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Organizational Capacity of Executing Agencies in the Developing Countries

- Case Studies on Bangladesh, Thailand and Indonesia -

December 1999

Research Institute for Development and Finance
Japan Bank for International Cooperation

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FORWARD TO THE ENGLISH EDITION

Globalization of the international economy has brought about sweeping changes in the external circumstances of Japan. In response to the changing world economy, Japan Bank for International Cooperation (JBIC) was established in October 1999 as an organization that conducts Japan's external economic policies and economic cooperation. JBIC is pursuing a more enhanced role by integrating the functions of two merged organizations: The Export-Import bank of Japan (JEXIM) and the Overseas Economic Cooperation Fund, Japan (OECF).

Upon the establishment of JBIC, the Research Institute for Development and Finance (JBICI) was created as its powerful research arm. Its research activities are geared toward improving not only the overall quality of JBIC's operations but also that of Japan's external economic policy and economic cooperation through systematic analysis of various issues and policies related to JBIC's activities. JBICI was established by merging the two former research institutes: the Research Institute for International Investment and Development (RIIID) of JEXIM and the Research Institute of Development Assistance (RIDA) of OECF.

Both RIIID and RIDA used to publish their research findings as "Staff Paper Series" or "OECF Research Papers." Upon establishing JBICI, it was decided to release these research papers as a single publication entitled "JBIC Research Paper Series" with the aim of disseminating the findings of studies and research activities of JBICI.

This report titled "Organizational Capacity of Executing Agencies in the Developing Countries" is the second issue of the JBIC Research Paper Series, and it is a translation of the Japanese edition published in September 1999 as OECF Research Papers No. 37.

We hope that this report provides you with useful information and viewpoints on the issues of organizational capacity of executing agencies and its implications for ODA operations. We look forward to your continuing support for our research activities as we step forward to further strengthen our roles.

December 1999

Koichi Kosumi
Executive Director
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FORWORD

This report presents a view on "organizational capacity" in developing countries, referring to actual cases of official development assistance.

For more than thirty years, the Overseas Economic Cooperation Fund (OECF) has supported development projects executed by a variety of organizations in the developing countries. Through such experience, we have learned that the organizational capacity of the project/program executing agency in the developing countries is one of the most important factors for the successful implementation of projects and eventually, successful development as a whole. Agendas in development assistance, such as, enhancing ownership of the developing countries or eradicating poverty, also pressingly call for closer examination of organizational capacity of the executing agencies.

Problems faced by developing countries that endeavor for development are multifaceted. So is the organizational capacity necessary for coping with those problems. The interaction between organizations and problems itself can be said to be a very learning process that is essential for development. Thus, in analyzing organizational capacity, we tried to understand the dynamic aspects of development processes, instead of considering it as static. We would be happy if this report can contribute to a better understanding of organizational capacity.

A comparative case study of rural electrification projects in Bangladesh and Thailand, which is presented in Chapter 2, is based upon the research contracted out by the OECF to a private consultant team.

Finally, we would like to express our deepest gratitude to many persons in the governments of Bangladesh, Thailand and Indonesia, related executing agencies, consultants, and staff members of the World Bank, for their most generous cooperation extended to this study.

September 1999

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ABBREBIATIONS

CHAPTER1

CIDA	Canadian International Development Agency
OECF	Overseas Economic Cooperation Fund, Japan
RIDA	Research Institute of Development Assistance, OECF

CHAPER 2

DESA	Dhaka Electric Supply Authority, Bangladesh
DESCO	Dhaka Electricity Supply Company, Bangladesh
EGAT	Electricity Generating Authority of Thailand
NRECA	National Rural Electrification Cooperative Association, USA
PBS	Palli Bidyut Samity (User's Association) , Bangladesh
PDB	Power Development Board, Bangladesh
PEA	Provincial Electricity Authority, Thailand
PTA	Performance Target Agreement (of REB/PBS)
REB	Rural Electrification Board, Bangladesh
USAID	United States Agency for International Development

CHAPTER 3

BANGDA	Directorate General of Regional Development, Ministry of Home Affairs
BAPPENAS	National Development Planning Agency
BINA MARGA	Directorate General of Highways, Ministry of Public Works
BPS	Statistics Indonesia (former Central Bureau of Statistics)
CIPTA KARYA	Directorate General of Human Settlements, Ministry of Public Works
CMMC	Central Monitoring and Management Assistance Consultant
GIS	Geographical Information System
IDT	Presidential Decree Grants for Backward Villages
LKMD	Village Development Council
LMAS	Local Management Assistance Services
P3DT	Village Infrastructure Development Project
PMD	Directorate General of Village Community Development, Ministry of Home Affairs
PMU	Project Management Unit

EXECUTIVE SUMMARY

As Japan's ODA loans are based on the principle of "self-help" efforts, organizational capacity of project/program executing organizations in recipient countries is of critical importance to the realization of development objectives of aid projects.

"Institutions" are rules of the game, such as laws, regulations and customs, while "organizations" are groups of players created for achieving certain objectives, such as political, economic, social and educational groups. Characteristics of both institutions and organizations are significant factors that affect the courses and consequences of development. The analysis of this report mainly focuses on "organizational" capacity. This is because Japan's ODA loans are executed mainly through projects, namely, supporting the improvement of capacity of executing agencies and the development of the country through the execution of projects.

This report tries to examine the "organizational capacity" of executing agencies in a comprehensive manner and present a framework for analyses. It is hoped that the report can contribute to a better understanding of organizational capacity and to an improvement in ODA operation. First, the report discusses what kind of criteria should be used to assess organizational capacity of executing agencies and with what factors organizational capacity can be explained. Then, by applying the analytical framework to some actual cases, the report examines the relationship between performance and organizational capacity of the executing agencies.

CHAPTER 1 DEFINITION AND ANALYTICAL FRAMEWORK OF ORGANIZATIONAL CAPACITY

(1) The costs for executing development projects consist of "transformation costs" and "transaction costs".

(2) The organizational capacity of an executing agency is defined as its ability to minimize the total amount of transaction costs through appropriate measures arranged in advance.

(3) The organizational capacity consists of the three elements: ① Expertise ② Specificity in authority and responsibility, and ③ Incentives. Incentives are determined by three factors: (a) Mission Sharing, (b) Contestability and (c) Accountability.

1. Criteria for Assessing the Capacity of Executing Agencies

We try to interpret organizational capacity from the perspective of new institutional economics, with an emphasis on the concept of “transaction costs”.

The costs for executing development projects consist of “transformations costs” and “transaction costs”. Transformation costs are project costs in a narrow sense, namely, costs for transforming inputs into outputs. Transaction costs include the costs for coordinating the interests of stakeholders, collecting information, checking qualification of contractors, supervising bidding, negotiating over contracts, monitoring the project progress, internal auditing and organizing local beneficiaries. Organizational capacity of executing agencies can be defined as an ability to minimize transaction costs incurred to the project execution.

2. Factors Determining Organizational Capacity

① Expertise

Expertise means capacity of an executing agency and its staff members in a narrow sense (technical knowledge, experience, know-hows etc.).

Expertise can be evaluated by checking: the number of engineers with special qualifications, academic backgrounds of staff members, adequacy of training systems, experience in overseas assistance, experience in the execution of similar development projects, information infrastructure for the communication between the central management unit and local sites (in case a project consists of numerous sub-projects), how well they understand the social/economic structure of local beneficiaries and communities, and so on.

② Specificity in Authority and Responsibility

Projects are likely to be executed smoothly if authorities and responsibilities of related individuals/organizations are clearly defined and operational procedures are transparent and simple.

“Specificity” can be examined by looking at: whether or not the executing agency has an authority to make final decisions; whether internal structure of giving instructions or orders is simple and clear-cut; what procedures a project document should go through and how long it takes to be finally approved; what countermeasures are prepared against contingencies, and so on.

③ Incentives

Even if staff members of the executing agency are highly qualified and responsibilities are well defined, the project would not be implemented successfully if the participants have very weak motivation to carry out the project. Incentives are affected by the following three factors.

(a) Mission Sharing

Incentives to execute a project are high when staff members of the executing agency and related parties outside the agency understand and share the goals of the organization and significance of a project.

This can be assessed by checking: how managers of the organization understand their mission and the significance of the project; in what ways they try to diffuse the mission among staff members and related parties; if there is any political, economic, social or cultural frictions or sense of value that may affect the judgement or behavior of staff members, and so on.

(b) Contestability

Stakeholders of a project have strong incentives to implement the project efficiently and effectively, when they are faced with severe competition. Competitive pressures can come internally as well as externally. Contestability can be checked by looking at; as for internal contestability, if there is any mechanism to encourage competition for good performance among different departments, units or staff members of the organization; if each department or staff member's shares of contribution to the operational results are properly evaluated and directly linked with rewards/ punishments; as for external contestability, if they try to outsource some of the operation to private firms or to privatize some departments.

(c) Accountability

Staff members of the executing agency have stronger incentives to implement a project honestly and efficiently when the contents and outcomes of their operation are monitored by multiple parties, or when they are required to be accountable for their activities to stakeholders. Accountability can be evaluated by checking; sufficiency of internal control system such as internal auditing, project information disclosure, and channels through which stakeholders can feedback information on monitoring the project.

CHAPTER 2 CASE STUDY OF RURAL ELECTRIFICATION PROJECTS: ELECTRIFICATION AUTHORITIES IN BANGLADESH AND THAILAND

(1) Power distribution authorities in Bangladesh and Thailand are examined in order to analyze the relationship between their recent performance and organizational capacity, by applying the analytical framework presented in Chapter 1.
(2) Bangladesh's REB/PBS and Thailand's PEA, showing good performance, have all the components of organizational capacity evaluated as satisfactory.
(3) PDB and DESA in Bangladesh which show unsatisfactory performance, have all the components of organizational capacity evaluated as partially satisfactory or unsatisfactory.

1. Outlines of Organizational Structure and Performance

- Executing agencies:

  Bangladesh: Rural Electrification Board (REB), Palli Bidyut Samity (PBS: users' association for rural electrification), Power Development Board (PDB), Dhaka Electricity Supply Authority (DESA)

  Thailand: Provincial Electricity Authority (PEA)

- Operational Mode and Recent Performance*

	Method	Performance (System loss ratio, Tariff collection ratio)
REB/PBS	Co-operative method	good (16.3%, 95.2%)
PDB/DESA	Vertically integrated method	poor (29.8%, 82.2% / 27.9%, 57.8%)
PEA	Vertically integrated method	good (5.5%, ---)

*System loss ratios and tariff collection ratios in FY 1997 are used as the criteria to judge performance.

2. Evaluation of Organizational Capacity

"Expertise" is evaluated by adequacy of training, "specificity" by explicitness of technical standards and job descriptions, and "incentives" by mission sharing, contestability, and accountability.

[Evaluation ratings]

A: Satisfactory B: Partially satisfactory C : Unsatisfactory

① REB/PBS

Evaluation

Expertise		
Training	A	Training/education programs are provided to staff members, management and customers. They also foster electricians.
Specificity		
Technical standards/ Job descriptions	A	Detailed technical standards are developed and respected at local sites. Management manuals are prepared. Customer service procedures are clearly defined.
Incentives		
Mission sharing	A	PBS's special division provides enlightenment programs on rights and responsibilities of customers. Mechanisms are provided to promote smooth communication with customers (village advisor system etc.) REB provides training to PBSs' directors in order to have significance of projects and responsibility of directors permeated.
Contestability	A	Each PBS concludes Performance Target Agreement (PTA) with the REB and set a performance target at the beginning of the year. At each year end, staff members receive bonus or penalty according to its achievement of the target. Meter reading is contracted out to a private company.
Accountability	A	Efforts are made to prevent concentration of power or dishonest activities. Performance of each PBS manager is checked by both the Board of Directors and by the REB. Organizational Structure is arranged so that internal check and balance can function (to separate stock management and construction/maintenance management, etc.), and that dishonest activities can be prevented (to separate tariff collection, meter reading, and billing etc.).

② PDB/DESA

	Evaluation	
Expertise		
Training	B	PDB has its own training facilities to provide the staff with technical training. DESA has no training facilities of their own and entrusts staff training to outside. Chances to have outside training, however, are limited due to budget shortage.
Specificity		
Technical standards/ Job descriptions	B	Technical standards and job descriptions are provided, but not compiled with at local sites. Post-construction quality inspection is not fully conducted because of staff's dishonesty or negligence.
Incentives		
Mission sharing	C	Labor unions are allied with political parties and confront with the management. Efforts to improve work efficiency and to control corruption are frustrated by the opposition of labor unions and political parties.
Contestability	B	DESA's introduction of merit personnel system has little effects, because profits gained from dishonest activities exceed official rewards for good conducts. Not very much progress in outsourcing meter reading and tariff collection. In some regions, local power distribution is contracted out to private firms.
Accountability	B	As for large-scale projects, construction process is double-checked by internal department and by the government. Few measures are taken to prevent dishonest activities, which leads to wide-spread corruption and high system loss ratios.

③ PEA

	Evaluation	
Expertise		
Training	A	Training is regarded as important and managed directly by a Deputy Governor. More than a half of staff members participate in extensive training programs (40 courses each for engineering and management). Its own training center is under construction. In-house vocational school is also available.
Specificity		
Technical standards/ Job descriptions	A	Detailed technical standards for designing, operation and maintenance, as well as manuals are provided. A certification system is developed for grading construction contractors.
Incentives		
Mission sharing	A	Management objectives are clearly set. Good personnel compensation and harmonious labor-management relationship.
Contestability	A	Merit-rating system is introduced for each section, operation office and staff. Targets are agreed for each at the beginning of the year, and bonus or penalty is given according to the performance.
Accountability	A	Internal Audit Office is independent and directory belongs to the Governor. They conduct regular inspection. Some post-evaluation studies are commissioned to external organization. Opinions of large customers can be heard at the annual general meeting of local offices. Various arrangements are established to prevent corruption (introducing portable terminals for meter reading and tariff collection, etc.).

CHAPTER 3 CASE STUDY ON SMALL-SCALE, SCATTERED PROJECT: RURAL AREAS INFRSTRUCTURE DEVELOPMENT PROJECT IN INDONESIA

(1) A project where small-scale sub-projects are distributed over a wide area and carried out by multiple organizations tends to have a complex executing structure, and thus requires higher levels of organizational capacity.
(2) Evaluation results of this project shows almost all the components of organizational capacity as satisfactory.
(3) Efforts to enhance organizational capacity during the preparation and implementation stages of the project constitute a key element to its satisfactory performance.

1. Outlines of the Project

① Objectives: The objectives of the project is to construct/improve village access infrastructure (roads and jetties) and water supply infrastructure (including sanitation facilities) in backward villages with high development potentials.

② Project Execution Framework

- Executing agencies

  BAPPENAS (National Development Planning Agency): Responsible for overall coordination, planning, monitoring and evaluation of the project

  Directorate Generals of Highways and Directorate General of Human Settlements, Ministry of Public Works: Responsible for technical supports

  Directorate Generals of Regional Development and Directorate General of Village Community Development, Ministry of Home Affairs: Responsible for (non-technical) guidance and supervision of local governments

  District governments: Responsible for implementing local sub-projects
- Coordinating mechanism: Coordination teams are organized at each administrative level, that is, central, provincial and district governments, for horizontal coordination. The Central Coordination Team has a project management unit.
- Consultant services: In order to support administrative organizations at each government level, consultant service is provided as central monitoring consultants, regional coordination consultants, and local management assistant service.

③ Performance: An impact evaluation study (a sample survey among sub-projects implemented in the FY1995) shows that majority of sampled sub-projects are satisfactory.

2. Evaluation of the Project from the Perspective of Organizational Capacity

- "Expertise" is evaluated in respect of the adequacy in training, consultant service and computer database; "specificity" in respect of simplicity in project structure, explicitness in responsibility and authority; "incentives" in respect of mission sharing, contestability and accountability.
- As described below, efforts are made to enhance each component of organizational capacity, through careful project preparation and continuous improvement during the implementation.

[Evaluation ratings]

A: Satisfactory B: Partially satisfactory C : Unsatisfactory

Components of capacity	Check item	Evaluation	
Expertise	Training	A	Guidelines and training are provided to acquaint stakeholders with the details of the project as well as the responsibilities of each administrative agency.
	Consultant service	A	Extensive consultant service is provided to support each level of government administration.
	Database development	A	Computer database is introduced for sub-project planning, monitoring sub-project progress and fund flows.
Specificity	Simplicity	A	The project structure is simplified by focusing on two key infrastructure (access roads and water supply).
	Clarity in responsibility	A	Responsibilities of central and local agencies are clearly defined.
	Clarity in authority	A	Strong authority is vested to BAPPENAS as a central coordinating agency and to the district governments as sub-project implementing agencies.
Incentives			
Mission sharing	Efforts to permeate organizational mission	A	Efforts are made to share the mission and significance of the project through training and socialization programs provided to stakeholders.
Contestability	Inter-unit competition	B	A pilot project is introduced to encourage villages to compete for an approval of sub-projects.
Accountability	Monitoring by higher-level organizations	A	Sub-project progress and quality are checked by multiple organizations/individuals, such as consultants, project managers, District Coordination Team, Provincial Coordination Team.
	Monitoring by beneficiaries	A	Efforts are made to disclose project information, such as fund allocation, to local beneficiaries in order to enable them to monitor sub-projects.

CHAPTER 4 CONCLUSION AND FURTHER STUDIES

(1) The case studies presented in Chapter 2 and Chapter 3 show that those executing agencies with sufficient components of organizational capacity, in general, perform better. The approach to analyze “expertise”, “specificity”, and “incentives” of an organization appears to be effective to explain the relationship between the organization and its performance.

(2) Organizational capacity can be improved. Although development stages and cultural backgrounds of a country certainly influence the organizational capacity, organizational capacity is not totally unchangeable or given. As is observed in the case studies in Chapter 2 and Chapter 3, efforts to enhance each component of organizational capacity can change and improve performance.

(3) Issues for Further Studies

① Methodologies for improving organizational capacity need to be investigated further, by conducting more comparative case studies on the organization and performance and by analyzing good practices.

② More attention must be paid to the issues of organizational capacity, in order to respond to the social requirements towards ODA (securing higher transparency and participation) as well as to better cope with new types of organizationally challenging projects (social development projects or small-scale scattered type projects).

CHAPTER 1

DEFINITION AND ANALYTICAL FRAMEWORK OF ORGANIZATIONAL CAPACITY

1.1. INTRODUCTION

As Japan's ODA loans are based on the principle of "self-help" efforts, organizational capacity of "project/program executing agencies in the recipient countries" (hereinafter called "executing agencies") is of critical importance to the realization of development objectives of economic assistance. Therefore, development aid institutions must address the issue of organizational capacity by utilizing their experience and knowledge, for the improvement of quality in ODA.

Before explaining the definition of organizational capacity and its analytical framework, a brief explanation on differences between "institutions" and "organizations" will be discussed. The New Institutional Economics defines "institutions" as "rules of the game in a particular society" or "the humanly devised constraints that shape human interaction". Institutions include formal and informal rules such as laws, regulations, customs, and norms[1]. Analyses of institutions cover the management of the public sector as a whole, democracy, corruption, improvement of legal and judicial systems. In the meantime, "organizations" are defined as "groups of players bound by some common purpose to achieve objectives". Organizations include political groups (political parties, municipal assemblies, etc.), economic groups (firms, labor unions, etc.), social groups (churches, etc.), and educational groups (schools, universities, etc.). Analyses of organizations cover incentive structures of individual organizations and executing systems of particular projects. It is evident that both "institutions" and "organizations" largely influence the impacts of development assistance projects, or even the development of a nation. This report discusses mainly "organizations". This does not mean that the report denies the importance of "institutions". Japan's ODA loans, however, are executed mainly through development projects. Through the execution of respective projects and the capacity building of executing agencies accompanied with such project execution, ODA loans try to assist the development of developing countries. In consideration of such characteristics of ODA loans, main focus of this paper is placed on the analyses of "organizational" capacity.[2]

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1. North (1990), Ostrom (1993).
2. Please refer to "Institutions and Organizations: World Bank's Efforts for Improving Capacity of Developing Countries" in Supplementary Discussions for analyses of institutions.

The organizational capacity of executing agencies is important for the smooth planning and monitoring of a development project, successful realization of development goals and sustainable development effects. Even after a loan project is completed, the organizational capacity of executing agencies significantly influences the realization of the intended impacts. For example, the executing agency must operate and maintain its facilities in an appropriate manner in order to fulfill the expected effects of the project to the fullest extent. As for social development projects that have rapidly increased in number in recent years, it is essential to understand the reality of beneficiary participation and to organize them in an appropriate manner. Therefore, in assisting such projects, more understanding and consideration for the organizational capacity of the executing agency will be required than in assisting traditional infrastructure projects.

The Post-Evaluation Group of Research Institute of Development Assistance (RIDA), the Overseas Economic Cooperation Fund, Japan (OECF) reviewed total 342 post evaluation cases and summarized 636 lessons[3]. The lessons are classified according to the three stages of the project cycle and three keywords, that is, proper macroeconomy and development policies", "improvement of organizational capacity", and "adoption of proper technology". The result shows that lessons concerning the "improvement of organizational capacity" is most significant at any stages of the project cycle, accounting for about one half of the total lessons (**Table 1-1**). It may be suggested that not enough examination or follow-up was carried out on the capacity of executing agencies or the project execution framework, while technical aspects of the project were appraised relatively well.

Table 1-1: Classification of Lessons Obtained from Post Evaluation of Japan's ODA Loans

Stage / Keyword	Project Formation/ Appraisal	Procurement/ Implementation	O & M/ Monitoring/ Project Results	Total
Proper Development Policies	86 (35%) (59%)	46 (30%) (31%)	15 (23%) (10%)	147 (32%) (100%)
Improvement of Organizational Capacity	105 (43%) (45%)	84 (55%) (37%)	41 (62%) (18%)	230 (49%) (100%)
Adoption of Proper Technology	54 (22%) (62%)	23 (15%) (26%)	10 (15%) (12%)	87 (19%) (100%)
Total	245 (100%) (53%)	153 (100%) (33%)	66 (100%) (14%)	464(100%) (100%)
Others	82	60	30	172
Grand Total	327	213	96	636

Source: "Lessons Learned from OECF Post Evaluation",
in "*Journal of Development Assistance*", Vol.4, No.2, 1999, P.23.

3. Ejima, Shinya, Katsuhiko Nakadate, "Lessons Learned from OECF Post Evaluation", in *Journal of Development Assistance*, Vol.4, No.2, 1999.

