

JAPAN INTERNATIONAL COOPERATION AGENCY

No 02

FOLLOW-UP STUDY
OF
DEVELOPMENT STUDIES

JICA LIBRARY



J1126727(5)

March 1995

JAPAN INTERNATIONAL COOPERATION CENTER
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN

S S P

J R

95-058

RY

JAPAN INTERNATIONAL COOPERATION AGENCY

FOLLOW-UP STUDY
OF
DEVELOPMENT STUDIES

March 1995

JAPAN INTERNATIONAL COOPERATION CENTER
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN



1126727 [5]

CONTENTS

CHAPTER 1. OUTLINE OF THE STUDY

1-1. The Background and Purpose of the Follow-up Study	1
1-2. Methods Used in the Follow-up Study	1

CHAPTER 2. A FULL VIEW OF COMPLETED DEVELOPMENT STUDIES

2-1 An Overview of the Number of Studies	8
2-2 Distribution of the Number of Studies by Type of study	11
2-3 Distribution of the Number of Studies by Sector	12
2-4 Distribution of the Number of Studies by Region	16

CHAPTER 3. THE PRESENT STATUS OF THE USE OF THE STUDY RESULTS

3-1 Introduction	26
3-2 Present Status of the Use of the Study Results of Group A Studies	21
3-3 Present Situation of the Proposed Projects of Group B Studies	28
3-4 Present Status of the use of Group A & Group B Studies	37

CHAPTER 1. OUTLINE OF THE STUDY

1-1 The Background and Purpose of the Follow-up Study

1. The Background of the Follow-up Study

Once the development studies were completed, it had often been difficult for JICA to grasp the progress of the proposed projects and the extent of the utilization of the results of the study, due to such factors as the time passed before the implementation of the proposed projects and consequent changes in policy environment and government administration, difficulty in tracing a variety of ways to utilize the results of the study, and limited information from the side of the recipient countries.

2. Purpose of the Study

The purpose of the Follow-up Study is to ascertain the outcome, and the circumstances thereof, of each completed development study systematically, to feed back the findings toward the improved performance of future development studies in terms of project identification, study design and execution, and project analysis and evaluation, and thereby to enhance the realization of the proposed projects/programs.

The FY 1994 Follow-up Study gathered and compiled relevant information on the development studies initiated its preliminary stage after August 1 of 1974 and completed by the end of FY 1993 (the end of March 1994). The results of the analysis are presented by country and region, by year of completion as well as by type of study and by sector. This report provides a clear definition of each concept concerning the present status of the use of study results and/or proposed project(s), and compiles and analyzes the relevant data on development studies in concern based on these concepts.

1-2 Methods Used in the Follow-up Study

1. Guideline of the Follow-up Study

The FY 1994 Follow-up Study is composed of the following surveys as well as collection of information from other relevant sources such as JICA internal materials.

- 1) A questionnaire survey of the consulting firms which undertook the respective development studies.
- 2) A questionnaire survey of relevant government agencies of the recipient countries through JICA overseas office.
- 3) A survey conducted by JICA's overseas follow-up missions in the selected sectors and countries.

2. Coverage

The FY 1994 Follow-up Study covers those development studies¹ financed by the development studies budget under the purview of the Social Development Study Department (separated from the Social Development Cooperation Department in July 1, 1989) and the Agriculture, Forestry and Fish-

eries Development Study Department of Japan International Cooperation Agency (JICA), which are initiated their preliminary stage by the two Departments after August 1 of 1974 and completed by the end of FY 1993 (the end of March 1994). A number of studies are excluded from coverage : basic design studies and special project studies² conducted as part of the grant aid program.

The total number of studies in concern comes to 813(579 in social development sectors and 234 in agriculture, forestry and fisheries sectors).

3. Classification of Development Studies by FY of Completion

The FY of Completion is defined as the FY during which the final report of the respective development study was submitted to JICA. Financial statements and attached specifications and Annual Report of JICA in respective fiscal years, and replies of consulting firms to the follow-up questionnaire are referred to for determining the FY of completion.

4. Classification by Country and by Region

The country and region of development studies are shown by the name listed in the most recent issue (January 1993) of JICA Practical Handbook on Statistics. Those studies the site or area of which ranges over several countries or regions are classified into "plural countries."

5. Classification by Type of Study

Studies are classified into five types as shown below.

Type of Study	Definition
1.M/P	Studies for formulating master plans
2.M/P+F/S	Studies which comprise M/P and F/S
3.F/S	Feasibility studies
4.D/D	Studies for detailed designs
5.Basic Studies	Studies to provide basic data, such as maps of various types, nautical charts and ground water surveys, forestry and fishery resource studies, and agricultural verification studies.
6.Other Studies	Studies for Aftercare Services, etc

The definition of each of these types of development studies is given according to the objectives as follows.

-
- 1 Development Study is the general term that involves the following activities carried out for public development planning, which is necessary for the socio-economic progress of developing countries: i) organizing study teams composed of experts to contribute to the implementation of a development plan for the recipient country; ii) carrying out a field survey, as well as analysis and study in Japan of the findings of the field survey; iii) making a study report which serves as basic information on a socio-economic development strategy for the recipient country; and iv) promoting technical transfer in terms of study methods and a planning approach to local counterparts in the course of the development study.
 - 2 Special project studies and basic design studies have been incorporated in the grant aid program since FY 1985, and therefore are excluded from the coverage.

i) Master Plan Studies (M/P)

A master plan study is carried out to determine a basic development strategy by formulating a comprehensive sectoral or regional plan. The formulation of a master plan of a region or of a sector is the first stage in the development project cycle, and prerequisite for and to be carried out prior to a study on a specific individual project. It serves to coordinate and facilitates efficient implementation of various individual projects.

ii) Master Plan/Feasibility Studies (M/P+F/S)

These are studies in which both the master plan and feasibility studies are undertaken.

iii) Feasibility Studies (F/S)

A feasibility study is made to study the rationale, appropriateness, investment effects, etc. of a particular development project. In general, it is to determine systematically and objectively whether the proposed project is viable and feasible socially, technically, economically and financially as well as from other important consideration, e.g. operation and maintenance, organization and institution, and preservation of social and natural environment.

The feasibility report serves as important reference for the concerning government agencies and officials to make a policy decision whether the country should proceed to the implementation of the given proposed project(s). It also provides the bilateral and multilateral aid agencies to which a request for financial assistance is addressed with necessary information to examine whether the proposed project is appropriate to be given such assistance.

iv) Detailed Design Studies (D/D)

Detailed design studies are used to develop the design documents needed (including data and specific draft drawings and specifications) to begin project construction work as planned. In this phase, since the study has to cover all the detailed investigations related to a project's detailed design, considerable cost and a long study period are generally required. This type of studies are followed by the selection of the constructor through competitive bidding, and the actual construction. Detailed design studies are indispensable to implement the project orderly and to facilitate the effectiveness of financial assistance.

v) Basic Studies (Long-term Studies, Topographical Studies, Ground-water Development Studies, Studies on the Amount of Forestry and Fishery Resources, etc.)

Long-term Studies

Formulation of region-wide plans such as River Conservation or irrigation plans, integrated regional resource development plans, and examination of alternative policy measures for environmental protection often require long-term and continuous accumulation of relevant basic data. The lack of such data or of abilities to collect and compile such data may become a major impeding factor against the implementation of development plans.

In this type of studies, a team of experts are sent to stay in the recipient country for a long period, and collect, record, compile and analyze relevant basic data through long-term observations.

Topographical Studies

The presence of basic maps of national land and cities is a necessary condition for planning and implementation of development projects. However in many regions of developing countries, topographical drawings of national territories and cities have been virtually non-existent, or not appropriate for practical use if ever exist, due to the lack of standard in the method of construction and information contents. This situation leads to difficulty in formulating and implementing development projects as well as in coping with urban problems that are becoming increasingly serious.

The results of these studies greatly serve to overcome such difficulties in developing countries by providing basic data and information.

Ground-water Development Studies

These surveys prospect for ground water and investigate the feasibility of its utilization for irrigation and the supply of drinking water and water for industry. It is a urgent task to provide the residents of areas with drinking water.

Agricultural Verification Studies

These studies aim to collect basic data on meteorology, hydrology, pedology and other natural conditions, and to conduct verification studies such as experiments on introduction of new varieties, experiments on the methods of cultivation of new varieties under different conditions and experiments on the introduction of the methods of transplants.

Studies on the Amount of Forestry and Fishery Resources

In forestry and fishery, grasp of resource accumulation is premised for overall planning of development and policy making. However, the technology for grasping resources and development is insufficient in developing countries, and therefore it aims to transfer study technology as well as to provide basic information and contribute to various development planning based on appropriate control of resource through the study.

vi) Other Studies (Studies for Aftercare Services, etc.)

Studies for Aftercare services are carried out when a review on the same project is required several years after the completion of the former study due to the change of socio-economic or natural conditions.

Pre-feasibility studies are also classified into "Other Studies".

6. Classification by Sector

The sectors are shown by the following classification employed by JICA Practical Handbook on Statistics.

Sector	Subsector	Sub-subsector
1.Planning & Administration	(1)Development Plan	1)General 2)Integrated Regional Development Plan
	(2)Administration	1)General 2)Public Finance & Banking 3)Environmental Problems 4)Statistics 5)Information & Public Relations
2.Public Works & Utilities	(1)Public Utilities	1)General 2)Water Supply 3)Sewerage 4)Urban Sanitation
	(2)Transportation	1)General 2)Road 3)Land Transportation 4)Railway 5)Marine Transportation & Airport 6)Port 7)Air Transportation & Ships 8)Urban Transportation 9)Meteorology
	(3)Social Infrastructures	1)General 2)River & Erosion Control 3)Water Resource Development 4)Urban Planning & Land Development 5)Architecture & Housing 6)Survey & Mapping
	(4)Communications & Broadcasting	1)General 2)Post 3)Telecommunication 4)Broadcasting
3.Agriculture,Forestry & Fisheries	(1)Agriculture	1)General 2)Sericulture 3)Irrigation,Drainage & Reclamation 4)Agricultural Machinery 5)Agricultural Processing
	(2)Animal Husbandry	1)Animal Husbandry 2)Animal Health 3)Livestock Processing
	(3)Forestry	1)Forestry,Forest Conservation 2)Timber Processing
	(4)Fisheries	1)Fisheries 2)Fish Processing
4.Commerce & Tourism	(1)Tourism	1)General 2)Tourism Infrastructure
5.Others	(1)Others	1)Others

Note : A study on a bridge serving both road and railway is classified as "General," while the one on a road bridge is classified as "Road," and the one on a railway bridge as "Railway."

7. Criteria for Classification of Present Status of Use of Study Results

Two sets of criteria for classification of the present status of the use of the study results are defined and used according to the types of development studies.

1) Group A Studies

For master plan studies (M/P), basic studies (B/D) and other studies, collectively named Group A studies, the information is sought on whether or not their recommendations (including overall plans and priority programs) or outputs (such as maps, bodies of basic data, and guidelines) have been adopted or utilized toward the realization of development goals. The present status is classified into three categories: 1) In progress or in use, 2) Delayed, and 3) Discontinued.

Criteria for determining the present status for Group A Studies are as follows.

Present Status	Criteria
a. In progress or in use	<p>A study is classified into this category when its results or proposals are satisfactorily utilized in the following manner.</p> <ol style="list-style-type: none"> 1) Based on the proposals, more specific and detailed studies are, or have been, undertaken. Or, the study results are utilized to undertake some development study or planning. 2) Japanese technical cooperation is started on the basis of the proposals or study results. 3) Proposals are incorporated into the development policy or plan of the recipient country. Or, study results are consulted to formulate the development policy or plan.
b. Delayed	<p>4) The government of the recipient country is taking some proposals are in one of the following conditions.</p> <p>A study is classified as "delay", when its results or</p> <ol style="list-style-type: none"> 1) No significant action has been taken by the government of the recipient country to utilize the proposals or results. 2) The government of the recipient country began to act on the proposals, or utilize the results, but the effort was halted for some reason.
c. Discontinued	<p>The government of the recipient country made an explicit decision not to act on the proposals. Or, the government decided to act on, or utilize, different proposals or results from other sources.</p>

2) Group B Studies

For feasibility studies (F/S), master plan/feasibility studies (M/P+F/S) and detailed design studies (D/D), collectively named Group B Studies, the information is sought on whether or not the projects or programs they appraised or proposed have been implemented, and the circumstances of their implementation or non-implementation. The present status is classified into four categories : 1) Completed or in progress, 2) promoting, 3) Delayed or suspended, and 4) Discontinued or canceled. The category of "completed or in progress" is further divided into four sub-categories : 1a) completed, 1b) partially completed, 1c) implementing, and 1d) processing.

For those development studies in which both the master plan study and the feasibility study were undertaken, the information is sought also regarding the master plan study portion of the study on whether or not their recommendations (including overall plans and priority programs) have been

adopted or utilized toward the realization of development goals.

The criteria for classification of proposed project(s) are shown in the table below.

Present Status	Criteria
A.Completed or in progress	(See below)
A1.Completed	The proposed development project has been already implemented and operated.
A2.Partially Completed	The proposed development project is partially completed and in use.
A3.Implementing	The implementation of the project is underway.
A4.Processing	The project is at one of the following stages. 1) Tenders have been invited. 2) Financing of project has been secured. 3) Following the completion of the JICA feasibility study, the basic design study or some other specific step is being undertaken with bilateral or multilateral financial assistance. 4) For some other reasons, the project concerned is considered highly likely to be implemented in the future.
B.Promoting	The project concerned is at one of the following stages. 1) The government of the recipient country is requesting financial support from international lending organizations and/or foreign governments including Japan. 2) The government of the recipient country has been undertaking the detailed design study or other additional studies subsequent to the JICA feasibility study. 3) The recipient country is otherwise actively promoting the implementation of the project.
C.Delayed or Suspended	The project concerned is at one of the following stages. 1) The government of the recipient country has not taken any specific action after the completion of the JICA study. 2) The government of the recipient country has at one point promoted the proposed project but suspended the effort for some reason.
D.Discontinued or Canceled	The government of the recipient country officially canceled the proposed project, or implemented the alternative which was substantially different from the proposal of the JICA study.

This means either that a loan agreement has been signed, or that the lending has been pledged, or the exchange of note is formally signed, as in the case of the Japan's yen credit program.

8. Collection of relevant information

Relevant information has been collected mainly from various internal materials and reports of JICA Headquarters and International Training Institute. In particular, the data on project expenditure of studies (expenditure on the preliminary study and other direct costs to JICA and contract cost with a consulting firm) have been made accurate through the examination of financial statements.

