

## Indonesia

### Professional Human Resource Development Project (II)

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Field Survey: September 2006

#### 1. Project Profile and Japan's ODA Loan



National map of Indonesia



Students participating in an  
ex-post evaluation

#### 1.1 Background

Since the 1980s, Indonesia has carried out structural adjustments on the basis of a development policy initiated by the central government, thereby enabling Indonesia to experience, relatively smoothly, the initial phase of economic growth. In particular, during the five-year period from 1990 to 1995, the economy grew at an annual average rate of nearly 8% and GDP per capita increased from 612 US dollars to 827 US dollars while inflation on average rose 7.6%<sup>1</sup>. During this period, the economy made the switch from one centered on agriculture to one centered on industry including manufacturing.

Recognizing the indispensability of human resource development for economic growth, in its 5th Five-Year National Development Plan (1989–1993), the government of Indonesia set human resource development as a priority issue. However, accompanying the economic growth, in addition to making Indonesian industry more sophisticated and further strengthening its science and technology, Indonesia has had to face the challenge of strengthening its policy-making and management skills to be able to implement measures for dealing with the principal issues facing Indonesia by promoting deregulation and decentralization. Consequently, in its 6th Five-Year National Development Plan, launched in 1994, the government continued to adopt human resource development, especially the development of human resources with extensive knowledge and expertise

<sup>1</sup> Source: World Bank

in the field of science and technology as well as in policy making and implementation, as one of the main policy issues facing the central government.

In Indonesia, the country achieved over 100% as the gross primary school enrolment ratio by 1980. In higher education, which was expected to play a principal role in developing professional human resources, school enrollment stood at 540,000 (GER3.8%) as of 1980. But by 1990, it had exceeded 1.7 million (GER9.5%) and by 1995, 2.3 million (GER11.3%).<sup>2</sup> During this period, because of budgetary constraints, the number of state-run universities remained relatively constant.<sup>3</sup> Thus, most of the increase in student enrollment in higher education can be attributed to an increase in the number of privately-run higher education institutions. However, since most of the increase had been at the undergraduate level, the opportunity to enroll in masters and doctoral programs at both state and private universities remained limited. In addition, while a number of high-quality colleges and universities had been established, the overall quality of higher education remained so poor that it failed to provide the basis for the human resource development policy the government had been promoting. This forced the government to implement its human resource development policy through the country's study abroad program with the cooperation of international organizations.

It is under these circumstances that JBIC has been supporting the government of Indonesia's efforts to dispatch students abroad by extending loans to the "Science and Technology Manpower Development Program (1988–1997)" and the "Professional Human Resource Development Project (I) (1990–1998)." As the 6th Five-Year National Development Plan demonstrates, the government continues to place human resource development at the top of its list of priorities, and JBIC, capitalizing on its experience and performance in assisting programs that support students studying abroad, carried out this project with a view to further improving Indonesia's efforts at human resource development.

## 1.2 Objective

The project objective was, continuing from phase I, to nurture human resources with the extensive knowledge and technical expertise required to play a key role in government agencies by providing government personnel with opportunities to study<sup>4</sup> or undergo short-term training abroad (mainly in Japan) and in Indonesia, thereby contributing to the economic growth of Indonesia.

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<sup>2</sup> Source: World Bank's EdStats (web edition)

<sup>3</sup> For example, in 1985 there were 30 universities, which were under the supervision of the Ministry of National Education, as opposed to 31 in 1995. During the same period, the number of privately-run universities rose from 131 to 251.

<sup>4</sup> In this report, "study abroad" and "study in Indonesia" mean to study at academic institutions to obtain BA, MA, MS, or Ph.D. degrees.

### 1.3 Borrower/Executing Agency

The Republic of Indonesia / Three agencies: National Development Planning Agency (BAPPENAS), Ministry of Finance (MOF), and Agency for Assessment and Application of Technology (BPPT)

### 1.4 Outline of Loan Agreement

Loan Amount / Loan Disbursed Amount	8.5 billion yen / 6.776 billion yen	
Exchange Notes / Loan Agreement	December 1995 / December 1995	
Terms of Conditions	Main	Consultant
-Interest Rate	2.5%	2.3%
-Repayment Period (Grace Period)	30 years (10 years)	30 years (10 years)
-Procurement	General untied	Partially untied
Final Disbursement Date	December 2004	
Main Contractor (Above 1 billion yen per contract)	None	
Consultant Services (Above 100 million yen per contract)	Japan-Indonesia Science and Technology Forum, etc.	

## 2. Evaluation Result ( Total Rating: B )

### 2.1 Relevance ( Rating : A )

#### 2.1.1 Relevance at the time of appraisal

Continuing the policy it adopted in the 5th Five-Year National Development Plan (1989–1993), in the 6th Five-Year National Development Plan (REPELITA VI) (1994–1999), the government of Indonesia defined human resource development as a major policy concern. In particular, Indonesia's central government agencies regarded as their priority challenges (i) the development of human resources capable of playing a key role in the design and implementation of new policies including those for promoting deregulation and utilizing private sector funds and (ii) the training of researchers in the field of science and technology. In 1994, in an effort to improve the skills of specialist, technical, and managerial personnel through the effective use of training programs in Indonesia and abroad, the government issued a number of decrees including Decree No. 14 (Education and Training of Public Officials), Decree No. 15 (Assignment of Public Officials to Structural Positions), and Decree No. 16 (Functional Positions of Public Officials). In addition, because of the underdevelopment of institutions of higher education and training facilities in Indonesia, promoting study abroad programs were considered essential.

Understanding the continuing importance of developing human resources as expressed in the 5th and 6th Five-Year National Development Plans, the government of Indonesia

has been implementing study abroad and study in Indonesia programs, which have received support from donors such as the World Bank's "Science and Technology Training Project" (Ln. 2599) and PHRDP Phase I (Ln. 3134), while JBIC has been implementing two study abroad and study in Indonesia projects for government personnel: "Science and Technology Manpower Development Program (1988–1997)" and "Professional Human Resource Development Projects (I) (1990–1998)." Inheriting these programs, this project was to nurture human resources with the extensive knowledge and technical expertise required to play a key role in government agencies by providing government personnel opportunities to study and undergo short-term training abroad (mainly in Japan) as well as in Indonesia. As such, the project had a high degree of priority.

