China

Ex-Post Evaluation of Japanese ODA Loan
"Hunan Higher Education Project"

External Evaluator: Naomi Murayama, OPMAC Corporation

0. Summary

The project objective was to improve higher education in Hunan Province quantitatively and qualitatively by supporting construction of buildings, procurement of equipment and teachers' training in the target universities. This objective has been highly relevant to the country's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high. The outputs were essentially completed in line with the initial plans, but the project cost slightly exceeded the plan, while the project period significantly exceeded the plan; therefore efficiency of the project is low. Based on the information gathered during this evaluation work, although the indicators on educational environment are deteriorating in some universities due to the rapid increase of the students, its effectiveness is high because of improvement of all the indicators on academic performance and research level. No major problems have been observed in the operation and maintenance system; therefore sustainability of the project effect is high.

In light of the above, this project is evaluated to be satisfactory.

1. Project Description

Project Location

Library at Central South University of Forestry and Technology

1.1 Background

Hunan Provincial People's Government had a plan to make further efforts toward market economy and economic growth, targeting a GDP growth rate of more than 9% in Hunan Province 10th Five-Year Plan (2001-2005) from the aspects of disparity rectification among regions. The provincial government recognized the necessity of expanding higher education in order to attain the objective, and announced the policy to raise higher education enrollment from about 450,000 in 2000 to 850,000 in 2005, including an increase in regular institutions of higher education from 250,000 in 2000 to 420,000 in 2005. Furthermore, the government put priority on development and enforcement of higher education institutions in light of poverty alleviation in urban areas through providing vocational training to laid-off employees by state enterprises and educational promotion in rural areas through training program for teachers dispatched to the rural areas.

1.2 Project Outline

The objective of this project was to improve higher education in Hunan Province quantitatively and qualitatively by developing educational infrastructures such as school buildings and equipment and enhancing human resources through teachers' training in 11 universities which play an important role in disparity rectification between coastal areas and inland areas through market-oriented economic reform and economic growth in Hunan Province, rural development and state enterprise reform, thereby contributing to the market-oriented economic reform and disparity rectification in China.

Loan Approved Amount/ Disbursed Amount	4,682 million yen / 4,486 million yen
Exchange of Notes Date/ Loan Agreement Signing Date	March, 2002 / March, 2002
Terms and Conditions	Interest Rate: 0.75 % Repayment Period: 40 years (Grace Period: 10 years) Conditions for Procurement: Bilateral tied
Borrower / Executing Agency	The Government of the People's Republic of China / Hunan Provincial People's Government
Final Disbursement Date	January, 2009
Feasibility Studies, etc.	1. F/S: "Feasibility Report on Hunan 'Central West Qualified Personnel Training Project' with Loans from the International Xieli Bank of Japan" (Hunan Province Investment Consulting Company, March 2001) 2. JBIC report: ① "FY 2001 Special Assistance for Project Implementation (SAPI) for Higher Education Project in China" (August 2003) ② "SAPI for Higher Education Project in the People's Republic of China" (March 2004) ③ "SAPI for Higher Education Project in China" (May 2005)

2. Outline of the Evaluation Study

2.1 External Evaluator

Naomi Murayama, OPMAC Corporation

2.2 Duration of Evaluation Study

Duration of the Study: December, 2010 – October, 2011
Duration of the Field Study: February 27 – March 19, 2011, June 11- June 18, 2011

2.3 Constraints during the Evaluation Study

No particular problem.

3. Results of the Evaluation (Overall Rating: B[1])

3.1 Relevance (Rating: ③[2])

3.1.1 Relevance with the Development Plan of China

China was admitted to the World Trade Organization (hereinafter referred to as WTO) in December 2001 and was aiming at high rates of economic growth, openness and reform through industrial structural adjustment. Disparities between coastal and inland areas, and urban and rural areas were challenges in China.

This project sought 1) to tackle industrial structural adjustment through development of highly-skilled human resources in high technology, biotechnology, manufacturing technology and so on, 2) to respond flexibly to market needs and international competition after becoming a WTO member state through development of high-quality human resources in the fields of law, finance and trade, and 3) to rectify the disparities between coastal and inland areas, and urban and rural areas through these human resource developments. These project objectives were in line with "10th Five-Year Plan for National Economic and Social Development (2001-2005)", "10th Five-Year Plan for Education" and "Hunan Province 10th Five-Year Plan".

At the time of appraisal, the "National Mid- and Long-Term Reform and Development Plan for Education Sector (2010-2020)" has been formulated in addition to the "12th Five-Year Plan for National Economic and Social Development (2011-2015)", "12th Five-Year Plan for Education" and "Hunan Province 11th Five-Year Plan"[3] and China has been promoting human resource development and regional disparity rectification for further economic growth, openness and reform. These five-year plans stay the course of 10th Five-Year Plans respectively. The project objectives are consistent with these development policies in China.

3.1.2 Relevance with the Development Needs of China

At the time of appraisal, the quantitative demand for higher education was growing along with the increase in postsecondary students. However, the lack of facilities and teaching staff of universities was a challenge. It was necessary to strengthen facilities, human resources and financial aspects in order to address the challenge. The project supported strengthening of the facilities and human resources; therefore it was consistent with the development needs of China.

Table 1: Number of Postsecondary Students and Tertiary Enrollments in Hunan Province

Unit: person

Year	2005 (forecast at appraisal)	2005 (actual)	2009 (actual)
Postsecondary students	254,000	340,207	415,666
Tertiary enrollments	240,000	250,844	324,737

Source: JICA appraisal documents, Hunan Province Education Department

At the time of ex-post evaluation, the numbers of graduates from high schools[4] and enrollments of higher education have been increasing more than estimated. This indicates growing needs for higher education (Table 1). Moreover, the project was implemented at the same time as higher education reform in China which required intensive improvement of facilities and quality of lecturers. The reform is still continuing. The project objectives are consistent with the development needs of universities, too.

