Multidimensional Poverty Index
For Iraq

Iraq Central Statics Office
Kurdistan Region Statistics Office

Inter-Agency Information and Analysis Unit
Deprivation Dimensions

- Education
- Nutrition & Health
- Standard of Living
- Employment
- Basic Services
Illiteracy Male:
An individual is derived if no adult male member in the household can read and write.

Illiteracy Female:
A individual is derived if no adult female member in the household can read and write.
Educational Attainment Male:
An individual is deprived if no adult male member in the household has completed primary education, which in this case translates to 6 years of basic education.

Educational Attainment Male:
An individual is deprived if no adult male member in the household has completed primary education, which in this case translates to 6 years of basic education.
Drinking water:
The household is deprived in drinking water if the source of drinking water is not General Network and close well-spring (MDG definition).

Sanitation:
The household is deprived if the sanitation facility is not public network, septic tank or covered canal (Outside), or the toilet is shared.
**Electricity:**
The individual is deprived if the total connection of electricity to the household from public network, community generator and private generator is less than 12 hours per day.

**Garbage Collection:**
The individual is deprived if the garbage is burnt out / buried, thrown in open areas, and others (this indicator is calculated only for urban areas).
Monetary Poverty:
An individual is deprived if the real per-capita expenditure (PCE) of the household is less than lowest expenditure quintile at the national level (equivalent to 91116 ID per person per month)

Housing unit:
An individual is deprived if the type of housing unit is clay house, tent, caravan, and others, or if the exterior walls are made of blocks from the turnkey construction, clay/stone and clay, metal plates, wooden plates, and others
Crowding:
An individual is deprived if more than three persons live per room in the household or the bedroom is shared with members from other households.
Balanced Diet:
An individual is considered as deprived in nutritional intake if he/she does not consume enough of one of the three macro nutrients (protein, carbohydrate, fat) and one of the three micro nutrients (iron, folic acid, and vitamin A) (FAO Method).

Calories intake:
The individual is deprived if the calorie intake is less than a particular required level (2330 cals/day).
Quality of health services:
The individual is deprived if he/she perceives/assesses the health services as bad or very bad.

Distant Health Services:
The individual is deprived if it needs more than 30 minutes to reach the closest health service among; Primary Health Care, Public Hospital, Clinic/Government Health Center, Clinic/Government Health Center Complex, and Pharmacy.
Unemployment Male:
An individual is deprived if any male member of his/her household in the labour force is unemployed.

Unemployment Female:
An individual is deprived if any female member of his/her household in the labour force is unemployed.
**Underemployment Male:**
An individual is deprived if any working male member of his/her household is underemployed.

**Underemployment Female:**
An individual is deprived if any working female member of his/her is underemployed.
Job Security Male:
An individual is deprived if no employed male member of his/her household works for the government/public sector, or has a secure job in the private sector (work contract and job benefits).

Job Security Female:
An individual is deprived if no employed female member of his/her household works for the government/public sector, or has a secure job in the private sector (work contract and job benefits).
Households Facing Multiple Deprivations

Iraq

Number of Deprivations

0 1 2 3 4 5 6 7 8 9 10 11 12 +

% 18.2% 17.2% 13.8% 10.8% 7.8% 5.2% 3.5% 2.6% 1.3% 1.2% 1.0%
Defining Poverty requires two key decisions with regard to:

1) The importance/relevance of dimensions and indicators (weights).

2) Number of deprivations one has to be considered poor (K).
<table>
<thead>
<tr>
<th>Dimensions and Indicators WEIGHTS</th>
<th>Education</th>
<th>20%</th>
<th>Primary Education Males</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary Education Female</td>
<td>5%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Illiteracy Male</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Illiteracy Female</td>
<td>5%</td>
</tr>
<tr>
<td>Standard of Living</td>
<td>20%</td>
<td></td>
<td>Income</td>
<td>10%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Housing</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Crowding</td>
<td>5%</td>
</tr>
<tr>
<td>Basic Services</td>
<td>20%</td>
<td></td>
<td>Water</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sanitation</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Garbage Collection</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Electricity</td>
<td>5%</td>
</tr>
<tr>
<td>Nutrition and Health</td>
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<td>Balanced Diet</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Calories Intake</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Poor Health Services</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Distant Health Services</td>
<td>5%</td>
</tr>
<tr>
<td>Employment</td>
<td>20%</td>
<td></td>
<td>Unemployed Male</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unemployed Female</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Underemployed Male</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Underemployed Female</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Protected Job Male</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Protected Job Female</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
Setting the value $K$

Graph showing the relation between K-value and Iraq with percentages.

- 100% at 0% K-value
- 91% at 5% K-value
- 73% at 10% K-value
- 55% at 15% K-value
- 40% at 20% K-value
- 28% at 25% K-value
- 13% at 33% K-value
- 9% at 40% K-value
- 6% at 45% K-value
- 3% at 50% K-value
- 2% at 55% K-value
- 1% at 60% K-value
Multidimensional Poverty Analysis and Targeting:
1) The deprivations of the poor.
2) The contribution of each indicator to overall poverty (decomposition by indicator).
3) Poverty at the Governorate and district level, identifying districts most hit by poverty.
4) The contribution of each governorate (district) to national (governorate) level poverty (poverty geographical decomposition).
5) Complementary between Multidimensional and Monetary Poverty (seeing the bigger picture, identifying private ‘market’ and public failure in providing key services).