CHAPTER 2 A FULL VIEW OF COMPLETED DEVELOPMENT STUDIES

2-1 An Overview of the Number of Studies

1. Classification by year of completion

The total number of development studies completed by the end of FY 1993 (the end of March 1994) is 813, 579 in social development sectors and 234 in agriculture, forestry and fisheries sectors. The number of studies was around 20-30 per annum during the 1970s, and settled around 40-50 per annum in the 1980s.

Table 2-a Time Trend of the Number of Development Studies

Fiscal Year Completed	Social Development	Agri, Forestry & Fisheries Development	Total	Fiscal Year Completed	Social Development	Agri, Forestry & Fisheries Development	Total
1974	1	0	1	1984	39	15	54
1975	5	0	5	1985	39	12	51
1976	9	4	13	1986	28	12	40
1977	20	7	27	1987	43	10	53
1978	25	7	32	1988	30	19	49
1979	24	12	36	1989	45	23	68
1980	30	7	37	1990	36	23	59
1981	27	9	36	1991	31	14	45
1982	34	18	52	1992	40	17	57
1983	32	13	45	1993	41	12	53
				Total	579	234	813

Note: As the subject of Follow-up Study is limited to the development studies which had respective preliminary surveys commenced after August 1 of 1974, the number of studies regarded to be completed between FY 1974 and FY 1976 turned out to be smaller than the number of studies actually completed during the same period.

2. Classification by Region

The number of studies carried out in Asia accounts for more than 60% of the total. It indicates that development studies have been centered in Asia. The six countries of ASEAN account for 43.3% of the total, and form a region in the world where most of the development studies, especially of Japan, have been conducted. Central and South America ranks next (17.2%), while Near Middle East and Africa have continued to have a share of about 10% each.

3. Classification by Country

The six countries of ASEAN have 352 studies, accounting for 43.3% of the total. It is a region that have received a bulk of development studies within the Asia region. Among them Indonesia has received the largest number of studies (129 studies), followed by Thailand (91 studies), Philippines (82 studies) and Malaysia (43 studies). The next comes China with 38 studies. Apart from these countries, the following countries have had more than 10 development studies conducted: Bangladesh, Nepal, Pakistan and Sri Lanka (in Asia); Egypt (in Middle East), Kenya and Tanzania (in Africa); Bolivia,

Brazil, Columbia, Honduras, Mexico and Paraguay (in Central and South America).

Table 2-b Classification by Region

Region	Social Development		Agriculture, Forestry & Fishery		Toatal	
Asia	356	61.5%	132	56.4%	488	60.0%
ASEAN	(264)	45.6%	(88)	(38%)	(352)	43.3%
Others	(92)	15.9%	(44)	(19%)	(136)	16.7%
Middle East	54	9.3%	27	11.5%	81	10.0%
Africa	56	9.7%	25	10.7%	81	10.0%
Middle & South America	95	16.4%	45	19.2%	140	17.2%
Oceania	8	1.4%	5	2.1%	13	1.6%
Europe	4	0.7%	0	0.0%	4	0.5%
Plural Countries	6	1.0%	0	0.0%	6	0.7%
Total	579	100.0%	234	100.0%	813	100.0%

Table 2-c Classification by Country

Country	Planning and Administration	Public Works and Utilities	Transportation					Social Infrastructure	Communication and Broadcasting	Tourism	Agriculture	Animal Husbandry	Forestry	Fishery	Total
			Road	Railroad	Port	Air Transportation and Airport	Others								
Bangladesh			1	1	2	1	1	4	1		6				17
Bhutan											1				1
Brunei							1	1					1		3
Cambodia		1													1
China	4	1	2	5	5	2		7	2		9	1			38
India				3	2		1				1				7
Indonesia	5	8	11	7	10	5	7	29	19	3	21		4		129
Korea		1		1				2			1				5
Laos		1	1					1			3				6
Malaysia	2	4	7	3	4		3	9	4	1	3		1	2	43
Mongolia				1											1
Maldives								1							1
Myanmar				2		1	2				4				9
Nepal			2			2		5	2		2				13
Pakistan		1		1	3		4	1	1		8				19
Philippines	2	3	14	1	5	1	7	17	3		24		1	4	82
Singapore			1		1		1		1						4
Sri Lanka		1	1		4	1			3		7			1	18
Thailand	5	10	13	5	4	1	9	9	5	3	26		1		91
Algeria								1			1				2
Egypt	3	5		1	3	1	4	1	3		7		1		29
Iran											2				2
Iraq							1	1			1				3
Jordan	2		1					2			2				7
Morocco				1		1		2			2				6
Oman					1			1			4				6
Qatar		1													1
Saudi Arabia								2							2
Sudan			2								2				4
Tunisia				1				3					1		5
Turkey	1		1		1						1			1	5
United Arab Emirates								2						1	3

Country	Planning and Administration	Public Works and Utilities	Transportation					Social Infrastructure	Communication and Broadcasting	Tourism	Agriculture	Animal Husbandry	Forestry	Fishery	Total
			Road	Railroad	Port	Air Transportation and Airport	Others								
Cameroun										1				1	
Djibouti					1									1	
Ethiopia								1						1	
Gabon													1	1	
Ghana										1				1	
Guinea							1	1		1				3	
Ivory Coast										1				1	
Kenya	1	3	4				1	3		3				15	
Liberia			1											1	
Madagascar		1	1						1					3	
Mali								1		3				4	
Moldavia		2	2					1						5	
Niger							1			3				4	
Nigeria					1			1		1				3	
Rwanda		1						1						2	
Senegal				1			1	1		2				5	
Sierra Leone			1							1				2	
Swaziland							1							1	
Tanzania	1	1	2				2			1	3	1		11	
Zaire			1	1			2							4	
Zambia			1			1		1	2	1				6	
Zimbabwe		1		1					2	2				6	
Argentina	1			1	1				1	1				5	
Bolivia	1	1	3	2		2		1	1	2		1		14	
Brazil	3			1	1		1	4						10	
Chile			1	1	1					2		1		6	
Colombia	1		1				2	2		5		1	1	13	
Costa Rica	1				2	1		1		1			1	7	
Dominican Republic					1			1	1	3				6	
Ecuador							1	1		1		1	1	5	
Guatemala		1			1	1	1	2		2				8	
Honduras					1	1		2	1	4		1	1	11	
Jamaica										2				2	
Mexico	2			4	3		1							10	
Nicaragua								1						1	
Panama			1		1		3	1	1			1	1	9	
Paraguay	1		1			1	4	1	2	4		2		16	
Peru		1			1	1		3		1			2	9	
Trinidad and Tobago		1												1	
Uruguay					1	1						2		4	
Venezuela					1			2						3	
Cook Islands	1													1	
Fiji												2	1	3	
Kiribati													1	1	
Papua New Guinea		1	1			1			1				1	5	
Solomon Islands							1		1					2	
Western Samoa						1								1	
Greece										1				1	
Hungary		1												1	
Poland		1					1							2	
ZZZ							2	2	2					6	
Total	37	55	79	44	64	28	67	135	61	9	190	2	22	20	813

2-2 Distribution of the Number of Studies by Type of Study

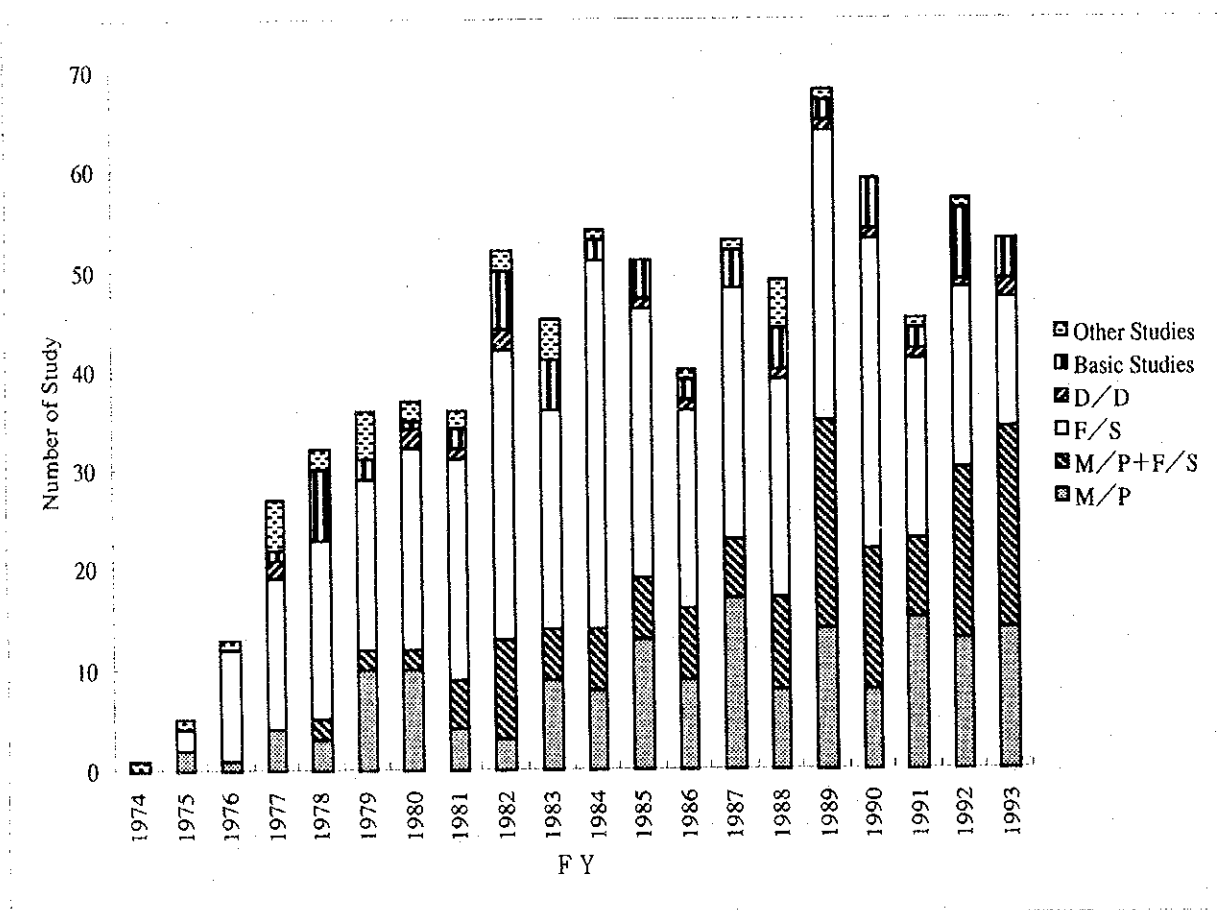
F/S studies account for 48.7% of the total development studies carried out in the last 20 years. The next is M/P studies, accounting for 20.3%. The number of M/P studies has been settled from 10 to 20 since FY 1989. It is notable that, while the number of Group B Studies (F/S studies, D/D studies and other studies) shows a downward tendency, that of M/P+F/S studies exhibits an upward tendency. In the recent years, Group A Studies has become increasing important, and feasibility studies have tended to accompany a master plan study in the same development study. It is inferred that the tendency to fully make use of the results of master plan studies has become strong.

Table 2-d Distribution by Type of Study

	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
M/P	0 (0.0%)	2 (40.0%)	1 (7.7%)	4 (14.8%)	3 (9.4%)	10 (27.8%)	10 (27.0%)	4 (11.1%)	3 (5.8%)	9 (20.0%)
M/P+F/S	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (6.3%)	2 (5.6%)	2 (5.4%)	5 (13.9%)	10 (19.2%)	5 (11.1%)
F/S	0 (0.0%)	2 (40.0%)	11 (84.6%)	15 (55.6%)	18 (56.3%)	17 (47.2%)	20 (54.1%)	22 (61.1%)	29 (55.8%)	22 (48.9%)
D/D	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (7.4%)	0 (0.0%)	0 (0.0%)	2 (5.4%)	1 (2.8%)	2 (3.8%)	0 (0.0%)
Basic Studies	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.7%)	7 (21.9%)	2 (5.6%)	1 (2.7%)	2 (5.6%)	6 (11.5%)	5 (11.1%)
Other Studies	1 (100.0%)	1 (20.0%)	1 (7.7%)	5 (18.5%)	2 (6.3%)	5 (13.9%)	2 (5.4%)	2 (5.6%)	2 (3.8%)	4 (8.9%)
Total	1	5	13	27	32	36	37	36	52	45

	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
M/P	8 (14.8%)	13 (25.5%)	9 (22.5%)	17 (32.1%)	8 (16.3%)	14 (20.6%)	8 (13.6%)	15 (33.3%)	13 (22.8%)	14 (26.4%)	165 (20.3%)
M/P+F/S	6 (11.1%)	6 (11.8%)	7 (17.5%)	6 (11.3%)	9 (18.4%)	21 (30.9%)	14 (23.7%)	8 (17.8%)	17 (29.8%)	20 (37.7%)	140 (17.2%)
F/S	37 (68.5%)	27 (52.9%)	20 (50.0%)	25 (47.2%)	22 (44.9%)	29 (42.6%)	31 (52.5%)	18 (40.0%)	18 (31.6%)	13 (24.5%)	396 (48.7%)
D/D	0 (0.0%)	1 (2.0%)	1 (2.5%)	0 (0.0%)	1 (2.0%)	1 (1.5%)	1 (1.7%)	1 (2.2%)	1 (1.8%)	2 (3.8%)	16 (2.0%)
Basic Studies	2 (3.7%)	4 (7.8%)	2 (5.0%)	4 (7.5%)	4 (8.2%)	2 (2.9%)	5 (8.5%)	2 (4.4%)	7 (12.3%)	4 (7.5%)	60 (7.4%)
Other Studies	1 (1.9%)	0 (0.0%)	1 (2.5%)	1 (1.9%)	5 (10.2%)	1 (1.5%)	0 (0.0%)	1 (2.2%)	1 (1.8%)	0 (0.0%)	36 (4.4%)
Total	54	51	40	53	49	68	59	45	57	53	813

Graph 2-d Distribution by Type of Study



2-3 Distribution of the Number of Studies by Sector

1. An Outlook

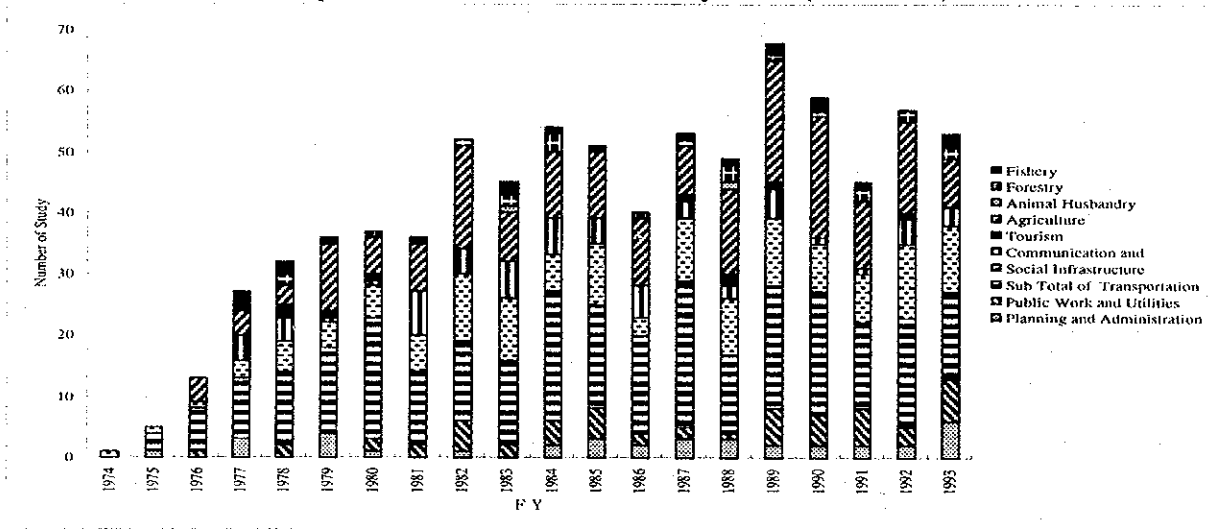
Table 2-e shows the number of completed development studies according to different subsectors (sub-subsectors). There are 282 studies in the subsector of Transportation, accounting for 34.7% of the total. 190 studies in Agriculture (23.4%), and 135 studies (16.6%) in Social Infrastructures. The number of studies in the rest of subsectors has remained in two digit figures. Transportation, Communication & Broadcasting, Agriculture and Social Infrastructures together account about 75% of the total development studies.