When a problem arose during the implementation or the operation and maintenance stage due to a shortage of organizational capacity of executing agencies, the OECF has endeavored to address the problem through improvement in project appraisal or vigorous efforts by the OECF staff at overseas representative offices. Problems of the organizational capacity of executing agencies are also often discussed at the time of loan negotiations between the OECF and the relevant borrowing countries. Measures to cope with such problems, however, tend to be sporadic, and knowledge and know-hows on organizational capacity of recipient agencies often remains as "tacit knowledge" of the staff members in charge of the individual project.

Therefore, the Development Assistance Group of RIDA took on a study on organizational capacity. It is hoped that comprehensive analyses of "organizational capacity" of executing agencies will contribute to an improvement in future operation of ODA activities. This research aims to examine what consists of "organizational capacity" and to present practical proposals on how to improve such capacity. First, the report presents a theoretical framework to help understand the issues of organizational capacity of executing agencies. Then, it tries to clarify relations between the performance and organizational capacity of executing agencies, referring to some actual cases of Japan's ODA loan projects.

1.2. EXISTING APPROACHES FOR ANALYZING ORGANIZATIONAL CAPACITY

Many practitioners and researchers have long recognized that in order to achieve intended objectives of development projects, not only financial assistance but also improvement in organizational capacity of executing agencies is necessary. Over the past years, there evolved some different perspectives for analyzing the organizational capacity of executing agencies. Following are some of the approaches classified by the Canadian International Development Agency (CIDA) (Morgan and Qualman 1996).

1.2.1. Traditional Institutional Development Approach

The organizational capacity of executing agencies in developing countries have been analyzed under the name of institution building, institutional strengthening or development management since the 1950s and 1960s. They aim to build up and strengthen key formal organizations, particularly in the public sector. The development of institutional capacity is regarded as a secondary component of development projects or "hardware". Poor organizational performance is attributed to a lack of management skills, or proper administrative

procedure. Accordingly, conventional recommendation to improve the performance are provision of training, technical assistance, system development, etc. In other words, "organizational engineering" is the core in analyses, while less attention is paid to the "softer" aspects of management, such as organizational culture, bureaucratic structure and incentives.

To be more concrete, points to be checked with regard to the organizational capacity are as follows:

(1) What an organization has: organizational structure, job descriptions, personnel skills, operational costs, and information systems; and
(2) What an organization does: performance of the organization such as strategic planning, financial management, service delivery, personnel policies, operation and maintenance, auditing, procurement, stakeholders management.

The analytical method of this traditional approach has been directly influenced by theories of corporate management. The approach tries to break down organizational capacity into several components such as management capacity, technological capacity, financial capacity, administrative capacity and information collection capacity. Then, it tries to measure the level of sufficiency of each component. Attention is paid to internal functioning of respective organizations, namely, the "nuts and bolts" of organizational functioning. If any problems are detected with a particular component, the component will be supplemented by technical assistance, such as employment of consultants or provision of training.

1.2.2. Governance Approach

The governance approach gives more attention to political issues rather than internal organizational functioning. The basic assumption is that the distribution and execution of political power has as great an impact on the functioning of organizations as does the internal restructuring and reforms. It assumes that a country with more democratic political system can have better organizational performance over a long-term. Thus, the main theme is a creation of "good governance". The WDI (World Development Institute) of the World Bank has dealt with issues of good governance. In particular, Governance Program of the Governance, Finance and Regulation Division (WBIGF) has conducted seminars and researches concerning governance problems in various parts of the world[4].

4. EDI of the world bank was merged with Learning and Leadership Center and renamed World Bank Institute (WBI). The outline of the WBI and efforts by former EDI for the solution of governance problems are shown on the World Bank's homepage (http://www.worldbank.org/wbi).

The governance approach has the following characteristics:

- Analyses cover not only governmental organizations such as ministries and agencies but also courts, legislative councils, electoral commissions, political parties, NGOs, the media, and community groups.
- One of the critical factor in "good governance" is the ability of the society to generate the trust which allows people to work productively together.
- Governance approach gives more attention to the impact of legal systems. The performance of the courts, property rights and legal restraints on government actions significantly affect organizational development.
- The approach gives importance to social values such as accountability, transparency, legitimacy, and participation in public affairs.
- It is expected political pluralism, participation and greater accountability can combine to allow stakeholders, customers, and beneficiaries to demand better performance from the executing agency.

1.2.3. New Institutional Economics Approach

This approach applies micro-economics techniques to institutional analysis, under the name of "New Institutional Economics". Under this approach, incentives of organizations are regarded as an important factor affecting the performance. Incentive structures both inside and outside organizations are analyzed.

Individuals and organizations behave differently under different incentive structures. The approach maintains that poor performance of an executing agency is attributed to insufficient incentives for improving performance. Project information is not distributed evenly, meaning that some participants have better access to information than others. This information "asymmetry" has enormous impacts on the behavior of respective individuals and organizations.

The New Institutional Economics approach is based on the following assumptions:

- Incentives are important for the performance of each organization. Analyses focusing upon roles and motivation of individuals both inside and outside the organization are necessary. Program participants are seeking to maximize their objectives under uncertain conditions with imperfect information. Individuals, groups and organizations behave differently according to the rules of the game, particularly incentives. Failure to take account of the existing pattern of incentives can lead to opportunistic behavior, such as free riding, rent seeking and corruption, which might damage the efficiency of the organization.
- In the developing countries, many of the individuals and organizations are not given sufficient incentives to improve performance. In some cases, incentive patterns are designed to meet various objectives, such as political survival and personal security.

- Program information (costs, timeliness, contents, distribution and risks) is the key to affect the organizational behavior of program participants. It is important to enhance the transparency of information and to improve access of participants to performance data, because information asymmetry has significant institutional impacts.
- A project or a program is regarded as a set of contracts agreed between principals and agents (owners, contractors, consultants, participants, beneficiaries, etc.). The organizational performance is largely affected by the structure and conduct of principal-agent relations.
- The institutional economics approach tries to bring the benefits of market forces and competition inside the organization. Given sufficient information and market power, customers can use it to reward and punish service deliverers. Competition can be also encouraged among staff members or different departments within the organization. Competition can be used as a main tool of organizational management, rather than supervision by the management.

Israel, who formerly worked for the Operational Evaluation Department of the World Bank, conducted a pioneering study (Israel 1989). In this study, he analyzed the performance of executing agencies of development assistance projects, paying special attention to incentives. Israel introduced two concepts, namely, "specificity" and "competition", as key determinants which affect the incentive structure of an organization. Then, he presented a hypothesis that incentives of relevant participants of the project are greater when roles and responsibilities of each participant are clearly specified and the project is implemented in a competitive environment. This view of Israel has been further developed by the World Bank in recent years (Girishankar & De Silva 1998).

1.2.4. Capacity Development Approach

The fourth approach is termed as "capacity building" or "capacity development". In common with the governance approach, the capacity development approach addresses macro institutional issues. It can be regarded as a synthesis of the above mentioned three approaches. "The Institutional Evaluation Tool Kit", which is currently under development by the PREM (Poverty Reduction and Economic Management Network) of the World Bank, tries to address problems at a national level including public sector reforms and anti-corruption and appears to be close to the capacity development approach.

The capacity development approach has the following characteristics.

- This approach aims at building a capable "state" (as opposed to a capable "government"). Its goal is to enhance the functions of public management in a broad sense including policy planning and public sector reforms. The approach is a response to the growing complex, multi-faceted problems that involve many

organizations in both the public and private section in areas such as environment, public health, export promotion and the administration of justice.

- Under this approach, it is considered that the "reengineering" organizations will produce little effect in the absence of supportive conditions of accountability, transparency, social trusts and participation.
- It is based upon the assumption that the institutional environment of a particular country is an important factor in determining the speed and direction of the development. Keen attention is paid to networks and clusters of multiple organizations. For example, in the field of child health, it covers interrelations among the ministry of health, large urban hospitals, nurse schools, rural health centers, local hospitals, private practitioners and traditional healers. The approach deals with a whole systems-in-action and tries to improve the capacity of a society as a whole.
- As attention has moved to the macro level, the determinant factors of the capacity (politics, the culture of civil society, social structure and trusts between individuals, social capital, nationality, ethnicity, religions, etc.) become more contextual. Thus, traditional assistance tools (training, management consultants, conditionality, policy reforms) cannot improve the institutional environment of a recipient country.
- The techniques of capacity analysis at national, sectoral, thematic levels can differ significantly from traditional methods to study individual organizations. The structure of networks and clusters of organizations is quite a different issue from those concerning the internal hierarchy of each organization. An organizational change on a grand scale such as comprehensive reforms of the public sector must be discussed and managed from a viewpoint different from traditional ones.
- Capacity development is viewed as a process of individual, organizational, and societal change. Whether or not such changes can have momentum and sustainability, depends upon endogenous energy, commitment and ownership. Donors can enhance and support local commitment but cannot create it from nothing.

1.3. ANALYTICAL FRAMEWORK OF THIS STUDY

The analytical framework of this study can be related to the above mentioned four approaches as follows. First, it applies the method used in the traditional institutional development approach by including "expertise" of executing agencies, such as qualification of the staff and information systems, as a component of organizational capacity. It is close to the governance approach in that it pays attention to normative issues such as accountability, transparency and

participation. Moreover, it is largely based upon the new institutional economics approach in that it handles issues of incentive structures. It also applies the new institutional economics and tries to explain the organizational capacity by using the concept of "transaction costs". The framework is close to the capacity development approach in that it covers external environment of a project in its analysis. However, it does not take a macro approach that addresses institutional problems at the national level from a comprehensive point of view.

In sum, the approach selectively introduces analytical tools of the above four approaches, while mainly relies on the new institutional economic approach that highlights incentive issues. The analytical framework adopted in this study will be presented in the following sections: how the organizational capacity of executing agencies can be explained and what factors constitute the organizational capacity.

1.3.1. Criteria to Measure Organizational Capacity of Executing Agencies

What is an appropriate yardstick to measure the capacity of executing agencies? What should executing agencies be able to do in order to be regarded as having high organizational capacity? In case of private, profit-making corporations, profits can be one of the important indicators of organizational capacity. In case of government entities or public enterprises which are, in most cases, executing agencies of development assistance projects, it is not necessarily appropriate to use profits as an exclusive indicator of organizational capacity. These organizations are frequently required to fulfill a variety of social responsibilities besides generating profits, or they often do not have authority to make their own decision on matters, like tariff charges, that directly influence their profit. Furthermore, if the executing agency is a ministry or agency, such as Ministry of Public Works or Education, it is completely out of point to discuss profits as an indicator to represent the organizational capacity.

Then, what exactly does it mean that an executing agency has organizational capacity? Organizational capacity is inherently a vague concept and there is no universally accepted definition. Different analysts would use different criteria to evaluate the capacity of organizations. In this study, we try to interpret organizational capacity from the perspective of new institutional economics, with an emphasis on the concept of transaction costs.

First, it is assumed that costs for implementing a development project, or project costs, consist of "transformation costs" and "transaction costs"[5]. Transformation costs are direct costs associated with construction. In other words, they simply mean the costs for "transforming" inputs, such as raw materials and labor into final outputs, such as buildings. These transformation costs are technically determined, meaning that with the same technical level, the costs would be the same no matter what organization executes the project.

On the other hand, transaction costs comprise of all the rest of the project costs. They include indirect management costs such as coordinating stakeholders, collecting necessary information and counteracting various types of opportunistic behavior. Other transaction costs include costs associated with checking qualification of contractors, supervising bidding, concluding contracts, monitoring project progress, authorizing the completion of a project, internal auditing, organizing local beneficiaries. As a matter of course, transaction costs increase or decrease according to the executing agency, that is, the way how the project is managed by the executing bodies. If an executing agency makes sufficient preparation, secures agreements from related parties, and prepares well for potential problems in advance, the project is unlikely to come to a standstill in the middle. Thus, although the costs for preparation may be relatively high, overall transaction costs will be relatively low. On the contrary, if an executing agency makes insufficient preparation or coordination in advance, or just leaves the project monitoring to the hands of a contractor, the project would be more likely to face successive difficulties in the course of implementation. Thus, although initial work involved may be small, the total transaction costs would be enormous.

Many of the troubles can be prevented and total transaction costs can be reduced if appropriate preparations are made for counteracting potential difficulties which might occur in the course of project execution. Therefore, we assume that organizational capacity of executing agencies is reflected by the ability of the agencies to reduce the amount of overall transaction costs through appropriate arrangements in advance.

Project Costs = Transformation Costs + Transaction Costs

Organizational Capacity of Executing Agency = Ability to reduce the total amount of transaction costs through appropriate measures arranged in advance.

5. Ostrom, Elinor ed. (1998), *Institutional Incentives and Sustainable Development, Infrastructure Policies in Perspective*, Westview Press

1.3.2. Factors Determining Organizational Capacity

What factors affect the organizational capacity of executing agencies? It is easy to see that academic backgrounds and qualifications of staff members are not the only determinants. Quite a few executing agencies have problems with their capacity to implement projects, although they employ many officers and staff members with a doctorate degree. Moreover, various donors have pointed out that technical cooperation by donors, including training programs, does not necessarily lead to an improvement in performance.

In this study, we assume that the organizational capacity of executing agencies consists of three factors, namely, “expertise”, “specificity of authorities and responsibility”, and “incentives”. Expertise means capacity of the executing agency and its staff members in a narrow sense, including technical knowledge, experience and know-hows. “Specificity” denotes how clearly and transparently authority and responsibility are defined and practiced among related organizations and individuals. “Incentives” serve as both carrots and sticks and affect the willingness of stakeholders to execute a project.

Determining Factors of Organizational Capacity
1. Expertise
2. Specificity in Authority and Responsibility
3. Incentives

Details of each of the three factors are explained as follows.

(1) Expertise

Expertise means capacity of the executing agency and its staff members in a narrow sense. The number of engineers with special qualifications, academic backgrounds of staff members, adequacy of training programs are some of the examples which show the level of expertise. Experiences of handling overseas assistance, including ODA loans, and implementing similar development projects are also an important indicator to evaluate the expertise. If a project has a number of sub-projects covering a wide area of a country, it is also necessary to check the adequacy of information infrastructure connecting the project management center and each sub-project site. If a executing agency has sufficient knowledge, experience, and know-hows and the information infrastructure is well developed, transaction costs, such as coordinating related parties and monitoring, can be reduced.

Expertise of executing agencies can be evaluated by checking following points.

- Whether the executing agency has staff members who have practical experience in ODA loans or other assistance provided by donors.
- Whether the agency has experience in executing similar projects in the past
- Whether the agency is provided with a sufficient number of staff members with technical or administrative skills.
- Whether the project is one of the core activities of the executing agency, in which the agency has sufficient experience.
- Whether the information/communication infrastructure to connect project sites and the central executing unit has been sufficiently developed.
- Whether the agency has a clear picture of social and economic structures of the region where the project is executed and the characteristics of beneficiary groups.

(2) Specificity in Authority and Responsibility[6]

In order to implement development projects smoothly, it is necessary that all the administrative procedures are specified, transparent, and, if possible, simple. If the procedure is not sufficiently specified and the person in change has a large scope of discretion, the implementation of the project would be easily influenced by external intervention or susceptible to corruption. Especially, a project in which many governmental organizations participate is very much likely to come to a standstill, unless the division of roles among respective organizations are clearly defined. Thus, specificity and transparency of authority and responsibility among related participants are considered to be important factors that affect executing agency's capability to implement projects. If such specificity has been sufficiently established, management of the project can be smoothly handled at various stages of implementation, such as a selection of contractors, troubleshooting, monitoring, and policing inappropriate activities, and as the result, transaction costs will be minimized.

Check points for specificity are as follows:

- Whether the counterpart of the executing agency has authority to make final decisions at respective stages of project execution. If he/she does not, who has the authority?
- Whether internal structure of giving instructions or orders is simple and specified. Whether such structure is in conformity with the job descriptions within the organization.
- What kind of steps should be taken after an official in charge of the project prepares a document until it is finally approved by the government. In similar

6. Israel (1998) is a pioneering study to analyze development projects focusing upon "specificity". It discusses that specificity of authorities and roles significantly affect incentives of individuals and organizations.

projects in the past, documents had to go through, which departments, in what order, and how long did it take?

- Which laws and regulations affect the execution of a project (environment protection law, preferential treatment for domestic firms, etc.). Any actual cases in which regulations had influence upon similar projects in the past?
- What countermeasures are prepared against unexpected troubles such as natural calamities, accidents resulting in injury or death, or labor disputes. If there were any contingencies before, how they were dealt with.

(3) Incentives

Providing appropriate incentives to related individuals and organizations is perhaps the most important factor that determines the organizational capacity of the executing agency. Even though the staff members of the executing agency are highly qualified and responsibilities of related parties are well specified, the project would not be implemented successfully if the participants have very weak motivation to carry out the project. On the contrary, if the staff members are provided with strong incentives, they would be likely to voluntarily strive to improve their expertise and are willing to clarify authority and responsibility. Thus, it is essential to examine the incentive structure surrounding the project, in analyzing the organizational capacity.

Then, what kind of framework we could use to understand the incentive structure of an executing agency? In other words, under what circumstances do staff members of the agency have strong incentives to carry out the project? Here, we introduce three factors to explain the incentive structure, namely, (a) mission sharing, (b) contestability, and (c) accountability.

Factors Affecting Incentive Structure
- (a) Mission Sharing
- (b) Contestability
- (c) Accountability

(a) Mission Sharing

One of the factors that largely influence the organizational capacity of executing agencies is sharing the mission of an organization, that is, staff members of the executing agency, as well as related parties outside the agency, understand and share the goals of the organization and the significance of the project. In many organizations known for good performance, each staff member fully understands the social importance of the project, has strong commitment to accomplishing the mission, and is proud of being a part of the organization. Empirical evidences seem to support that there exists interrelationship between the project performance and

the degree of mission sharing. So, it is important to check how managers of the organization understand their mission and the significance of the project and in what ways they try to diffuse the mission to staff members and related parties.

(b) Contestability

Stakeholders of a project have strong incentives to implement the project efficiently and effectively, when they are faced with strong competition. Competitive pressure can come internally as well as externally. Internal contestability includes competition among different departments and staff members within an organization. Each department or staff member has strong incentives to perform better if their share of contribution to the project or operational results are properly evaluated and are directly linked with rewards (promotion, salary increase, etc.) or penalties. As for external contestability, outsourcing some operations to private firms, or privatizing some departments of the organization will introduce competitive pressure from outside. When people are faced with competition, they can no longer afford to continue inappropriate activities, and supervision and monitoring costs will be reduced. Even if inappropriate behaviors exist, competitive environment will make it much easier to identify and deal with the problem.

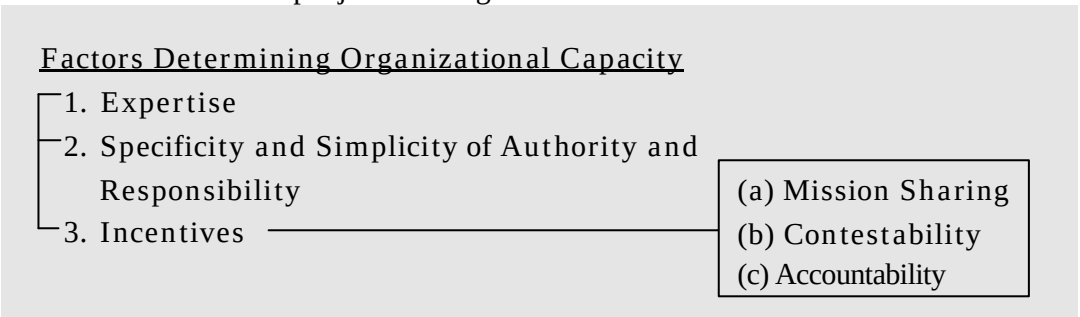
(c) Accountability

Staff members of the executing agency are likely to have stronger incentives to implement a project effectively, when the contents and outcomes of their operation are under scrutiny of other people, or when they are required to be accountable for their activities to stakeholders. On the contrary, under such circumstances that information about the project is not fully disclosed to stakeholders, they will not have strong motivation for punishing lazy staff members or those who are engaged in dishonest activities. Or worse, honest staff might be a loser. Accountability of executing agencies can be examined by checking the sufficiency of internal control systems such as internal auditing, project information disclosure, and channels through which stakeholders can feedback information on the project.

It would be useful to check the following points in examining the incentive structure of an executing agency.

- Whether efforts are made for diffusing the mission of the organization and the significance of the project among general staff members. Whether staff members in charge can clearly state the goals of the organization.
- Whether there are any political, economic, social, or cultural conflicts or sense of value that could affect judgements or behaviors of staff members (regional confrontation, labor-management conflict, religious beliefs, etc).

- How the performance of the department and staff members in charge of the project is evaluated. Whether their performance is linked with the rewards/ punishments.
- When multiple units are involved in a project, whether there is any mechanism to encourage competition among the units for accomplishing the targeted goal.
- Whether an organizational arrangement is made for internal control to prevent inappropriate activities. If any, whether or not the internal control system is regarded as effective by related parties inside and outside the organization. In particular, which department takes charge of internal auditing, or whether or not such a department is a permanent body and its independence is secured.
- Whether there is an effective channel for stakeholders, including beneficiaries of the project, to monitor the performance of the project and feed back the information to the project management.



Next two chapters will try to apply this analytical framework of organizational capacity as presented above to actual case studies of executing agencies in developing countries. Some OECF projects will be reviewed in order to examine the relationship between organizational performance and organizational capacity of the executing agencies.

Chapter 2 will look at the rural areas electrification projects in Bangladesh and Thailand. Chapter 3 will examine Rural Areas Infrastructure Development Project in Indonesia. Chapter 4 will present a summary of the discussions as well as issues to be addressed on organizational capacity in the future. Appendix will review the World Bank's recent development to place emphasis on institutional issues and their activities to evaluate and improve institutional capacity of the developing countries.

CHAPTER 2

CASE STUDY OF RURAL ELECTRIFICATION PROJECTS: ELECTRIFICATION AUTHORITIES IN BANGLADESH AND THAILAND

This chapter looks at rural electrification projects in Bangladesh and Thailand and analyzes organizational capacity of each executing agency. Several power distribution authorities in these countries are examined and relationship between their recent performance and organizational capacity is analyzed, based on the analytical framework presented in Chapter 1. Organizational capacity of these institutions are investigated from the perspectives of "expertise", "specificity" and "incentives."