[1] A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

[2] ③: High, ② Fair, ① Low

[3] According to Hunan Provincial Education Department, "Hunan Province 12th Five-Year Plan" was not developed yet. Therefore, it couldn't be confirmed at the time of ex-post evaluation.

[4] It corresponds to a high school in Japan.

3.1.3 Relevance with Japan's ODA Policy

Japan's ODA Charter at the time of appraisal put importance on assistance in the Asian region and assistance in human resource development; therefore the project objectives were consistent with Japan's ODA policy.

Furthermore, Country Assistance Program for China, Medium-Term Strategy for Overseas Economic Cooperation Operations and Country Assistance Strategy at the time of appraisal put priority on human resource development from the viewpoint of support for openness and reform and post-WTO economic reform, and on assistance in Mid-Western Region in China from the aspect of disparity rectification. The project objectives were consistent with Japan's aid policies.

This project has been highly relevant to China's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high.

3.2 Efficiency (Rating: ①)

3.2.1 Project Outputs

The project is composed of construction of teaching and research buildings, enhancement of educational and research equipment, and training of higher education personnel. The outputs of each component are as shown in Table 2.

Table 2: Comparison of Outputs (planned and actual)

Items	Planned	Actual (achievement rate)
Building	11 universities total: 238,208m^2	9 universities total: 257,141m^2 (107.9%)
Equipment	10 universities: 2,970	9 universities: 2,923 (98.4%)
Training	11 universities total: 318	9 universities total: 239 (75.2%)

Source: JICA appraisal documents, Responses to the questionnaire

The target universities were 11[5] at the time of appraisal. During project implementation, Xiangtan Polytechnical University merged with Xiangtan Normal University so that the target universities became 10 in total. There was a plan to construct Multipurpose Teaching Building in Nanhua University under the Project, but the building was constructed under own funds. The unused ODA fund for the building of Nanhua University was allocated to the construction of Electric Information Building in Central-South University of Forestry and Technology and to the construction of Science and Technology Building in Hunan University of Technology. Nanhua University which cancelled ODA Loan for building construction decided to cancel ODA Loan for training component, too. Then Nanhua University was excluded from target universities and the target universities became nine in the end. The fund of the training portion for Nanhua University was allocated to Xiangtan University, Changsha University of Science Technology and Hunan Agricultural University.

Regarding construction of buildings, there were some minor changes such as increase of floor area, design changes, and specification changes. The main reason for the change was to

[5] Initial target universities were as follows: Nanhua University, Xiangtan University, Hunan Normal University, Changsha Communication University, Xiangtan Polytechnical University, Hunan Agricultural University, Central-South Forestry University, Zhuzhou Institute of Technology, Hunan Institute of Traditional Chinese Medicine, Xiangtan Normal University, and Central-South University. Of this, Changsha Communication University was merged with Changsha Institute of Electric Power Engineering so that became Changsha University of Science Technology. Hunan University of Science and Technology was created by merging Xiangtan Polytechnical University with Xiangtan Normal University. The name was changed due to upgrade from institute to university in the following universities: Central-South Forestry University, Zhuzhou Institute of Technology and Hunan Institute of Traditional Chinese Medicine. Those universities became Central-South University of Forestry and Technology, Hunan University of Technology and Hunan University of Chinese Medicine, respectively.

cope with the increasing demand; therefore there were not any particular problems with these changes.

The teaching and research equipment in seven universities out of nine target universities was slightly changed, but it was basically completed as planned. The reasons why some equipment could not be procured as planned were that some equipment was changed or cancelled due to the outdated technology by the delay of procurement and was cancelled due to price increase by exchange rate fluctuations.

At the beginning of the project, the progress of training component did not go well. After two extensions of the project implementation period, dispatch of lecturers in the target universities except for Hunan University of Science and Technology was almost completed as planned. Hunan University of Science and Technology had a plan to send 70 trainees to Japan. However, it resulted in 18 because the candidates could not easily find the universities accepting them. In the project, trainees had to find Japanese institutions accepting them, make contact with the institutions and take the necessary procedures to study in Japan by themselves. Any agencies which took care of these procedures were not planned. The main reason for the delay in the training component at the beginning was that it is difficult for trainees to find the institutions and make contact with them because most of the target universities had few connections with universities in Japan or abroad. After the implementation of the project, this component gradually progressed due to JICA seminars to introduce Japanese universities, special courses established in some Japanese universities, commencement of consultation service for the training program and revision of the training program regulation in Hunan Province[6].

Box 1: Efforts to Promote Training Program — Hunan Normal University —

Hunan Normal University put priority on the training of staff in charge of the training program. At first, the university sent six administration staff to the University of Shiga Prefecture which had connections with Hunan Normal University before the project. The staff studied the office functions of International Exchange Center as well as Japanese culture in the University of Shiga Prefecture. After they acquired the know-how on the student exchange, they established the contact point in Hunan Normal University for candidate lecturers and dispatch them to Japan. As a result, they could dispatch many trainees.

Hunan Normal University could establish such system and dispatch the trainees to Japan successfully since some lecturers specializing in Japanese took initiative. However, there were a lot of difficulties from first contact with Japanese professors to acceptance if the candidate trainees did not have any connection with Japanese side. The matching often did not go well in other universities. These circumstances could be avoided if the lack of connections were perceived at the time of appraisal and such an intermediation role, which Provincial Education Department or administration office in each university had, was incorporated in the project implementation structure from the beginning of the project. Moreover, the training component would be smoothly implemented if good practices like Hunan Normal University were shared and became common to other universities in Hunan Province and other provinces.

