Transport Improvement in Developing Countries and Role of Japan’s Official Development Assistance (ODA)
発展途上国における交通の発達と日本の政府開発援助の役割

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Definition

- Willingness 意志
- Commitment 義務
- Participation 参加
- Motivation 動機

Connecting to:

- Ownership オーナーシップ
- Self-driven development using aid as a lever

Connecting to:

- Human skills 技術
- Technology 技術
- Organization 組織
- Management 管理
- Institution 制定

Connecting to:

- Ability to plan, design and implement development program 開発プログラムを計画、デザインと実行する能力

Connecting to:

- Grant, Technical cooperation Loan (grant element > 25 %)

Connecting to:

- Contribution to multilateral institutions

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Background

• ODA- not much effective (all donors)
  ODAは効率的でない
• “Good Ideas” more important than “Big Money”
  金額よりもアイデアが重要

ODA and economic growth

• Group of 39 DC
  (except India, China)
• Population > 5 million
• GNP per capita in 1980 < 2000 US$

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ODA for economic infrastructure and economic growth

Regression
Dep. variable: GDP growth rate

<table>
<thead>
<tr>
<th>Unit</th>
<th>Coeff</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const</td>
<td>2.8</td>
<td>2.5</td>
</tr>
<tr>
<td>ODA</td>
<td>% GNP</td>
<td>-0.05</td>
</tr>
<tr>
<td>Eco infra</td>
<td>% ODA</td>
<td>0.07</td>
</tr>
<tr>
<td>Social sect</td>
<td>% ODA</td>
<td>-0.01</td>
</tr>
<tr>
<td>Production</td>
<td>% ODA</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

R² = 0.43

How to improve effectiveness?

Transport sector- Important

Micro-level studies

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**Research Objectives and Approach**

*Japan's ODA*
- Philosophy 基本理念
- Principles 原則
- Priority 重点事項

*Take these as given (reference)*

*Research Objectives*

- Identify relevant areas for ODA within transport sector 交通部門におけるODA対象領域の把握
- Examine the system of implementation procedure to identify key issues 実施過程の調査と主要論点の把握
- Make recommendations to improve the effectiveness of Japan’s ODA 日本のODAの効率化のための政策提言

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Classification of recipient countries by “Ownership” and “capacity” 自助努力と能力によっての被援助国の分類

Ownership (High) → Emphasis on capacity building

Donors support recipient’s Policy 被援助国の政策をサポート
Recipient driven 自力で発展
Capacity (Low) → Donor driven 援助国主導
Donors’ conditions for reform 改革を目的とする援助の条件

Ownership (Low) → Capacity (High)

Donor driven 援助国主導

- Intellectual leadership
- Developmental objectives
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Types of Japan’s ODA

ODA (2000)
1兆127億円 (100%)

二国間援助
Bilateral 72.3%

ODA
Grant 42.9%

多国間援助
Multilateral (UN, WB, ADB etc) 27.7%

有償資金
Loan 29.4%

研修員受け入れ
Acceptance of trainees

専門家派遣
Dispatch of experts

機材の供与
Equipments grant

プロジェクト方式
Project type TC

開発調査
Development studies

青年海外協力隊
JOCE

Others

技術協力

無償資金協力
Grant-in-aid

Technical cooperation

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Main features of Japan’s ODA

<table>
<thead>
<tr>
<th>Policy</th>
<th>Merits</th>
<th>Demerits</th>
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<tbody>
<tr>
<td>Aid-on-request</td>
<td>Non-interference</td>
<td>Distorted priorities</td>
</tr>
<tr>
<td>High ratio of Loans</td>
<td>Ownership</td>
<td>Debt-burden</td>
</tr>
<tr>
<td>Multi-agencies</td>
<td>Specialization</td>
<td>Non-integrating</td>
</tr>
<tr>
<td>Hardware oriented</td>
<td>Pro-development</td>
<td>Lacks sustainability</td>
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</tbody>
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Challenges to Japan’s ODA

Resources + Efficiency + Impact

Present → Future

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1. ODA totally utilizing the feeling, intellect and vitality of Japanese people (Participation of Japanese firms, NGOs, transparency and accountability)
   国民の心、知力と活力を総結集したODA

2. Prioritized and effective ODA with a strategy (country assistance program, sector strategy, donor coordination)
   戦略を持った重点的・効果的なODA

3. Drastic improvement of ODA implementing system (consistency, decentralization, flexible response, effective evaluation)
   ODA実施体制の抜本的整備
Rationale: “to raise the visibility of Japan’s ODA through utilizing and transferring excellent technologies and know-how of Japanese firms”.