Table 2-e The Distribution of Studies by Sector(Subsectors)

	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Planning and Administration	0 (0.0%)	1 (20.0%)	0 (0.0%)	3 (11.1%)	0 (0.0%)	4 (11.1%)	1 (2.7%)	0 (0.0%)	1 (1.9%)	0 (0.0%)
Public Work and Utilities	0 (0.0%)	0 (0.0%)	1 (7.7%)	0 (0.0%)	2 (6.3%)	0 (0.0%)	2 (5.4%)	2 (5.6%)	5 (9.6%)	2 (4.4%)
Road	0 (0.0%)	0 (0.0%)	2 (15.4%)	2 (7.4%)	4 (12.5%)	3 (8.3%)	6 (16.2%)	1 (2.8%)	7 (13.5%)	4 (8.9%)
Railway	0 (0.0%)	1 (20.0%)	2 (15.4%)	2 (7.4%)	1 (3.1%)	3 (8.3%)	1 (2.7%)	2 (5.6%)	3 (5.8%)	5 (11.1%)
Port	0 (0.0%)	2 (40.0%)	0 (0.0%)	2 (7.4%)	3 (9.4%)	4 (11.1%)	6 (16.2%)	5 (13.9%)	1 (1.9%)	4 (8.9%)
Air Transportation and Airport	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.7%)	0 (0.0%)	2 (5.6%)	2 (5.4%)	1 (2.8%)	2 (3.8%)	0 (0.0%)
Others	0 (0.0%)	0 (0.0%)	3 (23.1%)	3 (11.1%)	4 (12.5%)	2 (5.6%)	5 (13.5%)	3 (8.3%)	0 (0.0%)	1 (2.2%)
Sub Total of Transportation	0 (0.0%)	3 (60.0%)	7 (53.8%)	10 (37.0%)	12 (37.5%)	14 (38.9%)	20 (54.1%)	12 (33.3%)	13 (25.0%)	14 (31.1%)
Social Infrastructure	1 (100.0%)	1 (20.0%)	1 (7.7%)	3 (11.1%)	5 (15.6%)	4 (11.1%)	5 (13.5%)	6 (16.7%)	11 (21.2%)	10 (22.2%)
Communication and Broadcasting	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (14.8%)	4 (12.5%)	1 (2.8%)	1 (2.7%)	7 (19.4%)	4 (7.7%)	6 (13.3%)
Tourism	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (6.3%)	1 (2.8%)	1 (2.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Agriculture	0 (0.0%)	0 (0.0%)	4 (30.8%)	4 (14.8%)	3 (9.4%)	11 (30.6%)	6 (16.2%)	8 (22.2%)	17 (32.7%)	8 (17.8%)
Animal Husbandry	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.2%)
Forestry	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (6.3%)	0 (0.0%)	1 (2.7%)	0 (0.0%)	1 (1.9%)	2 (4.4%)
Fishery	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (11.1%)	2 (6.3%)	1 (2.8%)	0 (0.0%)	1 (2.8%)	0 (0.0%)	2 (4.4%)
Total	1	5	13	27	32	36	37	36	52	45

	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
Planning and Administration	2 (3.7%)	3 (5.9%)	2 (5.0%)	3 (5.7%)	3 (6.1%)	2 (2.9%)	2 (3.4%)	2 (4.4%)	2 (3.5%)	6 (11.3%)	37 (4.6%)
Public Work and Utilities	4 (7.4%)	5 (9.8%)	2 (5.0%)	2 (3.8%)	1 (2.0%)	6 (8.8%)	5 (8.5%)	6 (13.3%)	3 (5.3%)	7 (13.2%)	55 (6.8%)
Road	5 (9.3%)	4 (7.8%)	0 (0.0%)	7 (13.2%)	4 (8.2%)	6 (8.8%)	9 (15.3%)	5 (11.1%)	5 (8.8%)	5 (9.4%)	79 (9.7%)
Railway	5 (9.3%)	4 (7.8%)	3 (7.5%)	5 (9.4%)	0 (0.0%)	1 (1.5%)	3 (5.1%)	1 (2.2%)	1 (1.8%)	1 (1.9%)	44 (5.4%)
Port	3 (5.6%)	2 (3.9%)	5 (12.5%)	5 (9.4%)	2 (4.1%)	4 (5.9%)	6 (10.2%)	2 (4.4%)	3 (5.3%)	5 (9.4%)	64 (7.9%)
Air Transportation and Airport	1 (1.9%)	2 (3.9%)	2 (5.0%)	2 (3.8%)	1 (2.0%)	5 (7.4%)	1 (1.7%)	2 (4.4%)	3 (5.3%)	1 (1.9%)	28 (3.4%)
Others	7 (13.0%)	5 (9.8%)	6 (15.0%)	5 (9.4%)	6 (12.2%)	4 (5.9%)	1 (1.7%)	4 (8.9%)	6 (10.5%)	2 (3.8%)	67 (8.2%)
Sub Total of Transportation	21 (38.9%)	17 (33.3%)	16 (40.0%)	24 (45.3%)	13 (26.5%)	20 (29.4%)	20 (33.9%)	14 (31.1%)	18 (31.6%)	14 (26.4%)	282 (34.7%)
Social Infrastructure	6 (11.1%)	10 (19.6%)	3 (7.5%)	10 (18.9%)	9 (18.4%)	11 (16.2%)	8 (13.6%)	8 (17.8%)	12 (21.1%)	11 (20.8%)	135 (16.6%)
Communication and Broadcasting	6 (11.1%)	4 (7.8%)	5 (12.5%)	3 (5.7%)	2 (4.1%)	5 (7.4%)	1 (1.7%)	1 (2.2%)	4 (7.0%)	3 (5.7%)	61 (7.5%)
Tourism	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.9%)	2 (4.1%)	1 (1.5%)	0 (0.0%)	0 (0.0%)	1 (1.8%)	0 (0.0%)	9 (1.1%)
Agriculture	11 (20.4%)	11 (21.6%)	11 (27.5%)	8 (15.1%)	14 (28.6%)	20 (29.4%)	20 (33.9%)	11 (24.4%)	15 (26.3%)	8 (15.1%)	190 (23.4%)
Animal Husbandry	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.2%)
Forestry	3 (5.6%)	0 (0.0%)	1 (2.5%)	1 (1.9%)	3 (6.1%)	1 (1.5%)	1 (1.7%)	2 (4.4%)	2 (3.5%)	2 (3.8%)	22 (2.7%)
Fishery	1 (1.9%)	1 (2.0%)	0 (0.0%)	1 (1.9%)	1 (2.0%)	2 (2.9%)	2 (3.4%)	1 (2.2%)	0 (0.0%)	2 (3.8%)	20 (2.5%)
Total	54	51	40	53	49	68	59	45	57	53	813

Graph 2-e Distribution of Studies by Sector(Subsectors)



2. Distribution by Sector and Type of Study

As for the distribution of studies by type of study, there is not a large difference among different sectors. Transportation has the largest share in all types of studies except for basic studies. Due to the nature of the study, basic studies comprises such studies as topographical studies and underground water development, and the share of Social Infrastructures in basic studies is as high as 53.3%. The share of Forestry and Fisheries, which includes studies on the amount of forestry and fishery resources, is also high in basic studies. Similarly, the share of Planning & Administration is relatively high in M/P studies. More than 80% of studies in Planning & Administration are M/P studies. On the other hand in Transportation, Communications & Broadcasting, and Agriculture, the share of F/S studies is larger.

Table 2-f Distribution by sector and Type of Study

	M/P	M/P+F/S	F/S	D/D	Basic Studies	Others	Total
Planning & Admin	30 (18.2%)	4 (2.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (8.3%)	37 (4.6%)
Public Utilities	2 (1.2%)	28 (20.0%)	24 (6.1%)	1 (6.3%)	0 (0.0%)	0 (0.0%)	55 (6.8%)
Road	8 (4.8%)	8 (3.7%)	54 (13.6%)	4 (25.0%)	2 (3.3%)	3 (8.3%)	79 (9.7%)
Railway	6 (3.6%)	2 (1.4%)	29 (7.3%)	1 (6.3%)	1 (1.7%)	5 (13.9%)	44 (5.4%)
Port	6 (3.6%)	24 (17.1%)	28 (7.1%)	1 (6.3%)	0 (0.0%)	5 (13.9%)	64 (7.9%)
Air Trans. and Airport	2 (1.2%)	8 (5.7%)	17 (4.3%)	0 (0.0%)	0 (0.0%)	1 (2.8%)	28 (3.4%)
Others	29 (17.6%)	5 (3.6%)	27 (6.8%)	1 (6.3%)	1 (1.7%)	4 (11.1%)	67 (8.2%)
Sub Total of Transportation	51 (30.9%)	47 (33.6%)	155 (39.1%)	7 (43.8%)	4 (6.7%)	18 (50.0%)	282 (34.7%)
Social Infrastructures	27 (16.4%)	30 (21.4%)	35 (8.8%)	2 (12.5%)	32 (53.3%)	9 (25.0%)	135 (16.6%)
Comm. & Broadcasting	10 (6.1%)	10 (7.1%)	35 (8.8%)	3 (18.8%)	2 (3.3%)	1 (2.8%)	61 (7.5%)
Tourism	3 (1.8%)	2 (1.4%)	3 (0.8%)	0 (0.0%)	0 (0.0%)	1 (2.8%)	9 (1.1%)
Agriculture	33 (20.0%)	17 (12.1%)	134 (33.8%)	2 (12.5%)	4 (6.7%)	0 (0.0%)	190 (23.4%)
Animal Husbandry	0 (0.0%)	1 (0.7%)	1 (0.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.2%)
Forestry	5 (3.0%)	0 (0.0%)	5 (1.3%)	0 (0.0%)	10 (16.7%)	2 (5.6%)	22 (2.7%)
Fisheries	4 (2.4%)	1 (0.7%)	4 (1.0%)	1 (6.3%)	8 (13.3%)	2 (5.6%)	20 (2.5%)
Total	165	140	396	16	60	36	813

	M/P	M/P+F/S	F/S	D/D	Basic Studies	Others	Total
Planning & Admin	93.1 (20.0%)	10.0 (2.7%)	0.0 (0.0%)	0.0 (0.0%)	0.0 (0.0%)	5.0 (11.2%)	108.1 (5.4%)
Public Utilities	4.0 (0.9%)	70.4 (19.3%)	51.4 (14.6%)	6.1 (11.9%)	0.0 (0.0%)	0.0 (0.0%)	131.9 (6.6%)
Road	26.2 (5.6%)	25.9 (7.1%)	111.4 (30.6%)	17.9 (34.8%)	1.2 (0.4%)	1.0 (2.2%)	183.6 (9.2%)
Railway	13.7 (2.9%)	6.1 (1.7%)	62.9 (17.6%)	0.9 (1.8%)	1.8 (0.6%)	2.3 (5.1%)	87.7 (4.4%)
Port	14.3 (3.1%)	53.6 (14.7%)	51.9 (14.5%)	6.9 (13.4%)	0.0 (0.0%)	3.0 (6.7%)	129.7 (6.3%)
Air Trans. and Airport	4.9 (1.1%)	14.0 (3.8%)	21.8 (6.0%)	0.0 (0.0%)	0.0 (0.0%)	0.3 (0.7%)	41.0 (2.1%)
Others	74.4 (16.0%)	15.4 (4.2%)	52.6 (14.5%)	1.6 (3.1%)	0.3 (0.1%)	7.7 (17.2%)	152.0 (7.6%)
Sub Total of Transportation	133.5 (28.7%)	115.0 (31.5%)	300.6 (83.5%)	27.3 (53.1%)	3.3 (1.1%)	14.3 (31.9%)	594.0 (29.9%)
Social Infrastructures	95.5 (20.5%)	102.6 (28.1%)	76.4 (21.0%)	2.7 (5.3%)	212.6 (70.6%)	7.1 (15.8%)	496.9 (25.0%)
Comm. & Broadcasting	16.7 (3.6%)	19.4 (5.3%)	37.4 (10.3%)	6.2 (12.1%)	4.9 (1.6%)	2.6 (5.8%)	87.2 (4.4%)
Tourism	5.1 (1.1%)	3.8 (1.0%)	2.9 (0.8%)	0.0 (0.0%)	0.0 (0.0%)	1.6 (3.6%)	18.4 (0.9%)
Agriculture	93.2 (20.0%)	40.0 (11.0%)	271.7 (75.7%)	7.1 (13.8%)	20.0 (6.6%)	0.0 (0.0%)	432.0 (21.7%)
Animal Husbandry	0.0 (0.0%)	1.6 (0.4%)	1.0 (0.3%)	0.0 (0.0%)	0.0 (0.0%)	0.0 (0.0%)	2.6 (0.1%)
Forestry	16.6 (3.6%)	0.0 (0.0%)	10.3 (2.9%)	0.0 (0.0%)	32.2 (10.7%)	7.5 (16.7%)	66.6 (3.3%)
Fisheries	7.6 (1.6%)	2.2 (0.6%)	4.9 (1.4%)	2.0 (3.9%)	28.3 (9.4%)	6.7 (15.0%)	51.7 (2.6%)
Total	465.3	365.0	761.6	51.4	301.3	44.8	1989.4

3. Distribution of studies in Major Sector

(1) Transportation

Transportation sub-sector is classified into 9 sub-subsectors. There have been 282 studies conducted during the last 20 years. There are particularly many studies in three sub-subsectors: 79 studies in Road (28.0%), 64 in Port (22.7%) and 44 in Railway (15.6%). These three sub-subsectors account for 66.3% of the total studies in this sub-sector. Following this is Air Transportation & Airport and Urban Transportation.