3.2.2 Project Inputs

3.2.2.1 Project Cost

Actual project costs amounted to 8,784 million yen (of this, the actual loan disbursement amounted to 4,388 million yen) against the estimated costs of 7,118 million yen (of this, the planned loan amounted to 4,682 million yen), and was slightly higher than planned (123%). The

[6] The trainees were decided in advance according to the budget in Hunan Province. However, the institutes where they studied were decided at a sluggish pace at the beginning of the project. After JICA's seminar, Hunan Provincial Education Department revised the regulation on a first-come-first-served basis regardless of the plan.

reasons for the higher project cost were attributable to the greater-than-expected inflation and the increase in universities' own expenses. Especially the account settlement exceeded the plan in the building construction component due to the greater-than-expected inflation, and regarding the equipment component, appreciation of Japanese yen created price increase of imported equipment so that each university paid 50% of the excess.

3.2.2.2 Project Period[7]

The project period planned at the time of appraisal was 36 months, or from March 2002 to March 2005. The actual project period was 81 months, or from March 2002 to January 2009, which was equivalent to 225% of the original plan, and was significantly longer than planned.

The loan period was extended for 18 months by two extensions of project implementation period. The delays were shown in each component. The main reasons for the delays were to take more time for the procurement procedures than expected regarding equipment, and to have difficulties to find institutes accepting the trainees as to the training component. The construction of buildings was completed in January 2009. It was because the procedures for the Electric Information Building in Central-South University of Forestry and Technology and Science and Technology Building in Hunan University of Technology started after the cancellation of Nanhua University. Other buildings were constructed as scheduled.

The project is characterized by more difficult control by the executing agency (Hunan provincial government) and the end-users (target universities) than other projects because many organizations are involved in the project implementation such as procurement agency and the Export and Import Bank in request for disbursement to JICA. The procurement packages were composed not by university but by kind of equipment, because it was expected that such procurement packages by kind of equipment reduced costs at the time of appraisal. However, this caused cross-universities coordination during the procurement procedure. The change of equipment and troubles occurred in one university affected other universities in the same package of equipment so that the procedure and coordination took more time than expected. As a result, it harmed the efficiency. In addition, some unavoidable matters, such as bankruptcy of the supplier of equipment included in the first package and six-month stoppage of the project due to SARS in 2003, affected the project.

The project cost slightly exceeded the plan, while the project period significantly exceeded the plan; therefore efficiency of the project was low.

3.3 Effectiveness (Rating: ③)

This project aimed at quantitative and qualitative improvement of higher education in Hunan Province by supporting construction of buildings, procurement of equipment and teachers' training in the target universities. There are 100 universities in Hunan Province as of 2008. The target universities are only nine out of these 100 universities. It is difficult for the project to contribute to quantitative and qualitative improvement of entire higher education institutions in Hunan Province directly. Therefore, quantitative and qualitative improvement of only the target universities was analyzed in this section.

3.3.1 Quantitative Effects

3.3.1.1 Results from Operation and Effect Indicators

The number of students was utilized as an indicator for quantitative improvement of education in this evaluation. In order to confirm whether the quality of education and research was improved and whether the quality was not deteriorated by increase in students, the lecturer

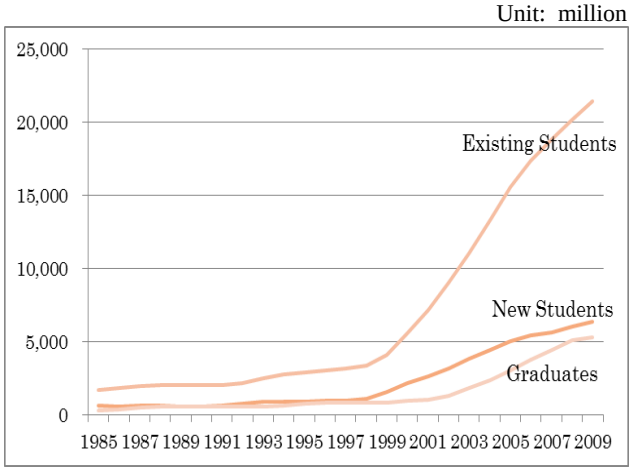
[7] The completion of the project was defined as completion of three components: teaching and/or research buildings, educational and/or research equipment, and personnel training at the time of appraisal. But at the time of ex-post evaluation, the completion is defined as final disbursement.

to student ratio, the floorage per student, the successful applicant's pass mark of university entrance exams, the graduate school enrollment rate, the university graduation rate, the employment rate and the designation of key faculties and laboratories were utilized as indicators and the before-after differences or recent transition of these indicators were analyzed.

(1) Change in the Number of Students

In China, the number of university students has sharply increased since 1999 (Figure 1). The Chinese Government aimed to increase the university enrollment rate from 9.8% in 1998 to 15% in 2010 in "Action Plan for Educational Vitalization Facing the 21st Century". The universities expanded the quota in respond to this plan. For China as a whole, the growth rates of university students from 2000 to 2009 reached 286% (Table 3).

Unit: million



Source: Webpage of National Bureau of Statistics of China (http://www.stats.gov.cn/english/ as of July 1)

Figure 1: Transitions in Number of University Students

In the meantime, universities in Hunan Province increased from 83 to 100. The number of students doubled in Hunan Province although it was not as many as national growth rate. A glance at Table 3 will reveal the increase of more than the target figures set at the time of appraisal. The objective of quantitative increase of higher education was accomplished from the aspect of the number of students.

