Migration. A Complex Analytical Process

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Content

1. Situation of migration:
   - Internal migration
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6. Some conclusions
Internal Migration in Mexico

Municipios que pierden población
Municipios que ganan población

FUENTE: Censos Generales de Población y Vivienda, 1990 y 2000. INEGI
II Conteo General de Población y Vivienda, 2005. INEGI
International Migration and (Forced)-Return

- 2010: 65.0% Migrants, 31.5% Returning former 5 year period
- 2000: 75.7% Migrants, 17.4% Returning former 5 year period
### Migrants over 25 years old, residents in OCDE countries with different levels of scolarity, 1990, 2000, and 2007 (million people)

<table>
<thead>
<tr>
<th>Year</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>20.4</td>
<td>8.8</td>
<td>12.2</td>
</tr>
<tr>
<td>2000</td>
<td>25.1</td>
<td>12.7</td>
<td>20.3</td>
</tr>
<tr>
<td>2007</td>
<td>28.3</td>
<td>15.5</td>
<td>25.9</td>
</tr>
</tbody>
</table>

**Source:** Fernando Lozano, 2011, based on Docquier, Lowell and Marfouk 2008. 2007 is estimated and based on growth rate observed between 1990 and 2000.

Mexican Migrants to USA and Returning to Mexico: 2006-2009
(1,000 people)
Native Mexicans Residents in USA: 2000-2009 (in million inhabitants)

Fuente: Passel y Cohn, 2009
Non permanent Immigrants in Canada
Reasons for Canadian Immigration

1. 2008: 250,000 immigrants:
   1. 150,000 economic reasons
   2. 66,000 family members
   3. 22,000 refugees

2. Other reasons:
   1. Skilled workers
   2. Professionals
   3. Investors
   4. Entrepreneurs
   5. Self-employed persons
   6. Experience claim (former workers and students)
Socioeconomic Security: Poverty and High Marginality

Distribución Municipal
Prioridad de Atención
- Muy Alta (222)
- Alta (509)

Source: Chávez, Ávila, Samanah, 2006
Vulnerability related to population density, growth, morbidity, water consumption/scarcity/pollution and the impact of CC
Environmental security: drought, fertility loss & erosion is affecting livelihood in Mexico
Environmental-induced migration

Aumento en calor e.g., ➔

Aumento en sequía e.g., ➔

Pérdida del permafrost e.g., ➔

Peligroso aumento del nivel del mar e.g., ➔

Aumento en lluvias severas e.g., ➔

Terremotos

<table>
<thead>
<tr>
<th>Zone</th>
<th>MM Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>MM V</td>
</tr>
<tr>
<td>1</td>
<td>MM VI</td>
</tr>
<tr>
<td>2</td>
<td>MM VII</td>
</tr>
<tr>
<td>3</td>
<td>MM VIII</td>
</tr>
<tr>
<td>4</td>
<td>MM IX</td>
</tr>
</tbody>
</table>

Huracanes tropicales

<table>
<thead>
<tr>
<th>Zone</th>
<th>Speed Range (km/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>76–141</td>
</tr>
<tr>
<td>1</td>
<td>142–184</td>
</tr>
<tr>
<td>2</td>
<td>185–212</td>
</tr>
<tr>
<td>3</td>
<td>213–251</td>
</tr>
<tr>
<td>4</td>
<td>252–299</td>
</tr>
<tr>
<td>5</td>
<td>≥ 300</td>
</tr>
</tbody>
</table>

MM: Escala Mercalli modificada, 2009
Social Vulnerability in Mexico

2 decades:
- 75 hydro-meteorological disasters:
- -10,000 deads, million of affected
- Damages: over 10 billion US$ (500 million/year)
- 2008: 632 storms (average 469), Tabasco flood: 1.2 million inhabitants affected; 80% of territory

Arreguín, 2009; Oswald, 2009
Food security: Corn Production and CC

2050: Loss between 13%-27% of surface for corn production, basically from rain-fed poor peasants