#### 2.1.2 Relevance at the time of evaluation

The Medium-term National Development Plan (PROPENAS) (2000–2004) aimed at realizing "good governance," including control of corruption, decentralization, public sector improvement, and economic deregulation. The current Medium-term National Development Plan (RPJM) (2004–2009), which has set as its goal the creation of an efficient government that can fight corruption, has expertise and takes responsibility. In particular, RPJM strives to enhance the ability and expertise of civil servants by implementing a human resource management program in government agencies.<sup>5</sup> To realize these goals, cultivating administrative officials with highly specialized knowledge and technical expertise in vital sectors is a task that is increasingly urgent.

In its 2007 annual action plan (RKP), RPJM regards bureaucratic reform as a priority issue and advocates enhancing the ability of civil servants. On the other hand, in addition to promoting economic growth, since the end of the 1990s, the government has initiated a series of administrative and financial measures to accelerate the process of decentralization including the passage of a number of laws in 2004: Medium-term National Development Plan System Law (Law No. 25), Local Governance Law (Law No. 32), and Financial Decentralization Law (Law No. 33). As a consequence, realizing deregulation and decentralization has emerged as a pressing issue for the government. In meeting this new challenge, government administrators with extensive knowledge and technical expertise remain as important today as ever.

To promote the functional improvement of the public sector, including the government, Indonesia has consistently placed importance on developing human resources with high levels of expertise and has, from the time of appraisal to the present, included human

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<sup>5</sup> This program includes reconsidering the scale of civil servants, improvement of the expertise of civil servants, improvement of the quality of education and training of civil servants.

resource development among its national development plans. The “Professional Human Resource Development Project (III)” (conclusion of an LA in March 2006), the inheritor of this project, is being implemented as an ODA yen-loan project to provide government personnel opportunities to study abroad and in Indonesia. In that project, the government also continues its program of providing government personnel opportunities to study or undergo training in Indonesia. Given the fact that the individual issues related to decentralization and deregulation have begun to take form, the relevance of this project, which aimed to improve the quality of government personnel by providing them with opportunities to study or undergo short-term training abroad (mainly in Japan) and in Indonesia, continues to be recognized. This is backed up by the comments of respondents of the beneficiary surveys of the three executing agencies that were conducted as part of the evaluation of this project.

While many new colleges and universities have been built as Indonesia’s higher education institutions and training facilities mostly in regional communities, they are still not developed enough to meet the new challenges such as the decentralization facing Indonesia today. On the other hand, thanks to the reform of higher education, a number of institutions in Indonesia have developed into high quality colleges and universities. It can be said that this project, which provided human resource development that combined study and training abroad and in Indonesia, responded to the country’s needs and suited the actual conditions.

The Asian economic crisis that erupted in the second half of 1997, that is, when this project was being implemented, had dire consequences for the Indonesian economy, resulting in the toppling of the Suharto regime that had ruled the country for nearly 30 years. The economic crisis caused great damage to the Indonesian economy including a precipitous drop in the value of the rupiah, a debt servicing crisis, inflation, and unemployment. However, the government took steps to recover from the damage by improving its ability to govern by, among other things, promoting democratization, wiping out the structure of corruption, and after 2001, transferring to local governments a considerable amount of power in making decisions regarding administrative and fiscal matters. After this project was launched, and as the government came under increasing pressure to deal with the variety of political and economic issues that came to the surface as a result of such drastic changes, the importance of developing human resources with extensive knowledge and expertise to be able to contribute to the efforts that were being made to deal with such issues gained increasing recognition.

## 2.2 Efficiency ( Rating : B )

### 2.2.1 Outputs

2.2.1.1 Past records of study abroad and training

Under this project, a total of 848 students, nearly double the number originally planned (448), were sent abroad or to some area of Indonesia to acquire a college degree. The number of students that were actually sent abroad (524) exceeded the number originally planned (308) by about 70%. As is shown in Tables 1 and 2, for all three executing agencies — BAPPENAS, the MOF, and BPPT— the number of students actually sent abroad exceeded the number originally planned. The main reason is that the cost of sending one student to Japan turned out to be lower than expected. The excess funds were used to send additional students to study abroad.

The number of students who actually studied abroad/in Indonesia for a degree exceeded the number originally planned (30–40) in the case of undergraduate programs, and (299–700) in the case of master’s programs. Although they were not included in the original plan, BAPPENAS sent 287 of its most promising local administrative officers to areas within Indonesia. For doctoral programs, both BAPPENAS and the MOF dispatched more students than they originally planned. In the case of BPPT, the agency discontinued sending students to areas within Indonesia and instead sent them to Japan within its budget by applying the funds made available by the discontinuance. Consequently, as a whole, the total number of students the agency sent for a doctoral program turned out to be fewer than the number the agency originally planned (119–108), the number of students the agency sent abroad exceeded the number it originally planned to send. Additionally, with the exception of students who were sent to countries other than Japan because the courses they wanted to major in were not available in Japan (12 to Australia, 6 to the U.S., and 4 to the U.K.)<sup>6</sup>, all the students dispatched to Japan enrolled in Japanese universities and higher education institutions.

Table 1: Original Plan of Study Abroad / Training Programs

	Overseas (all in Japan)			In Indonesia			Total					
	Degree Objective		Training	Degree Objective		Training	Degree Objective		Training			
	No. of stud.	Degree obtained		No. of stud.	Degree obtained		Total no. of stud.	Degree obtained				
BAPPENAS	78	B.A./B.S.	0	350	0	B.A./B.S.	0	3,400	78	B.A./B.S.	0	3,750
		M.A./M.S.	71			M.A./M.S.	0			M.A./M.S.	71	
		Ph.D.	7			Ph.D.	0			Ph.D.	7	
MOF	67	B.A./B.S.	14	25	0	B.A./B.S.	0	0	67	B.A./B.S.	14	25
		M.A./	48			M.A./	0			M.A./	48	

<sup>6</sup> As for the destination of overseas students, in the discussion leading up to the conclusion of the loan agreement, as a general rule, Japan was the country where students studied. However, if their needs could not be met in Japan, as an exception, they were allowed to study elsewhere. The actual courses that they took included aeronautical engineering, material science, health physics, and information technology. There was one student dispatched by the MOF and 21 students dispatched by BPPT.

