Enhancing the Distribution of Social Services in Mexico

SEDESOL

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Poverty in Mexico

Total population: 120,000,000

* Source: CONEVAL
Poverty in Mexico

Total population: 120,000,000
53,000,000* people in poverty

46% of the population

* Source: CONEVAL
Poverty in Mexico

Multidimensional Poverty

Six Deprivations

Income Line

Total population: 120,000,000
53,000,000* people in poverty

46% of the population

* Source: CONEVAL

Rural: < 45 USD
Urban: < 65 USD

... per month

Poverty in Mexico
Program Matching

SEDESOL
SECRETARÍA DE DESARROLLO SOCIAL
Program Matching

SEDESOL
SECRETARÍA DE DESARROLLO SOCIAL

3x1 PARA MIGRANTES
PROGRAMA DE EMPLEO TEMPORAL
SINHAMBRE CRUZADA NACIONAL
LICONSEA AMASO SOCIAL DE LECHE
RED DE ESTANCIAS INFANTILES
PROSPERA PROGRAMA DE INCLUSIÓN SOCIAL
INAPAM INSTITUTO NACIONAL DE LAS PERSONAS ADULTERAS MAYORES
SEGURO POPULAR SISTEMA DE PROTECCIÓN SOCIAL EN SALUD
DICONSA
Program Matching
Program Matching
80 million people receive some benefit
20 million people with known deprivations
60 million people with incomplete data
## Predicting Poverty Indicators

<table>
<thead>
<tr>
<th></th>
<th>Food</th>
<th>Health</th>
<th>Education</th>
<th>Housing</th>
<th>Water</th>
<th>Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
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<tr>
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<td>✓</td>
</tr>
<tr>
<td>People</td>
<td>✓</td>
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</tr>
</tbody>
</table>

The Eric & Wendy Schmidt Data Science for Social Good Summer Fellowship 2016
Geographic Based Prediction
Geographic Based Prediction
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Geographic Based Prediction
7.7 million people without deprivation levels for whom we have linked geographic information
## Predicting Poverty Indicators

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<th>Water</th>
<th>Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
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<td>x</td>
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<td>✓</td>
</tr>
</tbody>
</table>

The table above shows various factors that contribute to poverty, such as access to food, health care, education, housing, and water, as well as the provision of aid. The checkmarks (✓) indicate factors that are present, while the crossmarks (✗) indicate factors that are absent.
Our Results

- 2.85M people with imputed poverty indicators
- 0.78M people with education indicators
- 0.21M people with housing indicators
- 0.84M people with water access indicators
- 0.77M people with healthcare indicators

Total people with imputed poverty indicators, who can now be better matched with social programs: **7,401,777**