The reason this chapter chooses rural electrification projects in Bangladesh and Thailand as a case study, among many other development projects, is partly because of characteristics of rural electrification and partly because of diversity in execution method and performance among executing agencies in question. That is, first, rural electrification is a relatively standardized operation, that is, to purchase electricity from power generators and distribute it to customers. It has relatively little influence from factors such as differences in nation or region (compared with irrigation projects, for example) and therefore convenient for a comparative study of organizational capacity in different countries. On the other hand, rural electrification projects are not easy to operate or manage because they usually cover wide areas and deal with numerous customers such as individual households. Accordingly, this kinds of projects tend to have high transaction costs, and thus, performance depends significantly on organizational capacity of the executing agency. For those reasons mentioned above they were considered to be an excellent example for this study.

Secondly, great differences can be observed in execution method and performance among executing agencies of rural electrification projects in Bangladesh and Thailand. In Bangladesh, Rural Electrification Board (REB) is in charge of electrification in rural area through PBSs, user's cooperatives. Its performance is good. On the other hand, Power Development Board (PDB) and Dhaka Electricity Supply Authority (DESA)in Bangladesh are managed in a traditional way, that is, power distribution authority is also responsible for supplying power to end users. Their performance is quite unsatisfactory. On the contrary, Provincial Electricity Authority (PEA) of Thailand also uses the traditional method and their performance is good. So, it is interesting to compare four power distribution authorities with different management methods and performance and to examine what explains for the differences in their

performance.[1] The hypothesis is that differences in organizational capacity accounts for differences in performance of those organization.

Table 2-1: Outline of Rural Electrification Authorities in Bangladesh and Thailand

Country		Bangladesh			Thailand
Name of Authority		REB/PBS	PDB	DESA	PEA
Fiscal year		1997	1997	1997	1997
Total Sales of Electricity	million kWh	1,238	9,447	3,908	47,179
Number of Customers	thousand households	1,712	1,157	634	10,140
Service Area	square km	123,840	n.a.	7,473	510,000
Number of Personnel		7,473	16,266	4,285	30,585
System Loss Ratio (distribution)	%	16.3	29.8	27.9	5.5
Tariff Collection Ratio	%	95.2	82.2	57.8	n.a.

Note: Number of staff of REB/PBS shows that of PBSs only.
Number of staff of PDB represents only distribution division (24,371 in total).
System loss ratios of PDB and DESA exclude sales to REB.

Source: "REB Annual Report 1996-97", REB.
"Rural Electrification Programme in Bangladesh, 1978-1998 and Future Programme", REB.
"Rural Electrification Board of Bangladesh and the Fifty Four PBSs, FY 1996-97", REB.
"RDB. Commercial Operation Statistics, November 1998"
"DESA, Commercial Operation Statistics, September 1998"
"DESA, Key Statistics (Report of RIDA/SADEP study in FY 1998)"
"PEA Statistics Review 1997" (Report of RIDA/SADEP study in FY 1998)
"An Overview of Bangladesh Power Sector", (1997) ADB Dhaka Office.
"Power Sector System Loss Statistics", (1999) ADB Dhaka Office.

Table 2-1 outlines basic operational statistics and recent performance of four electrification authorities, REB/PBS, PDB, DESA in Bangladesh and PEA in Thailand. Performance, measured in terms of system loss and tariff collection ratios, clearly varies among those organizations. PEA's system loss ratio is 5.5%, which is as low as that of power supply corporations in advanced countries. The system loss ratio of REB/PBS is 16%. It is slightly higher than PEA's but much better than PEB's or DESA's which is around 30%. Similarly, as for tariff collection ratios, differences are clear to see among REB/PBS, PDB and DESA.

The rest of this chapter tries to examine information on organization and performance of four institutions and evaluate their organizational capacity by

1. National Electrification Administration (NEA) in the Philippines, which is not included in this study, has adopted the same cooperative method with the same assistance from USAID. Its performance is often pointed out to be unsatisfactory and it has financial problems. Therefore, electrification by the cooperative method is not always successful. On the contrary, Local Water Utilities Administration (IWUA) in the Philippines is in charge of water and sewage projects in rural area and operates through the same cooperative method as NEA. Its performance is reported to be good (OECF Post-Evaluation in FY 1998). Comparison between NEA and LWUA would be an interesting theme of study, although these organizations are responsible for different sectors.

applying the analytical framework presented in Chapter 1.

2.1. RURAL ELECTRIFICATION BOARD (REB) IN BANGLADESH

2.1.1.Outlines of Organizational Structure and Performance

(1) Outlines of Organization and Operation

Rural electrification projects are executed by Rural Electrification Board (REB) in Bangladesh. REB was established on October 31, 1977 and started its operation on January 1, 1978 (Ordinance No. L1). Until then, Power Development Board (PDB) was the only power supply authority. Main power suppliers in Bangladesh now are not only PDB and REB but also Dhaka Electricity Supply Authority (DESA) which was separated from PDB in 1991.

One of the main characteristics of REB's operation is to electrify rural areas not by itself but through Palli Bidyut Samity (PBS), an independent user's association. REB is an organization that supervises, manages and extends financial support to all PBSs in Bangladesh. Just from the beginning when a PBS is created, REB provides extensive advice and help on technical, financial management, human resource development and other related activities. As a new PBS establishes its operation, REB's role gradually reduces. 67 PBSs were approved by the government and 54 started power supply business as of October 1998.[2] The entire distribution lines of REB/PBS are as long as 96,000 km, longer than those of PDB or DESA. REB has 165 substations. It has installed 1700,000 meter of electricity lines, and is estimated to supply power to 23 million residents in the rural area.

In Bangladesh, rural electrification project has been supported by USAID (U.S. Agency for International Development) from the onset. The U.S.A. has carried out electrification in rural areas by introducing a cooperative method since 1930's, and accumulated much know-how on organizing beneficiaries and managing cooperatives. National Rural Electrification Cooperative Association (NRECA) is a central organization of rural electrification cooperatives in the U.S. Its consultation division has been entrusted by USAID to extend technical assistance to REB (See **Box 2-1**).

Rural electrification projects both in the U.S.A. and Bangladesh are operated with the same basic architecture. In both countries, customers become members by paying membership fee, and directors are selected as representatives of members. Bangladesh is different from the U.S.A. in such points that the first director of a

2. 24 PBSs and 30 substations were damaged by the flood in summer 1998 (interview with REB's Chairman).

cooperative (PBSs in Bangladesh) is appointed by the central organization (REB in Bangladesh), they have "village advisor" system as described later, and equipment and materials are procured through international competitive bidding (because they use ODA funds).[3]

Box 2-1: Activities of NRECA in U.S.A.

Rural Electrification Administration was established in 1935 in the U.S.A. to start rural electrification projects through Rural Electric Cooperatives (RECs). Electrification in rural area was not expected to be profitable enough for private companies to take up the business. This is why cooperative method was introduced and electrification was promoted through participation of beneficiaries. Electrification through cooperatives is still active and 875 cooperatives supplied power to 32 million residents in total in 46 states in 1998. 45% of power distribution networks are under the control of cooperatives in the U.S.A.

National Rural Electrification Association (NRECA) is a national association of all RECs in the U.S.A. It has International Programs Division that supports rural electrification in developing countries. NRECA started development aid projects in 1962 and has dispatched more than 400 experts to 70 countries mainly through USAID projects.

NRECA has been supporting rural electrification projects in Bangladesh since 1976. It first conducted a feasibility study on rural electrification in Bangladesh with USAID funds, then it created 17 Palli Bidyut Samity (PBS: Rural Electrification Cooperative). NECRA still has a local office in Dhaka where four long-term experts are stationed.

Reference: NRECA's home page [http:/www.nreca.org].

NRECA provided assistance to rural electrification projects in the Philippines earlier, and the assistance to Bangladesh was based on their experiences in the Philippines. Not a few REB's managers and engineers received "training in a third country (the Philippines)" before starting up the electrification projects in Bangladesh. The training helped REB staff learn lessons from Philippines' rural electrification projects and make most of the experience in implementing projects in their own country.[4] Following two points are the main lessons learned from the Philippines' case.

(a) In the Philippines, several cooperatives formed different associations, which made overall coordination and instruction channels more complicated. In Bangladesh, efforts were made to create centralized instruction channels.

3. Interview with a team leader of NRECA's Dhaka office.
4. Interview with a REB's director responsible for technical affairs.

(b) In the Philippines, the Board of Directors included members from political parties, which might lead to political intervention to project operation. In Bangladesh, therefore, members of political parties were excluded from PBS's Board of Directors from the beginning.

Today Bangladesh's rural electrification projects receive assistance not only from USAID but from as many as 15 donors including the OECF, CIDA, World Bank (IDA) and ADB. A total investment to rural electrification projects from overseas aid amounts to about $900 million.[5]

Experiences of REB attracts a lot of attention from other developing countries. One of the PBS's directors is to be dispatched to Senegal to support rural electrification projects there with the aid extended by Islamic Development Bank. REB is also asked for cooperation with rural electrification projects in a state in India and Nepal.[6]

(2) Organizational Structure

REB's management consists of the chairman, three full-time directors and four part-time directors under the chairman. All the full-time directors are former staff of REB. Each is responsible for "engineering", "PBSs and training" or "finance". Each part-time director are from the government or other public organizations. The chairman has been traditionally an retired military officer. This seems to be because military authority is implicitly expected to serve as a last resort in case labor-management conflict occur, as it did with PDB and DESA. Under three full-time directors, there are four divisions, namely "planning & operation", "projects", "accounts & finance" and "PBS development & management" divisions.

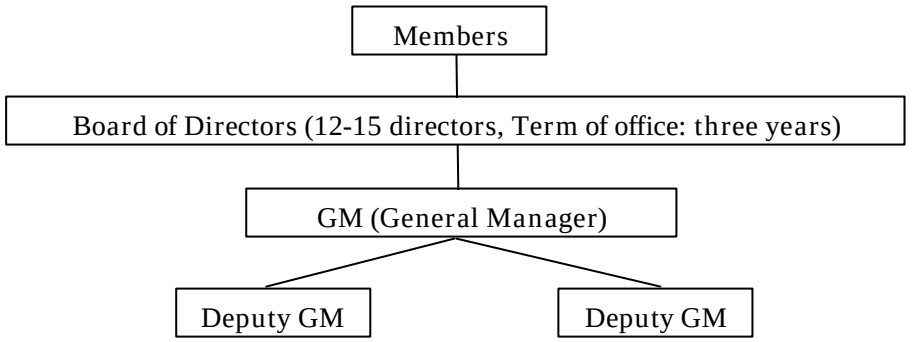
PBS is a cooperative organization and as such it is organized and managed in a way like direct democracy by participation of beneficiaries. The organization is headed by end users of electricity, called "members" of a cooperative. Under the members, there is a Board of Directors which is consists of 12-15 directors who are elected from cooperative members. The board has a decisive power over all aspects of management of the PBS including investment plans and financial management. The directors are unpaid and their term of office is for three years. One third of the directors are reelected every three years.

Under the Board of Directors, there is a General Manager (GM) who is selected by the board and approved by REB. It is GMs who actually manage day-to-day business of PBS and are responsible for the operation of PBSs. If a GM acts dishonestly or achieves unsatisfactory results, REB or the Board of Directors can dismiss him. There were some cases in the past where a GM was actually

5. *Annual Report 1996-1997*, REB, p.11
6. Interview with the above mentioned REB's director.

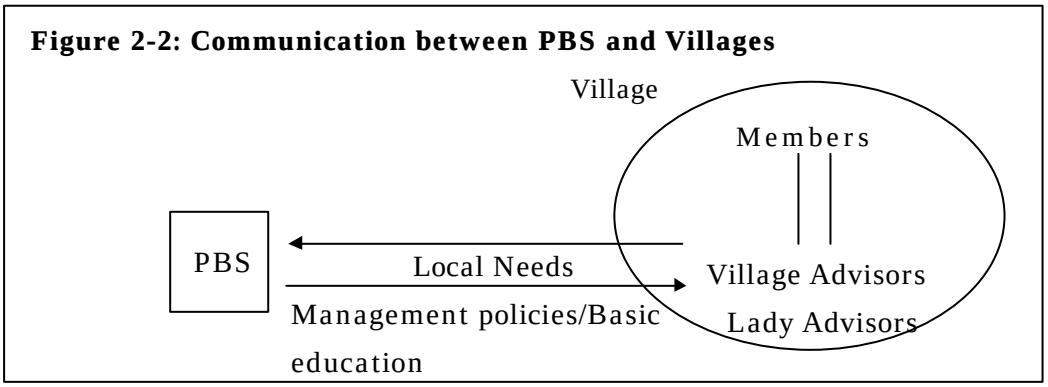
dismissed. Monitoring function of the Board of Directors is secured through REB's strong control over the operation of each PBS. The term of office of GMs is for three years. They are reelected through direct votes of members. When a PBS covers a large area, the territory is divided into several zones each of which a Deputy GM is responsible for.

Figure 2-1: Management Structure of PBS



In addition, a Village Advisor is appointed by the PBS for each village. Advisors are honorary posts and unpaid. Their duties are to provide village people with information on operational status and policies of PBS and provide basic education such as how to use electricity, to report to RBS on Villages' needs for electricity, to promote early construction of distribution lines. Meetings are held for all village advisors at the PBS twice a year. Thus, GMs can communicate with customers in every village via village advisors.

Figure 2-2: Communication between PBS and Villages



In each village, there are 2-3 Lady Advisors appointed by each PBS. Women with high-level education, such as teachers or lawyers, are often selected as Lady Advisors. Their term of office is for three years. They provide advice and consultation to customers on various issues, such as advancement of women's social status, education, or family problems.

(3) Performance

REB's rural electrification projects show good performance. System loss ratio in FY1997 was 16.3%, much lower than that of PDB or DESA which was nearly 30%. PBS's average tariff collection ratio showed surprisingly high level achievement of 95.2%[7] (See **Table 2-1**).

REB's performance is so excellent that part of the PDB's and DESA's territories have been gradually transferred to REB. In the future, DESA will limit its operation to urban areas within Dhaka, and PDB to urban areas outside Dhaka.

It is estimated that REB's system loss ratio increased recently as a consequence that REB has succeeded part of the operation from PDB and DESA. In the case of Dhaka PBS1, for example, system loss ratio was only 10.4% in September 1996, and soared up to 13.9% in September 1998.[8] The system loss has increased in the two years partly due to the transfer of PDB's territory. System losses are classified into two: technical loss caused by technical factors such as electricity leakage during transmission, and non-technical loss caused by human such as illegal wire-tapping or uncollected tariff charges. Those areas transferred from PDB or DESA suffers from technical losses, however, non-technical losses are considered to be more serious problems. Customers are reported to get used to cheating on meters or bribing tariff collectors to evade payment.

(4) Methods to Introduce Electrification[9]

How to create a new PBS

REB's steps to start electrification in a new area are as follows. First, the government decides which rural area to be electrified. The decision depends on potential demands for electricity in the area. If an area has electricity demands from industry or agriculture, higher priority will be given to the area. A priority list, based on several criteria, is prepared for each region. Technical conditions, such as whether PDB's transmission line is available or not or whether access (road) to the area is secured, also influence the priority.

Following the government's decision, REB forms, within the organization, an ad hoc project team called Institution Development Team. The team usually consists of 6-7 staff. Before establishing a new PBS, the team is dispatched to a Thana, a rural administrative unit which is equivalent to a county. The team explains the outline of electrification plan to the representatives of a union, a smaller village unit that forms Thana. At the same time, the team provides

7. *Annual Report 1996-97*, REB, June 1997.
8. *Dhaka PBS-1, At A Glance* and interview with the GM of the PBS.
9. According to the above-mentioned REB's director.

education to potential beneficiaries about the importance and convenience of electricity. After representatives of a union reach an agreement to introduce electrification, the team visit each union to have consent from residents in the union. Those who want power supply pay Tk 20 (about half a dollar), which pays for the right to have power supply as well as membership of cooperative. It usually takes about three to four months for the team to complete the above-mentioned process.

The Institution Development Team then chooses a representative of the area, who is to be the first director of an electrification cooperative. The director should be politically neutral and is forbidden to belong to any political party. After three years of establishment of PBS, a new director is elected by direct votes by residents in the region.

Each PBS is requested by REB to prepare a master plan on regional electrification. In order to prepare a technically and financially sound electrification master plan, expert consultants are hired to assist the preparation. As a part of creating a master plan, the consultant team conducts an intensive survey to all households within the region on matters including social and economic aspects. Priorities of villages for electrification are determined by taking into consideration of results of the survey.

When REB was established at first, they had to persuade rural people into electrification. Today such persuasion is no longer necessary, because everyone is waiting for electricity supply in unelectrified rural areas. The headquarters has a waiting list of villages for electrification.

PBS's Electrification method

Even though a PBS is established in a village, not all the households in the village are supplied with electric power. In Bangladesh, only 15% of all households have power supply on average. Perfect electrification (all households) is not an objective of REB. Customers must be prepared to spend 6-7 dollars as an initial investment on lead-in wires and interior wiring. Only households who can afford such initial costs and monthly electricity fees, can be a PBS member.

Under the PBS system, several members form a community group within a cooperative. If a member in the group taps on electricity illegally, all the group members must pay for the cost. This means that an entire group is subject to a penalty if they cannot prevent stealing electricity. If a member fails to pay for the fee, after a 30 days of grace period, he/she will be ousted from the PBS and equipment such as a meter will be taken away.

If a resident who lives in a remote area within a PBS's territory wants to have power supply, the cost of connecting distribution lines is not shared among the PBS members, but the resident alone has to pay for it. The payment can be done in installment, and some PBSs provide a loan. Utility rate is the same for

every residential customer in a region.[10]

The average annual cost for electricity per customer, for example, in Dhaka PBS1, is Tk 400 (about $10) for households, Tk 480 for commerce, Tk 15,000 for irrigation, and Tk 19,000-43,000 for industry.[11] Ordinary households use electric power only for lighting for several hours per day at night and utility charge is not so expensive.

(5) Impacts of Electrification on Rural Life

As a result of steady growth of PBSs, PBSs has reached various areas from rural agricultural villages to middle-scale light industrial areas. In rural areas, power demand has increased not only for households but for agricultural usage such as irrigation pumps, threshing machines, and fans for poultry farming. Power demands for irrigation pumps and threshing machines are subject to large seasonal fluctuation. As small-scale local agricultural enterprises develop, power demands for small-scale business such as producing ice for prawn or fish farming, motor for logging or making furniture, and flour milling, are increasing. In light industrial areas, there is also power demands for small-scale spinning factories. Those factories have their own power generators in case for power failure which happens quite often. Power shortage is a serious problem, and RER is considering to create small-scale power generating companies.

Rural electrification tends to serve as a driving force to promote small-scale local industry. Small-scale household industry can emerge even in traditionally mono-agricultural villages, supported by the activities of NGOs. Electrification enables housewives to produce handicrafts at home even after dark and obtain some side income by selling the products for export via NGOs. The extra-income can help raise school enrollment ratios for children, and increase purchasing power. Higher level of education can help enrich consumer's life, for example, by introducing TV programs through satellite broadcasting, and increase small-scale business activities such as farming poultry or producing bricks. This also leads to increased purchasing power and promotes local economy. In the course of such dynamism in quickly changing rural villages, power demand is rapidly growing.

10. According to the team leader of NRECA's Dhaka office.
11. According to the above-mentioned GM of Dhaka PBS-1.

Table 2-2: Evaluation of Organizational Capacity of REB/PBS

	Evaluation	
Expertise		
Training	A	REB has in-house training facilities to provide various training programs to its staff and management. Extensive training programs with lectures and on-the-job training. Each PBS provides training/education programs to its staff and customers. PBS also train local people to be electricians.
Specificity		
Technical standards/Job Descriptions	A	Technical standards are established in detail with the support of NRECA. Construction and maintenance of facilities follow the standards. Operation manuals are prepared in series for each job classification. PBSs also have operation manuals. Customer (member) service procedures are clearly defined.
Incentives		
Mission sharing	A	PBS has a dedicated section to educate customers about their rights and duties. Systems, such as Village Advisors, are introduced to facilitate communication with local customers. REB also tries to have PBS directors understand the importance of projects and responsibility as a director, by providing management training courses to PBS directors.
Contestability	A	Performance Target Agreement (PTA) system is introduced to stimulate competition among PBSs. At the beginning of each year, each PBS sets targets for performance agreed with REB. At each year end, staff receives bonus or penalty according to its performance. Contracting out part of its operation to the private sector is introduced for meter reading.
Accountability	A	Centralization of authority and dishonest activities are carefully prevented. Achievement of each PBS manager is checked by the board of directors and by REB. PBS is structured so that internal checking system can work. Measures are taken to prevent dishonesty in tariff collection.

A: Satisfactory B: Partially satisfactory C: Unsatisfactory

2.1.2. Evaluation of Organizational Capacity

As described before, rural electrification projects of REB through PBSs show excellent performance. Their system loss ratio is about 16%, much lower than other electrification bodies in Bangladesh. Tariff collection ratio exhibits an extremely high level of 95%. What enables such an excellent performance? Analyzing organizational capacity of REB and PBSs will demonstrate that good performance is achieved neither by chance nor by aid of foreign countries, but by

their own efforts to improve the capacity. **Table 2-2** shows the summary of evaluation for REB and PBSs.

(1) Expertise

(a) Training

REB has it own training facilities at their premises and provides extensive training programs. REB's training courses are divided into two: one is for REB's staff and the other is for PBSs' staff. Both courses are classified into specialty such as engineering, or accounting, and by staff title such as managers or clerical staff. Each course has detailed classes which consist of both lectures and field training. All REB's staff below directors receive training. They are all assigned with how many courses and hours they must attend for the first, second and the third year of employment.

Trainings for PBSs' staff are extended by REB as well as provided by each PBS itself. REB's training is given regularly at REB's training facilities and PBSs send their staff members to the facilities. As for the courses that require orientation or on-the-job skill training, REBs' instructors visit PBSs' training courses. As for training for PBS's directors, policies and regulations related to rural electrification are explained at first and special focus is placed on the mission of the PBS and responsibilities of the director.

PBSs have various educational and training courses not only for PBS staff but also for residents, including electrician training course for interior wiring or women's course for social participation. Having electricians available is essential to electrify unelectrified areas, and PBSs give training courses to residents who want to be an electrician. PBSs are very active in employing women and provide women with various training courses from traditional hand crafts to accounting. On the-job training is an important component of the training for electricians and some PBSs install training electricity poles with a transformer and connector at their premises.

In addition, PBSs have, for their own staff, their original training courses designed to meet local needs or circumstances. For example, Satkhira Palli Biddut Samit PBS whose customers are agricultural users, organizes its training courses for the maintenance of equipment that their customers often use, such as motorcycles, power generators, and water pumps.