		M.S.				M.S.				M.S.		
		Ph.D.	5			Ph.D.	0			Ph.D.	5	
BPPT	163	B.A./ B.S.	16	14	140	B.A./ B.S.	0	0	303	B.A./ B.S.	16	14
		M.A/ M.S.	80			M.A/ M.S.	100			M.A/ M.S.	180	
		Ph.D.	67			Ph.D.	40			Ph.D.	107	
<b>Total</b>	<b>308</b>	<b>B.A./ B.S.</b>	<b>30</b>	<b>389</b>	<b>140</b>	<b>B.A./ B.S.</b>	<b>0</b>	<b>3,400</b>	<b>448</b>	<b>B.A./ B.S.</b>	<b>30</b>	<b>3,789</b>
		<b>M.A/ M.S.</b>	<b>199</b>			<b>M.A/ M.S.</b>	<b>100</b>			<b>M.A/ M.S.</b>	<b>299</b>	
		<b>Ph.D.</b>	<b>79</b>			<b>Ph.D.</b>	<b>40</b>			<b>Ph.D.</b>	<b>119</b>	

Table 2: Study Abroad (including Indonesia) / Training Results

	Overseas (in parentheses, other than Japan)					In Indonesia					Total							
	Degree Obtained				Training	Degree Obtained				Training	Degree Obtained				Training			
	No. of Students		Degree Obtained	No Degree		No. of Students		Degree Obtained	No Degree		Total No. of Students		Degree Obtained	No Degree				
BAPP ENAS	117	BA/ BS	0	0	0	282	287	BA/ BS	0	0	0	2,130	404	BA/ BS	0	0	0	2,412
		MA/ MS	105	105	0			MA/ MS	287	287	0			MA/ MS	392	392	0	
		Ph.D.	12	10	2			Ph.D.	0	0	0			Ph.D.	12	10	2	
MOF	137	BA/B S	0	0	0	0	12	BA/ BS	0	0	0	0	149	BA/ BS	0	0	0	0
		MA/ MS	131 (1)	130 (1)	1			MA/ MS	12	12	0			MA/ MS	143 (1)	142 (1)	1	
		Ph.D.	6	5	1			Ph.D.	0	0	0			Ph.D.	6	5	1	
BPPT	270	BA/B S	40 (5)	39 (5)	1	0	25	BA/ BS	0	0	0	0	295	BA/ BS	40 (5)	39 (5)	1	0
		MA/ MS	140	138	2			MA/ MS	25	24	1			MA/ MS	165	162	3	
		Ph.D.	90 (16)	88 (16)	2			Ph.D.	0	0	0			Ph.D.	90 (16)	88 (16)	2	
<b>Total</b>	<b>524</b>	<b>BA/ BS</b>	<b>40 (5)</b>	<b>39 (5)</b>	<b>1</b>	<b>282</b>	<b>324</b>	<b>BA/ BS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,130</b>	<b>848</b>	<b>BA/ BS</b>	<b>40 (5)</b>	<b>39 (5)</b>	<b>1</b>	<b>2,412</b>
		<b>MA/ MS</b>	<b>376 (1)</b>	<b>373 (1)</b>	<b>3</b>			<b>MA/ MS</b>	<b>324</b>	<b>323</b>	<b>1</b>			<b>MA/ MS</b>	<b>700 (1)</b>	<b>696 (1)</b>	<b>4</b>	
		<b>Ph.D.</b>	<b>108 (16)</b>	<b>103 (16)</b>	<b>5</b>			<b>Ph.D.</b>	<b>0</b>	<b>0</b>	<b>0</b>			<b>Ph.D.</b>	<b>108 (16)</b>	<b>103 (16)</b>	<b>5</b>	

Note: The actual numbers are based on data obtained from the executing agencies at the time of ex-post evaluation. Of the students dispatched by BPPT to Japan, 3 earned bachelor's degrees, 8 earned master's degrees, and 4 earned doctoral degrees with scholarships they obtained from other institutions being sent to study in Japan.

Most of the students in doctoral programs who were sent from BAPPENAS majored in economics or business administration. Those who enrolled in master's programs mainly majored in fields such as international relations, international development, development planning, and development studies. In the case of students who were sent from the MOF, most of the students in doctoral programs majored in economics or business administration, while those enrolled in master's programs majored mainly in international-related studies (international administrative sciences, international development, or international relations), public policy, or the like. Whether on the

graduate or undergraduate level, the bulk of the students sent from BPPT majored in engineering technology or in some other scientific fields (Table 3). Although comparisons cannot be made because the number of students that the three executing agencies planned were not selected in terms of their majors, it can be said that the majors these students actually took corresponded to the areas of expertise associated with each of the three executing agencies that dispatched them.