Incremental benefit (Grant Element) 10~20 %?

Benefit and cost of concessional tied loan

Incremental cost (tied loan) ~40* %?

High cost of tied procurement?

Learning-by-doing

Incremental benefit (Grant Element) 10~20 %?

Incremental cost (tied loan) ~20 %?

Cost effectiveness

Capacity building

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Transport policy agenda (i)
交通部門の政策行動計画

1. **Infrastructure** 社会基盤
   - **Lack of Infrastructure**
     - National network
     - Urban transport
     - Rural transport
   - **Long-term infrastructure development strategy**
     - Priority setting
     - Coordination with land-use plan
     - Linkage with regional development
     - Linkage with poverty reduction
2. Service Operation and Maintenance

- Public transportation
- Poor maintenance
- Low operational efficiency
- Poor service standard

3. Institutional development

- Human resource
- Organizational set-up
- Laws, regulations
- Information and statistical system
- Research and analysis
- Capacity of consultants and contractors
4. **Sustainability** 持続可能性

- Modal balance,
- Public transport
- Environment
- Financing sources
- Motorization, congestion
- Safety
- Equity and fairness

5. **Cross-border or trans-Asian network**

 国際ネットワーク (eg Asian Highway Project)

- Neglected in individual country priority
- Institutional issues
Transport sector has both hardware and software elements

Shift from Hardware to software.....

Transport sector

New ODA Philosophy

Likely Strategy?

Appropriate Strategy?

Hardware

Social sectors

Software

Transport Sector

Transport sector

• Hardware

• Software

• Poverty reduction

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ODA to transport sector agenda

Japan’s ODA

Development study
- Master plan
- Feasibility study

Loan Grant
- Infrastructure
- Services

Equipment grant
- Project type TC

Training Experts
- Institution building
- Human res development

Specific ODA scheme for each component

Share of Transport sector in Japan’s ODA, 2000

Total bilateral ODA: 23%
Total bilateral Technical Cooperation: 5%

Less priority to Institution building in transport sector

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Multiple components combined in a single program

- Infrastructure
- Poverty reduction
- Institution building

Coordination among donors

- Transport sector level
- Program level
- Project financing level (co-financing)
  - ADB/WB loan + bilateral grants
  - In case of Japan, only JBIC loan for co-financing

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Selected Examples of ODA Projects in Transport sector 交通部門におけるODA事業の事例

1. New Bangkok International Airport- JBIC Loan
2. Sindhuli Road Construction (Nepal)- Grant-in-aid
3. Vietnam Transport Strategy Study- Technical cooperation (Master Plan)
4. National Center for Transport Studies (NCTS), Philippines- Technical cooperation (Institution strengthening)
1. New Bangkok International Airport (NBIA)

- Planning started in 1960s, NBIA in 1995
- Highly relevant for ODA financing

- Total project cost 120 bilB
- JBIC loan commitment 72 bB

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1. NBIA...

Bidding for Construction of Passenger Terminal and concourse

Design Consultant

Design 1
High cost?

Design 2
Alternative?

Controversies

New design
• Lower price
• Local materials

Thai Govt.
• New design?
• Re-bidding

Bidding for design-1
• Four bidders
• Bidding price 56 to 64 bBh
• Estimated cost 45 bBh

Winning bid
36.7 bBh < estimated!

Issues
• Corruption and transparency?
• Positions of Thai govt, NBIA?
• Role of donor (JBIC)? Neutral?

Lessons
• Recipient should take a lead role
• Donor’s role should be supportive

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3. Shindhuli Road project, Nepal*

Type: Bilateral (Grant Aid)-on going

Background:
- Grant-in-aid, E/N signed in 1996
- Total length- 158 km (37 km up-grading)
- Construction period about 8 years
- Highly relevant- important network link
- Socio-economic impact- very high
- Special provision for maintenance
2. Shindhuli Road project, Nepal

**Issues:**

- Potential for capacity building not fully utilized
- Low design standard, 20-40 km/hr (as a National highway)
- Inappropriately high-tech retaining structure (sec II)
- High cost (over 2 times the locally constructed)
  - Due to lump sum contract
  - High quality standard
  - Procurement condition (tied to Japanese firm)
Type: Bilateral (Technical cooperation)

Background:
• VN govt Requested in 1997 – JICA signed in 1998
• Collaboration with local research institute (TDSI)

Impacts:
• The strategy document serve as government policy document
• Acceptable to all stakeholders
• Japan side coordinated donor’s meeting for transport sector

Possible factors for success
• High relevance, participation of local institutions, co-ordination with other donors, quality of the study
• Lesson - both output and process are important!

