Indonesia

Professional Human Resource Development Project

Report Date: March 2001 Field Survey: August 2000

1. Project Profile and Japan's ODA Loan



Location Map of Language Training Center



Overall View of Language Training Center

(1) Background

From the end of Indonesia's Fifth Five-Year Plan (1989 ~ 1993) through the Sixth Five-Year Plan was a take-off period for the country's society and economy. The situation demanded highly specialized people with advanced knowledge that could be applied to structural adjustment policies and to the promotion of science and technology, which are essential for economic development. However, compared to other developing countries, the proportion of university graduates among the country's civil servants, and in the workforce as a whole, was very low¹. The number of graduates the universities could supply was limited, and it was not possible to increase the number of such personnel as rapidly as they were needed.

This situation led the Indonesian government to make quantitative expansion, qualitative improvement and effective use of human resources in the country's development into a priority policy task for the above period.

(2) Objectives

This project was to educate personnel, particularly civil servants, giving them more advanced knowledge and skills in fields such as public policy, management, the environment and development, economics and financial policy, industrial development, and science and technology. It also aimed to strengthen the organizations and infrastructure related to human resource development policy, in order to improve the country's ability to prepare and implement human resource development policies. These efforts were intended to promote Indonesia's economic development.

¹ Before the appraisal in 1988, only 1.7% of the workforce and 14.6% of civil servants had received higher education to university graduate level or beyond. In 1989 the proportion of staff with diploma or graduate degree level qualifications in the six government-affiliated research centers (the National Geographical Institute, the Atomic Energy Authority, the Central Bureau of Statistics, the Technology Evaluation and Application Agency, the Space and Aeronautics Research Center and the Scientific Research Center) was only 30.3%.

Specifically, professional human resource development was focused on civil servants in a position to promote economic development policy, employing the methods described below.

- [1] In addition to reinforcing the civil servants responsible for promoting the science and technology needed for industrial development, education in the areas of finance, financial policy and administration is to be provided for civil servants who are responsible for the new policy areas of deregulation, devolution and environmental consideration.
- [2] Local civil servants and university teaching staff are to be strengthened with a view to securing balanced regional development.

(3) **Project Scope**

1) Project components

This project aimed to achieve the following objectives:

- [1] To provide training and study abroad to a total of 4,657 Indonesian civil servants and regional university staff.
- [2] To strengthen organizations and infrastructure related to human development.

It comprised the five components below, divided among the executing agencies as shown.

Abbreviation of		i) HRD	ii) OTO	iii) MOF	iv) STAID	v) HEDS
component names		Strengthening human resources development policy	Strengthening organization of overseas training centers	Training in economics and finance, and strengthening of the Language Training Center	Reinforcement of the scientific and technological fields needed for industrial development	Training of higher education teaching staff in industrial fields
Executing agencies		National Development Planning Agency (BAPPENAS)		Ministry of Finance (MOF)	Technology Evaluation and	Ministry of Education and
		Departments responsible for human and natural resources	Managing offices/ OTO	Application Agen (BPPT)		Culture Directorate General of Higher Education (DGHE)
	Overseas		544	100	370	
	In Indonesia and overseas		700			
p.	In Indonesia	2,433			230	280
abroa	Total for each component	2,433	1,244	100	600	280
study	Total	4,657 trainees (1,714 overseas and 2,943 in Indonesia)				
Training and study abroad	Main fields of training	Human resources development planning Analysis of labor force Growth and employment Sector analysis	Public policy Sustainable growth and the environment Company management	Company management Public policy Financial and taxation systems etc.	Aviation, mechanics, chemistry, metals, energy, environment, physics, atomic power, electricity and electronics	Civil engineering, machinery, electricity and electronics, chemistry, production engineering
Improvement of organizations and infrastructure		Consulting services	Consulting services	Expansion of the Language Training Center Procurement of equipment	Consulting services	

Table 1Project Outline

Source) JBIC materials (1990)

2) Consulting service

The project provided consulting services, as described below, for each component (HRD, OTO, STAID etc.).

<u>Component i: HRD (National Development Planning Agency, Human and Natural Resources</u> <u>Department)</u>

- Implementation of training for human resources development planners for local governments.

Component ii: OTO (National Development Planning Agency, Management Department)

- Project management consultant for NASTOT ({National Overseas Study Operation Team}).
- Legal consultation concerning study abroad, and contracts with the Educational Exchange Organization (EEO).
- Assistance in the preparation and implementation of short training programs.