Table 3: Number of Students Who Studied in Japan by Major

	Economics/ Business administration	Development	International	Public administration	Environment	Tax	Engineering	Other scientific field	Statistics	Other	Total
<b>BAPPENAS</b>											
Ph.D.	7	0	1	1	0	0	0	0	0	3	12
M.A./M.S.	8	23	46	14	8	0	0	0	0	6	105
B.A./B.S.	0	0	0	0	0	0	0	0	0	0	0
<b>MOF</b>											
Ph.D.	4	0	1	0	0	1	0	0	0	0	6
M.A./M.S.	8	10	80	23	0	8	0	0	0	1	130
B.A./B.S.	0	0	0	0	0	0	0	0	0	0	0
<b>BPPT</b>											
Ph.D.	0	0	0	0	0	0	51	23	0	0	74
M.A./M.S.	0	0	0	0	0	0	84	40	8	8	140
B.A./B.S.	0	0	0	0	0	0	26	9	0	0	35
<b>Total</b>	<b>27</b>	<b>33</b>	<b>128</b>	<b>38</b>	<b>8</b>	<b>9</b>	<b>161</b>	<b>72</b>	<b>8</b>	<b>18</b>	<b>502</b>

On the other hand, the actual number of trainees (282 abroad, 2,130 in Indonesia) was fewer than the number originally planned (389 abroad, 3,400 in Indonesia). The number of personnel who received training in Indonesia decreased significantly because BAPPENAS, the agency in charge of all domestic training programs, changed the plan so that most of the training cost (for 2,800 trainees) would be covered by money drawn from the government budget and by money borrowed from the World Bank. However, to address the issue of decentralization, which was implemented in earnest while this project was being implemented, BAPPENAS subsequently expanded the number of participants in its training program. As a result, from BAPPENAS two thirds of the planned number of personnel actually participated in the training programs in Indonesia. In addition, short-term training abroad was curtailed by all three executing agencies. Indeed, except for the BAPPENAS component, there were no personnel sent abroad for short-term training. The reason is that the program did not clearly indicate a favorable cost-to-benefit ratio, so that in the middle of the project, the training program was basically shifted to domestic training. Consequently, the number of personnel who actually participated in the training program was about 30% less than was originally planned.

### 2.2.1.2 Consulting services

Approximately 10% more hours of consulting services (1,114.5 M/M) were provided than was originally planned (999 M/M). The main reason is that the one-year extension of the period for implementing the project (which will be discussed later) forced a corresponding extension in the number of hours of consulting services that were provided. Table 4 shows the details of the consulting services provided.

Table 4: Comparison of Consulting Services at the Time of Planning and Actual Services Provided

TOR	Type of consultant	At the of time of planning M/M (Employment executing agency M/M)	Actual M/M (Employment executing agency M/M)	Explanation and reasons for the change
Operation of training	International	<b>135M/M</b> OFUTET: 90M/M BPPT: 35M/M	<b>90M/M</b> OFUTET: 90M/M	Since a local consultant performed the services on behalf of BPPT, there is no record of consulting services actually provided by BPPT
Training coordination and financial control of study abroad program	Local	<b>522M/M</b> OFUTET: 180M/M MOF: 174M/M BPPT: 168M/M	<b>636.5M/M</b> OFUTET: 176.5M/M MOF: 92M/M BPPT: 368M/M	In the middle of the project, the MOF canceled the contract it had with a local consultant, after which it implemented its own coordination and supervision carried out mainly by MOF staff members with counseling experience. Since BPPT strengthened its coordination service and had to employ an IT consultant, which was not in the original plan, M/M increased.
Study abroad support service (procedure for dispatching [accepting] students, payment of tuition, allowance, etc.) (EEO)	Local	<b>342M/M (EEO)</b> BAPPENAS: 162 M/M MOF: 96 M/M BPPT: 84 M/M	<b>388M/M(EEO)</b> BAPPENAS: 186 M/M MOF: 100 M/M BPPT: 102 M/M	Extension of the period accompanying the extension of the time for implementing the project.
<b>Total</b>		<b>999 M/M</b>	<b>1114.5 M/M</b>	
<b>International</b>		<b>135 M/M</b>	<b>90 M/M</b>	
<b>Local</b>		<b>864 M/M</b>	<b>1024.5 M/M</b>	

In this project, which was implemented by three executing agencies, coordination of project implementation was carried out by the coordinating agency OFUTET established within BAPPENAS. In addition, consultants were hired within the MOF and BPPT to advise on their respective operations. Moreover, along with the BPPT, a number of independent corporations participated in the BPPT component, including the Indonesian National Nuclear Energy Agency (BATAN), the Indonesian Institute of Sciences (LIPI), and the Central Bureau of Statistics (BPS). Therefore, it was deemed necessary to provide

far more consulting services than originally planned or to provide IT consulting services that were not included in the original plan. Thus, to reinforce the coordination and supervision services, in the case of local consultants within BPPT, more than double the amount of time had to be devoted than was planned to provide the required consulting services.

Additionally, in this project, a consultant (EEO) was hired, among other things, to help students decide where they should study and to monitor their activities while in Japan. Because the project period was extended, the term of the contract with EEO was also extended.

### 2.2.2 Project period

The project period at the time of planning was supposed to be from December 1995 to October 2003, but actually the project lasted from December 1995 to October 2004 (13% longer than the initial plan). The reasons for the delay are as follows. For BPPT until 1998 and for BAPPENAS and for the MOF until 2000, all three executing agencies achieved their numerical goals for sending students to study abroad or in Indonesia. After that, in response to the progress that had been made in front loading and cutting back on expenses, the agencies reviewed the budget and the implementation plan and decided to increase the number of personnel to be dispatched abroad. As a result, the period for providing consulting services was extended, which in turn delayed the completion of the project for 12 months from the original plan.

### 2.2.3 Project cost

The total cost of the project was significantly reduced. The actual cost was 6.917 billion yen against 10.034 billion yen of the original cost, for a reduction of about 30%. As for the ODA yen-loan portion, the actual cost was 6.776 billion yen against 8.5 billion yen of the original cost, which was a reduction of about 20%. There were two reasons for this. First, the cost involved in overseas study (mostly in Japan) and in training was reduced (5,614 million yen – 5,177 million yen). In terms of cost per student, this meant a reduction of 15% to 45%. The reduction was made possible because, despite the fact that at the time of appraisal most students were expected to attend private universities, which charge more tuition than do national and public universities, nearly 70% of the students attended national and public universities, and because there was no significant rise in overseas prices during the project period.

The second reason for the reduction is that, with the economic crisis of 1997 as the watershed event, the Indonesian rupiah lost more than a third of its value, thus drastically reducing the cost of the domestic currency against the yen and, combined with the

reduction of the project cost, the loan amount was scaled down by about 20% from the amount allocated in the original plan.