(2) Social Infrastructure

Social infrastructure sub-sector comprises 6 sub-subsectors. There have been 135 studies conducted during the last 20 years. Among these sub-sectors, the studies are concentrated in two sub-subsectors: 49 each in River & Erosion Control (36.3%) and Water Resource Development. These two sub-subsector account for more than 70% of the total studies in this sub-sector.

(3) Public Utilities

Public Utilities sub-sector is divided into 4 sub-subsectors. There have been 55 studies carried out during the last 20 years. 27 studies (49.1% of total) are in Water Supply, 16 studies (29.1%) in Sewerage, and 12 studies (21.8%) in Urban Sanitation. No study has been conducted in General (Public Utilities).

(4) Communications & Broadcasting

The Communication & Broadcasting sub-sector is classified into 4 sub-subsectors. There have been 61 studies conducted during the last 20 years and the overwhelming 45 studies (73.8%) are in Telecommunication.

(5) Agriculture, Forestry and Fisheries

This sector is divided into four sub-sectors, each of which further divided into several sub-subsectors. The sub-sector of Agriculture consists of General Agriculture, Sericulture, Agricultural Machinery and Agricultural Processing. The sub-sector of Forestry comprises Forest Conservation and Timber Processing. Development studies in this sector have been concentrated in a few sub-subsectors. In the agriculture subsector, the majority of development studies have been conducted in General Agriculture (73.1%); in the Forestry sub-sector, studies are exclusively in Forest Conservation (9.4%); and in Fisheries sub-sector, studies have been concentrated in Fisheries sub-subsector (8.5%). In other sub-subsectors for example, Animal Husbandry, only a few development studies have been carried out.

2-4 Distribution of the Number of Studies by Region

1. Outlook

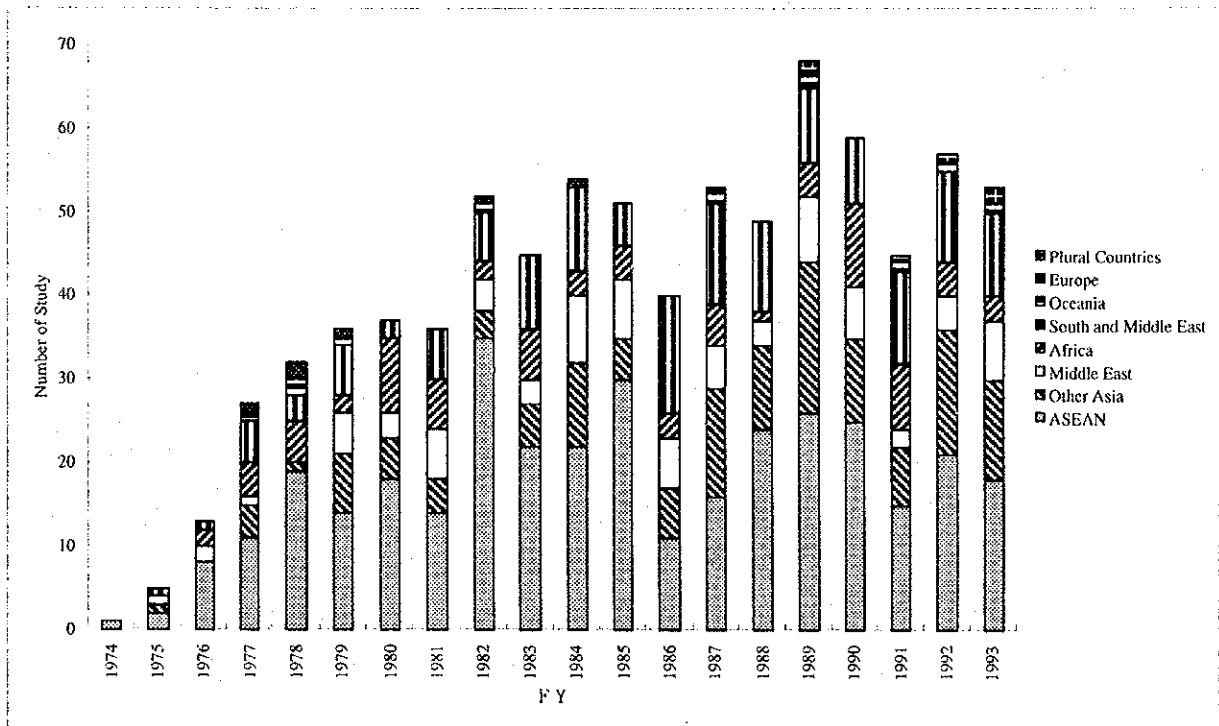
The Table 2-g shows the time trend of the distribution of development studies by region. The Asia region has an overwhelming share. Especially the six countries in ASEAN account for more than 43.3% of the total studies. This tendency has remained the same since the development studies were regularized in the 50s. Central and South America comes next (17.2%), followed by Asian countries outside ASEAN (16.7%). With regard to the time trend, the share of the six countries of ASEAN shows a downward tendency, while the share of other countries in Asia exhibits upward tendency.

Table 2-g Distribution of Studies by Region

	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Asia	1	3	8	15	20	21	23	18	38	27
	(100.0%)	(60.0%)	(61.5%)	(55.6%)	(62.5%)	(58.3%)	(62.2%)	(50.0%)	(73.1%)	(60.0%)
ASEAN	1	2	8	11	19	14	18	14	35	22
	(100.0%)	(40.0%)	(61.5%)	(40.7%)	(59.4%)	(38.9%)	(48.6%)	(38.9%)	(67.3%)	(48.9%)
Other Asia	0	1	0	4	1	7	5	4	3	5
	(0.0%)	(20.0%)	(0.0%)	(14.8%)	(3.1%)	(19.4%)	(13.5%)	(11.1%)	(5.8%)	(11.1%)
Middle East	0	1	2	1	0	5	3	6	4	3
	(0.0%)	(20.0%)	(15.4%)	(3.7%)	(0.0%)	(13.9%)	(8.1%)	(16.7%)	(7.7%)	(6.7%)
Africa	0	0	2	4	5	2	9	6	2	6
	(0.0%)	(0.0%)	(15.4%)	(14.8%)	(15.6%)	(5.6%)	(24.3%)	(16.7%)	(3.8%)	(13.3%)
South and Middle East	0	1	1	5	3	6	2	6	6	9
	(0.0%)	(20.0%)	(7.7%)	(18.5%)	(9.4%)	(16.7%)	(5.4%)	(16.7%)	(11.5%)	(20.0%)
Oceania	0	0	0	1	2	1	0	0	1	0
	(0.0%)	(0.0%)	(0.0%)	(3.7%)	(6.3%)	(2.8%)	(0.0%)	(0.0%)	(1.9%)	(0.0%)
Europe	0	0	0	0	0	0	0	0	0	0
	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
Plural Countries	0	0	0	1	2	1	0	0	1	0
	(0.0%)	(0.0%)	(0.0%)	(3.7%)	(6.3%)	(2.8%)	(0.0%)	(0.0%)	(1.9%)	(0.0%)
Total	1	5	13	27	32	36	37	36	52	45

	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
Asia	32	35	17	29	34	44	35	22	36	30	488
	(59.3%)	(68.6%)	(42.5%)	(54.7%)	(69.4%)	(64.7%)	(59.3%)	(48.9%)	(63.2%)	(56.6%)	(60.0%)
ASEAN	22	30	11	16	24	26	25	15	21	18	352
	(40.7%)	(58.8%)	(27.5%)	(30.2%)	(49.0%)	(38.2%)	(42.4%)	(33.3%)	(36.8%)	(34.0%)	(43.3%)
Other Asia	10	5	6	13	10	18	10	7	15	12	136
	(18.5%)	(9.8%)	(15.0%)	(24.5%)	(20.4%)	(26.5%)	(16.9%)	(15.6%)	(26.3%)	(22.6%)	(16.7%)
Middle East	8	7	6	5	3	8	6	2	4	7	81
	(14.8%)	(13.7%)	(15.0%)	(9.4%)	(6.1%)	(11.8%)	(10.2%)	(4.4%)	(7.0%)	(13.2%)	(10.0%)
Africa	3	4	3	5	1	4	10	8	4	3	81
	(5.6%)	(7.8%)	(7.5%)	(9.4%)	(2.0%)	(5.9%)	(16.9%)	(17.8%)	(7.0%)	(5.7%)	(10.0%)
South and Middle East	10	5	14	12	11	9	8	11	11	10	140
	(18.5%)	(9.8%)	(35.0%)	(22.6%)	(22.4%)	(13.2%)	(13.6%)	(24.4%)	(19.3%)	(18.9%)	(17.2%)
Oceania	0	0	0	2	0	2	0	2	1	1	13
	(0.0%)	(0.0%)	(0.0%)	(3.8%)	(0.0%)	(2.9%)	(0.0%)	(4.4%)	(1.8%)	(1.9%)	(1.6%)
Europe	0	0	0	0	0	1	0	0	1	2	4
	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(1.5%)	(0.0%)	(0.0%)	(1.8%)	(3.8%)	(0.5%)
Plural Countries	1	0	0	0	0	0	0	0	0	0	6
	(1.9%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.7%)
Total	54	51	40	53	49	68	59	45	57	53	813

Graph 2-g Distribution of Studies by Region



2. Distribution by type of study and region

We cannot see a marked difference in the distribution of studies by type of study across different regions. In most of the regions, cumulative number of M/P studies is about one-third as many as that of F/S studies.

Table 2-h-a Distribution of Studies by Type of Study and Region
(Social development and Agriculture, Forestry and Fisheries sectors)

	Asia	ASEAN	Others	Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
M/P	101 (20.7%)	78 (22.2%)	23 (16.9%)	17 (21.0%)	13 (16.0%)	32 (22.9%)	0 (0.0%)	1 (25.0%)	1 (16.7%)	165 (20.3%)
M/P+F/S	103 (21.1%)	77 (21.9%)	26 (19.1%)	10 (12.3%)	1 (1.2%)	21 (15.0%)	3 (23.1%)	2 (50.0%)	0 (0.0%)	140 (17.2%)
F/S	240 (49.2%)	163 (46.3%)	77 (56.6%)	39 (48.1%)	50 (61.7%)	61 (43.6%)	5 (38.5%)	0 (0.0%)	1 (16.7%)	396 (48.7%)
D/D	7 (1.4%)	6 (1.7%)	1 (0.7%)	4 (4.9%)	3 (3.7%)	1 (0.7%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	16 (2.0%)
Basic Studies	15 (3.1%)	11 (3.1%)	4 (2.9%)	8 (9.9%)	10 (12.3%)	19 (13.6%)	4 (30.8%)	0 (0.0%)	4 (66.7%)	60 (7.4%)
Other Studies	22 (4.5%)	17 (4.8%)	5 (3.7%)	3 (3.7%)	4 (4.9%)	6 (4.3%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	36 (4.4%)
Total	488	352	136	81	81	140	13	4	6	813

Table 2-h-b Distribution of Studies by Type of Study and Region
(Social development sectors)

	Asia	ASEAN	Others	Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
M/P	73 (20.5%)	59 (22.3%)	14 (15.2%)	11 (20.4%)	12 (21.4%)	25 (26.3%)	0 (0.0%)	1 (25.0%)	1 (16.7%)	123 (21.2%)
M/P+F/S	87 (24.4%)	67 (25.4%)	20 (21.7%)	9 (16.7%)	1 (1.8%)	19 (20.0%)	3 (37.5%)	2 (50.0%)	0 (0.0%)	121 (20.9%)
F/S	159 (44.7%)	111 (42.0%)	48 (52.2%)	22 (40.7%)	30 (53.6%)	36 (37.9%)	4 (50.0%)	0 (0.0%)	1 (16.7%)	252 (43.5%)
D/D	6 (1.7%)	5 (1.9%)	1 (1.1%)	2 (3.7%)	3 (5.4%)	1 (1.1%)	1 (12.5%)	0 (0.0%)	0 (0.0%)	13 (2.2%)
Basic Studies	11 (3.1%)	7 (2.7%)	4 (4.3%)	7 (13.0%)	8 (14.3%)	8 (8.4%)	0 (0.0%)	0 (0.0%)	4 (66.7%)	38 (6.6%)
Other Studies	20 (5.6%)	15 (5.7%)	5 (5.4%)	3 (5.6%)	2 (3.6%)	6 (6.3%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	32 (5.5%)
Total	356	264	92	54	56	95	8	4	6	579

Table 2-h-c Distribution of Studies by Type of Study and Region
(Agriculture, Forestry and Fisheries sectors)

	Asia	ASEAN	Others	Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
M/P	28 (21.2%)	19 (21.6%)	9 (20.5%)	6 (22.2%)	1 (4.0%)	7 (15.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	42 (17.9%)
M/P+F/S	16 (12.1%)	10 (11.4%)	6 (13.6%)	1 (3.7%)	0 (0.0%)	2 (4.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	19 (8.1%)
F/S	81 (61.4%)	52 (59.1%)	29 (65.9%)	17 (63.0%)	20 (80.0%)	25 (55.6%)	1 (20.0%)	0 (0.0%)	0 (0.0%)	144 (61.5%)
D/D	1 (0.8%)	1 (1.1%)	0 (0.0%)	2 (7.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (1.3%)
Basic Studies	4 (3.0%)	4 (4.5%)	0 (0.0%)	1 (3.7%)	2 (8.0%)	11 (24.4%)	4 (80.0%)	0 (0.0%)	0 (0.0%)	22 (9.4%)
Other Studies	2 (1.5%)	2 (2.3%)	0 (0.0%)	0 (0.0%)	2 (8.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (1.7%)
Total	132	88	44	27	25	45	5	0	0	234

3. Distribution of studies by sector and region

There is not much difference in the sectorial distribution of studies across different regions. Transportation has the largest share in every region. However difference can be observed at sub-subsector level. In ASEAN and Africa, the share of Road is largest within the Transportation sector, while in other regions such as Asian countries outside ASEAN, the shares of Railway and Port are larger. In Central and South America a larger portion of studies has been conducted in Port and Others. Likewise, in the six countries of ASEAN, Social Infrastructures, Communication & Broadcasting together have a high share, while the share of Agriculture is small compared with another regions.