In the following analysis K=50%
## MPI results (K=33%)

<table>
<thead>
<tr>
<th></th>
<th>H Headcount</th>
<th>A Average Deprivation Share</th>
<th>M0 Adjusted Headcount Measure</th>
<th>Low income (Lowest quintile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>13.3%</td>
<td>44.8%</td>
<td>0.0596</td>
<td>20.0%</td>
</tr>
<tr>
<td>SULAIMAN IYA</td>
<td>1.4%</td>
<td>40.8%</td>
<td>0.0055</td>
<td>2.5%</td>
</tr>
<tr>
<td>ERBIL</td>
<td>3.3%</td>
<td>39.3%</td>
<td>0.0128</td>
<td>4.6%</td>
</tr>
<tr>
<td>BAGHDAD</td>
<td>4.3%</td>
<td>43.4%</td>
<td>0.0185</td>
<td>6.9%</td>
</tr>
<tr>
<td>KIRKUK</td>
<td>6.2%</td>
<td>42.6%</td>
<td>0.0263</td>
<td>9.4%</td>
</tr>
<tr>
<td>DUHOK</td>
<td>8.4%</td>
<td>41.4%</td>
<td>0.0347</td>
<td>15.2%</td>
</tr>
<tr>
<td>BABYLON</td>
<td>9.9%</td>
<td>43.6%</td>
<td>0.0434</td>
<td>18.5%</td>
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<tr>
<td>DIYALA</td>
<td>11.2%</td>
<td>40.7%</td>
<td>0.0457</td>
<td>23.6%</td>
</tr>
<tr>
<td>KERBELA</td>
<td>12.9%</td>
<td>46.2%</td>
<td>0.0598</td>
<td>17.4%</td>
</tr>
<tr>
<td>ANBAR</td>
<td>14.2%</td>
<td>43.0%</td>
<td>0.0610</td>
<td>23.6%</td>
</tr>
<tr>
<td>SALAH AL-DEEN</td>
<td>14.5%</td>
<td>43.3%</td>
<td>0.0628</td>
<td>15.6%</td>
</tr>
<tr>
<td>NAJAF</td>
<td>14.0%</td>
<td>46.3%</td>
<td>0.0650</td>
<td>15.2%</td>
</tr>
<tr>
<td>BASRAH</td>
<td>17.9%</td>
<td>45.0%</td>
<td>0.0808</td>
<td>29.3%</td>
</tr>
<tr>
<td>MUTHANNA</td>
<td>19.2%</td>
<td>43.0%</td>
<td>0.0825</td>
<td>42.4%</td>
</tr>
<tr>
<td>MOSUL</td>
<td>23.2%</td>
<td>45.3%</td>
<td>0.1053</td>
<td>37.0%</td>
</tr>
<tr>
<td>QADISIYA</td>
<td>22.6%</td>
<td>47.9%</td>
<td>0.1082</td>
<td>32.6%</td>
</tr>
<tr>
<td>THI-QAR</td>
<td>29.8%</td>
<td>44.8%</td>
<td>0.1337</td>
<td>51.1%</td>
</tr>
<tr>
<td>WASIT</td>
<td>29.8%</td>
<td>45.1%</td>
<td>0.1344</td>
<td>29.1%</td>
</tr>
<tr>
<td>MAYSAN</td>
<td>30.4%</td>
<td>48.9%</td>
<td>0.1486</td>
<td>24.6%</td>
</tr>
</tbody>
</table>
MP Headcount “H” at the Governorate level
Percentage contribution of indicators to the deprivations of the Multidimensional Poor individuals

- Income: 17.2%
- Primary Education Female: 9.1%
- Poor Health Services: 7.6%
- Electricity: 7.3%
- Water: 6.9%
- Illiteracy Female: 6.6%
- Primary Education Males: 6.2%
- Balanced Diet: 5.3%
- Crowding: 5.1%
- Housing: 4.6%
- Distant Health Services: 4.5%
- Calories Intake: 3.8%
- Illiteracy Male: 3.4%
- Unprotected Job Male: 2.8%
- Garbage Collection: 2.5%
- Sanitation: 2.4%
- Unemployed Male: 1.9%
- Underemployed Male: 1.6%
- Unprotected Job Female: 1.0%
- Unemployed Female: 0.2%
- Underemployed Female: 0.1%
Geographical Distribution of the MP poor

- MOSUL: 14.9%
- THI-QAR: 12.9%
- BASRAH: 9.9%
- WASIT: 8.5%
- MAYSAN: 7.6%
- QADISIYA: 6.4%
- BAGHDAD: 6.1%
- ANBAR: 5.0%
- SALAH AL- DEEN: 4.6%
- NAJAF: 4.4%
- BABYLON: 4.1%
- DIYALA: 3.5%
- KERBELA: 3.3%
- MUTHANNA: 3.2%
- DUHOK: 2.2%
- KIRKUK: 1.8%
- ERBIL: 1.1%
- SULAIMANIYA: 0.5%
Percentage contribution of indicators to the deprivations of the Multidimensional Poor individuals

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- Sanitation: 2.4%
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- Underemployed Male: 1.6%
- Unprotected Job Female: 1.0%
- Unemployed Female: 0.2%
- Underemployed Female: 0.1%
<table>
<thead>
<tr>
<th>Region</th>
<th>MPI Poor</th>
<th>Not low income HH</th>
<th>Low income HH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>23%</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>KRG</td>
<td>36%</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Baghdad</td>
<td>31%</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>Others Governorates</td>
<td>22%</td>
<td>78%</td>
<td></td>
</tr>
</tbody>
</table>
Low income HHs and MP

- 77% Both MP poor and low income HH
- 10% MP poor but not a low income HH
- 10% Low income HH but not MP poor
- 3% Niether MP poor nor a low income HH
Thank you