## 2.3 Effectiveness ( Rating: A )

### 2.3.1 Number of participants earning a degree<sup>7</sup>

Considerably more students earned degrees than were originally expected (Table 5). A total of 838 students earned degrees (515 earned theirs abroad) as opposed to 448 who, at the time of appraisal, were expected to earn degrees (308 were expected to earn theirs abroad). For all three executing agencies, the number of students who earned degrees far outnumbered the goal set at the time of planning. Only 9 students who studied abroad failed to earn degrees, and only 1 who studied in Indonesia failed to earn a degree. So the rate of degree acquisition was extremely high. The reason is twofold: (i) in Japanese universities, especially in the master's programs, students rarely withdraw before earning their degrees due to failure in their academic performance. Thus the number of students earning their degrees under this project is not particularly high; and (ii) the three executing agencies require candidates for study in Japan and other countries to go through a rigorous selection process (BAPPENAS selected only 1 out of 6 candidates, MOFA 1 out of 14, and BPPT 1 out of 10), which means that the elite among government personnel in Indonesia were selected to study abroad.

Table 5: Number of Students Earning a Degree

	Overseas				In Indonesia			
	Degree Objective			Training	Degree Objective			Training
	No. of Stud.	Degree Earners	Acquisition rate		No. of Stud.	Degree Earners	Acquisition rate	
BAPPENAS	117	115	98.3%	282	287	287	100%	2,130
MOF	137	135	98.5%	0	12	12	100%	0
BPPT	270	265	98.1%	0	25	24	96%	0
Total	524	515	98.3%	282	324	323	99.7%	2,130

### 2.3.2 Personnel affairs for students after they return home

Developing countries are often faced with the problem of a brain drain whereby badly needed human resources decide not to return home to their posts but to stay in the country they were sent to study. In this project, at least in the BAPPENAS and MOF components, there were no such examples. The one doctoral student dispatched by the MOF shown in Table 6 did not return home to his post because he died before completing his course. If this case were excluded, the return rate would be 100%.

<sup>7</sup> Meanwhile, those who participated in short-term training programs presumably did not aim for a degree; instead all completed the training course.

Most of the participants in the BAPPENAS and the MOF were personnel with college degree when the project started. So when they returned home after completing their graduate courses (either master's or doctorate) in a foreign country or in Indonesia, they resumed working at the posts they held before they were dispatched and advanced through the position classification scheme for college graduates. Incidentally, there have been reports that at the MOF those with degrees have an advantage in their career development.

Even in the case of participants from BPPT, since most of those who were sent to study abroad and in Indonesia were hired as high school graduates,<sup>8</sup> when they returned home, although the degree would assist them to earn points for promotion, they still resumed work at the same rank they held when they were dispatched and advanced through the position classification scheme for high school graduates. In other words, as is the case with personnel of BAPPENAS and the MOF with college degrees, even if personnel of BPPT with high school diplomas earned doctorates, under this project, there would be a gap in the position classification scheme between these two groups of participants after they returned home. Furthermore, there were many cases where, upon returning home, participants in this project were assigned to areas of expertise in which they had no previous experience. Also, there were reports that the agencies that dispatched the personnel abroad under this project failed to provide an environment where those returning participants could continue engaging in their graduate level research activities. In many cases, these negative factors combined to force participants to quit their posts or continue to remain at their posts only in appearance while actually doing work other than that which their positions required them to do.

However, in BAPPENAS, the MOF, and BPPT alike, it is possible for personnel to be promoted, say, to a managerial position under a system of promotion other than the position classification scheme based on their educational backgrounds at the time they were hired by these agencies. Thus it is possible for graduates of the project to raise their skills and expertise and improve their job performance by studying abroad and in Indonesia, which in turn will contribute to their career development.

Meanwhile, students studying with public funds are required to work at their agencies for a period of twice the time they spend studying plus one year. There is a rule which states that if they fail to meet this requirement, they will be forced to pay a penalty. Up to now, there have been only a few cases of violation of this rule, although the actual amount of penalty paid has not been reported.

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<sup>8</sup> At that time, BPPT adopted a human resource development strategy whereby BPPT hired promising high school graduates as future researchers and dispatched them abroad to study in an undergraduate, masters, or doctoral program.

Table 6: Number of Students Who Returned to Their Post after Studying Abroad

		Ph.D.	M.A./M.S.	B.A/B.S.	Total
BAPPENAS	Students	12	105	0	117
	Returning to own post	12	105	0	117
	Percentage returning to own post	100%	100%	-	100%
MOF	Students	6	131	0	137
	Returning to own post	5	131	0	136
	Percentage returning to own post	83%	100%	-	99%
BPPT	Students	74	140	35	249
	Returning to own post	68	136	33	237
	Percentage returning to own post	92%	97%	94%	95%

Note: The BPPT portion applies only to students who studied in Japan.

### 2.3.3 Improving the skills of government personnel

In a beneficiary survey conducted at the time of the ex-post evaluation, participants were asked to evaluate their own experience. Specifically, all beneficiaries (816 who studied in Japan or in Indonesia) were asked to rate, on a scale of 1 to 4, their experience in terms of skill-raising and usefulness of the skill in performing their duties at work. The items in the questionnaire were categorized into three groups: “knowledge,” “skills and ability to think” and “attitude.” In the “attitude” group, respondents were asked questions designed to determine their sense of responsibility, morality, discipline, self-confidence, goal orientation, spirit of challenge, curiosity, etc. The survey found that for all three executing agencies, both the personnel who were sent abroad to study and those who studied in Indonesia gave a high average value (3.0 or higher<sup>9</sup>) for each evaluation item. As a whole, students in the BAPPENAS and the MOF components gave higher evaluations than did those in the BPPT component. Those who studied in Japan gave higher evaluations than did those who studied in Indonesia. Moreover, it is noteworthy that for both skill-raising and usefulness, the attitude acquired through studying abroad was given higher evaluation scores than the knowledge gained through studying both in Japan and Indonesia. In terms of the individual items in the questionnaire, those who studied in Japan gave much higher evaluations than did those who studied in Indonesia in such areas as scientific method of research and discipline. According to the response obtained in interviews conducted as part of the beneficiary survey, supervisors generally held high regard for subordinates who were sent to study for a degree in this project and viewed the good performance of their subordinates as proof of the project’s benefits.