Table 2-i Distribution of Studies by Sector and Region

	Asia	ASEAN アセアン	Others その他	Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
Planning and Administration	18 (3.7%)	14 (4.0%)	4 (2.9%)	6 (7.4%)	2 (2.5%)	10 (7.1%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	37 (4.6%)
Public Work and Utilities	31 (6.4%)	25 (7.1%)	6 (4.4%)	8 (9.9%)	9 (11.1%)	4 (2.9%)	1 (7.7%)	2 (50.0%)	0 (0.0%)	55 (6.8%)
Road	53 (10.9%)	46 (13.1%)	7 (5.1%)	5 (6.2%)	13 (16.0%)	7 (5.0%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	79 (9.7%)
Railway	30 (6.1%)	16 (4.5%)	14 (10.3%)	2 (2.5%)	3 (3.7%)	9 (6.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	44 (5.4%)
Port	40 (8.2%)	24 (6.8%)	16 (11.8%)	6 (7.4%)	2 (2.5%)	15 (10.7%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	64 (7.9%)
Transportation	14 (2.9%)	7 (2.0%)	7 (5.1%)	2 (2.5%)	2 (2.5%)	8 (5.7%)	2 (15.4%)	0 (0.0%)	0 (0.0%)	28 (3.4%)
Air Transportation and Airport	36 (7.4%)	28 (8.0%)	8 (5.9%)	7 (8.6%)	8 (9.9%)	13 (9.3%)	0 (0.0%)	1 (25.0%)	2 (33.3%)	67 (8.2%)
Others	173 (35.5%)	121 (34.4%)	52 (38.2%)	22 (27.2%)	28 (34.6%)	52 (37.1%)	4 (30.8%)	1 (25.0%)	2 (33.3%)	282 (34.7%)
Social Infrastructure	86 (17.6%)	65 (18.5%)	21 (15.4%)	14 (17.3%)	11 (13.6%)	22 (15.7%)	0 (0.0%)	0 (0.0%)	2 (33.3%)	135 (16.6%)
Communication and Broadcasting	41 (8.4%)	32 (9.1%)	9 (6.6%)	4 (4.9%)	5 (6.2%)	7 (5.0%)	2 (15.4%)	0 (0.0%)	2 (33.3%)	61 (7.5%)
Tourism	7 (1.4%)	7 (2.0%)	0 (0.0%)	0 (0.0%)	1 (1.2%)	0 (0.0%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	9 (1.1%)
Agriculture	116 (23.8%)	74 (21.0%)	42 (30.9%)	23 (28.4%)	23 (28.4%)	28 (20.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	190 (23.4%)
Animal Husbandry	1 (0.2%)	0 (0.0%)	1 (0.7%)	1 (1.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.2%)
Forestry	8 (1.6%)	8 (2.3%)	0 (0.0%)	1 (1.2%)	1 (1.2%)	10 (7.1%)	2 (15.4%)	0 (0.0%)	0 (0.0%)	22 (2.7%)
Fishery	7 (1.4%)	6 (1.7%)	1 (0.7%)	2 (2.5%)	1 (1.2%)	7 (5.0%)	3 (23.1%)	0 (0.0%)	0 (0.0%)	20 (2.5%)
Total	488	352	136	81	81	140	13	4	6	813

CHAPTER 3 THE PRESENT STATUS OF THE UTILIZATION OF STUDY RESULTS

3-1 Introduction

The present status of utilization of study results is classified in two sets of categories.

The present status of master plan studies, basic studies and other studies (Group A Studies) is classified into the following three groups: 1) In progress or in use, 2) Delayed, and 3) Discontinued. The criteria are shown in 1-2 of Chapter 1. Those studies for which information obtained from domestic and overseas surveys is not sufficient are tentatively classified into the category of "Delayed".

The present status of feasibility studies, master plan-cum feasibility studies (M/P+F/S), and detailed design studies (Group B Studies) is classified into the following four groups: 1) Completed or in progress, 2) Promoting, 3) Delayed or suspended, 4) Discontinued or canceled. The category of "Completed or in progress" is further divided into four sub-categories: 1a) Completed, 1b) Partially completed and in use, 1c) Implementing, 1d) Processing. The criteria are presented also in 1-2 of Chapter 1.

The classification above is based on the fact that Group A and Group B Studies are different in the use of their study results, and thereby the appraisal of and the criteria for the present status.

Firstly, the "Realization rate" is a concept relevant only to feasibility studies and other Group B studies, which are followed by the appraisal of technical, economic and financial validity of the proposed project(s), and subsequent decision on implementation. Those studies classified into "Completed or In Use" are regarded as "Realized". The idea behind is that proposed project(s) is expected to progress smoothly once the study becomes "Processing" by way of securing investment funds, invitation of tenders, implementation of detailed design studies, etc., and proceed to next stages of "Implementing", "Partially Completed", and finally "Completed" successively. In particular, "Realization rate" is defined as the number of development studies the present status of which falls in the category of "Completed or in progress" as the percentage of the number of total Group B studies. Group A studies are excluded from the denominator.

Secondly, the use of the study results of master plan and other Group A studies is not confined to the implementation of proposed project(s). An even more important role of these studies is to contribute to the policy making of government agencies and to the formulation of development plans both at national and regional levels. Basic studies and other studies are aimed at being used for particular purposes such as facilitation national land development and development planning by collection and compilation of long-term basic data, and providing recommendations on institutional building by drawing up guidelines, and so forth. This kind of contributions cannot be rendered by such quantitative indicators as "Realization rate". In fact, the results of almost 90 per cent of Group B studies are utilized in one form or another.

This chapter attempts to analyze the present situation of the use of master plan and other Group A studies in detail, by noticing the specific nature of these development studies. It also provides analysis of feasible studies and other Group B studies by centering on the degree of realization of

the proposed project(s). The data are summarized in various tables by sector and by region(in this chapter), as well as by country and sector(in Appendix).

3-2 Present Status of the Use of Study Results of Group A Studies

(Master Plan Studies, Basic Studies and Other Studies)

1. Analysis by year of completion

Table 3-a-a,b and c show the number of projects and present status by year of completion.

Table 3-a-a Present status of Group A studies and completed year
(Social development & agriculture, forestry and fisheries sectors)

Present Status	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
In Progress or in Use	1 (100.0%)	3 (100.0%)	1 (50.0%)	7 (70.0%)	11 (91.7%)	14 (82.4%)	10 (76.9%)	7 (87.5%)	11 (100.0%)	14 (77.8%)
Delayed	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (10.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.6%)
Discontinued	0 (0.0%)	0 (0.0%)	1 (50.0%)	2 (20.0%)	1 (8.3%)	3 (17.6%)	3 (23.1%)	1 (12.5%)	0 (0.0%)	3 (16.7%)
Total	1	3	2	10	12	17	13	8	11	18

	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
In Progress or in Use	9 (81.8%)	13 (76.5%)	11 (91.7%)	19 (86.4%)	15 (88.2%)	15 (88.2%)	12 (92.3%)	14 (77.8%)	18 (85.7%)	17 (94.4%)	222 (85.0%)
Delayed	1 (9.1%)	2 (11.8%)	1 (8.3%)	2 (9.1%)	2 (11.8%)	2 (11.8%)	1 (7.7%)	4 (22.2%)	2 (9.5%)	1 (5.6%)	20 (7.7%)
Discontinued	1 (9.1%)	2 (11.8%)	0 (0.0%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (4.8%)	0 (0.0%)	19 (7.3%)
Total	11	17	12	22	17	17	13	18	21	18	261

Table 3-a-b Present status of Group A studies and completed year
(Social development sectors)

Present Status	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
In Progress or in Use	1 (100.0%)	3 (100.0%)	1 (50.0%)	7 (77.8%)	7 (87.5%)	11 (84.6%)	8 (72.7%)	6 (85.7%)	9 (100.0%)	10 (71.4%)
Delayed	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (7.1%)
Discontinued	0 (0.0%)	0 (0.0%)	1 (50.0%)	2 (22.2%)	1 (12.5%)	2 (15.4%)	3 (27.3%)	1 (14.3%)	0 (0.0%)	3 (21.4%)
Total	1	3	2	9	8	13	11	7	9	14

	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
In Progress or in Use	6 (75.0%)	11 (73.3%)	8 (88.9%)	15 (93.8%)	8 (80.0%)	7 (100.0%)	9 (100.0%)	12 (85.7%)	13 (92.9%)	14 (100.0%)	166 (86.0%)
Delayed	1 (12.5%)	2 (13.3%)	1 (11.1%)	1 (6.3%)	2 (20.0%)	0 (0.0%)	0 (0.0%)	2 (14.3%)	0 (0.0%)	0 (0.0%)	10 (5.2%)
Discontinued	1 (12.5%)	2 (13.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (7.1%)	0 (0.0%)	17 (8.8%)
Total	8	15	9	16	10	7	9	14	14	14	193

Table 3-a-a Present status of Group A studies and completed year
(Agriculture, forestry and fisheries sectors)

Present Status	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
In Progress or in Use	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100.0%)	3 (75.0%)	2 (100.0%)	1 (100.0%)	2 (100.0%)	4 (100.0%)
Delayed	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Discontinued	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0	0	0	1	4	4	2	1	2	4

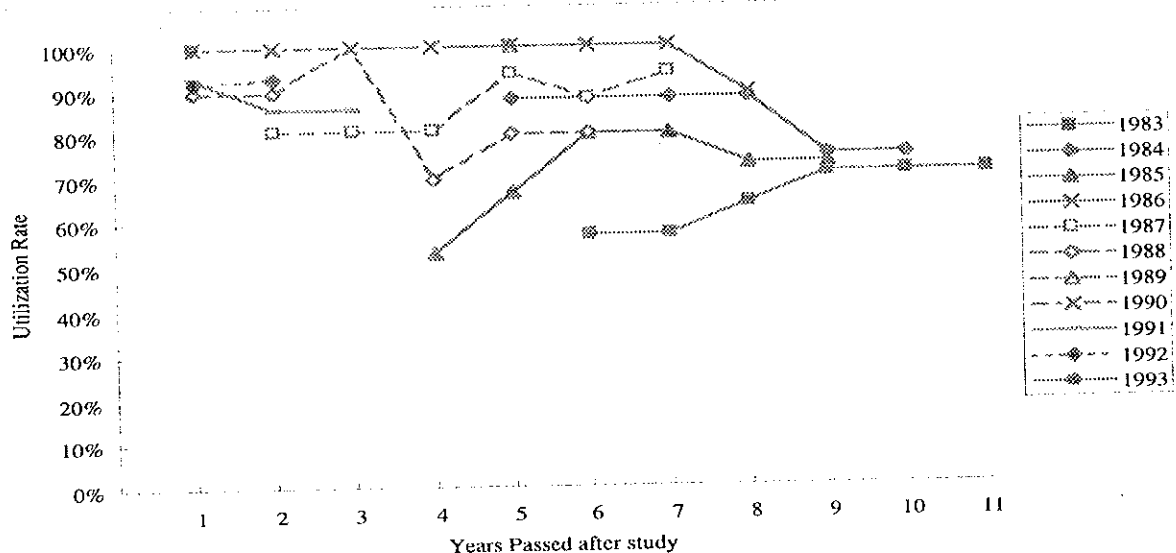
	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
In Progress or in Use	3 (100.0%)	2 (100.0%)	3 (100.0%)	4 (66.7%)	7 (100.0%)	8 (80.0%)	3 (75.0%)	2 (50.0%)	5 (71.4%)	3 (75.0%)	56 (82.4%)
Delayed	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (16.7%)	0 (0.0%)	2 (20.0%)	1 (25.0%)	2 (50.0%)	2 (28.6%)	1 (25.0%)	10 (14.7%)
Discontinued	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (16.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (2.9%)
Total	3	2	3	6	7	10	4	4	7	4	68

The total number of master plan studies is 242, and 84.3% of them, 204 studies, are classified into "In progress or in use". To recognize the transition of present status more dynamically, this study focused on the relation between the years passed after the completion and the rate of utilization of respective studies. Based on the data of past follow-up studies from FY 1989, table 3-b shows the result in social development sectors.

Table 3-b Years passed after the completion of study and utilization rate
(Group A Studies in social development sectors)

Years Passed after study		1	2	3	4	5	6	7	8	9	10	11
Fiscal Year of Completion	No. of Studies											
83	14						57%	57%	64%	71%	71%	71%
84	8					88%	88%	88%	88%	75%	75%	
85	15				53%	67%	80%	80%	73%	73%		
86	9			100%	100%	100%	100%	100%	89%			
87	16		81%	81%	81%	94%	88%	94%				
88	10	90%	90%	100%	70%	80%	80%					
89	8	100%	100%	100%	100%	100%						
90	9	100%	100%	100%	100%							
91	14	93%	86%	86%								
92	13	92%	93%									
93	14	100%										
Total	130											

Figure-b Years passed after the completion of studies and utilization rate
(Group A Studies in social development sectors)



Note: The fiscal year of completion is defined as "0 Year". A straight-line (linear) relation is assumed to approximate the true relation between the two variables. The regression equation was estimated by OLS (Ordinary Least Squares): no weight is attached to the number of projects.

In the social development sectors, utilization rates of Group A studies are relatively high and sometimes reach 100%. Especially in some fiscal years, the rates are 90% immediately after the completion of the studies.

A regression analysis on these figures provides a regression value and line in table 3-a. The result does not show the specific regression tendency. Although the contents proposed by the Group A Studies are alive in some form or other just after the completion of the studies, some obstructing factor or lack of action over years causes the rate to decrease gradually thereafter.