<u>Component iv: STAID (Technology Evaluation and Application Agency)</u>

- Management consulting to assess and analyze the systems that take in researchers and scientists after their studying abroad.
- Preliminary training of LPND (government-affiliated research agency) staff before they are dispatched for study overseas.
- Improvement of policy formation ability and training in management and engineering.
- Project management.

This project was carried out with co-financing from the World Bank, and with collaboration from JICA. These agencies carried out the following operations in parallel with the project:

<World Bank>

- Studies on human resource development.
- Improvement of National Development Planning Agency (BAPPENAS) overseas training facilities.
- Provision of loans to 2,673 students for study abroad or elsewhere in Indonesia.

<JICA>

- Dispatch of experts, training in Japan and provision of equipment and materials for local universities to assist the Directorate General of Higher Education (DGHE) in the training of local university teaching staff through the Professional Human Resource Development Project.

(4) Borrower/Executing Agency

Republic of Indonesia / Four ministries and agencies: National Development Planning Agency (BAPPENAS), Ministry of Finance (MOF), Technology Evaluation and Application Agency (BPPT) and Directorate General of Higher Education, Ministry of Education (DGHE).

Loan Amount/Loan Disbursed Amount	¥12,439 million / ¥12,351 million	
Exchange of Notes/Loan Agreement	December 1990 / December 1990	
Terms and Conditions	Interest rate: 2.5%, Repayment period: 30 years (10 years for grace period), General Untied	
Final Disbursement Date	December 1998	

(5) Outline of Loan Agreement

2. Results and Evaluation

(1) Relevance

This project, which aimed to raise the quantity and quality of the human resources needed for Indonesia's future economic development, was assigned a high priority under Indonesia's Fifth Five-Year Plan. It was planned in an effort to build the country's infrastructure and its organizations for human resources development, in order to enhance Indonesia's ability to devise and implement human resource development policies. The project's objectives continued to be relevantat the time of evaluation.

As shown in the section "Comparison of Original and Actual Plan", the scope of the project was expanded substantially. Changes were made because an external factor at the time of implementation, namely the devaluation of the Rupiah, , increased the project's reserved fund, which were used to further the attainment of the project objectives. These changes meant that a larger number of personnel received higher education than was originally planned; they were considered a relevant expansion of the project scope.

(2) Efficiency

1) Implementation scheme

This project was implemented in five components by four agencies (BAPPENAS, MOF, BPPT and DGHE). The content of the programs was diverse, and many consultants and assisting agencies (dispatching agencies and receiving destinations) of different types were involved through a large number of contract procedures. Therefore, NACOT (the National Committee for Overseas Training) was established to serve as an overall control, coordination and promotion agency.

As Figure 1 shows, NACOT comprises two organizations, NASTOT (the National Steering Team for Overseas Training) and OTO (the Overseas Training Office), which is the implementing unit. Organizationally, NACOT is positioned under the National Development Planning Agency (BAPPENAS). It comprises officials of vice-ministerial grade from the various executing agencies, and it acts as the overall coordinating body for this project, supervising the executing agencies and the smooth progress of the project.

Trainees were selected according to each executing agency's standards, which were established under previous, similar ODA projects, such as the "Science and Technology Manpower Development Program", and there was no cause of concern with the standard. The selection of candidates for graduate and Masters' degree courses was relatively easy, as it was not difficult to find suitable students, but the level of previous qualifications held by civil servants made it difficult to find suitable candidates for Ph.D. courses. As a result, the number of students who could be found to take Ph.D. courses fell below the initial target number.

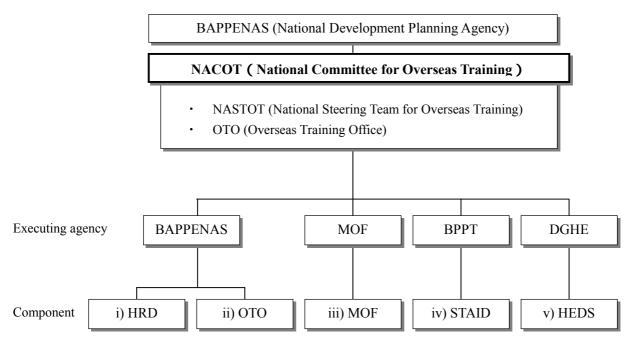


Figure 1 Organization of NACOT

2) Schedule

The implementation of each component lagged behind schedule by a number of years, but the main reason for the delay was the expansion in the scope of the project (increased number of students).