Table 3: Changes in the Number of Students in the Target Universities

Unit: person

	Baseline (2000)	Target (2005)	Total number of students (2009)	% of baseline	% of target	Growth rate
Nanhua University	10,384	20,000	24,795	239%	124%	139%
Xiantan University	12,925	25,000	26,196	203%	105%	103%
Hunan Normal University	15,379	18,500	26,515	172%	143%	72%
Changsha University of Science Technology	6,485	17,000	22,826	352%	134%	252%
Hunan University of Science and Technology	14,058	25,411	32,453	231%	128%	131%
Hunan Agricultural University	5,016	13,200	21,012	419%	159%	319%
Central-South University of Forestry and Technology	8,730	18,500	23,532	270%	127%	170%
Hunan University of Technology	6,272	12,400	34,795	555%	281%	455%
Hunan University of Chinese Medicine	4,432	10,560	21,917	495%	208%	395%
(reference)						
Hunan Province Total	454,300	850,000	952,330	210%	112%	110%
National Total	5,561,000	—	21,447,000	386%	—	286%

Source: JICA appraisal documents, Responses to the questionnaire, Webpage of National Bureau of Statistics of China (http://www.stats.gov.cn/english/ as of July 1)

Note: The baseline and the target for Changsha University of Science Technology are those for Changsha Communication University. The baseline and the target for Hunan University of Science and Technology are the totals of Xiangtan Polytechnical University and Xiangtan Normal University.

(2) Lecturer to Student Ratio

The Undergraduate University Establishment Standards of China[8] require that the number of students per full-time lecturer is equal to or less than 18. At the time of appraisal, eight target universities excluding Central-South University of Forestry and Technology passed the standard. On the other hand, since the number of students increased by 226% on average at the target universities from appraisal to ex-post evaluation as studied in the previous section, the number of students per full-time lecturer in four target universities exceeded the standard. The deterioration in the quality of education is a slight concern. Despite the exponential increase in the students, it can be appreciated that more than half of target universities can stay within the standard.

In Central-South University of Forestry and Technology, the number of students per full-time lecturer was forecasted to increase by 23.13 in 2005 in prospect of increase of the students. However, it resulted in slight increase (from 19.19 to 19.71) due to the efforts to increase full-time lecturers. In Hunan University of Technology and Hunan University of Chinese Medicine where students have increased significantly, the addition of full-time lecturers cannot keep up with the rapid increase of the students so that the number of students per full-time lecturer is around 30. It has been deteriorating in significant excess of the expectancy. It is necessary to ensure the increase of new high quality lecturers in addition to the development of buildings and equipment and training for existing lecturers in order to enhance and/or maintain the effectiveness of the project.

Table 4: The Number of Students per Full-time Lecturer

Unit: student/full-time lecturer

	Baseline (2000)	Target/ prediction (2005)	Actual (2009)
Nanhua University	13.18	14.81	17.98
Xiantan University	14.39	15.01	11.32
Hunan Normal University	9.76	9.49	15.74
Changsha University of Science Technology	13.43	21.25	13.33
Hunan University of Science and Technology	12.42	14.69	20.70
Hunan Agricultural University	7.37	9.26	18.15
Central-South University of Forestry and Technology	19.19	23.13	19.71
Hunan University of Technology	16.91	15.90	27.27
Hunan University of Chinese Medicine	7.29	11.60	33.98

Source: JICA appraisal documents, Responses to the questionnaire

Note: The baseline and the target for Changsha University of Science Technology are those for Changsha Communication University. The baseline and the target for Hunan University of Science and Technology are the totals of Xiangtan Polytechnical University and Xiangtan Normal University.

(3) Floorage per Student

The Undergraduate University Establishment Standards of China[9] require that the floorage per student is more than 30m^2. The actual average of the target universities in 2009 was 31.91m^2, which was better than 28.3m^2, the average in 2000. Although the buildings constructed under the project account for only a small percentage of total floorage in each university, the project might have contributed to improvement of the floorage per student to some extent.

[8] Japan Science and Technology Agency China Research Center, 2011, "2010 Current Situation and Trend of Higher Education in China"(「平成 22 年版　中国の高等教育の現状と動向本文編」), p.77 Table 3-1-1

[9] Japan Science and Technology Agency China Research Center, 2011, "2010 Current Situation and Trend of Higher Education in China" (「平成 22 年版　中国の高等教育の現状と動向本文編」), p.77 Table 3-1-1

Table 5: Floorage per Student

Unit: m^2/student

	Baseline (2000)	Planned (2005)	Actual (2009)
Nanhua University	31.36	29.28	37.42
Xiantan University	23.09	14.50	31.91
Hunan Normal University	17.69	16.76	33.63
Changsha University of Science Technology	30.19	34.41	38.87
Hunan University of Science and Technology	31.25	32.32	25.88
Hunan Agricultural University	37.09	15.99	51.05
Central-South University of Forestry and Technology	20.51	18.31	35.03
Hunan University of Technology	25.51	32.26	17.11
Hunan University of Chinese Medicine	37.97	28.76	16.33

Source: JICA appraisal documents, Responses to the questionnaire

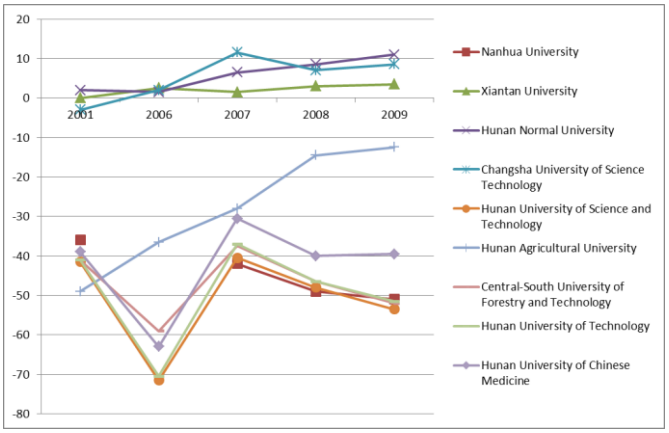
Note: The baseline and the target for Changsha University of Science Technology are those for Changsha Communication University. The baseline and the target for Hunan University of Science and Technology are the totals of Xiangtan Polytechnical University and Xiangtan Normal University.

Considering individual universities, the floorage per student improved in six out of nine universities. All the improved universities pass the standard. The floorage per student in Hunan University of Technology and Hunan University of Chinese Medicine with significant increase of students deteriorated by about 33% and about 57%, respectively, as with the case of the number of students per full-time lecturer. Any of these universities have invested their own funds in buildings in addition to the ODA Loan. Nevertheless, they cannot keep up with the rapid increase of the students. More investments in building construction are needed.

