Promoting education for all in Lao PDR: Increasing Access Through School Meals and Inclusion

Evidence-based Findings for a Food for Education Evaluation in Lao PDR

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Evaluation Overview
Background

- Impact and performance evaluation of the LEAPS II by IMPAQ
  - Baseline for performance (March 2017) and impact (September 2017)
  - Midterm performance and impact follow-up (March 2019)
  - Final performance (March 2021)
Midterm Evaluation Objectives

▸ Assess whether target beneficiaries are receiving services as expected

▸ Assess whether the project is on track to meet its stated goals and objectives

▸ Document initial lessons learned

▸ Discuss mid-course corrections and provide recommendations
Research Questions

▸ Relevance
▸ Efficiency
▸ Effectiveness
▸ Sustainability
▸ Impact
Research Questions

▸ Relevance

▸ Efficiency

▸ Effectiveness

▸ Sustainability

▸ Impact

“In what ways is the project increasing the capacities of MoES at various levels, teachers, administrators, and VEDC/communities?”
Research Questions

- Relevance
- Effectiveness
- Efficiency
- Sustainability
- Impact

“What mechanisms are in place for the local stakeholders (including VEDC) to continue school feeding after the duration of the project, and with high standards for health/dietary practices?”
Research Questions

▸ Relevance
▸ Efficiency
▸ Effectiveness
▸ Sustainability
▸ Impact

“To what extent, has students’ level of reading and understanding of second-grade-level text changed?”
Evaluation Approach
Performance Sampling & Design

- Quantitative Approach
- Qualitative Approach
  - Seven schools: One in each LEAPS II district
  - Best-worst case purposive sampling
    - Cooking Rates
    - Attendance
    - Attentiveness
## Performance Sampling and Design

### Qualitative Approach

<table>
<thead>
<tr>
<th>Interview Type</th>
<th>Number of Groups</th>
<th>Men</th>
<th>Women</th>
<th>Total Number of Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers FGD</td>
<td>7</td>
<td>N/A</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Fathers FGD</td>
<td>7</td>
<td>33</td>
<td>N/A</td>
<td>33</td>
</tr>
<tr>
<td>VEDC FGD</td>
<td>7</td>
<td>26</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>Teachers FGD</td>
<td>7</td>
<td>3</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Cooks FGD</td>
<td>7*</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Students FGD</td>
<td>7</td>
<td>26</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>Principal KII</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Pedagogical advisor KII</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>District Education and Sports Bureau KII</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Provincial Education and Sports Service KII</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Community literacy volunteer KII</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>104</strong></td>
<td><strong>100</strong></td>
<td><strong>204</strong></td>
</tr>
</tbody>
</table>
Impact Sampling & Design

A quasi-experimental design: combined propensity score matching and difference-in-differences
Impact sampling & Design

- 52% attrition rate at follow-up
- Balanced sample using only students sampled at baseline and endline
- Unbalanced sample using all baseline students and tracked students at follow-up
- Full sample using replacement students to overcome attrition

- **Tracked student:** Surveyed at baseline and follow-up
- **Missing student:** Only surveyed at baseline
- **Replacement student:** Only surveyed at follow-up

<table>
<thead>
<tr>
<th>District</th>
<th>Students Surveyed at Baseline</th>
<th>Students Surveyed at Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SF</td>
<td>SF+LB</td>
</tr>
<tr>
<td>Atsaphone</td>
<td>248</td>
<td>345</td>
</tr>
<tr>
<td>Sepon</td>
<td>353</td>
<td>398</td>
</tr>
<tr>
<td>Overall</td>
<td>601</td>
<td>743</td>
</tr>
<tr>
<td></td>
<td>2,184</td>
<td></td>
</tr>
</tbody>
</table>
Data Sources

- Student survey
- Literacy Boost Reading Assessment
- Classroom Observation
- Key Informant Interviews
- Focus Group Discussions
Key Findings
Finding 1 – Performance Qualitative Findings

- Effectiveness
  - School meals as an incentive for attendance and improved attentiveness

When I eat at school...it helps me to concentrate on studying. When I am hungry, I cannot concentrate, and I only want to go home and to get something to eat.

- Student
Finding 1 – Performance Qualitative Findings

- Effectiveness
  - Increased capacity for VEDC and other stakeholders

*The most important thing is getting along well with the VEDC members because otherwise nothing gets done. They are the command center.*

- CRS Community Mobilizer
Findings 2 – Performance Qualitative Findings

- Sustainability
  - VEDCs’ commitment is vital to sustainability

  Where VEDCs are more active, cooks prepare meals better and more regularly

  - Community Mobilizer
Findings 2 – Performance Qualitative Findings

• Sustainability
  • LEAPS II been successful in providing school meals

  We need to work closely with the local government. They need to be a key partner.
- CRS
Finding 3 – Impact Results

Balance

- The SF+LB group was made up of more girls (51%) than the comparison group (45%)
- SF students were less likely to repeat a grade (23%) than the comparison group (33%)
- No differences for socioeconomic index, age, ECD/preschool attendance, Lao speakers, or availability of books at home
Finding 3 – Impact Results

- **Regression analysis**
  - For three samples: Full, unbalanced, and balanced
  - Disaggregated by gender and ethnic background

- **Impact evaluation outcomes for SF and SF+LB:**
  - Letter Recognition
  - Reading comprehension
Finding 3 – Impact Results

**SF**

- No evidence of an impact in the SF group
- No differences in gains made by each of the subgroups
Finding 3 – Impact Results

- **SF+LB**
  - The impact of LEAPS II on letter recognition is positive and significant in each sample.
  - Subgroup analysis shows strong positive results for girls, boys, Lao, and non-Lao speakers.

### Letter Recognition

<table>
<thead>
<tr>
<th>Variables</th>
<th>Balanced Sample</th>
<th>Unbalanced Sample</th>
<th>Full Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
</tr>
<tr>
<td>Treatment*Post (DID)</td>
<td>0.430 (0.045)**</td>
<td>0.430 (0.045)**</td>
<td>0.410 (0.049)**</td>
</tr>
<tr>
<td>Treatment</td>
<td>0.011 (0.032)</td>
<td>0.020 (0.029)</td>
<td>0.010 (0.028)</td>
</tr>
<tr>
<td>Post</td>
<td>0.440 (0.045)**</td>
<td>0.429 (0.045)**</td>
<td>0.450 (0.047)**</td>
</tr>
<tr>
<td>Controls</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>N</td>
<td>1,472</td>
<td>1,437</td>
<td>2,743</td>
</tr>
</tbody>
</table>

**Source:** Student survey; authors’ calculations; p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01; Standard errors shown in parentheses are clustered at the school level. All regressions include cluster-level fixed effects.

### Reading Comprehension

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<tr>
<td></td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
</tr>
<tr>
<td>Treatment*Post (DID)</td>
<td>0.043 (0.039)</td>
<td>0.041 (0.039)</td>
<td>0.041 (0.039)</td>
</tr>
<tr>
<td>Treatment</td>
<td>-0.001 (0.018)</td>
<td>-0.000 (0.019)</td>
<td>-0.011 (0.012)</td>
</tr>
<tr>
<td>Post</td>
<td>0.092 (0.031)***</td>
<td>0.091 (0.033)***</td>
<td>0.096 (0.026)***</td>
</tr>
<tr>
<td>Controls</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
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*
Discussion & Conclusion

- Sustainable pathways to supplementing school meals
- Important role of VEDCs
- Importance of school meals on other outcomes