Hurricane paths during 20iest century
Historical droughts: Tree rings

Source: Therrell et al., 2006
Magenta and yellow lines indicate annual rainfall variability for the northern state of **Chihuahua** and **Sonora** and Northern state of **Durango** and **Sinaloa** respectively. Black and blue lines are 10 years moving average of precipitation; horizontal lines shows mean annual rainfall. Data above the average are wet years and below are dry years (Villanueva et al., 2008).
Projections of yield averages/ha related to climate change: 2020, 2050, 2080 with & without mitigation
Potential and real changes of temperature

Figure 1: Trends in annual and seasonal mean temperature for the recent past and projected future. All values shown are anomalies, relative to the 1970-1999 mean climate. Black curves show the mean of observed data from 1960 to 2006, Brown curves show the median (solid line) and range (shading) of model simulations of recent climate across an ensemble of 15 models. Coloured lines from 2006 onwards show the median (solid line) and range (shading) of the ensemble projections of climate under three emissions scenarios. Coloured bars on the right-hand side of the projections summarise the range of mean 2090-2100 climates simulated by the 15 models for each emissions scenario.
Higher temperature: droughts

Situación de temperatura máxima (promedio 365d) extrapolada al 2040
(no datos directos, sino rectas de tendencia ajustadas)

1961

2000

2040
Potential changes in annual precipitation in Mexico for 2050

Scenario base (1961 – 1990) of average precipitation/year annual (mm/day)

% of changes in average annual precipitation depending on medium sensitivity. The interrupted lines represent decrease. Model ECHAM4

Conde C., 2006
Precipitation anomalies
Seawater intrusion in aquifers

Acuíferos afectados por intrusión salina
Límites de acuíferos
4. Economic security: remittances from the USA: 1990-2010
6. Financial crisis and migration

Estimates of the U.S. Unauthorized Immigrant Population, 2000-2010

(millions)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

Notes: Bars indicate low and high points of the estimated 90% confidence interval. The symbol * indicates the change from the previous year is statistically significant.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.
Estimates of the U.S. Unauthorized Immigrant Population from Mexico, 2000-2010

(units in millions)

2000  2001  2002  2003  2004  2005  2006  2007  2008  2009  2010

4.6   4.8   5.2*  5.5   6.0*  6.3   6.5   7.0*  6.8   6.7   6.5
Change in Employment Over the Same Quarter Last Year for Foreign-Born and Native-Born Workers, 2007 to 2010

(nonseasonally adjusted; ages 16 and older; numbers in thousands)

Note: Data are adjusted to account for the effects of annual revisions to the CPS.
Source: Pew Hispanic Center tabulations of Current Population Survey data
Changes of remittances at family level:
2006 and 2008

Source: Fernando Lozano, elaborated on microdata from ENIGH, 2006 y 2008
Unauthorized Immigrants in the U.S. Civilian Labor Force, 2000-2010

Note: Includes employed and unemployed workers.

Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.
Some conclusive remarks

- An agreement between Mexico, Canada and USA with annually contingent of low qualified people that are legally accepted.
- The trafficking of arms from the US to Mexico and the high US drug consumption and the money laundering in the USA, Canada and Mexico must be addressed.
- Mexico: environmentally induced migration could decrease with rural development policy.
- Cooperation between the USA, Canada and Mexico should support the weaker country as an ethical compensation for historical and current higher levels of greenhouse gas emissions.
- Prevailing Hobbesian mindset of military solution to migration reflect strategies of business as usual.
- A wider human, gender and environmental security: a ‘HUGE’ security approach (Oswald 2009) reduces tensions, illegality and migration.
- A new sustainability paradigm must be developed.
- A new worldview, mindset and policy require changes in thinking and action towards a fourth sustainability revolution.
- Sustainability in development and peace will be able to develop the sophisticated political strategies to address the causes of socioeconomic and environmental induced migration.
Thank you for your attention

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