Table 3-c Years passed after the completion of study and utilization rate
(Group A Studies in agriculture, forestry and fisheries sectors)

Years Passed after study	1	2	3	4	5	6	7	8	9	10	11
Fiscal Year of Completion											
83							75%	100%	100%	100%	100%
84						67%	67%	100%	100%	100%	
85					100%	100%	100%	100%	100%		
86				100%	100%	100%	100%	100%			
87			67%	83%	83%	67%	67%				
88		71%	100%	100%	100%	100%					
89	90%	90%	90%	80%	80%						
90	75%	75%	75%	75%							
91	50%	50%	50%								
92	71%	71%									
93	75%										
Total	54										

Figure 3-c Years passed after the completion of study and utilization rate
(Group A Studies in agriculture, forestry and fisheries sectors)

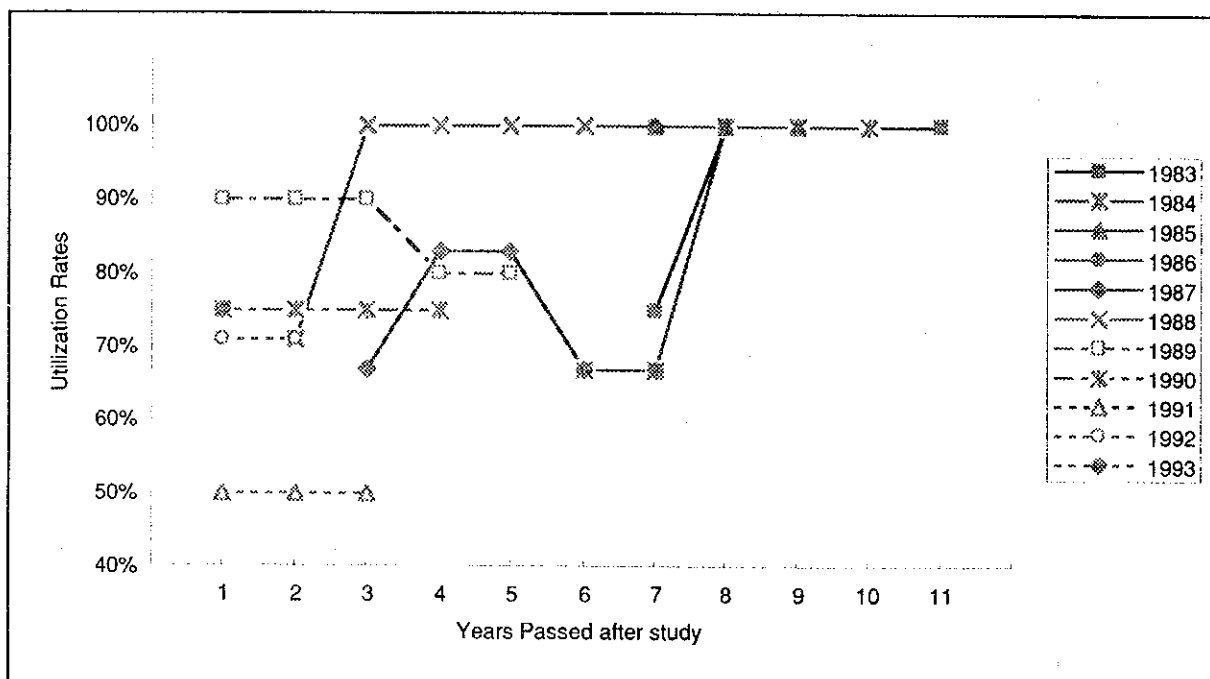


Table 3-c shows years passed after the completion of the study and utilization rate in agriculture, forestry and fisheries sectors. The utilization rates in these sectors are higher than those in social development sectors. The rates in several cases are 100%.

Besides master plan studies, the type of "Group A studies" also includes Basic Studies and Other Studies. Table 3-d shows utilization rate according to these three types. The utilization rate of Basic Studies is as high as 93.3%. The reason is that most Basic Studies are topographical studies, groundwater development and Forestry and Fishery Resource Studies, which are designed to be, and can be utilized just after the completion of the studies.

Table 3-d Three categories of Group A Studies and utilization rates
(Social development and agriculture, forestry and fisheries sectors)

Present Status	M/P	Basic Studies	Other Studies	Total
Progress or In Use	136 (82.4%)	56 (93.3%)	30 (83.3%)	222 (85.0%)
Delayed	16 (9.7%)	3 (5.0%)	1 (2.8%)	20 (7.7%)
Discontinued or Cancelled	13 (7.9%)	1 (1.7%)	5 (13.9%)	19 (7.3%)
Total	165	60	36	261

2. Analysis by region

Table 3-e Utilization rate by region
(Social development and agriculture, forestry and fisheries sectors)

Present Status	Asia	ASEAN	Other Asia	Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
Progress or In Use	117 (84.8%)	87 (82.1%)	30 (93.8%)	22 (78.6%)	22 (81.5%)	50 (87.7%)	4 (100.0%)	2 (100.0%)	5 (100.0%)	222 (85.0%)
Delayed	15 (10.9%)	13 (12.3%)	2 (6.3%)	2 (7.1%)	0 (0.0%)	3 (5.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	20 (7.7%)
Discontinued or Cancelled	6 (4.3%)	6 (5.7%)	0 (0.0%)	4 (14.3%)	5 (18.5%)	4 (7.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	19 (7.3%)
Total	138	106	32	28	27	57	4	2	5	261

Table 3-e shows the utilization rate by region. Here focused are regions that have more than 10 studies. The utilization rate in "Other Asian Countries" is 93.8%, which is the highest among all regions. The utilization rates in "Oceania", "Europe", and "Plural Countries" are 100.0%, although there are only a few studies.

3. Analysis by sector

Table 3-f Utilization rate by sector
(Social development and agriculture, forestry and fisheries sectors)

Present Status	Planning & Administration	Public Works and Utilities								Social Infra-structures	Communi-cations & Broad-casting	Commer-ce Tourism	Agriculture, Forestry & Fisheries				Total
		Public Utilities	Transportation					Others	Others				Agri-Culture	Animal Husbandry	Forestry	Fisheries	
			Road	Railway	Port	Air Trans- portation & Airport	Others										
Progress or In Use	30 (90.9%)	2 (100.0%)	12 (92.3%)	10 (83.3%)	9 (81.8%)	3 (100.0%)	29 (85.3%)	63 (86.3%)	56 (82.4%)	12 (92.3%)	3 (75.0%)	31 (83.8%)	0 (0.0%)	14 (82.4%)	11 (78.6%)	222 (85.0%)	
Delayed	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (11.8%)	4 (5.5%)	6 (8.8%)	0 (0.0%)	0 (0.0%)	6 (16.2%)	0 (0.0%)	2 (11.8%)	2 (14.3%)	20 (7.7%)	
Discontinued or Cancelled	3 (9.1%)	0 (0.0%)	1 (7.7%)	2 (16.7%)	2 (18.2%)	0 (0.0%)	1 (2.9%)	6 (8.2%)	6 (8.8%)	1 (7.7%)	1 (25.0%)	0 (0.0%)	0 (0.0%)	1 (5.9%)	1 (7.1%)	19 (7.3%)	
Total	33	2	13	12	11	3	34	73	68	13	4	37	0	17	14	261	

Table 3-f shows the utilization rate by sector. In several sub-sectors, such as Public works, Road, Air Transport & Airport in transportation subsector and Telecommunication and broadcasting, the utilization rates are the highest, 100%. Despite the large volume of studies, the utilization rate in Road remains 100%. On the contrary, the utilization rate in Tourism is the lowest, 75.0%.

4. Details of "in Progress or in Use" studies

This section analyses the present status of those studies classified as "In progress or in use" in some detail. The "In progress or in use" studies total 222 out of 261 Group A studies.

The category of "In progress or in use" actually includes the following cases:

I.) Subsequent study

More specific and detailed studies(c.g. F/S, D/D) are, or have been undertaken.

II.) Subsequent implementation

Some of the proposed projects are, or have been, financed and implemented.

III.) JICA technical cooperation

Japanese technical operation is started on the basis of the proposals or study results.

IV.) National development policy/plan

Proposals are incorporated into the development policy or plan of the recipient country. Or, study results are consulted to formulate the development policy or plan.

V.) Other

The study results in the form of maps, data base etc. are utilized or published. Or, the study results are used as a model for similar studies to imitate. Or, the government of the recipient country is taking some preparatory step to utilize the proposals.

Usually, when a proposed projects is implemented(case II), more specific and detailed studies like F/S always precede the implementation(case I). In such cases, only the final state i.e. case II is recorded for a given study. For other cases, multiple choice is possible as long as they are relevant to the course of events since a study's completion.

Details of the ways of utilization are known for 222 studies out of the 261 "In progress or in use" studies(85.0%). They are tabulated by region in Table g and by sector in Table h. The top row of the three memo items in Table g and h indicates the numbers of those studies by region or by sector. It can be seen that the column totals generally exceed the corresponding total in the top row of the memo items because of the multiple entries.

Table 3-g Details of "In Progress of in Use" Studies of Group A by Region

Region	Asia			Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
	Total	ASEAN	Others							
Subsequent studies,etc	85	66	19	14	12	27	1	1	2	142
JICA technical cooperation	15	12	3	5	1	9	0	0	1	31
Project-type tech.foop.	9	7	2	1	1	3	0	0	0	14
Expert Dispath	6	5	1	4	0	6	0	0	1	17
Provision of Equipment	0	0	0	0	0	0	0	0	0	0
National dev.policy/plan	20	18	2	6	3	9	2	1	0	41
Other	23	16	7	6	10	14	1	1	1	56
Total	143	112	31	31	26	59	4	3	4	270
Total of "In progress or in use"	117	87	30	22	22	50	4	2	5	222
Total of Group A *1)	138	106	32	28	27	57	4	2	5	261

*1) "Total of Group A" includes M/P, Basic and Other studies.

*2) This "total(=270)" is larger than the total of specific discription(=222) because of the multiple entries.

Table 3-h Details of "In Progress of in Use" Studies of Group A by sector

Sector	Planning & Administration	Public Utilities	Transportation					Sector total	Social Infrastructures	Communications & Broadcasting	Tourism	Subtotal	Agriculture	Animal Husbandry	Forestry	Fisheries	Subtotal	Total
			Road	Railway	Port	Air Transportation & Airport	Others											
Subsequent studies, etc	19	2	9	9	7	3	22	50	29	7	2	109	22	0	4	7	33	142
JICA technical cooperation	7	0	0	0	1	0	6	7	3	1	0	18	8	0	5	0	13	31
Project-type tech coop.	3	0	0	0	0	0	0	0	1	0	0	4	7	0	3	0	10	14
Expert Dispath	4	0	0	0	1	0	6	7	2	1	0	14	1	0	2	0	3	17
Provision of Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
National dev. policy/plan	16	1	2	2	1	0	4	9	2	3	0	31	6	0	4	0	10	41
Other	5	0	1	2	1	0	3	7	23	6	1	42	6	0	4	4	14	56
Total	47	3	12	13	10	3	35	73	57	17	3	200	42	0	17	11	70	270
Total of "In progress or in use"	30	2	12	10	9	3	29	63	56	12	3	166	31	0	14	11	56	222
Total of Group A *1)	33	2	13	12	11	3	34	73	68	13	4	193	37	0	17	14	68	261

*1) "Total of Group A" includes M/P, Basic and Other studies.

*2) This "total(=270)" is larger than the total of specific discription(=222) because of the multiple entries.

How far details are known?

As stated above, 222 out of the 261 "In progress or in use" studies are given some specific description of the ways of their utilization. This rate(85.0%) is fairly uniform both over the regions and the sectors.

How much are the results used?

The 222 "In progress or in use" studies represent 85.0% of the total 261 Group A studies so far finished. This high rate of utilization, however, should be discounted slightly because some studies are labeled "in-use" almost automatically.

The Group A studies are broadly divided into two groups: one group of studies typically head for implementation through further studies like F/S and D/D; the other group consists of those studies whose outputs themselves are the end results of practical value(e.g. maps). This latter group, classified as "other" cases (V) of utilization is virtually guaranteed to be reported as "in-use". Included here are mainly "Basic Studies" and "Others", which number around 60. If we include those studies and recalculate the rate of utilization only for the first group, it turns out to be about 80%(162/201).

How diversely are the results used?

There can be various ways of utilizing a study's results and we can assess the diversity by calculating the average number of items chosen per study. Multiple choice is allowed among five cases: Either I. subsequent study of II. subsequent implementation; III. JICA technical cooperation; IV. national development policy/plan and V. Other. Dividing the total sum of items(270) by the total number of studies with details known(222), we get 1.22 as average. In other words, one study on average is used in 1.22 different ways. This figure is again highly uniform, irrespective of region or sector.

Ways of Utilization

When we look into the details of the ways of utilization, regional and sectoral variations, they emerged with interesting patterns.

On average, "subsequent study/implementation" (I or II) accounts for 64.0%, "JICA technical cooperation" (III) 14.0%, "national development policy plan" (IV) 18.5%, and "other" (V) 25.2% (The figures add up to 122% due to multiple choice).

This overall pattern changes when viewed regionally. In Asia, the "subsequent study/implementation" case shoots up to 72.6%. By contrast the figure is generally below 65% in other regions, where the "other" category becomes much more prominent with a 31.9% average for Middle East, Africa and Middle & South America combined. The corresponding figure for Asia is only 19.7%.

One reason for this marked variation is that "Basic Studies" and "Other Studies", whose utilization is classified as "other"(V), dealing with topography, forestry and fishery resource survey, ground water development etc., were mostly carried out in the three regions. If we took this into account in the calculation, the variation would become a much subdued one. In fact, two other categories, "JICA technical cooperation" and "national development policy/plan", show little regional difference.

Seen sectorally on the other hand, the pattern also fluctuates widely among the sectors, reflecting the difference in the sectors' characteristics and study needs among sectors. If divided into two large sectors, social development and agriculture, forestry and fisheries sectors, "subsequent study/implementation" accounts for 65.7% for the social development sector and 58.9% for the agriculture, forestry and fisheries sectors. By contrast, "JICA technical cooperation" and "national development policy/plan" together account for 29.5% for the former sector and 41.1% for the latter. These difference indicate that studies in the social development sectors are generally oriented to implementation while many agricultural studies are designed as a first step for some technical cooperation projects.

It should be noted that a large portion of "other" cases are found in the social infrastructures sector. This is because a number of "Basic Studies" and "Other Studies" concerned with mapping and resource survey belong to this sector.

3-3 Present Situation of the proposed projects of Group B studies

(Feasibility studies, master plan/feasibility studies and detailed design studies)

1. Analysis by the year of completion

Table 3-i-a,b and c shows the number of projects and present status according to year of completion.