(2) Specificity

(a) Technical Standards/Job Specifications

Technical standards of REB and PBSs were established by NRECA who has given technical consulting to REB and PBSs since their foundation. The standards are based on American technology standards such as electric wires with three-phase four-wire multiple earth system using grand neutral star-connection.

Job specifications are also well standardized and organized in manuals which are serial numbered, like No. 400 series for engineering, No. 500 series for finance and accounting, and No. 600 series for administration and personnel affairs. PBSs use matching standardization: No. 100 series for engineering, 200 series for finance and accounting and No. 300 series for administration and personnel affairs.

REB prepares design standards which all PBSs should follow. As design standards are so well established that actual designing process can be handled systematically.

REB is, in principle, in charge of supervising construction, with actual construction done by contractors. In case of minor construction, PBSs directly carry it out. For example, installation of distribution lines less than 400m or a new transformer is directly managed by a PBS, installation of lines between 400m-2km is done by a contractor which a PBS can select, as for lines more than 2km REB is responsible for planning, construction and inspection.

PBSs are responsible for operation and maintenance. Each PBS has, usually in its territory, 5-7 Zonal Offices each of which has a Complaint Center that receives and handles customers' various requests. A Zonal Office has 4-5 technicians who deal with general technical issues. If it's too difficult for the technicians at Zonal Office, they ask for help to PBS headquarters. Each complaint center can communicate with PBS headquarters by radio.

As for service requests beyond PBSs' responsibilities, such as interior wiring, PBSs refer customers to private electrician trained by the PBS. PBSs have a list of electricians with their service coverage and unit cost, to refer them to customers. In general, PBSs provide extensive and attentive service to customers.

Every PBS has a small workshop where PBS staff checks equipment such as transformers, and handles simple repair jobs. PBSs' warehouses are well organized sorting item by item in order. For example, at one PBS a check list is posted at the entrance of the warehouse, used for checking inventory every month. This helps the worker understand the importance of keeping stock items in order. Distribution line maintenance workers check equipment following REB's specifications and, if necessary, do minor repairment or installation. Special manuals for testing meters are also provided.

As to customer services, well-developed customer services are provided by establishing House Wiring and Inspection Section to test power leakage without charge, and One Stop Customer Center where customers can just drop in at with all kinds of requests or problems, and keeping a repair crew ready to be dispatched for 24 hours to repair breaking of wire within several hours after a customer request. Thanks to those quick and free-of-charge services, customers would not feel it necessary to bribe the staff for a special favor.

(3) Incentives

(a) Mission Sharing

Success of rural electrification operated through users cooperative largely depends on whether its beneficiaries, rural residents, can actively participate in the project. PBSs have special division of Member Education to cope with enlightening beneficiaries with rights and obligations of cooperative members. They also have Village Advisor service to communicate with local customers. REB is making efforts through training programs for PBSs' directors to share the significance of the project and mission of directors.

REB's personnel evaluation is subject to government's personnel policies, such as performance rating, recruitment guidelines, and wage ranking, as REB is a government enterprise. RES's wage level is relatively low, around 60% of those of leading private companies, however, they provide much better fringe benefits, such as handsome pension plans and official housing. In total, their remuneration is just as good as private sectors and job security adds extra attraction to work for REB. Thanks to success of PBSs, ex-staff of REB are strongly demanded by DESCO or newly established PBSs. This also contributes to higher motivation and pride of REB staff.

(b) Contestability

REB/PBSs have tried to introduce market competition by actively contracting out part of their operation, such as meter reading, to the private contractors. Also Performance Target Agreement (PTA) is introduced for REB to assess performance of each PBS regularly and give bonus or penalty according to their performance. The PTA system is aimed to promote competition among PBS units and lead to an improvement of their operation. Outlines of PTA is as follows.

First, 55 PBSs are classified into three groups according to some criteria such as operation period. Each group is given 15-21 indices for self assessment of performance. Each index is given weight according to its importance. Weights are 100 in total, among which "System loss" (22-28 weights), and "debt amount" (22-28 weights) are given relatively heavy weights. For newly created PBSs, weights for "growth of customers" and "growth of sales" are also give high weights as 14 and 11 respectively. For older PBSs, "efforts to reduce costs" is important. Each PBS sets a target for each index every year, submits the target to Permanent Committee for Performance Targets, and the target are agreed between the PBS and the committee. Every August, the committee assesses PBS's performance in the previous fiscal year and decides the amount of bonus or penalty according to each PBS's performance. All the staff of a PBS whose performance significantly exceeds the target, can get a bonus as much as 15% of their annual salary. On the contrary, all the staff of a PBS that cannot meet their target, are imposed a penalty of maximum 1% of their annual income.

(c) Accountability

REB/PBSs' operation system is carefully designed so as not to centralize authorities and to prevent inappropriate activities. In sum, organizational and operation structure are designed to secure accountability to stakeholders. First, General Managers (GM) who are responsible for the management of PBSs, is checked for its performance by the Board of Directors that consists of representatives of local customers. To prevent the board from being merely a name, REB also maintains strong control over GMs.

Second, the structure of PBSs is organized so that internal check and balance can work. A Typical PBS has five divisions under the GM, that is, General Service Division (GSD), Engineering Division (ED), Construction, Operation & Maintenance Division(COMD), Finance Division (FD), and Member Service Division(MSD). Responsibilities are divided into each division so that internal checking system can function. Stock management is separate from COMD and placed under GSD. Consumer's complain service and interior wiring/inspection is not under COMD but under MSD. Billing/collection that tends to be susceptible to corruption, belongs directly to FD.

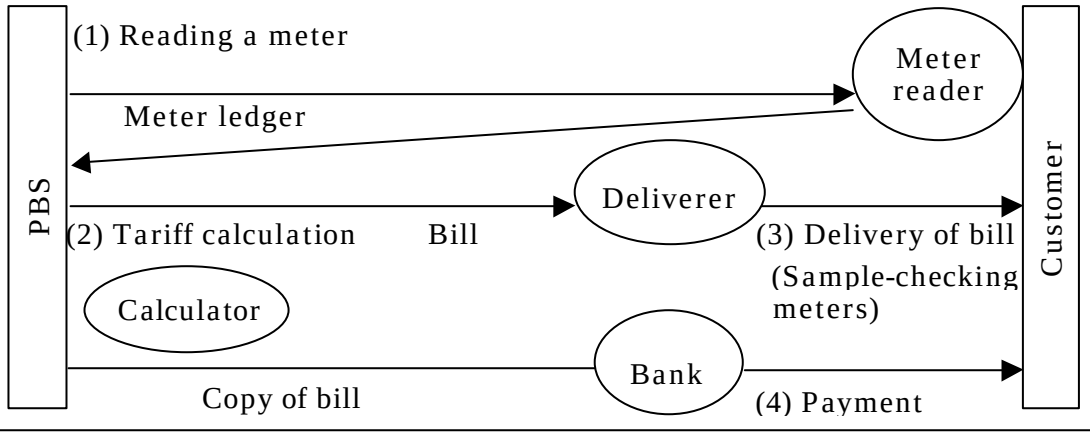
Tariff collection procedures are full of well-planed arrangements to prevent dishonesty. In PBS's system, different persons are responsible for meter reading, tariff calculation, bill delivery, and book keeping. In addition, a mechanism of mutual checking has been invented as bill deliverers sample check the meter when delivering bills. Tariff collection is done through bank transaction so that bill collectors don't receive cash from customers. Meter readers are employed by contract and their contracts last for one year. Those who show excellent performance can be renewed the contract, but it lasts for no longer than three years. Each meter reader covers 1,700 customers a month. To prevent corruption, their territories are changed every four months.

Operational procedures from meter reading to tariff collection are as follows:

1. A meter reader visits a household to read a meter and enter the data into a meter ledger.
2. The meter reader submits the meter ledger to a book keeper.
3. The book keeper prepares a three-copy bill based on the ledger, and enters the amount into a book.
4. A bill deliverer delivers the first and second copies of the bill to a customer.
5. The third copy is kept at the PBS.
6. The customer goes to a bank, with copies of the bill and pays for the tariff.
7. The bank send the second copy to the PBS through the bill deliverer (the customer keeps the first copy).
8. A cashier of the PBS receives the second copy of the bill from the bank.

As discussed above, REB/PBSs are equipped with measures to improve every component of organizational capacity: "Expertise", "Specificity" and "Incentive". Thus, good performance of REB/PBS can be attributed to the high-level of supportive organizational capacity of those institutions.

Figure 2-3: Flow of Billing/Collection at PBSs



2.2. POWER DEVELOPMENT BOARD (PBD)/DHAKA ELECTRITY SUPPLY AUTHORITY (DESA) IN BANGLADESH

2.2.1.Outlines of Organizational Structure and Performance

(1) Outlines of Organization and Projects

Power Development Board (PDB) was established in 1940 as the only electric power enterprise in Bangladesh (then East Pakistan). When established, it was a private company. In 1950's, it was reorganized as a governmental entity covering electric power and water supply businesses. In 1971 when East Pakistan became independent from Pakistan as Bangladesh, it was divided into water supply division and electric power supply division, and the latter is the present PDB. PDB is a vertically integrated electric power enterprise which consists of power generation, transmission, and distribution divisions. Major donors, such as ADB and the World Bank were seriously concerned about the bad performance of Dhaka area and insisted to have the distribution division as a separate company. Thus, Dhaka Electric Supply Authority (DESA) was establish in 1990 and power distribution business in metropolitan Dhaka area was transferred to DESA on October 1, 1991. It is also under consideration to transfer power transmission business to Power Grid Company of Bangladesh (PGCB), a subsidiary of PDB.

Total generation capacity of PDB is about 3,000MW of which 84% is generated with domestically produced natural gas as fuel. Transmission consists of three systems, 230kV, 132kV and 33kV. With 230kV system as trunk lines, power

is transmitted to four major demand area: Dhaka, Chittagong, Khulna, and Rajshahi. Distribution is through 11kV/400-230V system. PDB is responsible to distribute power mainly to local major cities. DESA inherited equipment and personnel that had been owned by PDB, and their facilities and operation methods are basically the same as those at PDB. DESA's power distribution is also through 11kV/400-230V system and its specifications are exactly the same as PDB's.

(2) Organizational Structure

PBS's organizational structure is roughly divided into six: generation, transmission, distribution, planning/research & development, finance, and administration. Each of generation, transmission, and distribution departments divides the territory into regions and has several sections in charge of each region at the headquarters. Distribution division is responsible for up to low tension cables, while lead-in wires and meters are under the responsibility of Accounting Division. DESA's organizational structure is divided into three: engineering/sales, finance, and administration departments. The Engineering/sales department is further divided into North, South and Central divisions. Each division is further divided into sections covering smaller areas, and each section has units in charge of operation/maintenance and in charge of sales.

(3) Performance

System loss ratios of both PDB and DESA are extremely high (See **Table 2-1**). PDB's distribution system loss ratio was 29.8% and that of DESA was 27.9% in FY 1997(excluding the sales to REB). They are much higher than those of REB/PBS or PEA. System loss is classified into technical loss caused by facilities degradation and non-technical loss caused by illegal wire-taping or cheating on meters. In cases of PDB and DESA, non-technical portion is estimated to be quite large. Tariff collection ratios of PDB (including the sales to DESA) and DESA were 82.4% and 60.42% as of November 1998 respectively. DESA's collection ratio dropped from 69.31% in November 1997.[12]

12. *Commercial Operation Statistics of DESA*, September 1998, DESA.

2.2.2. Evaluation of Organizational Capacity

What accounts for the unsatisfactory performance of PDB or DESA, in terms of system loss and tariff collection ratios? This section will try to identify strong and weak aspects of both institutions, from the perspective of organizational capacity in executing projects (See **Table 2-3**).

Table 2-3: Evaluation of Organizational Capacity of PDB/DESA

	Evaluation	
Expertise		
Training	B	PDB has its own training facilities to give mainly technical training to its staff. No training is provided to contractors. DESA, having no training facilities of itself, entrusts outside organizations to train its staff. Due to budget shortage, chances to have training are limited.
Specificity		
Technical standards/Job descriptions	B	Technical standards and job descriptions are provided, but not respected at operation sites. Few facilities are operated and maintained according to the standards. Inspection is not fully conducted because of staff's negligence or dishonest activities.
Incentives		
Mission sharing	C	Labor unions, backed by political parties, conflict with the management. Measures for improving operational efficiency and customer services are frustrated by opposition from the labor unions. Dishonest activities cannot be punished due to interference by labor union/political party.
Contestability	B	Merit system was introduced but had not functioning because profits gained through dishonest activities are more than rewards for good performance (DESA). Meter reading and tariff collection are done by internal staff. In certain areas, efforts are made to entrust power distribution business to the private sector (PDB, DESA).
Accountability	B	As for large-scale projects, construction process is double-checked both by internal department and government organization (PDB). No measures are taken against dishonest activities for sales operation. This leads to wide-spread corruption and high system loss ratio.

A: Satisfactory B: Partially satisfactory C: Unsatisfactory

(1) Expertise

(a) Training

PDB has its own training facilities and training programs for the staff members. Their curriculum consists mainly of technical classes. Part of the courses are trained by outside organizations. Unlike REB/PBS, PDB does not provide training for contractors. They consider that contractors should ask PDB if they have a question. DESA has no training facilities and entrusts training of the staff to PDB and others. Due to budget shortages, chances for the DESA staff to

participate in outside training courses are limited. In the past five years, only 200 employees were given training at outside organizations. On-the-job training (OJT) does not seem to be carried out in an systematically organized manner, either.

(2) Specificity

(a) Technical Standards/Job Specifications

Although specifications and technical standards on design, construction, maintenance are provided both at PDB and DESA, they are apparently not always respected at the operational sites. For example, PDB's regional offices have facility maintenance manuals which state equipment should be checked by using a check sheet. But, in fact, few facilities are operated and maintained according to the standards,[13] especially few low tension lines and lead-in wires are installed as instructed in the manuals. This is mainly because constructors don't build facilities according to the standards and PDB/DESA staff fails to fully conduct inspection due to negligence and dishonesty.

(3) Incentives

(a) Mission Sharing

At either PDB or DESA, people apparently don't have shared mission or goals. Rather both organizations suffer from serious conflict between management and labor unions. In DESA, for example, there are three labor unions each of which closely related with different political parties. As each labor union presents different demands, management cannot come to any agreement and therefore cannot control the staff. Measures for increasing efficiency and service quality proposed by the management are often frustrated by strong opposition from the labor unions.

Current state of low performance, that is, high system loss ratio and low tariff collection ratio, is often pointed out to be caused by dishonest activities of the staff members (See **Box 2-2**). For example, employees of PDB or DESA privately install lead-in wires for their own houses using materials of PDB or DESA without permission, and meter readers cheat on the data by taking a bribe from customers. If a manager tries to penalize such dishonesty, labor unions use collective bargaining power to threaten the management in order to protect the employee. As labor unions are closely connected with a specific political party, they try to exert influence upon management through politicians. Under those circumstances, employees don't share any common value in improving performance.

13. Based on the field survey in FY 1998.

Box 2-2: Tariff Collection in Bangladesh

Followings are some examples of what is happening with the tariff collection of DESA. These statements are based on the interviews conducted for this RIDA study.

- DESA's tariff collectors sometimes do not come as long as for 10 months. One day he suddenly appears to demand for paying all the fees. It is difficult for an ordinary household to pay such an amount at one time. He then says "If you can't pay it all now, you can instead pay me a couple of months' due. " I suspect he does not come regularly on purpose. (REB's staff)
- Sometimes a collector refuses to take formal payment even if I want to pay. He would say "If you insist to pay, I will cut off the power to your house." I have no choice but give him a bribe if I don't want to have the power off. (Staff of Ministry of Finance)
- Even though there is a service interruption due to technical reasons, DESA never repairs it immediately. Staff always demands to pay a rebate privately. I sometimes suspect that they cut off the power intentionally for rebates. (REB's staff)
- Everybody knows tariff collectors of DESA and PDB are problematic. They, however, have connection with aggressive labor unions, and management cannot take any steps against them. Once a director of PDB's local office was attacked by hoodlums and seriously injured. Rumors said that he was attacked because he tried to control dishonest activities of tariff collectors in his territory. Such an accident may happen at DESA as well. Even if staff has a trouble, the organization won't protect him or her. (DESA's staff)
- If tariff collectors come and collect formal charges regularly, customers opt to pay it rather than to bribe the collectors. 90% of the customers are such "decent" persons. (DESCO's staff)

(b) Contestability

At PDB/DESA, introducing merit personnel evaluation system that links employee's performance with rewards has been under consideration. At DESA, however, a proposal to give bonus or to impose penalty according to performance of each employee was met with strong opposition from the labor unions. It is pointed out that even though the proposal is actually implemented, it will not give enough incentives for better performance because money earned by cheating or bribery will be more than the rewards for good performance.[14]

An attempt to contract out a part of services to private companies to introduce market competition from outside has hardly been in practice. Both at PDB and DESA, all services including meter reading, tariff collection and power connection, are provided directly by operation offices. Some operation offices, however, have started to contract out some computer works to prepare bills to outside.

Both PDA and DESA have also started, on a trial basis, to contract out distribution service in certain areas to private companies. In Tangail district, which is to the north of Dhaka, PDB has entrusted a part of their services of the operation office, such as meter reading and tariff collection, to Tangail Boidyutic

14. According to DESA's manager of Planning/Investment Section.

Banijjo Sangstha, a private company founded with a capital of about ¥1 million by nine rich men in the district. The contract should be renewed every two years. The main objective of contracting out is to reduce non-technical losses. Therefore, the company places great importance on measures against illegal activities. Meter readers, tariff calculators, and bill deliverers are clearly separated and tariff payment is done through banks. Also, double-checking mechanism is introduced to deter corruption. As a result, system loss ratio that was 44.8% in 1996, reduced to as low as 21.6% in 1998. It is aimed to further reduce it to 20% in 2000. Customers welcome this arrangement as it has increased transparency and reduced corruption.

DESA founded Dhaka Electricity Supply Company (DESCO) as a holding company and DESCO started its operation in September 1998. DESCO covers Mirpur area in Dhaka and has taken over DESA's business as it was, including technical operation such as operation/maintenance of distribution lines and sales such as meter reading and tariff collection. Learning a lesson from DESA's failure in service improvement, the organization structure of DESCO is quite different from that of DESA. DESCO's directors are chosen from the private sector, and staff members are recruited from outside DESA through newspaper advertisement.[15] The organization is relatively small, since considerable part of their operation is contracted out. While the number of customers is about 70,000 households in 1998, the number of employees is only 65. For proper operation of meter reading and tariff collection, DESCO, from the beginning, contracts out services such as meter reading, bill preparation, new lead-in wire installation, and power suspension. Contracts are awarded through public tender advertised openly in the newspaper and the contract period is basically for two years.

(c) Accountability

For PDB's large-scale projects, construction processes are well monitored. Project teams submit monthly progress reports to the headquarters, and the government's Implementation Monitoring & Evaluation Division, every quarter, checks the progress of the project. The above-mentioned procedures work as double-checking.

On the other hand, as for tariff collection, no measures are taken to prevent dishonest activities either at PDB or DESA. Meter readers are permanent employees and they are, in principle, in charge of the same territory all the time. Sometimes meter readers also deliver or collect bills. Corruption and dishonesty, such as taking a bribe from customers by cheating on meters or illegally tapping on wires, appears to happen quite often. As described above, management can

15. DESCO's directors responsible for finance came from a foreign affiliated chemical company and a bank. There are only a few employees at DESCO who originally worked for DESA.

hardly take any measures against dishonest activities due to labor conflict.

As is described above, both PDB and DESA have serious problems regarding every component of organizational capacity. Especially the incentive structure is quite different from that of REB/PBS. Thus, both PDB and DESA need to create an appropriate incentive structure as well as to improve physical capacity, such as facilities and skills, in order to achieve better performance.

2.3. PROVINCIAL ELECTRICITY AUTHORITY (PEA) IN THAILAND

2.3.1.Outlines of Organizational Structure and Performance

(1) Outlines of Organization and Operation

Provincial Electricity Authority (PEA) of Thailand is a government enterprise in charge of power distribution under the supervision of the Ministry of Interior. It was established in 1960. While Metropolitan Electricity Authority (MEA) covers the metropolitan area, PEA covers the rural area. PEA supplies power to an area of about 510,000km^2 that accounts for 99% of Thailand. It has 1,081 operation offices, about 30,000 employees and 10,000,000 households as customers.[16]

Power supply industry in Thailand works as follows. Electricity Generating Authority of Thailand (EGAT) are in charge of a so-called trunk system from generation to primary transmission system. Power distribution organizations such as PEA and MEA purchase electricity from EGAT and sell it to their customers in each territory. Since PEA has customers in the rural area who sometimes live away from the EGAT's main distribution lines, PEA also has small-scale power plants; namely, nine diesel plants, six micro hydroelectric plants, and three solar battery plants. These plants' total power generation amounts to 44,500,000kWh in FY 1997.[17] Most of the transmission lines in Thailand are managed by EGAT, with systems of 500kV, 230kV and 115kV. PEA has 115kV system as well as 115kV/22(33)kV system supplying electricity to the areas far away from EGAT's main lines.

(2) Organizational Structure

In PEA, there are eight Deputy Governors under the Governor; each is responsible for "technique/services", "planning/system development", "construction", "operations 1", "operations 2", "maintenance", "economics and finance", and "corporate services". Internal Audit Office, Office of the Project Coordination,

16. *PEA Statistical Review 1997.*
17. Based on PEA's response to RIDA/SADEP survey in FY 1998.

Corporate Plan Office and Human Resource Development Office are independent and directly belong to the Governor. Two Operations Divisions are further divided into four by region as northern, north-eastern, central and southern areas. Operations divisions are in charge of local operations only and design and construction is handled by the headquarters.

Project Coordination Office has only 15 staff, but they consists of experienced personnel equivalent to a deputy manager. They are mainly in charge of coordinating the interests of various stakeholders related to the project execution. They play an important role in management of loan projects of the World Bank or OECF. Their main duties are as follows:

(a) To instruct PEA's local offices to begin acquiring the right of land use in order to proceed with construction.
(b) To consult with construction contractors and designers to acquire the right of land use.
(c) To organize a meeting for concerned parties when a trouble emerges during construction.
(d) To approve payment to construction contractors and inform the Accounting Division.
(e) To recommend, if necessary, to the Governor for an extension of period, changes in construction plan or contract value.
(f) To promote communication between PEA and construction contractors or designers.
(g) To coordinate with Ministry of Arts, Forestry, Railways, and Roads.
(h) To prepare a monthly report on above-mentioned responsibilities and submit it to related parties and Deputy Governors.