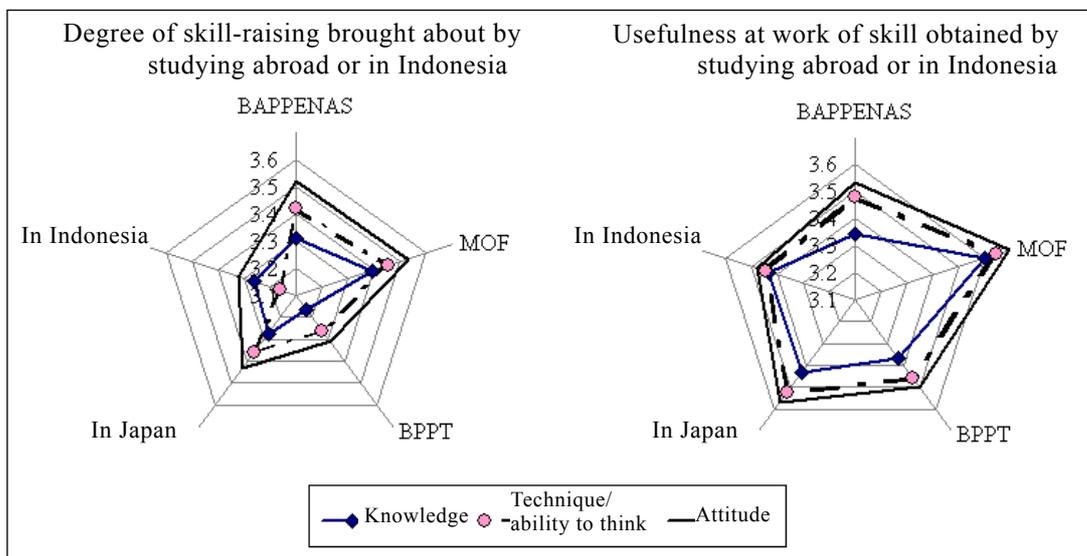
<sup>9</sup> The score given to each answer is shown below:

Skill-raising: 1. None, 2. Somewhat, 3. Considerable, 4. To the max.

Usefulness: 1. Not useful, 2. Somewhat useful, 3. Rather useful, 4. Extremely useful.

On the other hand, as noted in the foregoing regarding BPPT, there are cases where, due to problems related to the personnel system, students who earned degrees abroad were unable to take full advantage of their overseas experience.

Figure 1: Ratings of Students by Beneficiaries Regarding this Project (average rating)



#### 2.3.4 Internal rate of return

The project's internal rate of return is not calculated. The reason is as follows: Returns on investment in human resource development and educational programs are generally calculated on the basis of the difference between lifetime earnings before and after degree acquisition and the cost of earning a degree. However, in the case of this project, since students who earn degrees in higher education are expected to return to the agency that dispatched them to study abroad and in Indonesia, they face difficulty making a career switch that would give them a higher income. Consequently, while overseas education might give incentive to individuals in the form of promotion to higher positions, no one expects wages to increase sufficient enough to cover the cost of studying abroad and in Indonesia. Even in regard to the economic internal rate of return, although the goal of investing in human resource development is to raise the skill of individual employees as well as the agencies they work for, no method of converting this benefit to monetary value has yet been devised.

#### 2.4 Impact

##### 2.4.1 Improving the performance of government agencies

###### Trend toward higher educational background

During the period between 1995 (when the project was launched) to 2006, the overall

educational background of Indonesia's civil servants improved significantly. In 1995, there were only 290 Ph.D.s out of a total of about 3.95 million civil servants, but in 2006, against the background of a slight decrease in the total number of civil servants (3.63 million), the number of Ph.D.s increased dramatically to more than 8,700. Also, during the same interval, while the percentage of civil servants with at least a bachelor's degree rose from 7% to 31%, the percentage of those with only a high school education or less was halved, from 83% to 42%.

In the case of BAPPENAS, one of the three executing agencies of this project and one that played an important role in serving as the linchpin for the government of Indonesia, the proportion of personnel with doctorates, at nearly 6%, was fairly high in 1995 (31% with master's degrees). Although its function is said to have weakened since the implementation of decentralization measures, as of 2006, the percentage of Ph.D.s hovers at about the same level. The percentage of MOF personnel with doctorates remained at a low 1% during the period concerned, but doubled in absolute terms, while the number of personnel with master's degrees increased 7 fold.

#### Promotion of decentralization

In Indonesia, decentralization of administrative functions went into effect in 2001, and has steadily advanced since then. A breakdown of civil servants in Indonesia reveals that while in 1995 nearly 90% were working in the central government, since 2001, three out of four were working in local governments. Additionally, during this period, the local governments' share of the national revenue and expenditure rose to 30% (2005) from just a few percent in 1995. A large majority (at least 227) of the 287 personnel of BAPPENAS dispatched to study in master's programs in Indonesia were local administrative officers. From this, it can be said that the project responds adequately to the demands of the times.

#### Improving governance

A glance at the changes that have been made in the World Bank's governance indicators<sup>10</sup> for Indonesia from 1998 to 2005 shows that, while its regulatory quality declined somewhat, improvements have been made in the other five indicators — voice and accountability, political stability, government effectiveness, rule of law, and control of corruption. Nevertheless, its overall ranking remains low. Of the 213 countries surveyed, Indonesia belongs somewhere between the lowest 20 percentile and the lowest 40 percentile.