The only facility built under the project was the Language Training Center for the Ministry of Finance (MOF). The contractor for the building work went bankrupt during construction, necessitating the suspension of the works. Completion of the Center was delayed by approximately three years as a result, but there were no notable problems with the performance of the replacement contractor.

3) Project cost

Project cost, totaling \$14,815 million, overran somewhat the planned figure of \$14,634 million. The additional cost was borne by the Indonesian government. The value of the ODA loan was \$12,351 million, falling within the planned \$12,439 million.

Based on the points made in 1) \sim 3) above, there appears to have been no problem with the overall efficiency of project implementation.

(3) Effectiveness

The following four project effects were anticipated at the time of the appraisal:

[1] Education of personnel, giving civil servants, in particular, more advanced knowledge and skills in fields such as public policy, management, the environment and development, economics and financial policy, industrial development, and science and technology. This education was expected to help promote sound industrial development, decentralization, economic deregulation and consideration for the environment.

- [2] The strengthening of organizations and infrastructure for human development policy was expected to enhance the ability of each executing agency to formulate and implement human development policies.
- [3] Effects [1] and [2] were expected to encourage sustainable economic development in Indonesia.
- [4] The training of local civil servants and local university teaching staff was expected to contribute to balanced development in Java and other regions.

Awareness of and concern over environmental policy began rising in the second half of the 1990s; at the same time, major social and economic trends, such as decentralization, began to emerge. It was expected that the personnel that received higher education under this project would be involved in the formation and implementation of policies related to these concerns.

The description below will examine how this project contributed to the realization of higher-level plans for the development and education of human resources and analyze and assess the advantages of the project for trainees and the agencies that sent them for training on the basis of an interview survey of graduated trainees and their agencies.

1) Degree of contribution to the realization of national plans

Table 2 shows the target numbers of civil servants to be educated to each academic level under the Fifth Five-Year Plan (Replita V), which is the national plan. It also presents the figures representing planned and actual numbers of trainees under this project.

The scope of the project was expanded at the implementation stage, leading to actual figures in excess of the initial plan. In particular, training not leading to academic qualifications (including JICA training) produced five times more trainees than was called for by the higher-level plan. The number of Masters' degree graduates was 1.3 times higher than planned. Thus the project succeeded in producing a qualitative and quantitative improvement in human resources capacity. However, as described above, the low number of civil servants who already had Masters' degrees meant that the number of participants trained in Ph.D. courses under this project fell short of the target values, despite the expansion of the project overall. Personnel who earned Masters' degrees under this and similar projects are expected to receive higher education in the future.

	Ph.D.	Masters'	Graduate	Fraining only
Planned values under the Fifth Five-Year Plan	358	1,820	1,623	2,019
Diamod values under this project	127	735	124	3,680
Planned values under this project	(35.5%)	(40.4%)	(7.6%)	(182.3%)
A stud us has up den this president	95	975	228	10,178
Actual values under this project	(26.5%)	(53.6%)	(14.0%)	(504.1%)
Attainment rates against planned values for this project (/)	0.75	1.33	1.84	2.77

 Table 2
 Planned and Actual Number of Graduates at Each Level

* These figures are derived from appraisal records and documentation from the executing agencies, but due to the sources of the data, there may be some differences between the figures in the table and the data from the sources. The planned and actual values for "Training only" include figures for the "training program (Directorate General of Higher Education)" implemented by JICA in parallel with this project.

^{*} Percentages in brackets are contribution rates, relative to " Planned values under the Fifth Five Year Plan".

2) Evaluation by returned trainees and dispatching agencies

[1] Evaluation by dispatching agencies

A separate survey was carried out on two of the agencies that dispatched trainees, namely the National Development Planning Agency, Overseas Training Center (OTO/ BAPPENSA) and the Ministry of Finance, Financial Education and Training Department (BAPEPAM/ MOF). Questions covered "changes in the personal qualities of trainees after their training", "evaluation from the point of view of contribution to the country" and "overall evaluation". The findings are summarized in Table 3 below.