(4) Successful Applicant's Pass Mark of University Entrance Exam

The Transition of the successful applicant's pass mark of "the National Higher Education Entrance Examination", or commonly known as "Gao Kao"[10] was studied in order to confirm whether the quality was deteriorated by increase of students. The difficulty of Gao Kao varies year by year so that it is difficult to compare the level of enrollees by simple comparison of the pass mark. Therefore, the difference between the pass mark of the first group of applicants and the pass mark of each target university was analyzed (Figure 2).

Unit: score



Source: JICA appraisal documents, Responses to the questionnaire

Note: The baseline and the target for Changsha University of Science Technology are those for Changsha Communication University.

Figure 2: Transition of the Successful Applicant's Pass Mark of Gao Kao in Target Universities

Considering the average of target universities, the level of successful applicants generally continues to be flat. Hunan Normal University, which is the only designated university of

[10] The examination subjects are basically composed of three compulsory subjects " Mathematics, Chinese and a foreign language", with 150 scores for each subject and "Comprehensive Ability Test" which is categorized into science tests and liberal arts tests and chosen in either sciences or liberal arts , according to the students' interest, with 300 scores (750 scores in total). Students turn in an application based on their self-grading, referring to the acceptable marks of each university announced by Education Department. The Education Department also publishes the lowest mark of the first group, which is a top group of applicants.

"Project 211[11]" in the target universities, is variously supported by the Central government so that the level of enrollees has steadily improved. The difficulty of Changsha University of Science and Technology has been rising to the level that it can accept first group applicants, and becomes as competitive as Hunan Normal University, although the pass mark of Changsha University of Science and Technology did not reach the lowest mark of the first group applicants at the time of appraisal. The growth rate of students in Hunan Agricultural University was 319% during the project period. Despite the drastic increase of the students, the difference of the pass marks, has been improving year by year. It was reduced by 36.5% from 2001 to 2009. On the other hand, the differences of the pass marks in not only Hunan University of Technology, where students are rapidly increasing, but also Nanhua University and Hunan University of Science and Technology, where growth rates are at around 130%, have shown a consistent downward trend for several years compared to their performances in 2001. From these, it can be said that the number of enrollments does not necessarily have an effect on the difficulty to enter universities. And judging from overall trend of the target universities, the negative effects of the increase in enrollments on the level, which have been concerned at the time of appraisal, are not such an important issue.

(5) Graduate School Enrollment Rate, University Graduation Rate and Employment Rate

From the viewpoint of educational outcomes after entering universities, the quality of education was analyzed by using the indicators such as the graduate school enrollment rate, the university graduation rate and the employment rate[12].

Any of the target universities aims to be a high-level education and research institution and focuses on graduate education. Therefore, the graduate school enrollment rate is progressively increasing.

The national enrollment rate of graduate schools is 10% in Project 211 universities, and 7 % in other universities (both figures in 2008)[13]. Thus the rate in the target universities is at a higher level than the national average.

Table 6: Graduate School Enrollment Rate of the Target Universities

Unit: %

Year	2006	2007	2008	2009
Nanhua University	7.8	8.0	10.0	12.4
Xiantan University	47.0	50.0	54.0	60.0
Hunan Normal University	15.5	16.5	19.9	20.4
Changsha University of Science Technology	14.6	14.8	15.5	15.8
Hunan University of Science and Technology	12.8	13.6	14.4	15.0
Hunan Agricultural University	14.5	14.8	15.2	15.7
Central-South University of Forestry and Technology	14.5	14.8	15.5	15.9
Hunan University of Technology	13.7	13.9	14.3	14.8
Hunan University of Chinese Medicine	14.3	14.9	15.0	15.2

Source: Responses to the questionnaire

[11] Project 211 is a national project, named from the abbreviation of "the 21st century and approximately 100 universities respectively". It began in 1993 and now is implementing in the third stage (from 2007 to 2011). In the third stage, 112 universities are designated as key universities. The Chinese government has intensively invested national finance in the key universities in order to cultivate world-class leading-edge education and research institutions In Hunan Province, there are four designated universities; Hunan University, Central South University, and National University of Defense Technology other than Hunan Normal University. (Source: Japan Science and Technology Agency China Research Center, 2011, "2010 Current Situation and Trend of Higher Education in China", pp.30-36)

[12] Employment rate = (the number of university graduates who have found work+ the number of students going on to graduate school) / the number of graduates

[13] Japan Science and Technology Agency China Research Center, 2011, "2010 Current Situation and Trend of Higher Education in China" (「平成 22 年版　中国の高等教育の現状と動向本文編」), p.175

The graduation rates are extremely high, or from 97% to 100%, at all the target universities. Almost all of the students enrolled in universities can graduate. This situation has been unchanged for a long time. Table 7 shows that the drop-outs or students who cannot graduate do not increase even if the enrolments increase.

Table 7: Graduation Rate of the Target Universities

Unit: %

Year	2006	2007	2008	2009
Nanhua University	100.0	100.0	100.0	100.0
Xiantan University	99.2	99.1	99.3	99.5
Hunan Normal University	98.8	98.1	98.0	98.8
Changsha University of Science Technology	97.8	98.1	97.5	97.5
Hunan University of Science and Technology	97.5	98.2	98.4	98.5
Hunan Agricultural University	98.9	96.9	97.8	98.5
Central-South University of Forestry and Technology	98.8	98.5	97.4	98.0
Hunan University of Technology	98.0	98.2	97.5	98.6
Hunan University of Chinese Medicine	98.0	98.2	97.3	98.5

Source: Responses to the questionnaire

Although the employment rate recently suffers from the global economic slowdown, it holds steady at around 90% in all the target universities. However, note that this employment rate includes students going on to graduate school and does not illustrate job finders against job seekers or against entire graduates. Nonetheless, according to Hunan Provincial Education Department, since those who plan to continue their education do not go on to graduate schools on the grounds of unemployment, it can be appreciated that almost all the students who want to have a job or go on to a graduate school can get their desire.