Table 3-i-a Present status of Group B studies by the year of completion
(Social development and agriculture, forestry and fishery sectors)

Present Status	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Completed or in Progress	0 (0.0%)	2 (100.0%)	9 (81.8%)	12 (70.6%)	15 (75.0%)	9 (47.4%)	14 (58.3%)	19 (67.9%)	28 (68.3%)	16 (59.3%)
Completed or in Progress	0 (0.0%)	2 (100.0%)	5 (45.5%)	10 (58.8%)	7 (35.0%)	8 (42.1%)	5 (20.8%)	6 (21.4%)	8 (19.5%)	3 (11.1%)
Partially Completed	0 (0.0%)	0 (0.0%)	3 (27.3%)	1 (5.9%)	4 (20.0%)	1 (5.3%)	6 (25.0%)	6 (21.4%)	14 (34.1%)	5 (18.5%)
Implementing	0 (0.0%)	0 (0.0%)	1 (9.1%)	1 (5.9%)	4 (20.0%)	0 (0.0%)	3 (12.5%)	5 (17.9%)	6 (14.6%)	8 (29.6%)
Processing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (7.1%)	0 (0.0%)	0 (0.0%)
Promoting	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.0%)	0 (0.0%)	1 (4.2%)	4 (14.3%)	4 (9.8%)	3 (11.1%)
Delayed or Suspended	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (17.6%)	1 (5.0%)	2 (10.5%)	2 (8.3%)	3 (10.7%)	4 (9.8%)	3 (11.1%)
Discontinued or Cancelled	0 (0.0%)	0 (0.0%)	2 (18.2%)	2 (11.8%)	3 (15.0%)	8 (42.1%)	7 (29.2%)	2 (7.1%)	5 (12.2%)	5 (18.5%)
Total	0	2	11	17	20	19	24	28	41	27
Realization Rate(%)	0.0	100.0	81.8	70.6	75.0	47.4	58.3	67.9	68.3	59.3

Present Status	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
Completed or in Progress	25 (58.1%)	18 (52.9%)	15 (53.6%)	24 (77.4%)	20 (62.5%)	32 (62.7%)	27 (58.7%)	7 (25.9%)	14 (38.9%)	9 (25.7%)	315 (57.0%)
Completed or in Progress	8 (18.6%)	5 (14.7%)	4 (14.3%)	3 (9.7%)	3 (9.4%)	3 (5.9%)	3 (6.5%)	1 (3.7%)	0 (0.0%)	0 (0.0%)	84 (15.2%)
Partially Completed	9 (20.9%)	9 (26.5%)	6 (21.4%)	7 (22.6%)	4 (12.5%)	8 (15.7%)	2 (4.3%)	1 (3.7%)	0 (0.0%)	1 (2.9%)	87 (15.8%)
Implementing	8 (18.6%)	3 (8.8%)	4 (14.3%)	8 (25.8%)	6 (18.8%)	12 (23.5%)	13 (28.3%)	2 (7.4%)	4 (11.1%)	2 (5.7%)	90 (16.2%)
Processing	0 (0.0%)	1 (2.9%)	1 (3.6%)	6 (19.4%)	7 (21.9%)	9 (17.6%)	9 (19.6%)	3 (11.1%)	10 (27.8%)	6 (17.1%)	54 (9.8%)
Promoting	7 (16.3%)	8 (23.5%)	7 (25.0%)	1 (3.2%)	6 (18.8%)	12 (23.5%)	14 (30.4%)	16 (59.3%)	21 (58.3%)	23 (65.7%)	128 (23.2%)
Delayed or Suspended	7 (16.3%)	3 (8.8%)	4 (14.3%)	3 (9.7%)	5 (15.6%)	7 (13.7%)	4 (8.7%)	4 (14.8%)	1 (2.8%)	3 (8.6%)	59 (10.7%)
Discontinued or Cancelled	4 (9.3%)	5 (14.7%)	2 (7.1%)	3 (9.7%)	1 (3.1%)	0 (0.0%)	1 (2.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	50 (9.1%)
Total	43	34	28	31	32	51	46	27	36	35	552
Realization Rate(%)	58.1	52.9	53.6	77.4	62.5	62.7	58.7	25.9	38.9	25.7	57.0

Table 3-i-b Present status of Group B studies by the year of completion
(Social development sectors)

Present Status	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Completed or in Progress	0 (0.0%)	2 (100.0%)	6 (85.7%)	10 (90.9%)	13 (76.5%)	5 (45.5%)	11 (57.9%)	12 (60.0%)	16 (64.0%)	14 (77.8%)
Completed or in Progress	0 (0.0%)	2 (100.0%)	3 (42.9%)	8 (72.7%)	7 (41.2%)	5 (45.5%)	5 (26.3%)	3 (15.0%)	5 (20.0%)	2 (11.1%)
Partially Completed	0 (0.0%)	0 (0.0%)	2 (28.6%)	1 (9.1%)	4 (23.5%)	0 (0.0%)	4 (21.1%)	5 (25.0%)	10 (40.0%)	4 (22.2%)
Implementing	0 (0.0%)	0 (0.0%)	1 (14.3%)	1 (9.1%)	2 (11.8%)	0 (0.0%)	2 (10.5%)	3 (15.0%)	1 (4.0%)	8 (44.4%)
Processing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.0%)	0 (0.0%)	0 (0.0%)
Promoting	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.3%)	4 (20.0%)	3 (12.0%)	1 (5.6%)
Delayed or Suspended	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.9%)	0 (0.0%)	1 (5.3%)	2 (10.0%)	1 (4.0%)	0 (0.0%)
Discontinued or Cancelled	0 (0.0%)	0 (0.0%)	1 (14.3%)	1 (9.1%)	3 (17.6%)	6 (54.5%)	6 (31.6%)	2 (10.0%)	5 (20.0%)	3 (16.7%)
Total	0	2	7	11	17	11	19	20	25	18
Realization Rate(%)	0.0	100.0	85.7	90.9	76.5	45.5	57.9	60.0	64.0	77.8

Present Status	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
Completed or in Progress	19 (61.3%)	14 (58.3%)	9 (47.4%)	20 (74.1%)	16 (80.0%)	25 (65.8%)	16 (59.3%)	6 (35.3%)	11 (42.3%)	8 (29.6%)	233 (60.3%)
Completed or in Progress	7 (22.6%)	3 (12.5%)	2 (10.5%)	3 (11.1%)	1 (5.0%)	1 (2.6%)	3 (11.1%)	1 (5.9%)	0 (0.0%)	0 (0.0%)	61 (15.8%)
Partially Completed	6 (19.4%)	8 (33.3%)	2 (10.5%)	5 (18.5%)	4 (20.0%)	6 (15.8%)	2 (7.4%)	1 (5.9%)	0 (0.0%)	1 (3.7%)	65 (16.8%)
Implementing	6 (19.4%)	2 (8.3%)	4 (21.1%)	6 (22.2%)	5 (25.0%)	10 (26.3%)	6 (22.2%)	2 (11.8%)	2 (7.7%)	2 (7.4%)	63 (16.3%)
Processing	0 (0.0%)	1 (4.2%)	1 (5.3%)	6 (22.2%)	6 (30.0%)	8 (21.1%)	5 (18.5%)	2 (11.8%)	9 (34.6%)	5 (18.5%)	44 (11.4%)
Promoting	3 (9.7%)	7 (29.2%)	4 (21.1%)	1 (3.7%)	2 (10.0%)	7 (18.4%)	9 (33.3%)	9 (52.9%)	14 (53.8%)	16 (59.3%)	81 (21.0%)
Delayed or Suspended	5 (16.1%)	0 (0.0%)	4 (21.1%)	3 (11.1%)	2 (10.0%)	6 (15.8%)	1 (3.7%)	2 (11.8%)	1 (3.8%)	3 (11.1%)	32 (8.3%)
Discontinued or Cancelled	4 (12.9%)	3 (12.5%)	2 (10.5%)	3 (11.1%)	0 (0.0%)	0 (0.0%)	1 (3.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	40 (10.4%)
Total	31	24	19	27	20	38	27	17	26	27	386
Realization Rate(%)	61.3	58.3	47.4	74.1	80.0	65.8	59.3	35.3	42.3	29.6	60.3

Table 3-i-c Present status of Group B studies by the year of completion
(Agriculture, forestry and fishery sectors)

Present Status	1st Term					2nd Term				
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Completed or in Progress	0 (0.0%)	0 (0.0%)	3 (75.0%)	2 (33.3%)	2 (66.7%)	4 (50.0%)	3 (60.0%)	7 (87.5%)	12 (75.0%)	2 (22.2%)
Completed or in Progress	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (33.3%)	0 (0.0%)	3 (37.5%)	0 (0.0%)	3 (37.5%)	3 (18.8%)	1 (11.1%)
Partially Completed	0 (0.0%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	0 (0.0%)	1 (12.5%)	2 (40.0%)	1 (12.5%)	4 (25.0%)	1 (11.1%)
Implementing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (66.7%)	0 (0.0%)	1 (20.0%)	2 (25.0%)	5 (31.3%)	0 (0.0%)
Processing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (12.5%)	0 (0.0%)	0 (0.0%)
Promoting	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.3%)	2 (22.2%)
Delayed or Suspended	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (50.0%)	0 (0.0%)	2 (25.0%)	1 (20.0%)	1 (12.5%)	3 (18.8%)	3 (33.3%)
Discontinued or Cancelled	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (16.7%)	0 (0.0%)	2 (25.0%)	1 (20.0%)	0 (0.0%)	0 (0.0%)	2 (22.2%)
Total	0	0	4	6	3	8	5	8	16	9
Realization Rate(%)	0.0	0.0	75.0	33.3	66.7	50.0	60.0	87.5	75.0	22.2

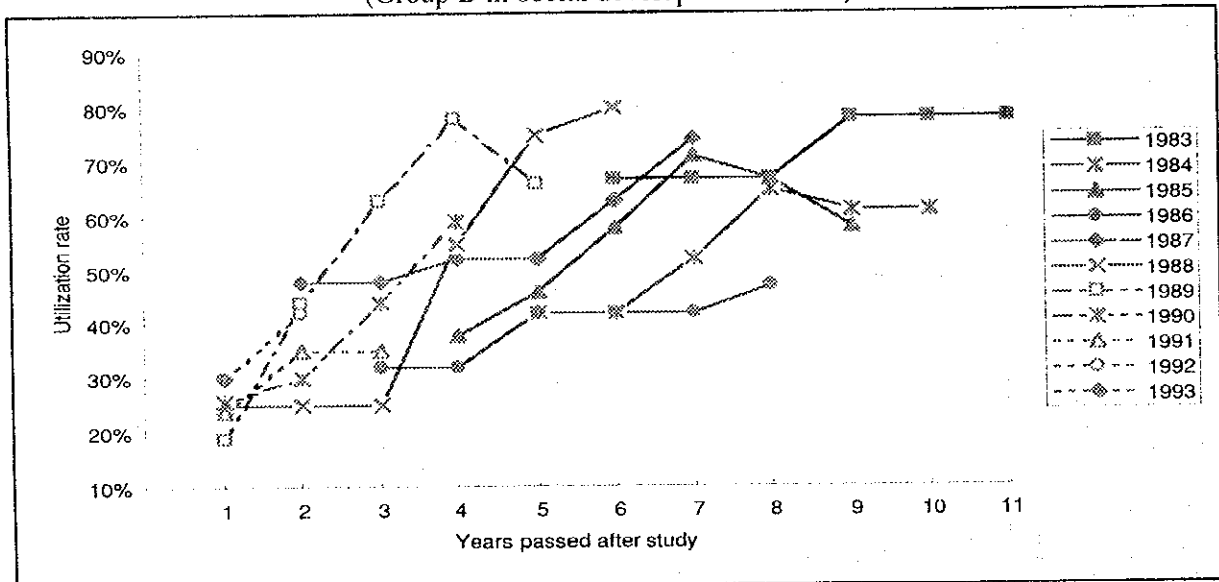
Present Status	3rd Term					4th Term					Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
Completed or in Progress	6 (50.0%)	4 (40.0%)	6 (66.7%)	4 (100.0%)	4 (33.3%)	7 (53.8%)	11 (57.9%)	1 (10.0%)	3 (30.0%)	1 (12.5%)	82 (49.4%)
Completed or in Progress	1 (8.3%)	2 (20.0%)	2 (22.2%)	0 (0.0%)	2 (16.7%)	2 (15.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	23 (13.9%)
Partially Completed	3 (25.0%)	1 (10.0%)	4 (44.4%)	2 (50.0%)	0 (0.0%)	2 (15.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	22 (13.3%)
Implementing	2 (16.7%)	1 (10.0%)	0 (0.0%)	2 (50.0%)	1 (8.3%)	2 (15.4%)	7 (36.8%)	0 (0.0%)	2 (20.0%)	0 (0.0%)	27 (16.2%)
Processing	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (8.3%)	1 (7.7%)	4 (21.1%)	1 (10.0%)	1 (10.0%)	1 (12.5%)	10 (6.0%)
Promoting	4 (33.3%)	1 (10.0%)	3 (33.3%)	0 (0.0%)	4 (33.3%)	5 (38.5%)	5 (26.3%)	7 (70.0%)	7 (70.0%)	7 (87.5%)	47 (28.3%)
Delayed or Suspended	2 (16.7%)	3 (30.0%)	0 (0.0%)	0 (0.0%)	3 (25.0%)	1 (7.7%)	3 (15.8%)	2 (20.0%)	0 (0.0%)	0 (0.0%)	27 (16.3%)
Discontinued or Cancelled	0 (0.0%)	2 (20.0%)	0 (0.0%)	0 (0.0%)	1 (8.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	10 (6.0%)
Total	12	10	9	4	12	13	19	10	10	8	166
Realization Rate(%)	50.0	40.0	66.7	100.0	33.3	53.8	57.9	10.0	30.0	12.5	49.4

Total number of Group B studies is 552 and 57.0% of them, 315 studies, are classified into "Completed or in Progress". To recognize a transition of present status more dynamically, this study focused on the relation between the years passed after the study completion and realization rate. On the basis of past follow-up studies since FY 1989, table 3-j and figure 3-j show the result in social development sectors.

Table 3-j Years passed after study and utilization rate
(Group B in social development sectors)

Years Passed after study	1	2	3	4	5	6	7	8	9	10	11
Fiscal Year of Completion	No. of Studies										
83	18					67%	67%	67%	78%	78%	78%
84	31				42%	42%	52%	65%	61%	61%	
85	24			38%	46%	58%	71%	67%	58%		
86	19		32%	32%	42%	42%	42%	47%			
87	27	48%	48%	52%	52%	63%	74%				
88	20	25%	25%	25%	55%	75%	80%				
89	38	19%	44%	63%	78%	66%					
90	27	26%	30%	44%	59%						
91	17	24%	35%	35%							
92	26	30%	42%								
93	27	30%									
Total	274										

Figure 3-j Years passed after study and utilization rate
(Group B in social development sectors)



Note: The fiscal year of completion is defined as "0 Year". A hyperbolic curve, which passes through the origin, is assumed to approximate the true relation between the Two variables. The non-linear model was transformed to a straight-line (linear) relation by taking inverse of each of the two variables, and OLS (Ordinary Least Squares) estimation was conducted. No weight is attached to the number of projects.

In social development sectors, a regression analysis on these figures provides a regression value and a curve in table 3-j. This result shows that the utilization rate gradually increases after the completion of the study, although this does not show the specific agressive tendency. The trend is contrary to that of the Group A Studies. This is related to the classification method of Group B studies. It implies that it is not until any specific steps are taken to realize the study results that the study is classified into "Completed or in Progress". In another word, Group B studies are realized by the plus points system, while Group B studies are utilized by the plus points system.