(3) Performance

System loss ratio of PEA was 5.5% in FY 1997, which is excellent performance as an electric power enterprise in the developing country.[18] Village electrification ratio in the rural area reached 98.7% in FY 1997. Thus, PEA's mission to supply electric power to the rural area in Thailand is successfully achieved.[19] Household electrification ratio also showed a high result of 86.3% in FY 1995.[20] Future tasks of PEA are to distribute power to newly developed rural villages and to improve reliability of existing facilities.

18. Ibid.
19. *PEA Statistical Review 1997.*
20. Based on internal documents of OECF.

2.3.2. Evaluation of Organizational Capacity

As is shown above, PEA's performance is excellent and PEA has a high capacity to execute projects. This section will evaluate PEA's organizational capacity, by analyzing the components of "Expertise", "Specificity" and "Incentives" (See **Table 2-4**).

Table 2-4: Evaluation of Organizational Capacity of PEA

	Evaluation	
Expertise		
Training	A	Training is regarded important and managed directly by the Deputy Governor. Its own training center with accommodation facilities will be completed in 2000. Training programs include engineering and management programs, each of which has about 40 courses. About 52% of the staff participates in the programs. Also it provides a program for the staff to acquire a degree at university with scholarships for 16 students. It has an in-house vocational school which fosters 50 wire maintenance workers every year.
Specificity		
Technical standards/Job descriptions	A	It has 5-6 files of detailed design standards. Also has a summary pamphlet. A certification system applied to construction contractors. Only contractors with good certification can have orders for large-scale projects. Standards for operation and maintenance are well-established.
Incentives		
Mission sharing	A	Management objectives are clearly set. Personnel compensation is good and relations between labor and management are harmonious.
Contestability	A	A merit rating system is introduced, in which each section, operation office or staff, sets a target at the beginning of each year, and receives bonus or penalty according to its performance.
Accountability	A	Internal audit office is independent and directly belongs to the Governor, conducting regular inspection. Also have post-evaluation of projects done by outside organization since FY 1998. An evaluation report is submitted also to NEPO. Opinions of large-scale customers can be heard directly at annual general meeting. Measures against dishonest activities are developed, by using portable terminals for meter reading and tariff collection, and depositing system for bill collections.

A: Satisfactory B: Partially satisfactory C: Unsatisfactory

(1) Expertise

(a) Training

PEA is very active to provide training to its staff members. Three Divisions (Human Resource Development Office, Training Division, Personnel Division and Electric Vocational School) are responsible for training and education, and belong directly to the Deputy Governor in charge of Special Affairs. In 2000, PEA's own training center with accommodation facilities will be completed in Nakhon Phathom District (50km to the west of Bangkok).[21] Training programs carried out by Training Section are classified into engineering courses and management courses. 43 engineering courses and 38 management courses are to be provided in FY 1999. 16,000 employees, or 52% of the entire staff, will participate in those courses. Engineering courses include: "Power Distribution", "Substations and transmission system", "Utilization of computer" and "Maintenance techniques". Management courses include: "Management development", "Quality improvement", "Computer programming" and "English".

PEA also has a program to help the staff acquire a degree at universities, providing scholarship to 30 students in bachelor's courses and 16 students in master's courses.

Electric Vocational School was established in 1968. It provides three-year secondary education courses to foster line maintenance workers for PEA. Every year 50 students enter the school. In the third year, they receive on-the-job training. After graduation, 40 of 50 students are given further training at the PEA headquarters for eight months and assigned a job at regional operation offices. Ten out of 50 students are given scholarship to study electric engineering at university.

(2) Specificity

(a) Technical Standards/Job Descriptions

PEA's power distribution system, including substations, is designed according to design standards in which voltages, sizes of lines and transformers, capacities, assembling poles are defined in detail. Standards manuals consist of 5-6 files, and their summary is prepared as a pamphlet.

Design standards for constructors are also prepared. Since tender document specifies that construction should follow PEA standards, completed facilities always meet the standards. PEA classifies contractors into four and issues certification, according to past awarded contracts and their construction quality. Only those who are certified as excellent can receive an order of large projects.

21. Based on "PEA's Office of Human Resource Development", "Personnel Training and Development of PEA", documents of PEA's Training Section.

Standards for operation and maintenance are well established and check sheets are prepared for maintenance workers at each facility. The Maintenance Division at the headquarters is responsible for budgeting, procurement, and allocation related to maintenance. In each region, Operation Division of Regional Offices is responsible for repair and maintenance of facilities, and Electric Office under the Operation Division actually carries out repair works, inspection, and patrol-checking the facilities.

(3) Incentives

(a) Mission Sharing

PEA has clear management objectives as follows:[22]

- To improve the process on provision and distribution service of electric energy for customers; to achieve an acceptable level of sufficiency, efficiency and reliability; to meet the timely need of customers; and to keep pace with changing circumstances.
- To achieve sufficient revenues to facilitate further development by increasing sales and reducing expenses.
- To develop its organization structure, man power and resources management in order to achieve the highest efficiency and effectiveness.

The labor-management relationship at PEA is considered to be relatively cooperative. There is no labor union but instead they have an employees' association. PEA has tried to supply power steadily and avoided radical strikes. Wage level of general staff is almost the same as those in private companies and welfare programs are generally better than private companies'. It is pointed out that such good remuneration program has contributed to good labor-management relations.[23]

(b) Contestability

PEA has introduced a merit-rating system that links performance to personnel evaluation. The Governor prepares General Guidance for the year and sends it to the subordinate organizations. Within the framework of the guidance, each division at the headquarters, each regional office and each staff set a target.

Each headquarters division and each office are also required to prepare a statement of assets and liabilities and a statement of profits and losses. They set a target such as cost reduction, and if they attain the target, they will be awarded with increased budget, and if they cannot, they will penalized with a decrease in budget. Each employee also sets a personal target. If they attain the target, they will be promoted and/or given increased wage. If they cannot, they will be demoted

22. *Annual Report 1997.*
23. Interview with a vice manager of Training Section, PEA.

and/or provided with decreased wage. Wage rates are classified into 54 grades. Merit-rating can influence one or two grades in wage classification. An increase by one grade equals to 6% increase in salary. Performance evaluation is conducted twice a year.[24]

(c) Accountability

Office of the Internal Audit at PEA serves as a separate and independent division and directly belongs to the Governor. The Office conducts regular inspection on Management, Personnel, Welfare, Engineering Divisions and submits a report directly to the Governor. A financial approval system is designed to allow internal cross-checking to work. For each project, budgets and actual results are compared monthly at each office. Also, total budgets and actual results are regularly checked.

Since FY 1998, post-evaluation of projects has been conducted by National Institute of Development & Administration, an outside research institute. They evaluate "quality of services", "satisfaction of customers", etc. One or two districts are selected from 12 regions in the country to conduct a sample survey for three months. A survey report is also submitted to National Energy Policy Office (NEPO).

Opinions of large industrial customers are directly heard through a regional office by inviting them to the annual general meeting of the office.

In addition, arrangements are made to prevent dishonest activities in tariff collection. Meter readers are PEA staff and they input the data into a portable tele-transaction computer on the spot. If any input data varies from the past data by more than 20%, the computer beeps and warns an input error. Tariff collection is done not only by their staff but also by a private company or by the head of the village. In case of contracting out tariff collection, amount equivalent to 1.5 times of monthly collection is required as a deposit to PEA.

As discussed above, PEA is taking various measures to give its staff appropriate incentives, in terms of mission sharing, contestability, and accountability.

2.4. SUMMARY OF ORGANIZATIONAL CAPACITY AND PERFORMANCE

Table 2-5 shows the summary of evaluation of organizational capacity of the electrification authorities in Bangladesh and Thailand and their performance.

24. "Personnel System in PEA", "Remuneration", documents of PEA's Personnel Section.

Table 2-5:Summary of Organizational Capacity and Performance

	REB/PBS	PDB/DESA	PEA
Organizational capacity			
Expertise			
Training	A	B	A
Specificity			
Technical standards/ Job specifications	A	B	A
Incentives			
Mission sharing	A	C	A
Contestability	A	B	A
Accountability	A	B	A
Performance			
System loss ratio	16%	30%/28%	6%
Tariff collection ratio	95%	82%/58%	n.a.

A: Satisfactory B: Partially satisfactory C: Unsatisfactory

Both REB/PBS and PEA have every component of organizational capacity evaluated as satisfactory. They have extensive training programs, clearly defined technical standards and job specifications which are actually practiced on local sites. They clearly set out organizational objectives and try to have the corporate values shared among their employees. They try to introduce market competition through linking performance with personnel evaluation and contracting out part of their operation. They have established a system to secure accountability to stakeholders. An appropriate incentive structure are created to execute projects efficiently, effectively and fairly. Above-mentioned efforts to improve organizational capacity have led to a successful execution of projects.

On the contrary, as for PDB and DESA, all the components of organizational capacity are evaluated as not satisfactory. Training is not provided sufficiently and their standards and specifications are not fully complied with at operational sites. Conflicts between labor and management have hampered any sense of mission sharing. Competition has been introduced only partially. Arrangements to secure accountability are not well established. In general, the organizations cannot smoothly carry out projects. Their unsatisfactory performance in system loss and tariff collection seems to be caused by not only technical factors but also by organizational factors.

From the fact that two power distribution organizations in Bangladesh show different performance, poor performance cannot be attributed to only political social or economic factors of the country. Similarly, good performance of REB/PBS cannot be explained by the cooperative method they adopted. Rather, their efforts

to improve organizational capacity seems to be the key for the entire system to function efficiently. Good performance of PEA in Thailand suggests that traditional electrification method of PDB and DESA itself cannot account for the performance.

In conclusion, differences in performance can be explained better by differences in organizational capacity than by differences in culture or execution method. The major lesson learned from this comparative study of rural electrification agencies is that we should pay more attention to organizational capacity for the successful implementation of development projects.

CHAPTER 3

CASE STUDY ON SMALL-SCALE, SCATTERED PROJECT: RURAL AREAS INFRASTRUCTURE DEVELOPMENT PROJECT IN INDONESIA

The Rural Areas Infrastructure Development Project (hereafter referred to as "Rural Infrastructure project" or as "the Project") is designed to develop and improve basic infrastructures of access roads, water supply and sanitation facilities for backward villages in Indonesia. The Rural Infrastructure project has been carried out since the FY 1994 as one of the principal policies to reduce poverty in Indonesia.

A development project which consists of numerous small sub-projects scattering over a wide space, like this Project, tends to have more complex implementation frameworks and be difficult to monitor, compared with a conventional large-scale stand-alone infrastructure project. Conventional projects are typically represented by construction of dams, power plants, railways, and so on. These projects are characterized by constructing relatively large scale infrastructures on a single site and are managed by a single executing agency. Contrarily, small-scale, scattered projects are implemented over widely distributed areas with a number of sub-project sites. It is often the case that one agency is responsible for an over-all project supervision at the center, while local executing agencies are responsible for day-to-day project implementation, such as construction and procurement. In case sub-projects cover multiple-sectors, agencies involved will increase in number, including those agencies responsible for different sectors at different levels of administrative hierarchy. It is virtually impossible for the central agency to directly monitor each of numerous widely-scattered sub-projects and check the progress and quality. Accordingly, it is necessary to incorporate a mechanism with which information gathered at the local sub-project sites is transmitted quickly and correctly to the central management and project monitoring is administrated locally. Moreover, it is extremely difficult to construct such a complex executing system in a perfect form at the onset. Therefore, it is important to incorporate a mechanism through which lessons learned from on-going and completed sub-projects are feedbacked to the project in order to improve the project executing system in the course of project implementation.

Thus, the small-scale, scattered project requires an approach different from that used for conventional projects. To facilitate smooth vertical (central and local agencies) and horizontal (inter-ministerial) coordination as well as to incorporate monitoring and evaluating sub- projects into the executing process is a crucial key

for the successful implementation of such a project. In other words, the small-scale, scattered project tends to have high transaction costs, such as coordination, information collection and monitoring costs, and thus demands high-level of organizational capacity for executing agency.

The Rural Infrastructure project is one of the good examples of successful management of small-scale, scattered projects. An impact evaluation, based on a sample survey, was completed for the sub-projects implemented in the FY 1995. This impact study was conducted by distributing questionnaires three times: first before an execution of sub-projects in 1995, second and third after the completion of the project in 1996 and 1997 respectively.

The purpose of the impact survey was to analyze 1) conditions of infrastructures (physical condition and functional performance) and 2) economic benefits (whether original objectives are achieved and intended effects are generated). The survey revealed that as for physical conditions, majorities of sampled sub-projects were considered satisfactory.

As for the economic benefits, evaluation is subject to limitation partly because the sample size was quite small and because the projects were not yet ready to show any tangible impacts as it had been only a few years since the completion of the sub-projects. The evaluation, however, shows that the projects achieved benefits in most of the objectives, especially, improving access to marketplaces and water supply facilities.

During the course of this Indonesian case study, following two factors are often pointed out as a key to the smooth implementation of the Project by a number of officials in change of the Project: that is, (1) carefully-planned arrangements based on intensive examination of the executing framework between the executing agencies and the OECF; and (2) to feedback lessons from sub-project implementation in order to improve the process of project execution.[1] This chapter takes up the Rural Infrastructure project for a case study of project executing framework and organizational capacity, and applies the analytical framework of organizational capacity presented in Chapter 1.

The chapter tries to consider what kind of organizational arrangements are necessary to improve the management of a development project with multiple implementing agencies and a complex execution structure.

The execution framework of the Rural Infrastructure project explained in this chapter is based on the data collected from related OECF documents and a field survey conducted in February 1999. It should be pointed out that in view of the ongoing decentralization efforts in Indonesia, the executing structure or agencies in charge of this kind of scattered projects might undergo substantial

1. Interviews on “Organizational Capacity of Executing Agencies of Developing Countries” by Research Institute of Development Assistance (RIDA, 1999).

changes in the future.

This chapter first reviews the poverty profile and recent anti-poverty policies in Indonesia. Second, implementation framework of the Rural Infrastructure project will be summarized. Finally, organizational capacity of executing agencies of the Project will be analyzed, according to the "components of organizational capacity" explained in Chapter 1, Section 2.

3.1. POVERTY IN INDONESIA

3.1.1. Trends in Incidence of Poverty in Indonesia

Statistics on Indonesia's poverty has been provided by the Statistics Indonesia (BPS: Badan Pusat Statistik[2]) since 1976. The BPS has calculated an official poverty line and estimated the number of people living below this level based on the data provided by the National Socio-economic Survey (Susenas: Survei Social Ekonomi Nasional). The BPS defines the poverty line as the "minimum income level required to purchase foodstuff equivalent to daily caloric intake of 2,100 calories and non-food basic necessities." The BPS sets different poverty lines for urban and rural areas. Poverty line is reviewed and updated upon each Susenas survey (**Table 3-1**).

Population under the poverty line was estimated as 70 million (60% of total population) in 1970, and dramatically declined to 22.49 million (11%) in 1996. Poverty declined both in absolute number and in share against total national population. Such reduction in poverty can primarily be attributed to the growth of national economy as a whole. Per-capita gross domestic product (GDP) of Indonesia was about US$50 in 1967. It gained a 22-fold increase to $1,145 in 1996. In the meantime, Indonesia's economic structure went through tremendous changes. In 1966, agriculture/fishery and commerce sectors constituted a majority of gross domestic product respectively at 53.3% and 19.9% of national economy, far ahead of the manufacturing sector (8.4%) as the third biggest. Contrarily, in 1993, the manufacturing industry emerged to be the biggest with a share of 22.3%, followed by agriculture/fishery (18.5%), and commerce (16.5%). Other industries gained larger shares in the economy, such as mining (10.2%), transportation & communication (6.9%), construction (6.0%) and finance (5.1%), which resulted in deeper inter-relationship among industrial sectors.[3]

However, the Asian currency crisis which started in 1997 inflicted a heavy blow on the efforts to reduce poverty in Indonesia. According to the early BPS estimation, the number of poor increased to 79 million (about 40% of total

2. Renamed from Biro Pusat Statistic (Central Bureau of Statistics) in 1997.
3. Yasunaka and Mihira (1995), pp.213-215.

population) at the end of 1998[4]. Later, a World Bank survey pointed out that social impacts of the Asian currency crisis was not as devastating as had been estimated earlier and also indicated substantial regional disparities. Urban formal sectors and Island of Java have suffered considerably from negative impacts on poverty, unemployment, education and health. On the other hand, rural areas and outer islands exporting primary products have escaped severe damages[5]. Post-crisis microeconomic data collection on poverty has just started, however, recent survey estimates poverty ratio to be most likely somewhere between 14% and 20%.[6]

In any case, poverty and unemployment is undoubtedly the top policy priority for Indonesia. It is of urgent needs to target social safety nets to the poor population.

Table 3-1: Poverty Line and Incidence of Poverty by BPS

Year	Poverty line (Rp.)		Number of Poor (1 million)			Poverty Ratio* (%)		
	Urban	Rural	Urban	Rural	Total	Urban	Rural	Total
1976	4,522	2,849	10.0	44.2	54.2	38.8	40.4	40.1
1978	4,969	2,981	8.3	38.9	47.2	30.8	33.4	33.3
1980	6,831	4,449	9.5	32.8	42.3	29.0	28.4	28.6
1981	9,777	5,877	9.3	31.3	40.6	28.1	26.5	26.9
1984	13,731	7,746	9.3	25.7	35.0	23.1	21.2	21.6
1987	17,381	10,294	9.7	20.3	30.0	20.1	16.1	17.4
1990	20,614	13,295	9.4	17.8	27.2	16.8	14.3	13.1
1993	27,905	18,244	8.7	17.2	25.9	13.5	13.8	13.7
1996	38,246	27,413	7.2	15.3	22.5	9.7	12.3	11.3

* Poverty (Headcount) Ratio = Proportion of population below poverty line to total population

Source: *Statistical Yearbook of Indonesia 1997*, p.579

3.1.2. Recent Poverty Alleviation Programs in Indonesia

The Indonesian Government placed reduction of poverty as one of the top priority policies in the 6th Five-year National Development Plan (Repelita VI, 1994-99) and launched a new policy initiative targeting the poor. Three main anti-poverty policies are 1): Presidential Grants for Backward (Poor) Villages (Impres Desa Tertinggal, hereafter referred to as "IDT" grants), 2) Provision of facilitators to assist village group activities and 3) Provision of village infrastructure development projects (P3DT: Pembangunan Prasarana Pendukung Desa Tertinggal). The policies aim to provide "backward villages" with a package of regional development measures, including promotion of capital accumulation,

4. Sato (1999), p.26.
5. World Bank, News Release No.99 (1999).
6. Cameron (1999), p.12.

development of human resources and construction of basic infrastructures. The main objectives of those policies are to promote regional economy, reinforce the institutional capacity of villages and empowerment of the poor, through a concerted efforts of above-mentioned three policies to increase the economic status of the communities.

(1) Backward Village Survey

The BPS conducted "village potency" (Potensi Desa) survey in 1993 as background data for the poverty alleviation policy and compiled the "backward village" statistics[7]. The data differ from conventional poverty statistics in that it uses villages as a basic unit instead of households or individuals, thus simple comparison between those data is not possible. All the villages in Indonesia were classified into "backward" or "non-backward," based on the results of two types of questionnaires regarding villages' economic affluence. The first questionnaire consisted of objective indices. They included 25 variables common to both urban and rural areas, including 10 variables on "village potency" 8 variables on "housing and environment," 7 variables on "condition/potency of residents," and other 2 variables applied only to rural areas.[8] Each variable was scored and the results were compiled. The second questionnaire collected opinions on the poverty status of villages from the respective authority and census field officers. This classified villages into "poor villages" and "non-poor villages." Then, findings from these two questionnaires were combined to make a comprehensive decision whether the village concerned was identified "backward" or not. The 1993 survey identified 20,633 villages as "backward villages," which accounted for about one-third of 65,554 villages across the country.

The backward village statistics was revised in 1994 with re-selection and re-classification of variables and improvement in scoring technique. Variables were reviewed to better reflect welfare conditions of the residents, resulting in 17

7. At the beginning, these villages were called "poor villages" (Desa Miskin), but later renamed to "backward villages" (Desa Tertingaal).

8. (a) "Village potency/facilities" variables are: (1) type of village development council (LKMD), (2) main road, (3) occupation of majority residents, (4) average utilized land area per agriculture household, (5) distance from sub-district office, (6) education institutions, (7) health and sanitation facilities, (8) medical personnel living in the village, (9) communication facilities and (10) marketplaces availability.
(b) "Housing and environment" variables are: (1) population density, (2) source of drinking water, (3) epidemic disease last year, (4) types of cooking fuels, (5) way of garbage disposal, (6) type of sanitary, (7) type of lighting facility, and (8) religious centers per 1,000 citizens.
(c) "Condition/potency of residents" variables are: (1) crude birth rate, (2) crude mortality rate, (3) enrollment ratio, (4) number of livestock per household, (5) percentage of households with a TV set, (6) percentage of households with telephone, and (7) social and cultural activities of residents.
Variables applicable only to rural areas are: percentage of agricultural households and means of transportation.

and 18 variables for urban and rural areas respectively.[9] A new scoring technique was introduced to take into account of regional disparities between villages located on "Java and Bali islands" and "other regions," and between "rural areas and urban areas." Moreover, the values of one variable are divided into several classes according to per capita expenditure. The second questionnaire used for the 1993 survey was excluded because collected opinions tended to be subjective. The 1994 survey identified a total of 24,414 villages as backward.

In 1995, the selection criteria were revised again to include all villages in four eastern provinces in Indonesia (Maluke, East Nusa Tenggara, East Timor, and Irian Jaya)as well as five districts on isolated islands which lagged behind in development, into the category of "backward villages." Accordingly, the total number of backward villages was 28,376.