Table 8: Employment Rate of the Target Universities

Unit: %

Year	Baseline (2000)	Target (2005)	2006	2007	2008	2009
Nanhua University	95.5	95.0	93.9	92.8	92.5	93.1
Xiantan University	90.7	99.0	94.9	94.1	92.2	91.5
Hunan Normal University	93.3	98.0	93.0	93.0	93.0	95.0
Changsha University of Science Technology	98.2	99.0	95.8	94.9	96.3	94.7
Hunan University of Science and Technology	99.6 (94.4)	99.0 (98.0)	91.5	91.4	92.0	93.2
Hunan Agricultural University	93.3	95.0	90.5	93.6	91.2	92.3
Central-South University of Forestry and Technology	99.3	99.0	91.4	92.0	91.8	92.2
Hunan University of Technology	84.3	88.0	97.0	97.0	93.0	87.0
Hunan University of Chinese Medicine	78.7	85.0	95.3	95.6	93.9	95.2

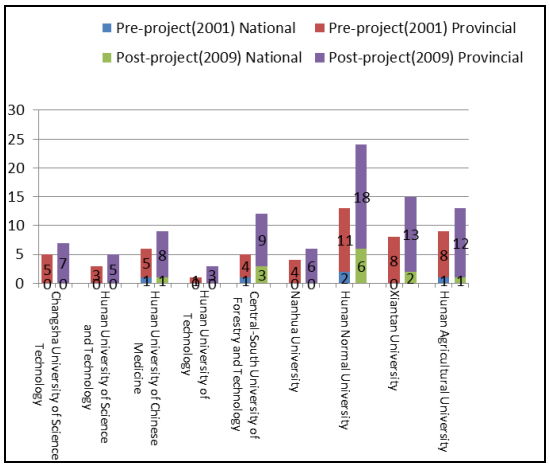
Source: JICA appraisal documents, Responses to the questionnaire

Note: The figures in baseline and target of Hunan University of Science and Technology are ones of Xiangtan Polytechnical University. The figures in parenthesis are from Xiangtan Normal University.

(6) Designation of Key Faculties[14] and Key Laboratories[15]

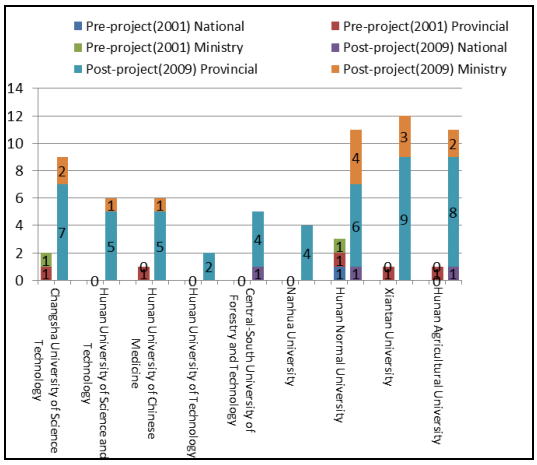
The number of faculties or laboratories designated as key faculties and key laboratories in all the target universities increased compared to the figures at the time of appraisal. Regarding key national faculties, Project 211 universities account for 94% of the first level key faculties and 79% of the second level key faculties[16]. However, each two faculties in Central-South University of Forestry and Technology and Xiantan University, which are not designated as Project 211 universities, are newly designated as the key national faculties. This is because these universities deserve to raise their research and education to the national highest level. As to key laboratories, Central-South University of Forestry and Technology and Xiantan University were also newly designated as national level key laboratories.

The number of key provincial faculties and laboratories has drastically increased in all the target universities. It should not be surprising that the number of designation increases, because Hunan Provincial Education Department chosen the target universities from the excellent universities to which Education Department intensively provides support. As seen above, the research and education in the target universities has been improved by designation of key faculties and key laboratories.



Source: Responses to the questionnaire

Figure 3: Number of Key Faculties



Source: Responses to the questionnaire

Figure 4: Number of Key Laboratories

Although the indicators on educational environment such as the lecturer to student ratio and the floorage per student are deteriorating in some universities due to the rapid increase of the students at the time of ex-post evaluation, according to the level of enrollees, the graduate school enrollment rate, university graduation rate and employment rate, the deterioration does

[14] Key national faculties have been established by Ministry of Education since 1988 in order to invest intensively to universities and /or faculties suitable for the center of innovation human development and scientific research. Key national faculties have been selected three times until now. In the third selection in 2007, 967 faculties were certified or re-certified across the country. Key faculties certified by provincial education departments or ministries other than Ministry of Education (e.g. Ministry of Agriculture) are called provincial key faculties and ministry-level key faculties, respectively.

[15] The Chinese government, especially Ministry of Science and Technology, Ministry of Education and Chinese Academy of Sciences, began Key National Laboratories Project in 1984 in order to improve basic research and catch-up to the world level. Affected by key national laboratories, ministries' or provincial key laboratories including Ministry of Education key laboratories and Chinese Academy of Sciences key laboratories have been established one after another. Today, there are 220 key national laboratories and six national laboratories including planned laboratories. Japan Science and Technology Agency China Research Center Webpage (as of July 22, 2011): http://www.spc.jst.go.jp/science_policy/chapt3/3_01/3_1_2/3_1_2_3/3123_5.html

[16] Japan Science and Technology Agency China Research Center, 2011, "2010 Current Situation and Trend of Higher Education in China" (「平成 22 年版　中国の高等教育の現状と動向本文編」), p.43 Table 2-1-8

not have serious negative impacts on academic performance. The indicator illustrating the students' level continues to be high or has improved. From the number of key faculties and laboratories, the research level is improving. The university buildings and equipment are assessed in designating key faculties and laboratories so that the project strongly contributes to the increase in the number of designation. The quality of education and research has also improved; therefore the project contributes to improvement to a certain degree.