Table 5 Evaluation by Dispatching Agencies					
Dispatching agency	Evaluation of personal qualities	Contribution to the country	Overall evaluation		
National Development Planning Agency, Overseas Training Center (OTO/ BAPPENAS) Trainee dispatching agency	Before training, they lacked an efficient and effective approach to carrying out their duties. After returning from training, they had gained a problem-solving approach and went about their work with due consideration of efficiency and efficacy.	The country needs personnel capable of strategic ?? through processes by which they can specify alternative ideas to solve a problem and select the optimum one.??	High		
Ministry of Finance, Financial Education and Training Department (BAPEPAM/ MOF) Trainee dispatching agency	Before being dispatched for training, they took a reckless approach to the work they were assigned. After returning from training, they had a good understanding of their own position and were able to go about their work with a cool and analytical approach.	We see the education of personnel as important for the formation of the foundations for economic and social development.	High The development of human resources is an important factor for future national development.		

 Table 3
 Evaluation by Dispatching Agencies

Both agencies evaluated positively the way their staff worked after returning from training, and they were well aware of the importance of human resource development. They also expressed the view that when similar projects for dispatching students abroad are carried out in future, it would be valuable to supplement university study and research with content that would build up more practical experience, such as short-term company training in developed countries.

[2] Evaluation by returned trainees

This study enlisted the cooperation of the Directorate General of Higher Education (DGHE) in carrying out a questionnaire survey of personnel who studied abroad under this project. The questions asked respondents to report changes in their posts and in income after the dispatch, to reflect on what they had gained by studying abroad, and to evaluate the project's contribution to Indonesia, from the viewpoint of a trainee and overall. The comments of the beneficiaries are included below as reference material. As the sample size was small, consisting of only eight respondents², their statistical significance should be evaluated with care.

To the personal content questions, most responded that they had been promoted as a result of their training. In their free responses, all indicated that they had been given positions of responsibility.

In their responses to the question of what they had gained by studying abroad, all referred to "the improved knowledge and skills I needed to work efficiently and effectively," and said that "the experience

² Questionnaires were sent through the DGHE to 20 trainees who had experienced studies in Japan. Responses were received from eight of them.

of studying abroad has given me the ability to look at my country from a foreign perspective." The respondents appeared to have become more enthusiastic about tackling their jobs. Their responses indicated that they had greater commitment and motivation.

On the question of "contributions to the country", seven of the eight gave enthusiastic responses. "Now I feel my work is related to the development of the country and I can tackle the preparation and promotion of plans and policies with a broader perspective". With a sense of pride, all respondents indicated that the project supported the growth of the strategic planners the country needed.

The respondents' overall evaluation of the project was reflected in a three-grade scale, from "highly satisfied" to "not satisfied." Seven respondents were "highly satisfied" and one was "satisfied."

The last question on the questionnaire asked for respondents' opinions of and comments on the project (and similar programs dispatching trainees for overseas education). Responses included the following:

Opinions of programs dispatching trainees for overseas education

- Human resource development is an important element for forming and reinforcing the foundations of the country's progress, and I want to see more such programs in future. Having opportunities for training, such as study abroad, is effective in building civil servants' ability to look at the country's future with a broad perspective.
- It is important to reinforce university courses related to industry, particularly in the manufacturing field.
- It is important to provide similar opportunities to other ministries, agencies and government organizations (that did not participate in this project).

(4) Impact

1) Environmental impact

This was a human development project, and as such it had no notable negative impact on the environment.

2) Social impact

The Language Training Center built under this project was constructed on the grounds of the National Advanced Accounting School (in Tangeran), an organization affiliated with the Ministry of Finance, on of the executing agencies. Therefore, there was no need for land acquisition, and the project caused no social problems, such as relocation of residents.

The number of trainees that received their training in Japan rose from the planned 444 to 610, nearly 40% more than planned. Of this number, 540 trainees obtained academic degrees. The breakdown by executing agency is as follows: The National Development Planning Agency, Management Department dispatched 32 (30 Masters' degrees and 2 Ph.D.s.), and the Ministry of Finance dispatched 36 (34 Masters' degrees and 2 Ph.D.s.). According to documents from these agencies, trainees were dispatched to private and public universities throughout Japan: mainly in Tokyo, but also in Ibaraki, Saitama, Aichi, Gifu, Shizuoka, Osaka, Hiroshima, Shimane and Okinawa prefectures. The trainees lived as foreign students for

two or three years, experiencing the Japanese culture and way of life. This should be recognized as a valuable exchange between Indonesia and Japan.