The Corruption Perception Indicator (CPI) used by Transparency International, an

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<sup>10</sup> Six governance indicators are measured based on surveys conducted by companies, citizen, and experts. Source: <http://go.worldbank.org/X35TR3HIM0>

international NGO, shows that Indonesia continues to score high on the degree of corruption. However, the country has made some progress in this area. While the CPI for Indonesia was ranked 85th out of 90 countries (that is, in the top 94 percentile) in 1990, in 2006, it ranked 130th out of 163 countries (in the top 79 percentile).<sup>11</sup> The Global Competitiveness Index (GCI), published by the World Economic Forum, is comprised of a combination of indices, including the quality of government, macro economics, and education. According to the GCI, Indonesia made tremendous strides from 2000, when it was ranked 64th out of 75 countries polled, to 2006, when it was ranked 50th out of 125 countries polled.<sup>12</sup>

It is difficult to verify the degree to which participants in the study for a degree and undergo short-term training programs offered in this project have contributed to these improvements, but it is safe to say that the project's participants have had a positive impact on raising the quality of civil servants as a whole.

#### 2.4.2 Other impacts

##### Gender

Until now, the proportion of women in Indonesia's civil servants has increased steadily from 30% to 40%. The ratio of women holding high ranking positions (Echelon I and II) remains low at about 10%. By contrast, women constitute 20% of those students who earned degrees in this project (28% in the BAPPENAS component, 29% in the MOF component, and 11% in the BPPT component). Higher education by itself does not guarantee higher position, but it is highly likely that, in the medium and long term, the project will contribute to a better gender balance in Indonesia's civil servants.

##### Impact on the environment

There have been no reports of this project having a negative impact on the environment. A total of 34 participants who studied abroad earned degrees in fields related to the environment such as environmental engineering and environmental health, and 19 participated in short-term training programs of environmental management. Thus there are high expectations that these individuals will indirectly contribute to the preservation and improvement of the environment in Indonesia.

#### 2.5 Sustainability ( Rating: B )

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<sup>11</sup> These figures are based on the indexed perception of degree of corruption of industry and country-by-country analysts and 12 world surveys. The lower the country is ranked according to their CPI score, the higher their degree of corruption is in the survey.

Source: [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi/2006](http://www.transparency.org/policy_research/surveys_indices/cpi/2006)

<sup>12</sup> Source: <http://www.weforum.org/en/initiatives/gcp/index.htm>

The effectiveness of the project may be sustained by its graduates, and this could be regarded as the sustainability of the study abroad and in Indonesia yen-loan project. However, since phase III of the project had already started, in addition to this form of sustainability, the following were also investigated: (i) sustainability of the study abroad project by the executing agencies; and (ii) the comparative superiority of having Indonesia's government personnel study in Japan to consider the question of sustainability regarding the needs of the study abroad project.

#### 2.5.1 Sustainability of the effectiveness of the project by its graduates

To study the effectiveness the project has on its graduates, it was necessary to have information about the rate at which they leave their jobs after they complete their study abroad. Consequently, a survey on job turnover was conducted, but data gathering proved difficult. In addition, it was found that while there are alumni associations for graduates of the various colleges and universities involved in the project, there are no alumni activities organized by student dispatching agencies or systems to continually support the graduates. In the years to come, there will be a need (i) to systematically sustain the effectiveness of the study abroad and in Indonesia project; and (ii) to monitor, among other things (in a sustainable manner), the ability of graduates in this project to perform their duties and the frequency with which they leave their job.

#### 2.5.2 Sustainability of the study abroad project by the executing agencies

##### 2.5.2.1 Operation and maintenance system/policies

In this project, OFUTET administered the implementation of the study/training program abroad and in Indonesia to which personnel from a number of ministries, agencies and public institutions were dispatched via one of the three executing agencies. OFUTET was established in BAPPENAS as a temporary organization to effectively implement the project and to coordinate the activities of the executing agencies participating in the project. Experienced members of each of the three executing agencies were assigned to staff OFUTET. The system of supervision created by OFUTET proved effective. Since OFUTET was dissolved after the completion of the project, it can be said that the temporary coordinating agency that was created on the basis of a clear TOR proved functionally effective.

Of the three executing agencies, as noted earlier, BPPT relied on a consultant to implement most of the coordinating and supervising of the project. Consequently, when implementing a similar project in the future, there is a strong possibility that the experience gained in this project may not be accumulated inside BPPT. In addition, of the three executing agencies, BPPT had the most difficulty grasping the condition of students

at the time of the ex-post evaluation (both international and local) dispatched in this project. Thus BPPT's ability to monitor the effectiveness of the project is a cause for concern. On the other hand, in addition to canceling its plan to employ an international consultant to operate its training program, the MOF cancelled the agreement it had with a local consultant five years after the project was launched, after which it operated and maintained the project on its own. This suggests that the MOF's own personnel have developed the operation and maintenance skills necessary for implementing a human resource development project. However, no efforts seemed to have been made to provide EEO (study abroad support service) within the MOF. As a whole, no organizational or institutional efforts seemed to have been made to eliminate the need to use consulting services in the future.

In addition, a mechanism is about to be put in place for implementing through phases I and II of the project (which have already been launched) the human resource development project more effectively than was previously possible. This is evidenced by, among other things, the fact that, in partnership with the outstanding colleges and universities in Indonesia and Japan that have participated and cooperated in the series of human resource development projects, a linkage program has actually been started in phase III of the project now in progress.

#### 2.5.2.2 Financial status

Indonesia has traditionally relied heavily on funds obtained from the World Bank, the Asian Development Bank (ADB), and JBIC to finance its public sector human resource development programs based on overseas study and training. Scholarship programs operated by the World Bank and the ADB were terminated in 2001 and 2000, respectively. In addition to phase III of the project currently being implemented, study abroad projects supported by the Netherlands, France, and Australia may also be utilized to develop human resources in Indonesia's civil service system. Among these, the training program that sends several dozen students to the Netherlands every year is a fairly large operation. (The study abroad program supported by Australia, which gives scholarships to about 300 individuals annually, is a large program, but most of the scholarships are given to academics.) Therefore, phase III of the project, which plans to offer human resource development programs that will meet the training needs of several hundred government personnel, holds an important place in the field of human resource development in Indonesia.