Table 3-k Years passed after study and utilization rate
(Group B Studies in agriculture, forestry and fisheries sectors)

Years Passed after study	1	2	3	4	5	6	7	8	9	10	11
Fisical Year											
No. of Studies											
83								33%	33%	22%	22%
84						67%	67%	58%	58%	50%	
85					30%	40%	40%	40%	40%		
86				56%	56%	67%	67%	67%			
87			100%	100%	100%	100%	100%				
88		33%	33%	33%	33%	33%					
89	15%	23%	46%	46%	54%						
90	21%	32%	47%	58%							
91	20%	10%	10%								
92	30%	30%									
93	13%										
Total	116										

Figure 3-k Years passed after study and utilization rate
(Group B Studies in agriculture, forestry and fisheries sectors)

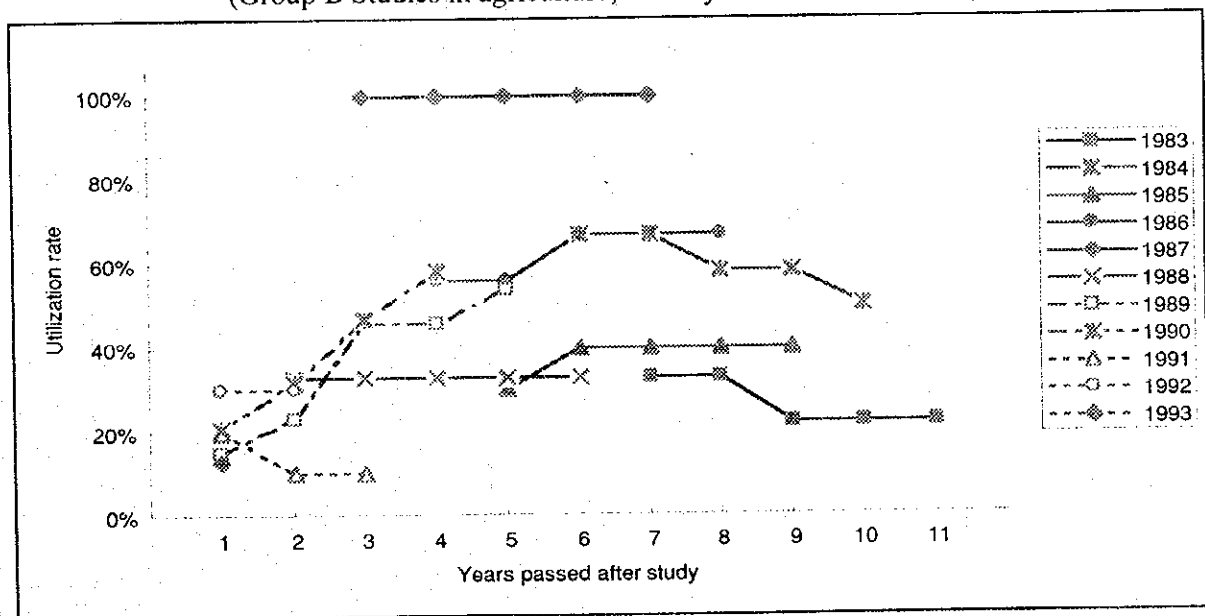


Table 3-k shows the years passed after the completion of the study and realization rate in agriculture, forestry and fisheries sectors. Because of the limited number of the studies in the sector, no regression analysis was conducted. However, there clearly is a trend that the realization rate is the highest in 5-8 years after the completion of the study.

Table 3-1 The realization rate by type of study
(Social development and agriculture, forestry and fisheries sectors)

Present Status	M/P+F/S	F/S	D/D	Total
Completed or in Progress	78 (55.7%)	225 (56.8%)	12 (75.0%)	315 (57.0%)
Completed	6 (4.3%)	72 (18.2%)	6 (37.5%)	84 (15.2%)
Partially Completed	29 (20.7%)	55 (13.9%)	3 (18.8%)	87 (15.8%)
Implementing	22 (15.7%)	67 (16.9%)	1 (6.3%)	90 (16.2%)
Processing	21 (15.0%)	31 (7.8%)	2 (12.5%)	54 (9.8%)
Promoting	46 (32.9%)	79 (19.9%)	3 (18.8%)	128 (23.2%)
Delayed or Suspended	12 (8.6%)	47 (11.9%)	0 (0.0%)	59 (10.7%)
Discontinued or Cancelled	4 (2.9%)	45 (11.4%)	1 (6.3%)	50 (9.1%)
Total	140	396	16	552

Table 3-1 shows the realization rate by the type of study. The rates are between 55.7 to 56.8% in M/P+F/S and F/S. The rate in D/D is 75.0%, which is the highest among all categories. Following two are plausible reasons for the high realization rate in D/D. One is a limited number of D/D. The other is that the feasibility of the projects which are in the stage of D/D has been already confirmed.

2. Analysis by region

Table 3-m Realization rate by region
(Social development and agriculture, forestry and fisheries sectors)

Present Status	Asia			Middle East	Africa	Middle & South America	Oceania	Europe	Plural Countries	Total
	ASEAN	Others	Total							
Completed or in Progress	224 (64.0%)	159 (64.6%)	65 (62.5%)	31 (58.5%)	26 (48.1%)	31 (37.3%)	3 (33.3%)	0 (0.0%)	0 (0.0%)	315 (57.0%)
Completed	50 (14.3%)	34 (13.8%)	16 (15.4%)	11 (20.8%)	11 (20.4%)	11 (13.3%)	1 (11.1%)	0 (0.0%)	0 (0.0%)	84 (15.2%)
Partially Completed	59 (16.9%)	42 (17.1%)	17 (16.3%)	15 (28.3%)	7 (13.0%)	6 (7.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	87 (15.8%)
Implementing	76 (21.7%)	55 (22.4%)	21 (20.2%)	3 (5.7%)	4 (7.4%)	6 (7.2%)	1 (11.1%)	0 (0.0%)	0 (0.0%)	90 (16.2%)
Processing	39 (11.1%)	28 (11.4%)	11 (10.6%)	2 (3.8%)	4 (7.4%)	8 (9.6%)	1 (11.1%)	0 (0.0%)	0 (0.0%)	54 (9.8%)
Promoting	72 (20.6%)	48 (19.5%)	24 (23.1%)	15 (28.3%)	12 (22.2%)	26 (31.3%)	2 (22.2%)	1 (50.0%)	0 (0.0%)	128 (23.2%)
Delayed or Suspended	30 (8.6%)	20 (8.1%)	10 (9.6%)	4 (7.5%)	7 (13.0%)	14 (16.9%)	3 (33.3%)	1 (50.0%)	0 (0.0%)	59 (10.7%)
Discontinued or Cancelled	24 (6.9%)	19 (7.7%)	5 (4.8%)	3 (5.7%)	9 (16.7%)	12 (14.5%)	1 (11.1%)	0 (0.0%)	1 (100.0%)	50 (9.1%)
Total	350	246	104	53	54	83	9	2	1	552

Table 3-m shows the realization rate by region. The rate is the highest in ASEAN six countries. It is 64.6%. These rates are low in Middle & South America and Oceania. The former is 37.3% and the latter is 33.3%. There seem to be some reasons for the high realization rate in ASEAN six countries. High rate of economic growth, a large number of development studies conducted and a large allocation of ODA from Japan are the key reasons. On the contrary, a price reduction of primary products, a burden of accumulated debt, and political instability might have resulted in the low rate in Middle & South America. However, recent economic recovery may cause to raise the rate. In Oceania, it is difficult to generalize the reason for the low rate due to a limited number of studies.

3. Analysis by sector

Table 3-n Realization rate by sector
(Social development and agriculture, forestry and fisheries sectors)

Present Status	Planning & Administration	Public Works and Utilities							Sector Total	Social Infra-structures	Communi-cations & Broad-casting	Commerce Agriculture, Forestry & Fisheries					Total
		Public Utilities	Transportation				Others	Tourism				Agri-Culture	Animal Husban-dry	Forestry	Fisheries		
			Road	Railway	Port	Air Trans- portation & Airport											
Completed or in Progress	2	35	45	17	30	12	13	117	37	38	4	78	0	3	1	315	
	(50.0%)	(66.0%)	(68.2%)	(53.1%)	(56.6%)	(48.0%)	(39.4%)	(56.0%)	(55.2%)	(79.2%)	(80.0%)	(51.0%)	(0.0%)	(60.0%)	(16.7%)	(57.0%)	
Completed	1	5	12	2	7	2	6	29	7	17	2	22	0	0	1	84	
	(25.0%)	(9.4%)	(18.2%)	(6.3%)	(13.2%)	(8.0%)	(18.2%)	(13.9%)	(10.4%)	(35.4%)	(40.0%)	(14.4%)	(0.0%)	(0.0%)	(16.7%)	(15.2%)	
Partially Completed	1	11	10	5	11	1	2	29	10	14	0	22	0	0	0	87	
	(25.0%)	(20.8%)	(15.2%)	(15.6%)	(20.8%)	(4.0%)	(6.1%)	(13.9%)	(14.9%)	(29.2%)	(0.0%)	(14.4%)	(0.0%)	(0.0%)	(0.0%)	(15.8%)	
Implementing	0	7	16	10	8	4	2	40	12	4	0	25	0	2	0	90	
	(0.0%)	(13.2%)	(24.2%)	(31.3%)	(15.1%)	(16.0%)	(6.1%)	(19.1%)	(17.9%)	(8.3%)	(0.0%)	(16.3%)	(0.0%)	(40.0%)	(0.0%)	(16.2%)	
Processing	0	12	7	0	4	5	3	19	8	3	2	9	0	1	0	54	
	(0.0%)	(22.6%)	(10.6%)	(0.0%)	(7.5%)	(20.0%)	(9.1%)	(9.1%)	(11.9%)	(6.3%)	(40.0%)	(5.9%)	(0.0%)	(20.0%)	(0.0%)	(9.8%)	
Promoting	1	15	14	6	10	9	5	44	17	4	0	42	1	1	3	128	
	(25.0%)	(28.3%)	(21.2%)	(18.8%)	(18.9%)	(36.0%)	(15.2%)	(21.1%)	(25.4%)	(8.3%)	(0.0%)	(27.5%)	(50.0%)	(20.0%)	(50.0%)	(23.2%)	
Delayed or Suspended	1	2	2	2	6	2	8	20	6	3	0	24	0	1	2	59	
	(25.0%)	(3.8%)	(3.0%)	(6.3%)	(11.3%)	(8.0%)	(24.2%)	(9.6%)	(9.0%)	(6.3%)	(0.0%)	(15.7%)	(0.0%)	(20.0%)	(33.3%)	(10.7%)	
Discontinued or Cancelled	0	1	5	7	7	2	7	28	7	3	1	9	1	0	0	50	
	(0.0%)	(1.9%)	(7.6%)	(21.9%)	(13.2%)	(8.0%)	(21.2%)	(13.4%)	(10.4%)	(6.3%)	(20.0%)	(5.9%)	(50.0%)	(0.0%)	(0.0%)	(9.1%)	
Total	4	53	66	32	53	25	33	209	67	48	5	153	2	5	6	552	

Table 3-n shows the realization rate by sector. Within the sectors which have more than 20 studies, some sectors such as public works, road, and telecommunication-broadcasting show the realization rates higher than 60%. Especially, the rate in telecommunication-broadcasting sector reaches the highest of 80%.

4. Details of the studies classified as "Completed or In progress"

This section examines details of the current status of 290 studies that have been classified as "Completed or in progress" among the total of 552 Group B Studies. First of all, most of the studies classified in the status of "Completed or in Progress" are ascertained of their procurement of fund for

project implementation. Once the procurement of fund is ascertained through various channels such as OECF loans and other loans from development banks and grant aids from JICA and other donors, the projects are normally expected to progress smoothly to the subsequent stages of "Processing", "Implementing", "Partially Completed", and "Completed" in sequence. Though only exceptionally, there are some projects that are classified in the status of "Completed or in Progress" but do not have their procurement of fund confirmed. These projects are ascertained of high possibility of realization for some reason. For example, after the completion of the survey of the "Agricultural Water Development Project on Chantaburi River Basin" in Thailand, detailed design was conducted and the proposed projects were incorporated into the 7th National Plan. After an environmental assessment is conducted this year (FY 1993), construction is planned to start with domestic-fund of 1.72 million bahts.

The above is a general description of the projects in status of "Completed or in Progress". In general those projects which are ascertained of procurement of funds are to be classified in this status.

Although the status of "Completed or in Progress" used to be further divided into three sub-status of "Completed", "Implementing" and "Processing", another sub-status called "Partially completed" was added this year. That is, those projects which have been implemented and completed only partially but used to be classified into either "Completed" or "Implementing" before are now classified into this new category to conform better with their actual situation. In line with this new classification, 87 studies have been modified their present status of proposed projects and come to fall into the status of "Partially Completed". Taken a close look at, it is observed of multiple stages or a package of various individual projects. Typical examples are given below.

[E.g. 1] In the "Lower-Moshi Agricultural Development Projects" in Tanzania, the implementation of the proposed projects was planned to consist of several agricultural development projects in different areas. Later on the project for River Rau scheme, the first priority area, was carried out with OECF loan. The second priority was given to Miwaleni Scheme, and the local government made a request for a Japanese grant aid to the Japanese Embassy. However the project has not been carried out, and there is still no activity regarding the area of the third and fourth priority.

[E.g. 2] The "Sewerage and Drainage System Project" in Malaysia was proposed as composed of five stages, namely Phase I through Phase V. The construction of phase I was completed in 1985 with domestic fund from the federal government. However the implementation of phase II-V was terminated due to the difficulty in acquiring the large amount of investment fund required.

The above studies are thus classified as "Partially Completed". The results of the examination of the studies in the status of "Completed or in Progress" are summarized as follows.

1) Realization rate

The number of the studies in the status of "Completed or in Progress" as the percentage of the total number of the projects in Group B studies is called as "Realization rate". As a result of the FY1993 Follow-up Study, 315 out of 552 Group B studies have turned out to be in the status of "Completed or in Progress", giving a realization rate of 57.1%. There has been a rise of 1.1% from 56.1% in FY1993.

2) Major types of funding

With regard to types of funding, it is found that the OECF loan is the most important source of fund as expected. However there is an tendency towards more use of domestic fund and grant aid.

3) With regard to region and/or sector, the following specific characteristics are observed.

I. Asian countries, six countries in ASEAN in particular, have received the largest portion of Japanese financial cooperation both in terms of the amount invested and the number of projects. These countries have carried out large scale projects in such sectors as transportation(road, port, railway and air transportation & airport), social infrastructures(water resource development, river & erosion control), communication & broadcasting with OECF loans. However total amount of loans received varies across countries.

II. In Africa, small scale projects in agriculture, forestry and fisheries sectors, particularly in agriculture sub-sectors such as irrigation have been implemented mostly with Japanese grant aid.

III. In Central and South America, due to the debt crisis in the 80s, there was an interruption to the inflow of foreign funds Hence a lot of projects ranged over all sectors have been delayed.

IV. In Near Middle-East, projects have been implemented mainly by domestic funding from the income of petroleum sales.

In order to facilitate the implementation of the proposed projects it is crucial that the projects are conformed to the development objective and policies of the country and receive high priority among alternative development programs/projects. It is most desirable that each development study propose projects with appropriate scale and design during the stage of the survey and a prompt step toward implementation be taken after the survey is completed(This is especially important that this step takes place within two years after the completion of the survey).

3-4 Present Status of the Group A & Group B Studies

The 66.1% (537/813 studies) of 813 of Group A & Group B studies have been utilized toward the realization.