tbody>
</table>

Similar results are obtained using per capita income classification.
Intergenerational elasticity coefficients are obtained by regressing log income of sons on log income of fathers: higher coefficient, less mobility. Results stronger with some smoothing (right panel). Coefficients are similar to earnings elasticity reported by Atkinson, Maynard and Trinder (1983) for 1950-1978 in York. Atkinson et al (1983) also report similar coefficients for height.
Household histories provide example of changing fortunes and mobility

**Upward Mobility**
- A Teli household has diversified income sources including mentha extraction units, a flour mill, farm and non-farm activity. It has not split since 1958. The household head is very enterprising.
- A Jatab working as casual labourer at railway yard, slowly developed contacts with the contractors and has now become one of the labour contractors himself. He now provides labourers at different railway stations including Agra and Aligarh.

**Downward Mobility**
- Naraini’s husband Om Prakash died after prolonged illness of six years in 2002. During this period she had to sell 2 bighas of land for treatment. Her son, who was working as marble polisher died a year later in an accident forcing her to rely on relatives as she could not find enough work as agricultural labourer in the village.
- A Passi household ‘dissipated’. Three brothers sold their land and migrated to Panipat (Punjab). All three brothers were known to drink heavily and also gamble regularly. They borrowed money from a Thakur at a rate of 120% p.a and had to sell off their land to him in 2002 when they were unable to repay their loans.
HUMAN DEVELOPMENT, INSTITUTIONS AND SOCIETY
**LITERACY RATES – GENDER GAPS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Gender Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>8.2</td>
<td>13.9</td>
<td>4.7</td>
<td>0.7</td>
</tr>
<tr>
<td>1964</td>
<td>3.5</td>
<td>23.5</td>
<td>18.6</td>
<td>3.5</td>
</tr>
<tr>
<td>1974</td>
<td>5.5</td>
<td>27.7</td>
<td>21.0</td>
<td>23.5</td>
</tr>
<tr>
<td>1984</td>
<td>8.7</td>
<td>37.6</td>
<td>25.2</td>
<td>42.6</td>
</tr>
<tr>
<td>1993</td>
<td>11.3</td>
<td>39.6</td>
<td>23.7</td>
<td>35.9</td>
</tr>
<tr>
<td>2009</td>
<td>33.1</td>
<td>44.2</td>
<td>33.1</td>
<td>0.0</td>
</tr>
<tr>
<td>2015</td>
<td>43.0</td>
<td>60.0</td>
<td>33.1</td>
<td>43.0</td>
</tr>
</tbody>
</table>
LITERACY RATES BY CASTE

- **Thakur 1993**: Male 68, Female 28
- **Jatab 2009**: Male 51, Female 22
- **Jatab 2015**: Male 64, Female 34

<table>
<thead>
<tr>
<th>Year</th>
<th>Thakur 1993</th>
<th>Jatab 2009</th>
<th>Jatab 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Male 64</td>
<td>Male 51</td>
<td>Male 68</td>
</tr>
<tr>
<td>Male</td>
<td>Female 28</td>
<td>Female 22</td>
<td>Female 34</td>
</tr>
</tbody>
</table>
GIRLS’/WOMEN’S EDUCATION IN PALANPUR

- Big increase in girls attending educational institutions – but this not yet showing much impact on employment and other aspects such as autonomy, mobility etc.

- When the current cohort of girls become adults and get married, there will likely (hopefully) be significant changes.

- Parental demand for girls’ education increasing but it is not yet seen as something that will get them jobs.

- Education also to increase eligibility in the marriage market.

- The quality of education is very poor. The government school although expanded in terms of infrastructure and now up to class 8, still has serious issues of teacher attendance and vacancies.