(5) Sustainability

1) Operation and maintenance

Monitoring of trainees while they were abroad was carried out by NACOT and the executing agencies. Trainees were provided with the following services by the Educational Exchange Organization (EEO:

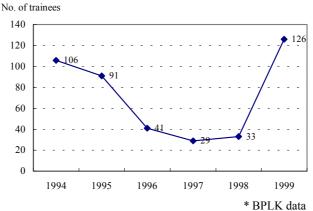
- Introduction and good offices at study destinations.
- Orientation in Indonesia before dispatch abroad.
- Orientation in the country where they were dispatched.
- Language training in the country where they were dispatched.
- Support for trainees.
- Assistance in making tuition payments.
- Assistance in paying allowances.
- Insurance services.
- Counseling services.
- Company training services.

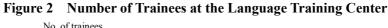
The Educational Exchange Organizations are non-profit agencies in each of the countries. They function as local agents and have contract agreements with the executing agencies. Educational Exchange Organizations were established in an earlier ODA loan project, the "Science and Technology Manpower Development Program", and functioned well in this project on the basis of that experience.

2) The status of the Language Training Center (Ministry of Finance)

The evaluation mission visited the Ministry of Finance Language Training Center, situated in the city of Tangeran, west of Jakarta, 8th August 2000 for an inspection of the status of the facilities.

The center comprises a central block and a housing block. The central block contains lecture rooms, language training rooms, audio-visual rooms, and accommodation and dining facilities. It houses the center's core functions. The housing block provides accommodation for the teaching staff. The operation and maintenance of the facilities is the responsibility of the Financial Education and Training Agency (BPLK), an organization under the Ministry of Finance. The agency reports that the dispatch of trainees had largely been completed by 1996. After that, the number of trainees at the center declined, but the Asian Development Bank (ADB) started an exchange student program in 1999, which increased the number of trainees considerably (Figure 2).





The facilities suffer from rain leakage in the central block, damage to the roof of the residential block, damage to the toilet and washing facilities and other problems. The damage is starting to become prominent, but the lack of an adequate maintenance and operation budget prevents proper improvements. The audio-visual facilities and other education equipment are still operable.

The ADB's dispatching program has brought a temporary increase in the number of trainees, but once the program ends, there is concern that the usage rate of the facilities will decline again. Measures should be devised to make full and regular use of the facilities, including opening them for a wider range of training. At present, the facilities are used exclusively for language training. Use of the facilities could also be offered to other ministries and agencies, and to private companies, for training purposes.

3) Sustainability of the effects

It is the nature of the education sector that the subject of such projects (the investment targets) are people; as such, the project faces the following risks, which could impede sustainability.

- [1] Personnel may not find themselves in a workplace environment where they can fully develop their careers after they return from overseas education and training.
- [2] Brain drain to other countries can occur.

To prevent the first problem, and to make the most of personnel that have received training, it is important for the agency that dispatched its staff maintain and build their morale after they return to their new, elevated career positions, by providing them with a suitable workplace, level of pay and treatment. The findings of the interview survey of trainees showed that they were employed, on their return, in positions of authority in their departments, and that they approached their work efficiently and effectively, with a view to the country's progress. It was not possible to grasp how satisfied they were with their salary, but their evaluation of matters including current workplace conditions was generally positive.

As for the second problem, the results of the questionnaire survey indicate that most returning trainees were employed in high-ranking positions, where they approached their work with a high degree of self-motivation and interest in the country's development. There does not appear to be a "brain drain" problem. In addition, the rules of overseas study for civil servants at public expense stipulate that students must work as civil servants on their return for a period proportional to the time they spent studying abroad ((years of study abroad x 2) +1 years). Those who fail to do so are punished by various measures, including having to repay their scholarships. This regulation helps prevent brain drain.

The implementation of this project produced personnel with advanced skills in fields such as public policy, management, the environment and development, economic and financial policy, industrial development, and science and technology, thereby expanding the human infrastructure available for Indonesia's social and economic development. However, it is still too early to judge whether Indonesia will be able to use that infrastructure to achieve such progress.

3. Lessons Learned

In the field of human development for administrative agencies, it is important to produce an ongoing supply of highly expert personnel, in both qualitative and quantitative terms, and to build a working environment in which they will be able to work to their own satisfaction.