3.3.1.2 Results of Calculations of Internal Rates of Return (IRR)

Due to the fact that data needed for quantitative analysis was not available, analysis for the internal rate of return was not possible.

3.3.2 Qualitative Effects

According to responses to the questionnaire, many target universities provide the opinion that they have perceived some changes in education and research and/or students' job hunting as a qualitative effect of the project, although it cannot be quantitatively indicated.

3.3.2.1 Changes in Education and Research

A representative opinion on the changes in education and research is that the level of education and research has been improved since the preconditions for the education and research were improved by development of buildings and equipment under the project. The similar opinion is that scientific experiment classes have increased.

It has been generally pointed out that the quality of education has been deteriorating in China because lecturers cannot keep personal attention to their students due to the increase of students and classroom lectures are mainly conducted instead of experiments and laboratory work[17]. However, the level of education and research has been improving due to the increase of experiments by development of buildings and equipment under the project. This point can be appreciated.

3.3.2.2 Changes in Students' Job Hunting

Regarding the students' job hunting, the employment rate has stayed at a high level, as mentioned above. In addition, the project effect is highly admired from the aspect of capacity building of the students. For example, work-ready graduates can be developed by strengthening students' practical abilities through experiments and laboratory work. Or the increase of experiments contributes to developing the students' practical abilities so that the competitiveness of students' job hunting is augmented. From these, it is assumed that human resources that meet social demands have been fostered by utilizing buildings and equipment developed under the project.

This project has largely achieved its objectives; therefore its effectiveness is high.

3.4 Impact

3.4.1 Intended Impacts

The project aimed to give an impact on market-oriented economic reform and improvement of disparities. In addition, one of the objectives of the training program was to promote mutual understanding between Japan and China although it was not clearly mentioned in the project objectives.

3.4.1.1 Impact on Market-oriented Economic Reform and Improvement of Disparities

In the appraisal documents, the number of graduates who studied accounting, law, and finance was suggested as an indicator for the impact on market-oriented economic reform.

[17] "Pacific-rim Business Information" (「環太平洋ビジネス情報 RIM」), 2008 Vol.8 No.28, p.57

During the site survey, the number was confirmed, but it fluctuated from year to year and did not increase equally. In addition, the careers of students after graduation were unknown. Therefore, it was difficult to evaluate the impact, or how their knowledge benefits the society.

As regards improvement of disparities, there were some opinions that the project contributed to disparity adjustment of universities between the coastal areas and the inland areas, however there is not any concrete indicators to show how much the disparities have been corrected.

Box 2: Approaches to Rural Development

—Central-South University of Forestry and Technology—

Central-South University of Forestry and Technology concluded the agreement on industry-academia-government collaboration with Shuangpai County, Yongzhou City, Zhuzhou County, Zhuzhou City, Zixing, Chenzhou City and Yiyang etc. in Hunan Province. The university dispatches engineers to these counties every year and supports the increase in production and income of forestry labors.

Engineer who gives instruction for planting camellia oleiferas in Shuangpai County (Photo: Central-South University of Forestry and Technology)

The university also provides assistances to other provinces: e.g. it has continuously dispatched six vice governors in charge of science and technology to Luanchuan County, Henan Province, since 1993. In Luanchuan County, the university intensively supports economic forestry development, bamboo processing/ furniture manufacturing, forest ecosystem development and ecotourism. Approximately 1,167 hectares of low fertility forestry were improved from 2008 to 2010, and excellent camellia oleiferas were extended to around 33,300 hectares in Hunan Province, Jiangxi Province and Fujian Province. These projects have notable socioeconomic impacts. In October 2010, the cooperation agreement was concluded between the university and People's Government of Luanchuan County. It is expected that the project will contribute to rural development by utilizing the advantages of both parties and sustaining the project effects more through regular opinion exchanges and personnel exchanges.

3.4.1.2 Mutual Understanding between Japan and China

There are some distinguished examples of utilizing the fruits of training in Japan as follows: 1) academic publication of research results as academic papers or books, 2) acquisition of patent for collaboration research results in Japanese enterprise, 3) the first success of transplantation in China after the clinical training in Japan, 4) promotion to a core professor in Japanese course, and 5) receiving domestic and foreign/ provincial awards by the research results. Generally speaking, however, most of the lecturers regard it as their fruits that they absorb the research methods and attitudes during their stay in Japan and put them into practice after they return.

The training program might have limited effectiveness in terms of research results. Nevertheless, it is assumed that the program has produced the results in a broad sense. The project made a substantial contribution to deepening the understanding toward Japan and the understanding of receiving universities in Japan toward China. The training program has strengthened the exchanges between Japanese universities and Chinese universities. For instance, Hunan University of Technology and Nanhua University invited Japanese professors for academic lectures even after the project. Hunan University of Science and Technology enhances cordial relationships with Seisen University. In 2008, Xiantan University concluded the framework agreement with Doshisha University with which the project activated the exchange. Central-South University of Forestry and Technology also concluded the faculty-level academic agreement with University of Toyama.

3.4.2 Other Impacts

(1) Impacts on the natural environment

The Environmental Impact Assessment (hereinafter referred to as EIA) was conducted prior to the project implementation in accordance with the Chinese regulations. "Three-Stage Simultaneous" implementation (i.e. regulation that environmental protection facilities shall be designed, constructed and put into production simultaneously with main construction structures)" was envisioned.