- Shift to private schools – at least teachers come and some teaching-learning happens regularly.
WOMEN

- Around 40 women said they ‘worked’
- 8% had land in their name
- 18% had a bank account (might have changed after JDY)
- Mobility greatly restricted (e.g. 31% said they can go to the local market alone)
- TVs started coming in when we were leaving the village – otherwise not much exposure to media
WOMEN IN PALANPUR

• Women are still largely invisible in the village economy outside the home
• Life of drudgery – especially fuel collection/preparation and tending to livestock
• Restricted mobility
• High gender gaps in education and employment remain
• Hope: huge increase in school enrollment, some completing higher education, increased age at marriage, fewer children, greater communication with the natal family
Health

- Some improvements in maternal and child health – institutional deliveries after JSY
- Pulse Polio
- Almost complete dependence on private health care (92% OP and 86% IP from private sources)
- Average expenditure Rs. 6259 per hospitalization case in private and Rs. 839 in public
- 84 cases of monkey bites during a period of one year – a public health issue?
- Very high levels of stunting among children
Caste

- Overt caste discrimination has come down
- Some intermingling for work and village-related issues
- Segregated living
- Some evidence of caste based occupational clustering – caste and community networks strong in non-farm as well
- Better bargaining power – Mayawati, SC Pradhan, NREGA
- Overall greater participation in panchayat and local political processes

(Some evidence of religious polarization: strengthened after 2010)
Declining Institutions and Emerging Ones

- Seed store and co-operative bank are no longer important (buildings in dire conditions)
- School has seen a decline in number of teachers
- There is “nexus” between institutional and non-institutional credit agents.
- Emergence of new forms of labour contracts: laut-badal, piece rate contracts
- Interlinkages – new forms - credit in mentha, price volatility and speculative trading
- Chit funds, insurance etc by random private agents
Public Services and Collective Action

- Poor – school, anganwadi, health services, PDS, pensions, NREGA
- All suffer from neglect
- Almost no collective action on this
- Only instances some collective action seen – monkeys, Pradhan removal
- Persistent inequality (caste and gender) a barrier to collective action?
- Those who can afford it, look for private solutions
- E.g. in 2015, 63% boys and 62% girls (Thakur) in private schools compared to 35% boys and 9% girls (Jatab)
Human development, institutions and society

- Change and Inertia
- Inequality and Opportunity
- Poor public services and lack of collective action
LESSONS FOR DEVELOPMENT ECONOMICS AND POLICY
Lessons for development economics and policy (1): Growth

- Lewis/Kuznets and standard dual economy models provide insights helpful on role of sectors outside traditional agriculture but potentially misleading on nature of process of how activities change. Think of “Kuznets insights” into the functioning of the process, rather than the model. Experience has shown key differences from standard models:
  - Commuting versus migration.
  - Mixture of activities on-farm and off-farm not zero-one transfer from one to the other.
  - Importance of investments and capital and technical progress within agriculture.
  - Importance of information flows and local institutional and organisation in pace and nature of adoption of new activities; and in who adopts and when.
  - Embracing “new sector” changes old, including via institutions.
  - *Informal is normal.* Avoid bias both in understanding and policy.

- Points to stronger focus on *how opportunities arise and how they are taken.* Differentials in entrepreneurship, influence of institutions and communications, functioning of politics…
Lessons for development economics and policy (2): Agriculture

- Markets for services of land and of labour are active and fairly competitive. But issues of information.

- Behaviour broadly consistent with rational approaches to uncertainty (cf 1982 Bliss/Stern book).

- But social constraints are still important: working for those judged lower in social scale; women for most caste groups have very limited scope.

- Information, observation, trust. Preferences for leasing out within caste if possible. Movement to peshgi and chauthai as outside activity increases and time for supervision decreases.

- Still no productivity differences between share-cropping and own cultivation.