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5. National Center for Transportation Studies (NCTS), University of the Philippines, Manila

**Type:** Bilateral (Technical cooperation)

**Background:**
- Transport training center (TTC) in 1976
- TTC was upgraded to NCTS
- NCTS - a regular units of UP system
- Evaluation in 1996 - a successful project
- Extension of JICA assistance 1997-1999

**Current Status**
- NCTS runs on its own
- Master degree course
- Research
- Regular training program
- Third-country training
- Seminars

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Possible reasons behind the success 成功要因
- Appropriate choice of institution 適切な組織
- Well integrated with existing institution 既存組織の統合
- Coordinated assistance 協調的支援
- High degree of ownership on the part of recipient 被援助国のオーナーシップは高さ
- Carefully designed for sustainability 持続可能な制度設計
  ✓ Accredited training institute by Civil Service Commission
  ✓ Graduate courses and research
  ✓ International training programs
  ✓ Consulting services
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Emerging Issues

- Capacity building of Recipient
- Cost efficiency of ODA operation
- Effectiveness of ODA

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Project implementation and capacity building

**Issues:**
- Emphasis only to disbursement and output
- No incentive to involve local institutions
  - Government agencies
  - Consultants
  - Contractors
- Specific ODA schemes for specific purpose

**Possible measures:**
- Emphasis to a process of “Learning-by-doing”
- Conditionalities for institutional reform
- Promote participation of local institutions
  - Guidelines
  - Contract provisions
  - Other incentives
  - Preference in bid evaluation (e.g., WB)
- Integration of different ODA schemes
Cost effectiveness in ODA operation  

**Issues:**

- Price collusion among bidders 談合
- Lump sum contract- estimation biased to upper limit 総価契約
- Procurement conditions 調達条件

**Possible measures:**

- Transparent and accountable bidding procedure 透明性
- Appropriate contract design (eg avoid lump sum) 適切な契約
- Separation of capital-intensive and labor-intensive works 資本と労働の分離
- Utilization of local manpower and materials 地域資源の活用
- Combination of material aid and free labor (for rural roads)
- Adopt optimal quality standard considering 最適な基準
  - Cost-effectiveness
  - Sustainability
  - Donor’s image

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Evaluation of ODA Projects

**Issues:** 論点

- In-house evaluation- credibility ？ 信頼性
- Survey methods- Recipient’s biasness ？ 受入国のバイアス
- Evaluation also for institution building effect  機関設置の効果

**Possible measures:** 手段

- Independent evaluation institution  独立評価機関
- Use of diverse methods to obtain information  情報取得
- Selection of both successful and failure projects  事例
- Success rating (A, B, C…) (ADB/WB)  評価基準
- Rating of consultant linked to evaluation result  コンサルタント評価
- Promote evaluation research  評価手法の研究

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Summary of possible measures and expected impacts

**Measures**

- Country specific strategy
- Promoting local participation
- Emphasis to “learning-by-doing”
- Transparent, accountable bidding procedure
- Appropriate contract design
- Linking transport with poverty
- Integration of ODA schemes
- Independent evaluation
- **Intellectual leadership**
- Conditionalities for reform
- Partnership and coordination
- Appropriate technology

**Expected impacts**

- Cost efficiency
- Capacity building
- Enhance ownership
- Accountability

- Improve overall effectiveness
- Contribute to poverty reduction
- Ensure sustainability
- Make donor’s “face” visible

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Conclusion 結論

- The current policy direction- appropriate 現在の政策の方向は適切である
- Challenge- appropriate implementation mechanism ? 適切な実施方法は？
  - Incentive mechanism インセンティブ手法
  - Flexible guidelines ( promote “innovation”) 自由度の高いガイドライン
- Infrastructure investment still a priority- but should be supported by enhanced institution building.
  公共基盤整備の優先度はまだ高い - 整備を支える能力の高い組織が必要
- Emphasis to be given to
  - Participation recipient’s institutions 被提供側の組織の参加
  - Learning-by-doing 実施を通じた学習
  - Coordination with other donors ドナー間の協調
  - Independent evaluation 独立した評価
- There is a need and also scope for an intellectual leadership by Japanese ODA institutions in transport sector 交通部門における日本のODA機関による指導が必要
Tasks ahead 今後の予定

- Consultation with relevant institutions

- Identify ODA projects programs for detail case studies
  - Covering 3-4 countries (of different level of development)
  - Covering different ODA types
  - Both success and failure projects

Recommendations
- Appropriate areas within transport
- Implementation procedure

Compare with practice of other donors where applicable 他の援助国との比較