During the implementation of this project, BAPPENAS decided to defray the cost of the domestic training part of the project with funds from the World Bank and from the government of Indonesia, and in 1997, it was forced to reduce, from 3,400 to 600, the

number of trainees to whom it granted scholarships using ODA yen-loans. After that, because of the need to train local administrative officers capable of dealing effectively with decentralization issues, BAPPENAS ended up relying on ODA yen-loans to dispatch 2,130 civil servants to undergo training in Indonesia. In the original plan, the government was supposed to bear 15.3% of the total cost of the project, but actually, it merely contributed 2.0% of the total cost (141/6917). Based on these developments, it can be said that human resource development centered on overseas study and training relies heavily on outside funds. In phase III of the project, the government's share of the cost is set at 25%, which means that human resource development centered on overseas study and training continues to be heavily dependent on outside funds. However, since a law has already been enacted to make certain the government meets its share of the cost, the budget necessary for FY2006 is secured. Thus there has not been any problem so far regarding the ability of the government to pay its share of the cost of implementing the project.

### 2.5.3 Comparative superiority of studying in Japan (sustainability of the needs of study abroad projects)

As a general rule, in Indonesia's public sector, the academic degrees civil servants earn assist them to raise their service grades, so study on a graduate level can be a real incentive for civil servants with college degrees. The executing agencies have cited a number of reasons that make studying in Japan comparatively superior to studying elsewhere. These include: (i) a far fewer students who go to Japan than those who go to Europe or America fail to complete their course on schedule; and (ii) those who study in Japan maintain their personal contact with their academic advisers.

In addition, some colleges and universities in Japan that accepted a sizable number of foreign students have adjusted their regular courses to meet the special needs of Indonesian students. If the government of Indonesia and these colleges and universities manage to reach an agreement on ways to expand on the efforts made by these colleges and universities and set up a system for dispatching and accepting students on a long-term basis, then it will be possible to design human resource development programs that provide more useful services.

## 3. Feedback

### 3.1 Lessons Learned

In the project, unlike BAPPENAS and the MOF, BPPT did not have a coordinating function as part of its normal operations, and it was an independent agency on an equal footing with the other agencies that participated in the project as a BPPT component. As a

consequence, BPPT was unable to adequately coordinate and supervise the implementation of the project. If an agency that does not have any experience in project coordination and supervision has to be assigned as an executing agency, it will be necessary, from the beginning of the project, to devise a way to strengthen the capacity of the agency to implement the project while taking steps to support project coordination and supervision.

BAPPENAS greatly increased the number of individuals it dispatches to participate in domestic training programs with a view to meeting the challenge of decentralization more effectively. The executing agencies need to continually be prepared to change the design of the project so that they can respond effectively to any contingency.

There was no monitoring of (i) the career options participants chose after their study abroad and in Indonesia, (ii) the number of graduates of the project who quit their job upon returning home, and (iii) whether or not they were making use of the knowledge they gained by participating in the project. However, to enhance the effectiveness of the study abroad and in Indonesia project, it will be useful to incorporate into the project a monitoring system before the start of the project. It will also be useful to institutionalize the creation of a network of those who have participated in the project, as well as strive to utilize the knowledge and information participants acquire in the project. Concurrently, establishing courses that meet the special needs of Indonesian students at cooperating universities and colleges should also help increase the effectiveness of the project, as should establishing a system for dispatching and accepting students on a long-term basis to be worked out between the government of Indonesia and the colleges and universities that agree to accept Indonesian students.

### 3.2 Recommendations

#### To JBIC

In the future, to avoid relying excessively on outside funds for implementing human resource development projects, including phase III of the project, JBIC should urge the government of Indonesia to establish a cost-sharing scheme based on securing domestic funds using examples of how other countries raise domestic funds for development of human resources.

#### To executing agencies

The linkage program offered in phase III of the project is expected to be a highly cost-effective project particularly suited for a country like Indonesia lacking in financial resources. On the other hand, it will be necessary to confirm, such as by conducting a beneficiary survey similar to the present evaluation, whether or not the general

effectiveness of studying in Japan (including, though not limited to, the earning of a degree) is sustained in comparison with this project (phase II).

In the BPPT component in particular, there are many participants who studied cutting-edge technology during their study abroad, but in many cases, they were unable to continue the research in the same field when they returned home to their post because the facilities necessary to do so were not available. Consequently, interviews with project beneficiaries picked up examples where they (i) could not put the fruits of their study to direct use in their present research, (ii) they were assigned to departments and ministries unrelated to their area of research, or (iii) while remaining under the jurisdiction of a government organization, they worked in universities and other outside organizations. The fact that these graduates of the project are contributing in Indonesia doing research in related fields means that the fruits of their study abroad and in Indonesia are not being totally wasted. Nevertheless, thoughtful consideration is called for to establish consistency between human resource development and R&D policies.

Comparison of Original and Actual Scope

Item	Plan	Actual
(a) Output		
1. Actual study abroad/training (sum total of local/international)	4,237	3,260
International	697	806
Study abroad: Total no. of students	308	524
- No. of students earning B.S/B.A	30	39
- No. of students earning M.S./M.A.	199	373
- No. of students earning Ph.D.	79	103
Training: Total no. of trainees	389	282
Local	3,540	2,454
Study abroad: Total no. of students	140	324
- No. of students earning B.S/B.A	0	0
- No. of students earning M.S./M.A.	100	323
- No. of students earning Ph.D.	40	0
Training: Total no. of trainees	3,400	2,130
2. Consulting services		
(1) Overall supervision/management consultant	657 M/M	726.5 M/M
(2) Study abroad support service (EEO)	342 M/M	388 M/M
(b) Project period	Dec. 1995–Oct. 2003	Dec. 1995–Oct. 2004
(c) Project cost		
Foreign currency	7,865 million yen	6,632 million yen
Local currency	2,169 million yen (48,201 million rupiah)	285 million yen (19,025 million rupiah)
Total	10,034 million yen	6,917 million yen
ODA loan portion	8,500 million yen	6,776 million yen
Exchange rate	1 rupiah = 0.045 yen (as of April 1995)	1 rupiah = 0.01498yen (Weight average during project period)