- Importance of investment and increasing capital as land ownership per capita declines and outside opportunities take up time.
Lessons for development economics and policy (3): Mobility, inequality, poverty

- Mobility is real and linked to new opportunities. *Early period saw catch-up opportunities* on irrigation and double-cropping and some decrease in inequality.
- New opportunities are taken differentially: *some people get richer before others*; important for late part of period, with increase in inequality.
- Prior skills and stronger networks can influence these differentials: Muraos did well in “green revolution”, less well in growth of outside activities; Thakurs have better networks.
- Education not yet important in taking new opportunities off-farm. Income still has a role.
- Downward mobility linked to bad luck (e.g. illness), poor credit-funded investments, litigation, “dissipation”.
- Fall and rise in inequality has depended on nature of opportunities: catch-up on irrigation in first half of period, differential take-up of outside opportunities in second half. Entrepreneurship matters. *Relation between mobility and inequality depends on structure of opportunities*.
- Within group changes in inequality more important than between group, but both matter.
- Poverty declines with growth, opportunity, capability and entrepreneurship.
Lessons for development economics and policy (4): Institutions and behaviour

- **Powerful influence of institutions on investment** and functioning of markets.
  - Zamindari abolition encourages investment in land.
  - Lower groups could not lease in draught animals and therefore not land. Now markets for tractor services. Interaction between growth, social institutions and technology.
  - Within group trust influences land and credit markets.

- **Institutions are endogenous**
  - Bargaining power and group organisation of Jatabs within village influenced by availability of outside jobs.
  - Nature of tenancy contracts influenced by outside jobs and reduction of ability to supervise.
  - Communications and awareness of outside world influences social relations and market functioning. Influence of Indian and UP politicians.
  - Role of entrepreneurship: recognising opportunities, taking risks. Many innovate, some groups advantaged.

- **Entrepreneurship** – identifying opportunities, embracing risks to take them – important. Varies within castes and across groups. Rise of Telis.
Lessons for development economics and policy (5): Society

• Public institutions, including for health and education, have performed poorly in Palanpur. Why has social pressure been weak? Inequality, public administration in UP, role of women…?

• Position of girls and women still heavily constrained. Will this change with communications, integration with outside world, education…?

• Politics still problematic and corrupt but there can be real change. For example, reservation of Pradhan for caste and gender has had some influence. Pradhan was “impeached” when behaviour became egregious.

• Nature of village society likely to change as migration accelerates. Village increasingly a residential entity. Picture of village as “closed economy and society” long out-dated.

• Why is local politics ‘stronger’ in some places than others?
Lessons for development economics and policy (6): Longitudinal village studies and the major development perspectives

- Development, in large measure, about why some people advance more quickly than others. Close observation over long period key to that story. Example of lessons: informal is normal; mobility may lead to either greater equality or inequality and we can see from structure of change which may happen.

- Quality of data depends on presence over time. Example of lessons: land, tenancy and credit data may be misleading in a one-shot survey with limited time for data collection.

- Nature of change difficult to understand without direct observation of how markets and institutions function and behaviours change. Examples of lessons: Jatabs taking advantage of new opportunities and becoming stronger within village. Qualitative data also crucial.

- The dynamics and endogeneities hard to understand without observation of processes and relationships over extended periods. Examples of lessons: changing terms of tenancy market, credit and labour market.

- We can and should return growth, distribution and structural change to centre stage; must modify and advance inherited growth theories to include nature of opportunities and differential responses; the major development (both macro and micro) stories are intricately related and must be studied together. Longitudinal village studies are one key route.
Development economics is about understanding how and why lives change. How Lives Change: Palanpur, India, and Development Economics studies a single village in a crucially important country to illuminate the drivers of these changes, why some people do better or worse than others, and what influences mobility and inequality.

How Lives Change draws on seven decades of detailed data collection by a team of dedicated development economists to describe the evolution of Palanpur’s economy, its society, and its politics. The emerging story of the integration of the village economy with the outside world is placed against the backdrop of a rapidly transforming India and, in turn, helps in understanding this transformation. It puts development economics into practice to assess its performance and potential in a unique and powerful way, and to show how the development of one village since India’s independence can be seen in the context of the entire country’s story.