Using the EGRA Calculator for Study Design and Budget Estimates

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What is the EGRA calculator?

- An Excel-based estimation tool that can produce an approximate budget for an EGRA application
- Allows for adjustable inputs based on intended EGRA research design
- Is based on experience from past EGRAs to take into account common inputs that influence cost
Purpose and Intended Use of the EGRA Calculator

• For use by missions and implementing organizations interested in estimating costs

• Can help inform EGRA study design by providing rough estimates of costs associated with different design scenarios
How does the tool estimate costs?

Estimates are based on essential information that directly affects costs:

- Sample size
  - Number of schools
  - Number of grades
  - Number of students per grade
- Number of languages
- Number of EGRA subtasks being administered
- Geographic disaggregation needed (national vs. regional; urban vs. rural)
- Number of assessors and supervisors
- Number of assessor teams
Organizational Structure:
The tool assumes an organizational structure in which the EGRA is managed from a headquarters office located in a country other than the country of implementation.
Labor rates for work assumed to be done at headquarters need to be manually entered, as these costs vary among implementing organizations.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Labor Rate per Hour:</th>
<th>Hours:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Project Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument Design and Adaptation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument Translation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessor Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report Writing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other 1:  
Other 2: 
Required Cost Inputs: Travel Expenses

**Travel Inputs:** These costs must be manually entered into the calculator.

<table>
<thead>
<tr>
<th>12. Enter the estimated expenses associated with travel:</th>
<th>Number of Travelers:</th>
<th>Cost per Trip:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessor Training Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissemination Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other 1:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tool Assumptions: Unit Costs and Currency

- **Unit Costs:** Current unit costs are based on averages from multiple regions/locations. Costs may be manually updated as needed to better reflect local costs and provide a more accurate estimate.
  - Consider local norms and practices, weather constraints, and context specific transportation challenges

- **Currency Adjustments:** **Unit costs are based on current actual costs.** The calculator does not account for inflation or currency fluctuation.
### Updating Unit Costs

15. Adjust unit inputs to directly reflect unit costs of the items and expenses listed.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venue</td>
<td>$500</td>
</tr>
<tr>
<td>Lunch/tea break during workshop trainings</td>
<td>$8</td>
</tr>
<tr>
<td>Data collector per diem/payment</td>
<td>$40</td>
</tr>
<tr>
<td>Data supervisor per diem/payment</td>
<td>$65</td>
</tr>
<tr>
<td>Transport to schools during pilot</td>
<td>$100</td>
</tr>
<tr>
<td>Transport to schools during data collection</td>
<td>$150</td>
</tr>
<tr>
<td>Assessor transportation to training</td>
<td>$30</td>
</tr>
<tr>
<td>Lodging</td>
<td>$50</td>
</tr>
<tr>
<td><strong>Supplies</strong></td>
<td></td>
</tr>
<tr>
<td>Photocopies</td>
<td>$0.30</td>
</tr>
<tr>
<td>Flipcharts</td>
<td>$10.00</td>
</tr>
</tbody>
</table>
Example 1: Country X Research Design

Country X would like to conduct an EGRA in 2017. The Ministry of Education in Country X is interested in collecting data for grade 2 students in each of the 6 regions/languages in the country. In each region, pupils are taught in the national language but introduced to English gradually until the end of grade 3, after which they are taught in English. Therefore, pupils will be assessed in a national language and in English.

Each regional education office has an assessment team consisting of about 10 staff who will be trained to conduct the data collection.

The assessment will include the five core EGRA subtasks, plus phonemic awareness and familiar word reading.
### Example 1: Calculator Inputs for Country X

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Suggested</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td>2400</td>
<td>2400</td>
</tr>
<tr>
<td>Pupils Per Grade / School</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Data Collectors / Team</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Number of Teams</td>
<td>43</td>
<td>20</td>
</tr>
<tr>
<td>Total Number of Data Collectors</td>
<td>172</td>
<td>60</td>
</tr>
<tr>
<td>Total Number of Assessments</td>
<td>4800</td>
<td>4800</td>
</tr>
<tr>
<td>Number of Days for Data Collection</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Number of Pupils / Assessor / School</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Number of Schools</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Total Estimate Based on Inputs</td>
<td>225,444</td>
<td></td>
</tr>
<tr>
<td>Currency Exchange Rate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Estimate in Local Currency</td>
<td>225,444</td>
<td></td>
</tr>
</tbody>
</table>
Example 2: Country X Modified Research Design

The Department of Education in Country X has decided it is less interested in performance data for English since pupils will have had little exposure to English by the end of grade 2. Instead, Country X would like to compare early grade reading performance data in each of the national languages for pupils across grade 1, grade 2, and grade 3.

In order to complete the data collection in a timely manner, each region will use a mix of government and private data collectors, with about 10 government and 10 private per region.
# Modified Calculator Inputs for Country X

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Suggested</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample</td>
<td>7200</td>
<td>7200</td>
</tr>
<tr>
<td>Pupils Per Grade / School</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Data Collectors / Team</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Number of Teams</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total Number of Data Collectors</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Total Number of Assessments</td>
<td>7200</td>
<td>7200</td>
</tr>
<tr>
<td>Number of Days for Data Collection</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Number of Pupils / Assessor / School</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Number of Schools</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Total Estimate Based on Inputs</td>
<td>250,962</td>
<td>250,962</td>
</tr>
<tr>
<td>Currency Exchange Rate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Estimate in Local Currency</td>
<td>250,962</td>
<td></td>
</tr>
</tbody>
</table>
Important Reminders When Using the EGRA Calculator!

• The budget estimates from the previous example scenarios reflected only “other direct costs” or field costs. (Labor and international travel were not included.)

• While the estimates between the two scenarios appear to be similar, the gap will likely widen when labor and travel are included by the user.
  – e.g., budgeting for specialists and local experts to design tests for 1 grade in 6 languages (as in Example 1) versus 3 grades in 6 languages (as in Example 2)

• It’s always very important to verify sample and unit costs on second tab.
  – Users must manually adjust the pilot parameters based on the total sample.
  – Users can manually adjust unit costs to reflect local context.
Pilot Sample for 6 Languages/Regions and 3 Grades

<table>
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<td>30</td>
</tr>
<tr>
<td>Total Number of Data Collectors</td>
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<td>120</td>
</tr>
<tr>
<td>Total Number of Assessments</td>
<td>7200</td>
<td>7200</td>
</tr>
<tr>
<td>Number of Days for Data Collection</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Number of Pupils / Assessor / School</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Number of Schools</td>
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<td>240</td>
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<tr>
<td>Total Estimate Based on Inputs</td>
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<td>263,465</td>
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<tr>
<td>Currency Exchange Rate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Estimate in Local Currency</td>
<td></td>
<td>263,465</td>
</tr>
</tbody>
</table>

PILOT
- Total number of pupils: 900
- Total number of schools: 20
- Total number of pupils per school: 45
- Total assessors per team: 4
- Total number of teams: 10
- Number of days for data collection: 2