(2) IDT Grants

Based on the "backward village" statistics mentioned above, the Indonesian Government launched the IDT Grant Project in 1994. IDT grants were aimed to supply project operating funds to the villages identified as "backward village" in order to alleviate poverty. Subject to the approval of the Village Development Committee (LKMD: Lembaga Ketahanan Masyarakat Desa) and guidance by sub-district advisors, the IDT Grant Project gave villagers opportunities to organize small self-help groups (KMS) and to start small business with the fund provided by the Presidential Decree (Impres)[10]. Business eligible to the IDT grants was limited to productive activities (infrastructure construction was not eligible). Funds were often used for small-scale village manufacturing such as handcrafts, clothing, foods, and agribusiness, such as horticultural products, livestock and fisheries or distribution business. The IDT funds were granted to 28,223 villages, and each village received 20 million Rp, for the three years between 1994 and 1997. The funds were directly remitted from the Ministry of Finance to the head and branch offices of BRI Bank (Rakyat Indonesia) which could be withdrawn by the

9. As for variables common to both urban and rural areas, those excluded for 1994 method are: a) (1), (4), (5), and (10), b) (3), (7), and (8), and c) (1), (2), (3), (4), (6), and (7). Instead, added variables are: percentage of households with electricity, social and economic conditions of residents, access to medical facilities, and access to permanent marketplace. For urban areas, variables a) (2), (8) were deleted and replaced with percentage of agricultural households, percentage of households whose member goes to University and the percentage of households owning cars or motorboats. For rural areas, b) (5) and (6) and means of transportation were omitted and replaced with percentage of households owning two- or three-wheeled vehicles or small boats, availability of periodical subscribers and access to shopping facilities.

10. Impres (Instruksi Presiden) represents funds allocated to local governments out of the central government's development budgets to carry out specific projects prescribed by the Presidential Decree. Impres can be classified into (1) Special Impres, allocated to a certain sector, such as "School Impres," "Health Impres," "Provincial or District Roads Impres," "IDT,"; and (2) Block Impres, granted to local governments (provinces, districts, villages) without specifying fund usage.

KMS treasurer. The borrowers of the fund had to repay the money from the profits of the business they invested the funds in. The repaid funds, however, did not have to be returned to the government. Instead the repaid funds could be used as a revolving fund, financing another productive project in the village. Self-help groups were required to draft proposals and record and report fund appropriation in order to receive IDT grants. To assist these groups with diverse activities, facilitators were dispatched.

Before the IDT program, the Indonesian Government implemented a comprehensive village development program (PKT) targeted for village development under the 5th Five-year National Development Plan (Repelita V, 1989-94). The PKT program provided a package of local development projects including infrastructure development, promotion of agricultural and livestock industries and small enterprises and capacity building. It was reported that the program implementation was substantially delayed. Problems associated with the PKT program were pointed out as follows:

a) Criteria for selection of eligible villages were not clearly defined.
b) Coordination was difficult and time-consuming, as many components were put together into a single package.
c) Over 60% of the allocated funds was designated to infrastructure development, resulted in a shortage of business operation funds.
d) Management of the program was handled by the provincial government through a top-down method, which had to go through time-consuming administrative procedures and failed to meet local needs.

Based on these lessons learned from the PKT program, the IDT grants were exclusively provided to backward villages and to financing productive activities. In this respect, the IDT grant program largely differed from conventional village development projects in Indonesia.

(3) Facilitators

Facilitators are dispatched to backward villages to provide villagers with a guidance on project planning, project application, project operation and management and so on. The facilitators are classified into special facilitators (recruited through BAPPENAS, the Ministry of Education and Culture and the Ministry of Labor), technical facilitators (dispatched by the Ministry of Agriculture, the Ministry of Forestry, the Ministry of Population, etc.) and local facilitators (recruited locally by Directorate General of Village Community Development, the Ministry of Home Affairs). Local facilitators are selected from among local residents, such as school teachers, intellectuals, influential persons, NGO, and serve the job as unpaid volunteers. Facilitators recruited by the central government ministries and agencies are treated as government officers and paid salaries and official expenses accordingly. Facilitators are provided with

pre-dispatch training on the objectives of the IDT project, roles of the facilitator, techniques to communicate with villagers and by using manuals of IDT grant, participatory development, and organizing community group.

Facilitator's major responsibility is to assist LKMD in capacity building and program implementation ability. Their job includes checking candidate villages for compliance with the definition of "backward" village, organizing self-help group (KSM), hosting committee meetings, preparing project planning, coordinating villages with related government organizations, feasibility studies on village development projects, technical and marketing assistance, accounting support.

(4) P3DT Program

Among the three poverty alleviation programs, P3DT Program covers the portion of infrastructure construction and repair. Applicable infrastructures include intra-village access roads and bridges, jetties, water supply and sanitation facilities (combination of public toilets, washing and bathing facilities, which is called "MCK"). The P3DT Program is designed to[11]:

a) improve access to markets and decrease village isolation;
b) improve the level of health of local people (by providing clean water supplies and sanitation facilities);
c) create job opportunities in villages, especially during the dry season;
d) enhance the management capacity of district governments and villages and reinforce community and village institutional capacity; and
e) increase the capabilities of village people's skill in planning, constructing, implementing and maintaining local infrastructures.

The P3DT Program can be classified into three categories by the source of funding: OECF loan, World Bank loan, and Indonesian government's own funding. The "Rural Infrastructure Project" financed by the OECF covers the entire Indonesian territory except Java and Bali islands in the first phase (FY1994-96), and the entire Indonesian territory except Java, and Bali as well as the World Bank-financed districts on Sumatra island in the second phase (FY1997 onwards). The "Village Infrastructure Project," financed by the World Bank covered Java and Madura islands in the first phase, and then the scope of the project was increased to include part of Sumatra.[12]

11. P3DT Coordination Team (1998), pp.7-9.
12. The World Bank-financed Village Infrastructure Project has been replaced by Kecamatan Development Project, focusing on sub-district development by combination of small-scale infrastructures and micro-credits schemes since 1998.

The World Bank and OECF projects support the similar kind of infrastructures, but differ in how to select target villages and how to implement the projects. The OECF project adapts a system called “Cooperative Pattern”(Pola Kerjasama), where three to five villages form a cluster as a basic unit of project operation. The cluster approach aims to have target villages close with each other so that access roads can be designed effectively. With “Pola Kerjasama” system, at least 60% of the villages in a cluster should be classified as “potential” or “productive.” Infrastructure construction is contracted out to a local contractor who is to create a working agreement with the local LKMD that will mobilize local people and ensure their participation. Details of the Rural Areas Infrastructure Development Project will be outlined in the next section.

The World Bank-financed Village Infrastructure Project is based on a “Pola Swakelola” (Self-Management Pattern) system. It focused on clusters of five villages, where at least three villages had to be classified as “extremely poor.” The projects were planned, implemented and maintained directly by citizens of local communities with LKMD facilitating optimum levels of participation.

The third P3DT Program, “P3DT Murni” (Government of Indonesia), financed from the national budget of the Indonesian Government was added to the two preceding projects in 1997. Projects implemented in Java and Sumatra islands uses World Bank system and those in other eastern Indonesia uses the OECF system.

3.2. OUTLINES OF RURAL AREAS INFRASTRUCTURE DEVELOPMENT PROJECT IN INDONESIA

This section briefly explains the Rural Infrastructure project.[13]

As this project involves various organizations at various administrative levels of the government, it would be helpful for a better understanding of the project to present Indonesia’s administrative structure. Indonesia’s local governments are under the Ministry of Home Affairs and consist of four levels. Level 1 local governments consist of 27 provinces (and special districts and provinces) and the governor of a province is appointed by the President. Level 2 local governments consist of cities and districts, whose heads are appointed by the Minister of Home Affairs. The next administrative level is sub-districts and then there follow villages (**Table 3-2**). Provinces, districts and villages, have their own budgets. Sub-districts, however, do not have their own expenditure. The central ministries and agencies have representative offices at province, district and sub-district levels.

13. This section is based on OECF's internal documents.

Table 3-2: Local Governments in Indonesia

Local governments	Indonesian language	Title of the heads	Number of governments
Level-1	(Dati-I)		27
Provinces	Provinsi	Governor	24
Special districts And provinces	Daerah Istimewa (D. I.)	Governor	3
Level-2	(Dati-II)		305
Districts	Kabupaten	Bupati	243
Cities	Kotamadya	Wali Kota	62
Sub-districts	Kecamatan	Camat	3,844
Villages	Desa/Kelurahan	Lurah/Kepara Desa	65,852

Source: Biro Pusat Statistik *Statistical Year Book of Indonesia*, 1995.

(1) Objectives of the Project

The objectives of the project are to contribute to reducing poverty through self-sustaining development of villages by constructing/improving village access infrastructure and water supply infrastructure in backward villages with high development potentials. The above-mentioned IDT grants provided operation funds for non-infrastructure projects undertaken in backward villages. Together with the Rural Infrastructure project, those programs are expected to yield synergy effects in reducing poverty in backward villages.

(2) Applicable Regions and Infrastructures

The Rural Infrastructure project covers all Indonesian regions except for Java and Bali islands. As basic infrastructures in Java and Bali were better developed than those on the outer islands, causes for impeding development in Java and Bali were thought to be other factors than a shortfall in infrastructure.

Though backward villages badly need development of diverse infrastructures, the Project has focused on the improvement of most essential infrastructures, that is, access roads and small water-supply facilities. This was proposed in order to minimize the burden of project coordination. The more the number of components packaged in a project is, the more is the number of organizations involved in the project. This, then, complicates the coordination among various executing agencies concerned. The Indonesian Government well understood the importance of simplifying project components, based on the lesson they learned from the PKT Project mentioned before.

(3) Criteria for Selecting Target Villages

In view of a fact that project was financed by overseas loans, it was agreed that the Project would focus on those backward villages that were most likely to achieve high invest efficiency and project sustainability. Consequently, backward

villages with high development potentials and insufficient infrastructure were given priority to receive the assistance.

Selection criteria of eligible villages are chosen from among variables used in the "village potency" survey. In the first phase of the Project, five variables were adopted, including the type of LKMD, distance to district office, marketplaces facilities in the village, population density and educational standards. In the second phase, variables were revised to four items, including population, access to shopping facilities, access to permanent markets, education facilities, as a result of a revision in village potency survey. Each variable is scored and added up for each village. Then, "backward villages" are rated according to the total score points into five groups: 1) productive, 2) potential, 3) moderately poor, 4) poor and 5) extremely poor. Of these, upper two groups, namely villages classified as "productive" or "potential", are eligible for the Rural Infrastructure project.

Village selection procedure is as follows. A candidate list of "backward villages" with potentials is created by the central management of the Project and sent to district governments. Next, the district governments formulate clusters each consisting of three to five villages based on the list, place priorities to clusters and submit the cluster list to the provincial government. Each cluster should have at least 60% of villages listed in the candidate list sent from the center[14]. Then, the central government finalizes the budget allocation to the selected villages.

(4) Project Execution Framework

Related executing agencies are: the Bureau of Regional District and Rural Development, the National Development Planning Agency (BAPPENAS) serving as a central coordinating agency; Directorate General of Highways, Ministry of Public Works (BINA MARGA), Directorate General of Human Settlements, Ministry of Public Works (CIPTA KARYA), the Directorate General of Regional Development, Ministry of Home Affairs (BANGDA) and the Directorate General of Village Community Development, Ministry of Home Affairs (PMD) as executing agencies; and district governments (KABUPATEN) as implementing agencies. Each of the above mentioned organizations is assigned their responsibilities as follows:

- BAPPENAS: Responsible for overall coordination, creating operational guidelines, budget control, monitoring and sub-project selection. Project Management Unit (PMU) is created in BAPPENAS for project supervision.
- BINA MARGA: Responsible for technical support in development of access infrastructures, contributing to technical guidelines and providing technical guidance and supervision to local governments.

14. A cluster can include non-backward villages or "non-productive or potential" backward villages.

- CIPTA KARYA: Responsible for technical support to water supply infrastructures, contributing to technical guidelines and providing technical guidance and supervision to local governments.
- BANGDA: Responsible for providing guidance and supervision to local governments (districts and provinces) on non-technical affairs, promoting public awareness of guidelines and facilitating communication between central and local organizations.
- PMD: Responsible for providing guidance and supervision to local governments (sub-districts and lower levels) on non-technical affairs, especially for promoting participation of villagers, public awareness and training.
- District Governments: Responsible for procurement of contractors, performing functions as main implementing agencies, collecting village information and transmitting it to the central government via the provincial government and the Ministry of Home Affairs.

In addition, coordination teams, consist of related government agencies, are organized at each administrative level in order to assure smooth inter-organizational collaboration and coordination (see **Figure 3-1**).

- Central Coordination Team: BAPPENAS, BINA MARGA, CIPTA KARYA, BANGDA, PMD and Ministry of Finance, where BAPPENAS is responsible for overall coordination. The Central Coordination Team has a secretariat (P3DT Secretariat), which serves as a project management unit, and is responsible for project supervision supported by a consultant team.
- Province Coordination Team: Province Development Planning Board (BAPPEDA-Level l), the provincial government offices, the Provincial Public Works Agencies, Provincial Representative Offices of Ministry of Home Affairs and the Provincial Treasury offices, where the BAPPEDA-1 heads the team. The role of the provincial government is to check sub-project proposals submitted by the district governments and to send them to the central level, and to approve sub-projects after an authorized letter of development budget is issued at the center.
- District Coordination Team: Members are from District Development Planning Board (BAPPEDA Level-II), District Government offices, District Public Works agencies, District Health Service Agency, District Level representative offices of Ministry of Home Affairs, District Treasury offices, heads of sub-districts, where the BAPPEDA-II heads the team. As a main implementing agency, the district government prepares project plans, signs procurement contracts, monitors sub-projects, supervises and evaluates project progress and quality, and reports to provincial and central governments. In the course of project implementation a project manager(s) is appointed from the District Public Works Agencies and assigned responsibilities such as to check proposals submitted by villages, to work out

detailed design, cost estimation and tender documents, to promote participation of villagers, to procure contractors, to supervise construction works, to train Village Development Council members, and to report to district, provincial and central governments.

- Village Development Council (LKMD): Responsible for submitting sub-project application in a project planning stage, mobilizing villagers for sub-project construction under a contract with contractors and operation/maintenance of sub-projects.

(5) Consultant Services

To support the administrative organizations at each government level, consultant service is provided as : a) the Central Monitoring and Management Assistance Consultant (CMMC), b) the Regional Coordination Team and c) the Local Management Assistance Services (LMAS).

The CMMC supports P3DT Secretariat (PMU) while maintaining coordination with the Regional Coordination Team and the LMAS. The Regional Coordination Team is divided into four regions, that is, Sumatra, Kalimantan, Sulawesi- Maluk-Irian Jaya, and East and West Nusa Tenggara-East Timor. The Regional Coordination Team bridges CMMC and LMAS and sends a monitoring engineer to each province. The Local Management Assistance Service extends technical and management support to administrative organizations at provincial, district and village levels. The Province Technical Management consultants are stationed to support the Province Coordination Team, and the District Technical Management consultants are provided to support the District Coordination Team and project managers. Besides, design engineers, quality surveyors and field inspectors are provided to assist local operations under the supervision of the District Technical Management consultants.

(6) Procedures for Sub-project Selection and Budget Allocation

Sub-project selection is based on a combination of central government's data on villages and sub-project applications submitted by villages. Procedures for selecting sub-projects and finalizing sub-project designs are as follows:

① Project socialization program is offered to villagers at the district level.

② The central government (PMU at BAPPENAS) selects candidates villages from among backward villages based on the criteria mentioned earlier in this chapter, and sends the list of candidate villages and guidelines on cluster formation to the district governments through the provincial governments.

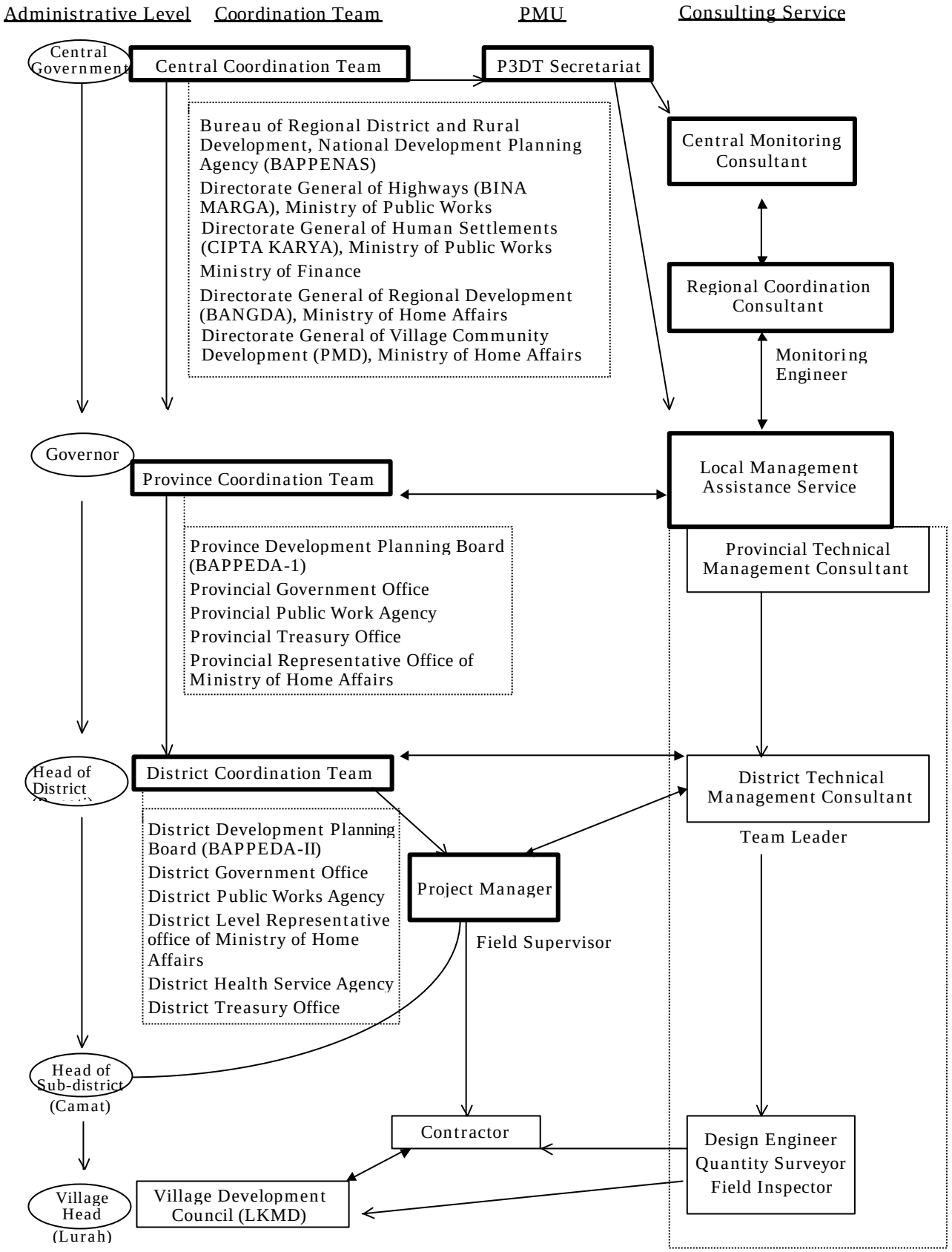


Figure 3-1:Framework for Implementing Rural Areas Infrastructure Development Project

③ Villages (LKMD) decides on which kind of infrastructures they need and on their priority, and the head of the village submits them to the district governments through the sub-district governments.
④ The district governments (project managers and District Coordination Team) closely evaluate village proposals, formulate clusters according to the criteria cited in ② and ③. Then, they place priorities to sub-project proposals and submit them to the central government via the provincial governments.
⑤ The central government closely examines proposals sent by district governments and decides on applicable villages and budget allocation to each district for the next fiscal year. Funds are to be transferred to each cluster.
⑥ Each district government finally confirms eligible sub-projects and works out detailed design and cost estimation.

3.3. EVALUATION OF RURAL AREAS INFRASTRUCTURE DEVELOPMENT PROJECT FROM THE PERSPECTIVE OF ORGANIZATIONAL CAPACITY

Table 3-3 summarizes the organizational capacity of related executing agencies of the Rural Infrastructure project, using the criteria presented in Chapter 1, that is, "expertise," " specificity," and "incentives."

"Expertise" is evaluated in terms of sufficiency in "training personnel," "consultant service" and the "database development" that support project execution. "Specificity," is evaluated by three criteria: "simplicity of project structure," "specificity in responsibility," and "specificity in authority." As for incentives, mission sharing is evaluated in terms of "efforts to infiltrate mission and value," contestability in terms of "inter-unit competition" and accountability in terms of "monitoring by higher-level organizations" and "monitoring by beneficiaries." Details of evaluation are presented as below.

3.3.1. Expertise

(1) Training

In order to acquaint people in charge of and participating in the project with project details and with their responsibilities and job assignments, training courses are offered to organizations and individuals on each administrative level. The training courses are provided to descend from the center to villages, like a "tree diagram" via provinces, districts, sub-districts, and villages. First, at the central level, the central consultant team provides applicable province level officers with training courses chiefly designed to foster instructors for the provincial and lower-level organizations. Participants include officers from the

Table 3-3:Analysis of Organizational Capacity in Rural Areas Infrastructure Development Project

Components of capability	Check Items	Evaluation	
Expertise	Training	A	Guidelines and training are provided to acquaint stakeholders with the details of the project, and with responsibilities and job descriptions of each organization.
	Consultant service	A	Extensive consultant service is provided to support government agencies at each administrative level in executing the project.
	Database development	A	Computer databases are developed for sub-project planning, monitoring project progress and double-checking fund flows.
Specificity	Simplicity of project structure	A	Simplifying the project structure by limiting the number of project components.
	Specificity in responsibility	A	Responsibilities of the central and local government agencies are well defined.
	Specificity in authority	A	Powerful authority is vested to BAPPENAS as a central coordinating agency and to the district government as a local sub-project implementing agency.
Incentives			
Mission sharing	Efforts to share mission	A	Efforts are made to share the mission and importance of the project through training and socialization programs.
Contesta-bility	Inter-unit competition	B	A pilot project is introduced to encourage villages competing with each other for the approval of a sub-project proposal.
Accounta-bility	Monitoring by higher-level organizations	A	Sub-project progress and quality are checked by multiple organizations/personnel, such as consultants project manager(s),
	Monitoring by beneficiaries	A	District Coordination Team, and Provincial Coordination Team. Efforts are made to disclose project information (such as fund allocation) to local beneficiaries in order to enable them monitor sub-projects.

A: Satisfactory B: Partially satisfactory C: Unsatisfactory

Province Development Planning Board, the Provincial Village Community Development Agency, the Provincial Public Works Agency (BINA MARGA and CIPTA KARYA) and the Provincial Treasury Office, Regional Coordination consultants, Provincial Technical Management consultants and Provincial monitoring engineers. Likewise, province level consultants trained at the center

serve as instructors and provide training to district level officers, such as those from the District Development Planning Board, the District Village Community Development Agency, the District Public Works Agency (BINA MARGA and CIPTA KARYA), the District Treasury office, project managers, District Technical Management consultants, design engineers. Up to the district level participants, trainees completing the full training course are certified as official instructors.