The financial difficulties currently faced by the Indonesian government make it difficult to improve facilities, equipment, salaries and other conditions in the public sector. Nevertheless, for the long-term benefit of the country it is important to maintain and improve the morale of such personnel in order to prevent "brain drain". Therefore it would be valuable to provide career counseling services and other forms of follow-up in the workplace from the graduated trainees' point of view. To produce an ongoing supply of higly expert personnel, it is vital to continuously offer new personnel opportunities for training and overseas study. In addition to increasing opportunities for study and training abroad, whereby trainees can absorb foreign skills and technology, it is important to build a "domestic transfer system for advanced education," which will make maximum use of expert personnel (those who have studied abroad) on their return. The mission of encouraging the country's economic development, which is this project's prime objective, is not something that can be achieved by a small group of technocrats who receive higher education through overseas study loans or other means. For the educational effects to be sustainable, the presence of personnel educated overseas must be used to build a system for the transfer of advanced education within the country. Such a system would raise the level of technology and knowledge throughout the country and help achieve the project's goals faster.

Item Plan Actual **Project Scope** 1. Strengthening of human resource Total: 2433 (domestic training only) Total: 5534 (domestic training only) development policy No diplomas: 2433 No diplomas: 5534 (HRD/BAPPENAS) 2. Organizational strengthening of Total: 1244 (194) Total: 2550 (250) overseas training centers (Overseas training+domestic (Overseas training+domestic (OTO/BAPPENĂS) training) training) Ph.D courses: Ph.D courses: 83 (0) 27(2) Masters' courses: 206 (28) Masters' courses: 248 (30) No diplomas: 955 (166) No diplomas: 2275 (218) 3. Economic and financial training, Total: 100 (65) Total: 156 (36) expansion of Language Training (Overseas training only) (Overseas training only) Center Masters' courses: 100 (65) Ph.D courses: 7(2) (MOF) Masters' courses: 149 (34) 4. Strengthening of science and Total: 600 (185) Total: 653 (324) technology fields for industrial (Overseas training) (Overseas training) development Ph.D courses: Ph.D courses: 34 (13) 45 (25) (STAID/BPPT) Masters' courses: 179 (79) Masters' courses: 214 (149) Graduate courses: 64 (33) Graduate courses: 182 (80) No diplomas: 102 (60) No diplomas: 92 (709) (Domestic training) (Domestic training) Ph.D courses: Ph.D courses: 10 5 Masters' courses: 69 Masters' courses: 70 Graduate courses: 60 Graduate courses: 46 No diplomas: 90 No diplomas: Total: 280 (domestic training only) 5. Training of higher education Total: 2583 (domestic training only) Ph.D courses: Ph.D courses: teaching staff in the engineering 180 11 No diplomas: 100 Masters' courses: 295 field (HEDS/DGHE) No diplomas: 2277 Note) The figures in parentheses indicate number of students dispatched to Japan. Same as left 6. Construction works Lecture rooms, language training rooms, dormitories etc. (Ministry of Finance, Language Training Center) 7. Procurement of facilities, furniture Additions and other household articles 2 sets of computers, 4 vehicles, 2 copying machines, 2 printers, 1 (Ministry of Finance, Language electronic blackboard. 2 fax Training Center) machines 8. Consulting service (1) Component i (HRD) Foreign: 345 M/M Foreign: 345 M/M Local: 935 M/M Local: 935 M/M (2) Component ii (OTO) (3) Component vi (STAID/BPPT)

Comparison of Original and Actual Scope

Item	Plan	Actual
Implementation Schedule		
1. Strengthening of human resource development policy	Jul 1990 ~ Sep. 1993	Apr. 1992 ~ Dec. 1994
2. Organizational strengthening of overseas training centers	Oct. 1990 ~ Mar. 1997	Jan. 1991 ~ Dec. 1998
3. Economic and financial training, expansion of Language Training Center	Jan. 1991 ~ Dec. 1994 Center planned to be constructed between Apr. 1991 and Dec. 1992	Apr. 1991 ~ Sep. 1997 Center was constructed between Oct. 1992 and Jun. 1993
4. Strengthening of science and technology fields for industrial development	Apr. 1990 ~ Mar. 1997	Apr. 1990 ~ Dec. 1998
5. Training of higher education teaching staff in the engineering field	Jul. 1990 ~ Jul. 1995	Apr. 1991 ~ Dec. 1998
Project Cost Foreign currency Local currency Total ODA loan portion Exchange rate	¥9,718 million ¥4,916 million ¥14,634 million ¥12,439 million 1Rp. = ¥0.08 (Mar. 1990)	¥12,589 million ¥ 2,226 million ¥14,815 million ¥12,351 million 1Rp. = ¥0.02 (average during implementation)