POVERTY MEASUREMENT IN TAJIKISTAN

Prepared by the Agency on Statistics under the President of Tajikistan with technical support from the Ministry of Economic Development and Trade and the World Bank
Outline

- Introduction
- Background
- Construction of the welfare aggregate
- Poverty lines used to estimate poverty
- Basic poverty results
- Road Map
Introduction – the national methodology

- National methodology for poverty measurement identified as a key priority in the 2005 NDS
- From 1999-2009, Tajikistan relied on the Living Standard Measurement Surveys
- Since 2009, the country has relied on poverty-growth elasticity to project poverty
- The limitations to this approach mean that the estimates become increasingly unreliable over time
Change in poverty according to TLSS 1999, 2003, 2007 and 2009

- 1999: 82
- 2003: 73
- 2007: 53.5
- 2009: 47.2
Introduction – the new method

- The new approach uses the Household Budget Survey to measure poverty.
- Administered by the Agency on Statistics (TajStat) in collaboration with the Ministry of Economic Development and Trade.
- Internationally recognized methodology.
Background – objectives and activities (short and long term)

- **Sort term solution (2011-2016)**
  - The new approach is an immediate solution

- **Long term solution (beyond 2016)**
  - The “Household Budget Survey Improvement Project” is supporting the development of an integrated Living Standard and Labor Force Survey.
    - Amendments to questionnaires
    - Updates to sampling methodology
    - Changes to fieldwork organization
  - 2015-2016 will be transition years from the short to the long term solution, where change will be gradually introduced
Background – previous vs. new

- Advantages
  - Survey is country-owned
  - 3000-household size provides much greater ability to estimate changes in poverty (TLSS was 1500 households)
  - The HBS is a continuous survey, resulting in fewer biases and the ability to take seasons into account
Background – previous vs. new

- Limitations
  - Not strictly comparable with the TLSS based methodology
  - HBS data entry system is outdated
  - HBS sample frame drawn from 2000 population census
  - Questionnaire does not reflect all of the latest policy needs
  - Field work protocols and supervision can be improved
  - Data access and dissemination practices can be improved
Construction of the Welfare Aggregate
A monetary welfare indicator can be defined as follows:

\[
\text{Welfare indicator} = \frac{\text{Nominal household consumption}}{\text{household size} \times \text{temporal CPI} \times \text{Spatial CPI}}
\]

Adjust for:
- Differences in needs caused by different household size
- Inflation
- Cost-of-living differences across geographical areas
The Welfare Aggregate – anatomy

- The welfare aggregate can be expressed as the sum of two consumption sub-aggregates,

\[ THC = FHC + NFHC \]

- Where:
  - THC = total household consumption,
  - FHC = food household consumption, and
  - NFHC = non-food household consumption.
The Poverty Line – the kilocalorie req.

- The average per-capita kilocalorie requirement (AKR) for Tajikistan is set to 2,250 Kcal/day
- In Tajikistan, households in percentiles 3-36 of the consumption distribution were selected
- The median value of a single calorie for households in the reference group is estimated to be TJS 0.0581/Kcal
- Food line = TJS 130.65/month
The Poverty Line – non-food

- The non-food component is calculated in three steps:
  - Step 1, identify the households for which total expenditures are close to the food poverty line
  - Step 2, calculate the share of food over total consumption (Engels coefficient)
  - Step 3, the food poverty line is divided by the Engels coefficient

- The median Engels coefficient for selected households was 77.86%.
- The summation of the food and non-components leads to a poverty line of TJS **167.80 per month**
# The Welfare Aggregate – results

## Total Monthly Per-capita Consumption Spatially Deflated, Tajikistan 2015

<table>
<thead>
<tr>
<th>Groups</th>
<th>Somoni/month</th>
<th>%food</th>
<th>%non-food</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dushanbe</td>
<td>275.45</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Sogd</td>
<td>273.81</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Khatlon</td>
<td>229.91</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>RRS</td>
<td>221.61</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>GBAO</td>
<td>201.28</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>266.95</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Rural</td>
<td>229.85</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Quintiles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 (poorest)</td>
<td>113.80</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>Q2</td>
<td>164.04</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>Q3</td>
<td>210.74</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Q4</td>
<td>273.98</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>Q5 (richest)</td>
<td>447.20</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>241.95</td>
<td>67%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: TajStat staff estimates based on HBS, 2015
Basic Poverty Results – extreme poverty

Extreme Poverty, 2015

- Dushanbe: 9.1%
- Sogd: 9.4%
- Khatlon: 16.8%
- DRS: 20.6%
- GBAO: 19.6%
- Rural: 17.5%
- Urban: 10.2%
- Tajikistan: 15.2%
Basic Poverty Results – overall poverty

Overall Poverty, 2015

Dushanbe: 20.4%, Sogd: 22.3%, Khatlon: 35.8%, DRS: 37.3%, GBAO: 39.4%, Rural: 35.2%, Urban: 23.2%, Tajikistan: 31.3%
Basic Poverty Results – urban/rural

SHARE OF POOR, 2015

Urban, 24.2%

Rural, 75.8%
Basic Poverty Results – regions

SHARE OF POOR, 2015

- Dushanbe: 7%
- Sogd: 18%
- Khatlon: 37%
- GBAO: 10%
- DRS: 28%
Road Map

- Data-entry
- Sampling
- Questionnaires
- Poverty fluctuations over time
- Updates to the poverty methodology
Thank you for your attention