Then, district level consultants serve as instructors and provide training to sub-district level officers including the heads of sub-districts, directors of Sub-district Village Community Development Agency, field inspectors, etc. Training at sub-district level focuses on project orientation. Lastly, at the village level, provincial and district level consultants, design engineers, quantity surveyors, field inspectors provide training on project socialization (introduction) to village-level participants including LKMD and villagers.

Thus, training is provided at each administrative level in order to assure that all the participants of the project understand the objectives of the project and details of job assignments.

(2) Consultant Service

Most of the project execution responsibilities fall on the shoulders of the following two organizations: (a) Project Management Unit, which is responsible for overall project planning, monitoring, supervision, evaluation and coordination of implementing agencies, and (b) district governments (and project managers), which are responsible for local sub-project implementation. Therefore, as mentioned before, central- and provincial-level consultant teams are provided to support the operation of PMU and district governments. In addition, in order to monitor the progress of sub-projects scattered over wide areas and to assure smooth evaluation, consultant teams are provided to the Provincial Coordination team. Provincial consultant teams support collecting information and monitoring sub-projects and thus facilitating communication between the district and central levels. As explained above, a multi-hierarchical consulting service is provided to assist the project execution. Consultant teams at each administrative level maintain close communication with each other, using sophisticated and standardized recording and reporting system.

Whether the project is sustainable or not after the completion of consultant service still remains to be seen. The consultant service, however, plays a significant role in supervising extensive and complex execution framework of this project.

(3) Database Development

Assisted by the Central Monitoring consultants, the P3DT Secretariat has been involved in the development of geographical information system (GIS) which

helps determine sub-project designs and eligible villages. In addition to geographical information such as topographical maps, the database stores information collected from the backward village survey, the socioeconomic survey, the rapid social survey. This database enables to sort and retrieve data such as health facilities, educational facilities, water supply systems, income levels of 6,500 villages across the country. The GIS system facilitates a quick access to geographical information; whether villages in one cluster are neighboring with each other, whether access roads under the Project are linked efficiently with other roads. Thus, the GIS system makes a valuable contribution to selecting eligible villages and designing sub-projects.

Also, information relating to civil work contracts and fund disbursement are stored in the database. The progress of contract execution is reported from local sub-project sites to provincial coordination teams in standard forms and sent to the central government by modem, e-mail or conventional mail (where internet communication is not possible). Contract and fund disbursement information collected from the local sites is double-checked with the central bank's actual fund disbursement data. This can detect any double-payments and monitor fund flows.

In the case of small-scale, scattered projects, to effectively monitor numerous sub-projects and a large number of accompanying contracts is a major challenge to successful operation of the project. In this Project, the computer database facilitates efficient project planning and helps monitor sub-project progress and fund flows. At the beginning of the project the computer database system was not as large or comprehensive as it is now. Continuous upgrading and revision has been made to the system in the course of project execution.

3.3.2. Specificity

(1) Simplicity of Project

Backward villages need various kinds of infrastructure. Initially, possibilities were explored for including rural electrification and small-scale irrigation systems as project components in addition to access roads and water supply facilities. It was concerned, however, that adding more components would further complicate the project structure which involved many villages and organizations. Targeting infrastructures on access roads and water supply facilities made it possible to limit the number of central government agencies responsible for technical supervision in the related sectors only to Bina Marge and Cypta Karya. Thus, it could reduce the number of government agencies to be coordinated. Also, as mentioned before, the Government of Indonesia felt that project components should be reasonably minimized based on the lesson learned from the former PKT Project.

At the time when RIDA survey was conducted in February, 1999, the P3DT Secretariat was planning the Phase 3 of Rural Areas Infrastructure Development Project. According to the officer in charge, the P3DT Secretariat was exploring the possibility of adding small-scale irrigation systems, post-harvest infrastructures (e.g. construction of marketplaces), small-scale power plants to sub-project components, since the Project was set on the right track.[15]

(2) Specificity in Responsibility

When multiple organizations at multiple levels of government are involved in project execution, as is the case with the Rural Infrastructure Project, inter-organizational coordination is a significant key to successful project implementation. To manage complex inter-organizational coordination, it is essential to well define the roles and scope of responsibility of respective executing agencies. The importance of defining the responsibilities of each organization in advance was well recognized by the officers concerned during the time of project preparation. At the time of project appraisal, an agreement was reached by the Indonesian Government and the OECF on defining the responsibilities of related executing agencies and the Loan Agreement specified BAPPENAS as a central coordinating agency.

As mentioned before, the responsibilities of central government agencies were defined and coordination teams were organized on each administrative level with their roles specified. In addition, the central level consultant team worked out guidelines setting forth details on the responsibilities and job descriptions of respective organizations. At the onset of the project, two guidelines were prepared: “operational guidelines” explaining the criteria for how to select eligible villages and sub-projects and the responsibilities of district governments and villages, and the “technical guidelines” stating basic specifications and construction methods of infrastructures. New guidelines have been added in the course of project execution.

Current major guidelines include 1) the general implementation guidelines, setting forth organizational structures on each administrative level, criteria for selecting eligible villages and sub-projects, overall framework of budget allocation, and so on, 2) the technical guidelines, explaining technical standards for roads, water supply, and sanitation facilities, authorized by the Ministry of Public Works, 3) the community participation guidelines presenting know-how on promoting beneficiaries' participation, authorized by the Ministry of Home Affairs, 4) the guidelines on village-level administration, documentation formalities and procedures, 5) the guideline on reporting system (standard format and how to fill in the format), and 6) the procurement guidelines (standard tender document and

15. According to the BAPPENAS P3DT officer in charge.

how to fill in the form).

These guidelines are revised and updated each year. In order to promote public awareness of the relevant guidelines, training courses are offered using specific guidelines as textbooks at each administrative level.

(3) Specificity in Authority

As for the authority concerning the project execution, BAPPENAS (and P3DT Secretariat) and district governments are endowed with strong authority to manage the project. BAPPENAS is responsible for inter-ministerial coordination at the center, overall project planning, supervision and evaluation, while the district governments are responsible for local sub-project implementation. Coordination among central government agencies is often difficult since a sense of rivalry on inter-ministerial relations may work as a deterrent to closer mutual collaboration, which a coordinating agency without powerful authority cannot handle with. In the case of BAPPENAS, inter-ministerial coordination is relatively easy because of its statutory status as a minister responsible for coordinating development policies and projects.

The district governments play a major role in the phases of planning and implementing projects. Specifically, the district governments are vested with a power to coordinate proposals submitted by villages, organize clusters, determine sub-project components, procure contractors, carry out civil engineering works on a contract basis. On the other hand the roles of the provincial governments are limited to formal acceptance of candidate village lists and proposals submitted by the district governments. Besides, in consideration of regional differences, the district governments are vested with large discretionary power to determine the lot number of procurements, sub-project design (based on standard specifications prepared by the central government) according to local needs and circumstances.

3.3.3. Incentives

(1) Mission Sharing

This project involves participants from both public and private sectors: central government agencies, local governments and the central government's local representative offices as for the former, and consultants and beneficiaries as for the latter. Accordingly, it is crucially important for the people with different backgrounds involved in the project to share common understandings of the mission and content of the project and the responsibilities of each organization/individual. Thus, project training is offered to the people involved in the project from the center to villages. Furthermore, public and private stakeholders participate in the training together. For example, district government officers and district level consultants are trained together. Joint

training is expected to promote mutual cooperation and coordination among the participants of the Project.

(2) Contestability

Pilot projects are underway in which trial has been made to introduce a principle of competition into the process of selecting villages and sub-projects. Under the current system, candidate backward villages are determined by the central project management first, and then the district governments formulate clusters based on the candidate list. Contrarily, the pilot project first selects 30 sub-districts (without specifying villages). Villages in the selected sub-districts work out project proposals and submit them to the sub-district office. Then, the proposal evaluation committee, organized at the sub-district level, decides on which proposal should be chosen. The proposal evaluation is made based on eight criteria, such as whether the proposal conforms with the regional development policies, whether many local residents participate in the project, whether local resources can be utilized, whether sub-project is sustainable. Inter-village proposal contest is expected to improve project quality and transparency in selecting sub-projects. The results of the pilot project have yet to be seen, but introduction of competition will be considered after evaluating the results of the pilot project, according to the BAPPENAS P3DT officer in charge.[16]

(3) Accountability

Efforts are made to secure accountability by developing an appropriate reporting and monitoring system and by having the project subject to inspection of multiple stakeholders. Here, inspection of sub-project progress and quality is categorized into two : monitoring by higher-level organizations and monitoring by beneficiaries.

Surveillance by higher-level organizations is based on a monitoring and reporting system implemented through a chain of command of administrative hierarchy. Results of monitoring sub-projects by quantity surveyors and field inspectors at sub-project operation sites are first submitted to District Technical Management consultants. The District Consultant Teams compile those reports, have them approved by the project managers in charge, and then submit them to the Province Coordination Team and the Provincial Technical Management consultants. Project managers also check interim progress and the quality of sub-projects through field supervisors. Monthly reports compiled by the Provincial Consultant Teams are submitted to the Regional Coordination Consultant, after an approval of the Province Coordination Team. The Regional Consultant Teams also receive reports from monitoring engineers stationed in each province. Reports

16. Ibid.

compiled by the Regional Consultant Teams are submitted to the P3DT Secretariat at the center and the Central Monitoring Consultant. Report forms are standardized and provided by the project management unit.

In addition to the monitoring by consultants, the District and Province Coordination teams organize sub-project site inspection independently. Inspection teams visit sub-project sites during and after the construction of sub-projects to check interim progress and construction quality. These monitoring arrangements and inspection by multiple-parties, are provided in order to enhance transparency in progress, quality and fund-flows of sub-projects.

Monitoring by beneficiaries is designed to enhance transparency by disclosing project information to beneficiaries. One of the characteristics of the small-scale infrastructure project is that beneficiaries can directly observe the end results of the project (road, water supply and sanitation facilities). Besides, local residents themselves propose what kind of infrastructures they need, take on part of the construction works and are responsible for operation and maintenance of the project. Thus, in the case of a project with high degree of local participation like this project, beneficiaries have more opportunities to observe the process and results of the project. In addition, efforts are made to disclose information on which sub-projects are selected and how much funds are allocated to which villages. Participation and information disclosure is expected to give an opportunity to beneficiaries to check if sub-projects are actually carried out as they are supposed to be.

This chapter has analyzed the Rural Areas Infrastructure Development Project from the perspective of organizational capacity. As shown in **Table 3-3**, it can be concluded that the Project passes as satisfactory in terms of most of the components of organizational capacity. (As for “contestability,” it may still be too early to have a complete evaluation, since inter-village competition is just at a trial stage.) Responsibility and authority of stakeholders and major agencies involved, as well as which organization has decisive power is well defined. Guidelines specifying the objectives and content of the Project and the roles of related organizations are prepared and training is offered to the stakeholders at each administrative level in order to have everyone involved in the project understand these guidelines. In order to assist planning, monitoring and evaluation of widely scattered sub-projects, consultant service and computer database are provided. Furthermore, a mechanism that promotes accountability is developed: multiple inspection by higher-level organization and surveillance by beneficiary through disclosing project information.

It is needless to say that different countries or sectors have different circumstances and constraints. So, the project execution framework of this project cannot simploy be applied to other small-scale scattered projects. Perhaps an

important lesson learned from the Rural Infrastructure project is the significance of preparing projects well, that is, to carefully assess a project execution framework and organizational capacity of related participants. As discussed above, bottlenecks of this complex project (with a number of people and agencies at plural administrative levels as well as numerous sub-project sites) were closely examined and potential impediments were analyzed. Then, counter-measures were devised in order to improve organizational capacity, such as specifying responsibility and authority of each organization, providing guidelines and training and devising a monitoring mechanism to facilitate surveillance from higher- and lower-level organizations. Besides, in the course of project execution, various improvements were made to the execution system, including revising guidelines, introducing inter-unit competitions. Efforts to improve organizational capacity at the preparatory and implementing stages of the project are the key to explain relatively good performance of the Project.

CHAPTER 4

CONCLUSION AND FURTHER STUIDES

Organizational capacity of executing agencies has been well recognized as a significant factor that influences the performance and effectiveness of development projects in the developing countries. Many donor agencies understand the importance of organizational capacity, and have been trying to improve the organizational capacity of executing agencies through various measures such as providing technical assistance in addition to projects. However, there is no common agreement how and with what criteria organizational capacity should be measured. Therefore, information on organizational capacity tends to be ambiguous or subjective and remains as personal "tacit knowledge", as there is no established framework through which information can be analyzed and shared. This paper tried to explain organizational capacity of the executing agencies by using an analytical framework of new institutional economics and transaction costs. It is hoped that the paper can provide an opportunity for practitioners and researchers of development to work on the concept of organizational capacity, which has not often been a subject of analysis in the field of development projects.

Chapter 1 presents a framework for analyzing organizational capacity. Project execution costs are assumed to consist of transformation costs and transaction costs. "Transformation costs" denote the project costs in a narrow sense. "Transaction costs" include the costs for coordinating interests of related organizations/individuals, collecting information, pre-qualifying contractors, arranging bidding, negotiating contracts, monitoring project progress, internal-auditing, organizing local residents. Organizational capacity of executing agencies is defined as "the ability to keep the transaction costs as low as possible by devising various counter-measures in advance". Organizational capacity can be explained by three factors: (1) Expertise, (2) Specificity and (3) Incentives. When all of these components are sufficiently developed, that is, an organization is provided with high expertise, clearly defined authority and responsibility, and appropriate incentive structure to execute a project, the executing agency is considered to have high level of organizational capacity. Thus, it can achieve superior performance in project execution.

Among those three components, incentives are the most important factor that affects the organizational capacity. Even when staff members of an executing agency have excellent expertise and their responsibilities are clearly defined, the project will most likely not be implemented effectively, if they have little incentives to do so. On the contrary, when the related members are faced with strong incentives to execute a project, they are likely to improve their expertise and try to

clarify their responsibilities. Incentives themselves are assumed to be influenced by the following three elements: (a) mission sharing, (b) contestability, and (c) accountability. Namely, incentives to execute a project will be high: when related members of the agencies understand and share the mission of an organization as well as the significance of the project; when they are faced with internal or external competitions; when the contents and outcomes of the project are subject to the scrutiny of multiple people; and when they are requested to be accountable to the stakeholders of the project.

Chapter 2 and Chapter 3 apply the analytical framework presented in Chapter 1 to some actual cases. Chapter 2 compares power distribution authorities in Bangladesh and Thailand. Bangladesh's Rural Electrification Board (REB) is executing rural electrification projects through PBSs, user's cooperatives, and the project performance is good in terms of system loss and tariff collection ratios. On the other hand, the Bangladesh Power Development Board (PDB) and the Dhaka Electric Supply Authority (DESA), although they are in the same country, are performing poorly. PDB/DESA employ a conventional operation structure in which one power distribution enterprise is also in charge of service/sales to end users. Moreover, the PEA in Thailand is showing excellent performance, while it employs the same conventional operation mode.

Chapter 2 attempts to explain the difference in performance of respective executing agencies by examining the differences in their organizational capacity. Criteria used to evaluate organizational capacity are: training for measuring "expertise", technical standards and job descriptions for "specificity", and mission sharing, contestability and accountability for "incentives". The results indicate that REB, PBS and PEA have all the components of organizational capacity evaluated as satisfactory, while PDB and DESA have all of them evaluated as unsatisfactory or partially satisfactory.

Chapter 3 examines a case study of a widely scattered development project. Projects with numerous small-scale sub-projects distributed in a vast area are usually more difficult to monitor than conventional large-scale infrastructure projects. Project management is difficult not just because there are a lot of sub-projects to supervise but also because coordination and communication is necessary among central agencies, local sub-project implementation units and administrative organizations that vertically connect the central and local institutions. In addition, when sub-projects involve multiple sectors, horizontal coordination between sectors is required at each administrative level. Furthermore, it is virtually not possible for the central project execution unit to precisely monitor the execution of individual sub-projects. Therefore, it is important to prepare in advance a mechanism to monitor the sub-projects at local sites and transmit the information to the central unit quickly and effectively. Thus, small-scale scattered-

type projects tend to increase the transaction costs, such as coordination, information gathering and monitoring, and require a higher level of organizational capacity of the relevant executing agencies.

The case study, Rural Areas Infrastructure Development Project in Indonesia, covers two sectors, access roads and water supply, and sub-project sites are numerous and distributed at the village level. Multiple executing agencies are involved in the project, including the coordinating agency, local governments in charge of the actual sub-project implementation, ministries in charge of relevant sectors, and two agencies in charge of regional development. The result of applying the analytical framework of Chapter 1 shows that almost all the components of organizational capacity are evaluated as sufficient.

The case studies in Chapter 2 and Chapter 3 show that performance of the project highly correlates with adequacy in each component of organizational capacity. While more case studies are necessary, the analytical framework of this report can be a robust tool to examine the relationship between performance and organizational capacity of executing agencies.

Another important lesson learned from these case studies is the fact that organizational capacity can be improved. As is observed in the case studies, REB and PBS in Bangladesh, PEA in Thailand, and agencies for the Rural Infrastructure Project in Indonesia are all making conscious efforts to improve their organizational capacity. Although development stages and cultural backgrounds of a country certainly affect the organizational capacity, organizational capacity is not unchangeable or given. Efforts to strengthen each component of organizational capacity before and during the project implementation can change and improve the capacity and performance.

The ultimate objectives of development are to eradicate poverty and to achieve higher levels of social welfare. These goals can be attained by several methods. A macro-approach that tries to enhance institutions governing the entire society or nation is, needless to say, effective to resolve development difficulties. Macro-approach methods include: creating or strengthening legal, social, economic institutions, reforming bureaucracy, fighting against corruption. Also important is a micro-approach that tries to enhance organizational capacity through executing development projects. A micro-approach can not only improve organizations related to the projects but also have spill-over effects reaching people in the society beyond the projects.

Issues left for further investigation are to conduct more comparative case studies on organizational capacity. Issues on institutions and organizations are relatively new areas of study in development, and theories and analytical frameworks still need to be further explored by academics and practitioners. The analytical framework for organizational capacity presented in this paper is a

hypothesis, and need a further refinement and revision through continuous examinations of case studies and accumulation of lessons from empirical cases.

Lastly, this chapter will touch upon future issues for Japan's ODA Loan projects and organizational capacity. While conventional large-scale infrastructure projects continue to be the majority, social development projects and small-scale scattered-type projects are increasing. Transaction costs for these new types of projects are higher in general and higher organizational capacity is required for the agencies in charge of the projects. In addition, donors are required to secure transparency, accountability, and participation of stakeholders, in order to enhance efficiency and effectiveness of ODA. With these new challenges in mind, more efforts should be made on preparation, monitoring, assessment and feedback of the project during the entire phases of the project cycle. This means that much more attention must be paid to the issues of organizational capacity, and further efforts must be made to improve the capacity based on the lessons learned from actual experiences. Hopefully the framework for analyzing organizational capacity presented in this report will help understand the organizational capacity and contribute to a better implementation of future ODA projects.

APPENDIX

INSTITUTION AND ORGANIZATION: THE WORLD BANK'S APPROACHES TO CAPACITY BUILDING IN THE DEVELOPING COUNTRIES

Institution and Organization

The word "institution" is sometimes used as interchangeable with "organization", because institutions mean systems, customs and regulations as well as groups, associations and foundations. According to the definitions of the new institutional economics, "institutions" are "rules of the game in a society" and "organizations" are "players or teams". Take an analogy of sports the purpose of the rules is to define the way the game is played. In contrast, the objective of the team within that set of rules is to win the game by combining skills of individual players and strategies[1]. In the same way, institutions can be defined as "humanly devised constraints that shape human interaction", and organizations as "groups of individuals bound by some common purpose to achieve objectives under institutional restrictions". According to these definitions, institutions may be considered as a wider framework to include organizations.

Using a sports analogy again, even with the same rules of the game (e.g. baseball) the outcome of the game is naturally different if the teams are different. Or, even with the same teams, if they play different sports (e.g. football) with different rules, their performance will surely be different. In the same way, different organizations under the same institutions will perform differently, and the same organization facing a different set of rules will naturally have different consequences. As presented in Chapter 2 "The Rural Area Electrification Projects in Bangladesh and in Thailand", REB/PBS and PDB/DESA show a great difference in performance even though both organizations share common institutions, (same country and same sector). In Chapter 2, we analyzed that the important factors to explain the differences in performance gap lie in the organizational capacity.

This report focused mainly on analyzing the capacity from the perspective of organizations, but there is another approach to focus on institutions. The institutional approach analyzes that differences in institutional environment of a country is a key to determine the performance, and maintains that institutional reforms are crucial for the capacity building of the developing countries. The Annex of this report will look at the World Bank as an example of the institution approach and review their undertakings for capacity building of the developing countries.

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1. North (1990), pp. 5-6.

Theoretical Backgrounds of Mainstreaming "Institution"

"Institutional Assessment" or "Capacity Building" are the terminology used at the World Bank in referring to the assessment and improvement of institutional capacity. Institutional assessment at the Bank typically focuses on the evaluation of "country-wide institutions" rather than individual organizations. This is because mainstream thinking on capacity building has shifted to conclude that organizations including executing agencies are embedded in the institutional structure of a country and that behaviors of organizations/individuals are largely subject to the surrounding institutional context. Thus, "getting institutions right" has become critical for development. Institutional analysis addresses issues, such as, adequacy of legal and judicial systems, degree of democratization, good governance, corruption, quality of bureaucracy in a given country. In the 1990s the World Bank opted for a more institution-oriented approach. Following sections will summarize the discussions on institutions presented in the World Bank's recent reports.

(1) The East Asian Miracle: Economic Growth and Public Policy

"The East Asian Miracle" published in 1993 is a report that analyzes what accounts for the success of eight high-performing Asian economies (HPAEs) which marked high and sustained economic growth at the same time with more equitable income distribution. The HPAEs achieved high growth by getting the basics right[2]. Namely, fundamentally sound development policy was a major ingredient in achieving rapid growth. The HPAEs' superior record of growth is largely due to: superior accumulation of physical and human capital supported by high levels of domestic financial savings and investment on education; good macroeconomic management; agricultural policies that stressed productivity; relatively low level of price distortion; and policies to keep openness to foreign ideas and technology.

