Project Evaluation:
Case Study on Infrastructure Project

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Outline

- About NEDA
- Evaluation’s Conceptual Framework
- NEDA’s Project Evaluation Concept
- Case Study
1. About NEDA

- Provide neighbouring countries with financial and technical assistance.

**Financial Assistance**
- Grants
- Concessional Loans
- Mixed Credit (Soft Loan with Grant Portion)

**Technical Assistance**
- Project Preparation
- Training
- Program/Capacity Building
1. About NEDA

“Neighbouring Countries”

- Cambodia
- Myanmar
- Sri Lanka
- Bhutan
- Lao PDR
- Vietnam
- Timor-Leste
- Cambodia

16th ODA Evaluation Workshops
1. About NEDA

Potential Projects

- Facilitate Trade and Investment
- Promote Industrial and Agricultural Cooperation
- Transportation Linkage
- Support and Promote the Service and Tourism Sector
- Support the Human Resource Development
- Support the Urban Development
Project Evaluation is an assessment as systematic and objective as possible, of an ongoing or completed project to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability.
2. Evaluation’s Conceptual Framework

- Characteristics of Infrastructure Evaluation

- Project lifetime is long.
- Impact is dynamic.
- Monopolistic.
- Inducing externalities.
- Multiple objectives.
2. Evaluation’s Conceptual Framework

Why is important?

- Recognizing project achievements and acknowledge people’s work.
- Identifying techniques and approaches that worked, and devise steps to ensure they’re used in the future.
- Identifying techniques and approaches that didn’t work, and devise steps to ensure they aren’t used again in the future.
2. Evaluation’s Conceptual Framework

What is an advantage?

- If changing an existing situation was a project objective, take measures of that situation’s key characteristics to see whether you successfully met that objective.

- Obtain final cost, labor-hour, and schedule performance reports for the project.

- Survey key stakeholders to determine how well they feel the project addressed their needs and their assessments of project team and project manager performance.
2. Evaluation’s Conceptual Framework

Methodology: Evaluation Criteria based on Development Assistance Committee (DAC) of OECD*

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Relevance to development needs at appraisal and at present, and consistency with development policies</td>
</tr>
<tr>
<td>Effectiveness (impact)</td>
<td>Comparison of planned and actual figures to measure the effectiveness, considering the operation &amp; effect indicators</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Comparison of input (project period and cost) and achieved output (constructed facilities and/or procured equipment and materials)</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Sustainability based on the financial aspects, technical capacity and operations &amp; management system</td>
</tr>
</tbody>
</table>

*OECD: Organization for Economic Co-operation and Development
2. Evaluation’s Conceptual Framework

- **Evaluating Process**
  - Relevance
  - Effectiveness (Impact)
  - Efficiency
  - Sustainability

**Scoping Concept**
- Indicate factors for evaluating, it has to follow the concept and should represent closely objectives of the project.

**Factor Evaluation**
- Scope concept regarding to each DAC criteria

**Criteria**
- Determine criteria to evaluate the factor

**Evaluate**
- Evaluate by using determined criteria, may apply Point Rating Method or questionnaire to evaluate it.
3. NEDA’s Project Evaluation Concept

- Completed Project Examples,

- NR 67 Road Construction
- Nhong Khai-Thanaleng Railway
- Pakse Airport Improvement
3. NEDA’s Project Evaluation Concept

Stage of Evaluation

- Project Impact Evaluation
  - Year 3rd
  - Project Impact Evaluation

- Project Completion Evaluation
  - Year 0
  - Project Completion Evaluation

Finishing construction and disbursement
3. NEDA’s Project Evaluation Concept

3.1 Project Completion Evaluation

- This stage is evaluated by NEDA. The main purposes are to summarize project cost and lessons learned during project implementation. The evaluation scopes are:

  • Contract Management and Disbursement
  • Project Cost
  • Construction and Supervision Summary Report
  • Project Obstruction
  • Project Outcome
3. NEDA’s Project Evaluation Concept

3.2 Project Impact Evaluation

- This stage is evaluated by 3rd Party selected by NEDA. Most Methodologies are related to DAC analysis. The purposes are to:
  • Evaluate project outcome and impact and its compliance to the objectives and policy
  • Evaluate project sustainability and performance
  • Evaluate project’s economic feasibility
  • Evaluate stakeholders’ satisfaction
3. NEDA’s Project Evaluation Concept