In addition, the report points out that in a few countries, mainly in Northeast Asia, in some instances government interventions resulted in higher and more equal growth than otherwise would have occurred[3]. However, the prerequisites for success were so rigorous that policymakers seeking to follow similar paths should be cautious and understand well what institutional and economic conditions enabled policy interventions to promote growth. One of the main prerequisites is the mechanism through which all competing parties can benefit from economic growth, which include: competent and relatively honest technocratic bureaucrats, a legal and regulatory structure that was generally hospitable to private investment,

2. The World Bank (1993a), p.5.
3. _____, p. 6.

promoting communication between business and government[4]. The report also maintains that policy interventions have often failed in countries where such institutional conditions are lacking[5].

This report, based on a Neo-classical economic theory, is clearly different from traditional Bank's thinking in acknowledging explicitly the potential effectiveness of active government intervention under certain circumstances. Furthermore, it is worthwhile to note that the report regards institutional environment as a prerequisite for achieving effective governmental interventions.

(2) **World Development Report 1997: The State in a Changing World**

"World Development Report 1997" analyzes what kinds of institutional environments are necessary for the creation of capable public sector. Taking "the role of the state in development" as a theme, this report categorizes the state function into three areas, 1) minimal functions, 2) intermediate functions, and 3) activist functions[6]. The basic functions are to provide pure public goods and to protect the poor. They include provision and/or protection of property rights, law and order, defense, macroeconomic stability, public health, the implementation of anti-poverty programs. The intermediate functions are addressing externalities, regulating monopoly, overcoming imperfect information, and providing social insurance. They include provision of environmental protection, basic education, anti-trust policies, insurance, financial regulation, and social security (pension, unemployment insurance). The activist functions include coordinating private activities and redistribution, such as fostering markets and asset redistribution.

The report proposes a "Two-Part Strategy" to address the issue of state effectiveness[7]. The first part of the strategy is to match the state's role to its capability. In other words, countries with weak capacity should concentrate on the fundamental functions and countries with a solid bureaucratic system and a high level of policy capacity should be able to provide active interventions concerning above-mentioned three types of state functions. The second part of the strategy explains the measures for raising state capability. Capacity improvement is not just a matter of providing training or resources, but it is rather a matter of changing incentives that determine behavior. This can be achieved through: (1) rules and restraints: developing mechanisms for enforcing the rule of law and appropriate separation of powers which can restrain the use of national arbitrary behavior; (2) competitive pressure: introducing the principle of competition into the public sector through recruitment of civil servants on the basis of merit and

4. _____, pp. 13-14.
5. _____, p. 26.
6. The World Bank (1997), pp. 26-28.
7. _____, Chapter 2 and Chapter3.

contracting out for services to the private sector; and (3) voice and partnership: promoting the participation of civil society and enterprises through giving a greater voice in the formation of government policies and decentralization.

The report is innovative in redefining the role of the state according to its capacity as well as in stressing the importance of incentives for the improvement of state capacity. The key factors influencing incentives (rules, competition, and participation) pointed out in the report are similar to the key determinants of the incentive structure discussed in Chapter 1 of this report (mission sharing, contestability, accountability).

(3) **Assessing Aid: What Works, What Doesn't and Why**

The Policy Research Report published in 1998, "Assessing Aid: What Works, What Doesn't and Why", also points out the importance of institutions. This report addresses a challenging issue of analyzing what accounts for differences in performance of overseas aid whose ultimate objectives are reduction of poverty and improvement of living standards in the developing countries. It focuses on the quality of "policies" and "institutions" of the developing countries as a way of examining the relationship between aid and performance. The measurements used for the assessment of policy quality are inflation rate, the budget surplus, and trade openness, and those for the assessment of institutional quality are the strength of the rule of law, quality of public bureaucracy, and the pervasiveness of corruption. Using these criteria, the report analyzes as follows. (a) As for developing countries with good policies, financial aid has a big effect on growth, poverty reduction and improving social indicators, while aid has little effect on development in countries with poor policies. (b) Aid works effectively when it is provided in a timely manner to a country with strong commitment to policy reforms and ownership. (c) Funds are fungible. A dollar of aid increases public investment by exactly the same amount as any dollar of government revenue. Therefore, when providing financial aid, the allocation and quality of the overall government expenditure should be considered. (d) Foreign aid can contribute to the development of better institutions and policies.

The report concludes that, aid works effectively in the environment of good policies and good institutions. It also maintains that for developing countries without sound policies or institutions (poor management), it is important to facilitate the environment for good policies and institutions through the provision of "idea" (knowledge) assistance rather than "financial" aid. Together with the "World Bank Report 1998/1999: Knowledge for Development" , this report indicates the direction of the World Bank to focus on the "softer" aspects of assistance, such as institution and knowledge.

The World Bank and Capacity Building of Developing Countries

(1) From Traditional Approach to Institutional Approach

As described in Section 2, Chapter 1 (Existing Approaches for Analyzing organizational capacity analysis), "traditional institutional development approach" used to be the mainstream at the World Bank. Main tools for capacity development were technical assistance (TA) provided to the executing agency in charge of the project.

TA is defined as "the transfer of skills and knowledge for the development purposes"[8]. The most common instruments of TA include dispatching advisors and consultants, providing formal and informal training (including on-the-job training) within-country and abroad, and providing equipment and supplies (buildings, vehicles, computers, software, training materials, etc.). Initially TA was a component of development projects and mostly served for assisting the preparation and implementation of a specific project. Therefore, the main forms of TA were to provide training to improve management and financial capability or to introduce computers to enhance information processing ability.

In the 1980s, Structural Adjustment Loan (SAL) was introduced to provide support for balance of payments on the condition that recipient countries should take on policy reforms. After the two oil crisis in the 1970s, many developing countries were faced with serious macroeconomic problems. Economies suffered from serious balance of payments difficulties, rampant inflation, increase in fiscal deficits, which was caused by huge increase in import bill due to surges in oil price, stagnation of exports due to sluggish economy of developed countries, increased interest payments on the loans due to the worldwide high interest rates. Development projects supported by the World Bank also faced with a shortage of counterpart funds and many of them came to a deadlock. With an awareness that conventional project-type assistance could not fully address nation-wide structural imbalance in the developing countries, Structural Adjustment Loans were introduced in 1979 to assist structural reforms of recipient countries. SALs are provided to aid balance of payments with the condition that recipient countries adopt short-term tight macro-economic policies (raising interest rates, exchange rate, devaluation budget reduction, etc.), as well as medium to long-term structural reform policies in terms of trade, fiscal finance and industrial sectors (improving efficiency by utilizing market forces through economic liberation). In the FY 1989, the amount of Structural Adjustment Loans reached 30% of the total loans provided by the World Bank (IBRD and IDA). While conventional project-type loans still are the mainstream, more attention was paid to the importance of policy

8. World Bank, *Lessons & Practices* (1996), p.1.

reforms and overall macroeconomic management.

Reexamination of Structural Adjustment began in the latter half of 1980s, as the debt problem of the developing countries were protracting. Also, it became clear that providing conditionalities of policy reforms could not necessarily result in desired improvement unless the developing countries had a proper domestic environment that made policy reforms feasible. In fact, compliance rates for the conditionality differed significantly among countries. According to the case studies of nine countries that received the Structural Adjustment Loans from the World Bank between 1980 and 1988, compliance rates showed a large variety ranging from the highest rate of 95% in Turkey to the lowest of 15% in Guyana[9]. As the World Bank placed more emphasis on "institutions" as explained earlier, the Bank began to recognize the importance of institutional reforms as well as policy reforms. In order to give incentives for altering institutions, a new lending instrument is under consideration that can provide longer-term loans for macro-level institutional reforms[10].

Along with changes in focus for capacity building in the developing countries, from project centered to policy reforms and to institutional reforms, the Bank's Technical Assistance has also changed. The emphasis has shifted away from a supplementary component of investment projects toward a free-standing TA (TA provided independently). The objectives of TA are increasingly aiming at institutional development rather than at the conventional style of assisting the preparation and implementation of individual projects. TA for institutional development aims to build and improve capacity through developing skills and strengthening institutions. Virtually all the Bank's investment projects involve one or more TA components for institutional development, while most adjustment operations are accompanied by free-standing TAs. In the FY 1994, approximately 50% of free-standing TA projects were for implementation support, approximately 45% for capacity building/institution development, and the rest for policy support[11].

(2) **Quality Assurance and Institutional Assessment**

(a) **Recommendation of Wappenhans Report**

In the 1980s, the World Bank experienced a gradual deterioration in "Portfolio Performance" (Portfolio here denotes "stock of lending operations under implementation"). Among on-going projects, the share of projects with "major problems" increased from 11% in FY 1981 to 20 % in FY 1991. The result of

9. Mosley, et. al. (1995), pp. 141-142.
10. Starting in fiscal 1992, the Institutional Development Fund is offering grant assistance to the least less-developed countries for institutional development.
11. World Bank Operations Evaluation Department (1996), pp. 3-4.

assessment by Operations Evaluation Department (OED) indicated the ratio of the projects rated as "Satisfactory" dropped from 85% in FY 1981 to 63% in FY 1991. OED pointed out that main factors contributing to the decline in portfolio performance were institutional constraints of the borrower countries, shortages of counterpart financing resulting from deterioration in the macro environment, poor project management and defective procurement[12].

Thus, the Portfolio Performance Task Force was created with the leadership of Willi Wappenhans, then Director of the Operations Evaluations Department, in order to examine the quality of the Bank's portfolio and make recommendations on what is needed to increase the proportion of successful projects. The recommendation was submitted in 1992 with the title of "Effective Implementation: Key to Development Impact (known as the "Wappenhans Report"). The outlines of the report are presented as below.

(1) The performance of the World Bank's projects and programs, and their ultimate development impact should be a fundamental measure of effectiveness in Bank's operation. (2) It is necessary to change the World Bank's "approval culture", in which emphasis was placed on achieving increased financial flows through loan approvals rather than ensuring the operations were implemented successfully. Incentives must shift towards implementation to achieve a better balance. (3) More attention should be paid to capability of executing agencies and macroeconomic risks of the country in the phases of project preparation and appraisal. (4) Conventional portfolio performance management was based on a project-by-project approach. As a result, generic country or sectoral obstacles were not systematically addressed. By shifting the approach from project-by-project to country-wide, country portfolio should be the unit of managerial accountability of the Bank's performance. (5) In order to improve the Bank's portfolio performance, it is necessary to restructure the on-going projects as well as upgrading the quality of projects entering the portfolio. (6) As a way to improve the accountability of the World Bank, the role of the Operations Evaluation Department should be enhanced and the emphasis must be placed on sustainable development impact. (7) The concept of country portfolio performance management should be incorporated to the personnel evaluation of the World Bank, and an internal environment supportive of better portfolio performance management should be created.

The recommendations of the report covers a broad range of issues, while focuses heavily on the project quality and country performance management. They also point out the importance of assessing capability of executing agencies as well as risks of the project at the time of project preparation, as a way to improve portfolio performance.

12. World Bank (1992), p. ii.

(b) **Quality Assurance Group and Project Quality Assessment**

With the inauguration of James Wolfensohn as the President of the World Bank in June 1995, the World Bank began to focus more clearly on the portfolio performance and country-by-country approach. The Quality Assurance Group (QAG) was established within the World Bank in 1996 with an objective of ensuring project quality. The QAG randomly selects projects under appraisal or implementation and audits the quality using the Quality at Entry Assessment Guidance Questionnaire[13]. The main focus of the QAG assessment is to evaluate the appropriateness of the project approach and the likeliness that a project will meet its development objectives. The evaluation ratings are based on a four-point scale: highly satisfactory, satisfactory, marginally satisfactory, and unsatisfactory. When any problems are found, QAG requires explanations and improvement of the section in charge of the project. Approximately one third of all new projects approved by the Bank's Board of Directors are subject to the appraisal, which is about 100 projects annually. The World Bank Strategic Compact sets a goal of 100% satisfactory quality at entry by FY 2001.

The Quality at Entry Assessment examines the entire aspects of a project, including some assessment for the institutional capacity. The Guidance Questionnaire has nine categories for assessment: (1) Project concept, objectives and approach, (2) Technical and Economic Aspects, (3) Environmental Aspects, (4) Social and Stakeholder Aspects, (5) Financial Management Aspects,(6) Institutional Capacity Analysis, (7) Readiness for Implementation, (8) Risk Assessment and Sustainability, and (9) Bank Inputs and Processes. The "Institutional Capacity Analysis" examines the following points: (1) Adequate analysis of institutional framework? (2) Does the executing agency have the capacity and incentives to carry out its mission? and (3) Rational for and appropriateness of Technical Assistance arrangements? The analysis of institutional framework includes specificity in roles of different actors and their consistency with the institutional mandates, pricing, legal and regulatory incentive structures. The capacity and incentives of the executing agencies is assessed by examining track record, quality of human resource base, adequacy of operation rules, regulations, procedures, staff incentives, ability to take on project activities, and so on. Each regional office creates its own Project Quality at Entry Checklist tailored to the condition and needs of the region, based on the QAG's Guidance Questionnaire.

(3) **Guidelines for Assessing Institutional Capability**

"Guidelines for Assessing Institutional Capability" was developed voluntarily

13. World Bank (1998c).

by the World Bank staff members who were interested in the issues of institutional capability[14]. The main concern of the guidelines was that the institutional and political context was not accorded careful enough assessment compared with technical issues in implementing development projects. As for the timing for assessing institutional capability, the guidelines suggest to check "borrower commitment" first. If the commitment is low, it need to be assessed if it is possible to supplement the commitment by other intervention. If the commitment is high, then "institutional capability" should be examined (the guidelines can be used at this stage). If the level of institutional capability is low, then assessment should be made if the project can be designed to develop appropriate rules of the game. If the institutional capability is adequate, then finally "technological capacity" should be examined.

The guideline defines "institutions" as "rules of the game" in accordance with the new institutional economics, and emphasizes the importance of an incentive structure. In the absence of a proper understanding of the incentives that govern transactions, an institutional problem can be misidentified as a technological one. For example, poor communication among levels of government is often interpreted as reflecting the lack of good information system. However, it is possible that the central office has no interest in informing lower levels of government (or has interest in monopolizing information). In such a case, an introduction of good information system will not improve the communication. The guideline points out that institutional capacity is one of major factors that influence the effectiveness of development projects, and that major reports of the World Bank (OED's Annual Review of Evaluation Results, QAG's evaluation results, "World Bank Report 1997") all find institutional capability as a key determinants of project effectiveness.

The "Guidelines for Assessing Institutional Capability" consists of the following 3 sections.

Section I:	The Outcomes: what has to occur for the problem addressed by the policy to be solved.
Section II:	Implementation Actions and Actors: What critical actions have to be taken to secure the outcomes and by whom? (Securing funds, creating laws and regulations, purchasing assets and services, establishing responsibilities and authorities, collecting data and knowledge etc.)
Section III:	What are the formal and informal incentives? (Monetary rewards, authority and power, trust, etc.)

14. Sue E. Berryman, et. al (1997).

Section I identifies what outcomes the policy tries to achieve. Cares must be taken not to confuse means (i.e. building schools) with ends (i.e. increasing school enrollments). Executing agencies here are not limited to government organizations but include other stakeholders who are involved in the implementation of the policy.

Section II investigates which stakeholders must take what actions and which government agencies must take what actions in order to realize the desired outcomes. Particularly, much of the analysis is focused on establishing/ coordinating/specifying responsibilities and authorities of relevant stakeholders. The guidelines examine in detail, for example, whether authority or responsibility for a critical action is assigned to multiple-actors, and who can prevent actions from being taken.

Section III analyzes the incentive structure that affects the players who control the resources required for a critical action. It examines various factors such as monetary rewards, authority or power, intangible rewards, support by those outside the organization who controls rewards, and trust. It is worth for noting that the guidelines explicitly see incentives as a critical factor that influences the project implementation.

This guideline is still a draft. Developing a tool for assessing institutional capacity is succeeded to the PREM (Poverty Reduction and Economic Management Network) and OED. "Institutional Assessment Took Kits" are under development by the PREM for "institutional arrangements for consistent policy-making in cabinet government" as well as "regulatory enforceability within the public sector". Those tool kits aim to analyze how institutions function in a country. It is expected that more tool kits will be developed in the future in order to create an "institution map" which can identify weak institutions and strong institutions in a country. It is also a possibility to use an institutional map to specify which institutions need to be improved in a given country and to provide institutional reform loans to assist institutional building.

As described above, the World Bank has shifted its emphasis away from a project-by-project approach, that is to improve capacity of individual projects and/or executing agencies, to macro level policy reforms, and more recently to institutional reforms of a country. The objectives for assessing institutional capability are also changing from examining the level of readiness to implement projects, to analyzing the institutional framework of a nation and identifying which institutions need to be improved as a step to provide financial assistance directly targeted to reform institutions.

It goes without saying that institutions of a country has a major impact on the results of development efforts. As observed in the case study of DESA in

Bangladesh in Chapter 2, tariff collection ratio will not improve unless bad practices of bill collectors are rectified and collectors start to collect official charges instead of asking for bribes[15]. To change the practices, it is surely effective to improve the quality of public officers and to eliminate corruption at the national level. It is also possible to improve the practices by changing the internal incentive structure within DESA, such as separating the meter reading from bill collection, contracting out bill collection to private companies, or introducing a performance-based personnel evaluation system. Even if the institutional setting is the same, the performance would naturally be different when the management and incentive structures of the organization are different. Using a sports analogy again, a baseball team with a different director and different game strategies is likely to perform differently. Thus, in addressing the issue of capacity building, it would be useful to analyze and improve organizational aspects as well as institutional aspects.

15. See Box 2-2, “Tariff Collection in Bangladesh”, in Chapter 2.

REFERENCES

[References in English]

Berryman, Sue E., et. al. 1997. (Draft) *Guidelines for Assessing Institutional Capability*.

Biro Pusat Statistik (Indonesia). Various years. *Statistical Year Book of Indonesia*.

Cameron, Lisa. 1999. "Survey of Recent Development", *Bulletin of Indonesian Economic Studies*, Vol. 35 No. 1, pp. 3-40.

Clague, Christopher. 1997. "New Institutional Economics and Economic Development", in Clague (ed.) *Institutions and Economic Development*, Johns Hopkins University Press, pp. 13-36.

Dhaka Electricity Supply Authority (Bangladesh). 1998. *Commercial Operation Statistics of DESA*.

Ejima, Shinya, Katsuhiko Nakadate. 1999. "Lessons Learned from OECF Post-Evaluation", *Journal of Development Assistance*, Vol. 4 No. 2, pp. 10-23., Research Institute of Development Assistance, Overseas Economic Cooperation Fund, Japan.

Girishankar, Navin and Migara De Silva. 1998. "Strategic Management for Government Agencies, An Institutional Approach for Developing and Transition Economies", World Bank Discussion Paper No. 386.

Israel, Arturo. 1988. *Institutional Development, Incentives to Performance*, The Johns Hopkins University Press.

Klitgaard, Robert. 1995. "Institutional Adjustment and Adjusting to Institutions", World Bank Discussion Paper No. 303.

_____. 1997. "Information and Incentives in Institutional Reform", in Clague (ed.) *Institutions and Economic Development*, pp. 293-315.

Lin, Justin and Jeffrey Nugent. 1995. "Institutions and Economic Development" in Behrman and Srinivasan (eds.) *Handbook of Development Economics* Vol. 3A, North-Holland.

Morgan, Peter and Ann Qualman. 1996. "Institutional and Capacity Development, Result-based Management and Organizational Performance", Paper prepared for the Political and Social Policies Division, Policy Branch, Canadian International Development Agency.

Mosley, Paul, Jane Harrigan and John Toye. 1995. *Aid and Power: The World Bank & Policy-based Lending*, second edition, Vol. 1, Routledge.

North, Douglass. 1990. *Institutions, Institutional Change and Economic Performance*, Cambridge University Press.

_____. 1995. "The New Institutional Economics and Third World Development", in Harriss, J, J. Hunter and C. Lewis (eds.) *The New Institutional Economics & Third World Development*, Routledge.

Ostrom, Elinor. 1990. *Governing the Commons*, Cambridge University Press.

_____ (ed.). 1993. *Institutional Incentives and Sustainable Development: Infrastructure Policies in Perspective*, Westview Press.

_____. 1996. “Incentives, Rules of the Game, and Development” in *Annual World Bank Conference on Development Economics 1995*, World Bank.
Picciotto, Robert (ed.). 1998. *Evaluation & Development, The Institutional Dimension*, Transaction Publishers.
Provincial Electricity Authority (Thailand). 1998. *PEA Statistical Review 1997*.
P3DT Coordination Team (Indonesia). 1998. *P3DT: Village Infrastructure Development*.
Rural Electrification Board (Bangladesh). 1997. *Annual Report* 1996-1997.
Wade, Robert. 1997. “How Infrastructure Agencies Motivate Staff: Canal Irrigation in India and the Republic of Korea”, in Moday, A (ed.) *Infrastructure Strategies in East Asia: The Untold Story*, World Bank EDI.
World Bank. 1990. *Indonesia: Strategy for Sustained Reduction in Poverty*.
_____. 1992. “Effective Implementation: Key to Development Impact” (The Wapenhans Report).
_____. 1993a. *The East Asian Miracle: Economic Growth and Public Policy*, Oxford University Press.
_____. 1993b. “Portfolio Management: Next Steps”.
_____. 1997 *World Development Report: The State in a Changing World*, Oxford University Press.
_____. 1998a. *World Development Report 1998*, Oxford University Press.
_____. 1998b. *Assessing Aid. What Works, What Doesn't and Why*, Oxford University Press.
_____. 1998c. “Assessing Quality at Entry (QAE): A Primer on the QAG Approach”.
_____. 1999. “Interim CGI Meeting Reviews Recent Development”, News Release No. 99, January 25, 1999.
World Bank Operations Evaluation Department. 1996. “Technical Assistance”, *Lessons & Practices*.

[References in Japanese]

Kikuchi, Tsuyoshi. 1997. “Challenge to Poverty: Indonesia Overcoming the Limitation of Macroeconomic Management”, in *International Development Journal*, November, International Development Journal.
Sato, Yuri. 1999. “Indonesia: Monetary Crisis Growing into National Crisis”, in *Ajiken World Trend*, No. 44, pp. 26-27, Institute for Developing Economies.
Yasunaka, Akio, Mihira Norio (eds.) 1995. *30 Year of Soeharto Government: Its Political and Economic Performance*, Institute for Developing Economies.

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