3.2 Project Impact Evaluation

- Evaluation scope
  • Project Output and Outcome
  • Project Impact
  • Project Sustainability
  • Project’s Economic Feasibility
  • Project Satisfaction
4. Case Study

The Improvement of the National Road No. 67 (Siem Reap – Anlong Veng), Cambodia

Project Details

• Improving Road NO. 67 approximately 137 Kms
• Two-Lane road with Double Bituminous Surface Treatment (DBST)
• Loan Amount: 1.3 Billion Baht

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget in Loan Agreement</th>
<th>Budget in Loan Contract</th>
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<tbody>
<tr>
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<td>1,152,988,525</td>
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<tr>
<td>Supervision</td>
<td>61,000,000</td>
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<tr>
<td>Management</td>
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<tr>
<td>Contingency</td>
<td>65,500,000</td>
<td>-</td>
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<tr>
<td>Total</td>
<td>1,300,000,000</td>
<td>1,226,488,525</td>
</tr>
</tbody>
</table>
1. Framework

- **Relevance**
  - Considering the relevance between objectives and work plan

- **Concept**
  - Enhancing economic activities in project area
  - Supporting national policy development, economic corridors, e.g. ACMEC, GMS
  - Improving living standard in the project area

- **Factor**
  - Level of Production, Tourism and Investment
  - Level of Cooperation both countries and among the countries in economic corridors
  - Level of accessing infrastructure

**Impact Evaluation with DAC analysis**
4. Case Study

Impact Evaluation with DAC analysis

1. Framework

- **Effectiveness and Impact**
  - **Traffic and engineering aspect**
    - Traffic volume, travel time, speed
  - **Economic benefit aspect**
    - Value-added, time value, accidental cost, investment & tourism value, cross border trade
  - **Social and Environmental impact**
    - Employment, income, education, hospitality, social problem

Actual - Expected Output and Outcome Comparison

Concept

Factor

Criteria
4. Case Study

Impact Evaluation with DAC analysis

1. Framework

- **Efficiency**

  **Concept**
  - Recurrent schedule and adjustment

  **Factor**
  - Recurrent frequency
  - Accidentally recurrent management
  - Project Management Organization

  **Criteria**
  - Regularity, economically resources, implementing time
  - Level of services in emergency time
  - Expertise, integration, responsibilities
4. Case Study

Impact Evaluation with DAC analysis

1. Framework

- **Sustainability**
  - Considering middle and long term sustainability

- **Road quality and readiness of maintenance**
- **Management and monitoring plan**
- **Human capital development**
- **Road physical, maintenance Expenses, rehabilitation**
- **Financial, intuitional, technological suitability's plan**
- **Capacity-building program**

Concept  | Factor  | Criteria
Impact Evaluation with DAC analysis

2. Evaluation Method

- Point Rating Method with 2 Steps
  - Step 1: Evaluate each DAC component with 3 levels
    - Level 1: Good
    - Level 2: Fair
    - Level 3: Poor
  - Step 2: Evaluate overall with 4 levels
    - Level 1: Very Good
    - Level 2: Good
    - Level 3: Fair
    - Level 4: Poor
4. Case Study

Impact Evaluation with DAC analysis

2. Evaluation Method
   • Disseminate Design

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Effectiveness and Impact</th>
<th>Efficiency</th>
<th>Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>3</td>
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</tbody>
</table>
Impact Evaluation with DAC analysis

3. Result: NR 67

G O O D

1. Relevance
   1
   2
   3

2. Effectiveness and Impact
   1
   2
   3

3. Efficiency
   1
   2
   3

4. Sustainability
   1
   2
   3

Very Good
Good
Fair
Poor
4. Case Study

Impact Evaluation with DAC analysis

4. Lessons Learned

- Assumption for the study should be based on the specific area, should not be one for all border.

- The pre-evaluating information is important for the local stakeholder, especially public institutions and government agency.

- Detail Design has to study covered the natural disaster effects. From this project, the underestimated natural disaster caused the road rehabilitation was fast than expected.

- The regulation should integrate both courtiers.
Q&A
THANK YOU
For Your Attention!