Based on this regulation, noise-abatement measures, appropriate sewage treatment and waste disposal were conducted by each university during the implementation period. Environmental facilities such as a waste water treatment plant were constructed until the project completion, as necessary, and the environmental facilities were operated at the same time as the beginning of use of buildings and equipment. All the target universities took necessary environmental protection measures including environmental monitoring at each stage, namely design, construction and operation. Like this, "Three-Stage Simultaneous" was smoothly implemented. At the time of ex-post evaluation, the negative impact on environment is not observed, according to the universities' responses to the questionnaire, interviews with the persons in charge, and visual confirmation at the sites.

(2) Land Acquisition and Resettlement

The project will be carried out on existing university properties, so there was no land acquisition or relocation of residents.

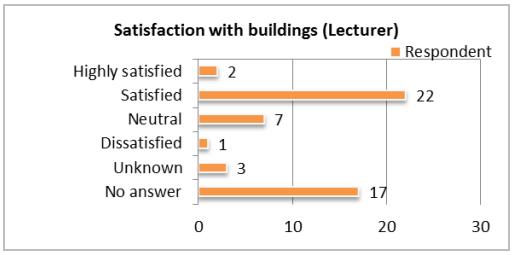
Although the impact on market-oriented economic reform is unclear, it is assumed that the project has a certain contribution to disparity adjustment between the coastal areas and the inland areas. The project has a major impact on mutual understanding between Japan and China. The negative impact on environmental and social aspects is not observed.

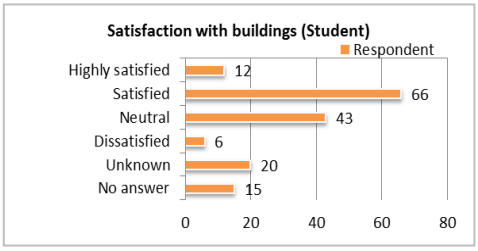
Box 3: Beneficiary Survey

The questionnaire survey targeted 52 lecturers and 164 students in nine target universities was conducted in order to confirm their satisfaction with each component of the project and their demands for future academic exchanges between Japan and China. The lecturers were limited to participants in the training program in Japan.

(1) Construction of Buildings

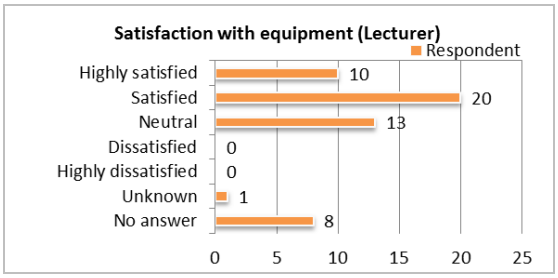
According to the responses, many of both lecturers and students are satisfied with constructed buildings.

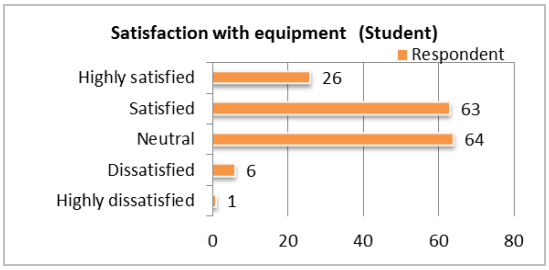




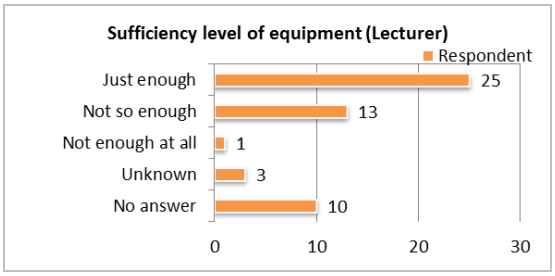
(2) Education and Research Equipment

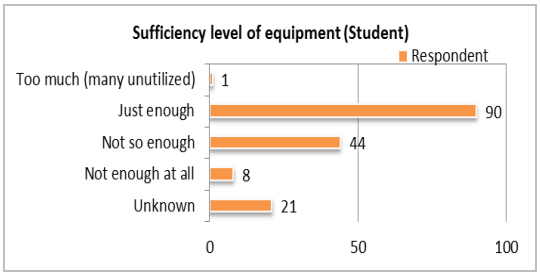
Equipment is not a key determinant of enrollment for students. However, 55 percent are satisfied with the equipment. 58 % of the lecturers are also satisfied with them.



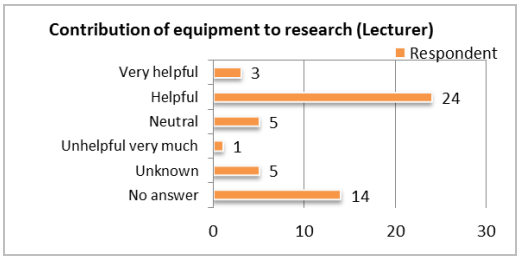


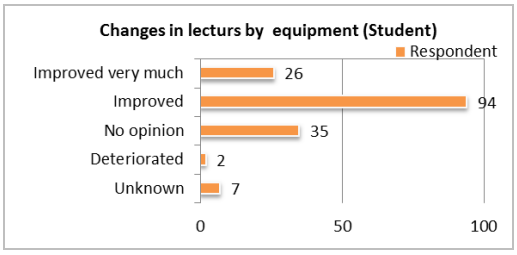
Half of the students and lecturers answered "just enough" to the question of the equipment sufficiency.





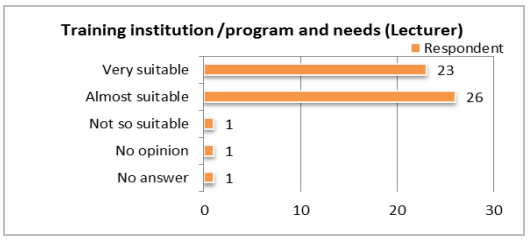
Students who feel the improvement in the quality of classes by the procured equipment account for 73% (including "improved" and "significantly improved"). It is assumed that the project contributes to the improvement of the quality of education to some extent. Regarding the question on contribution of the procured equipment to their research, 52% of the lecturers answered "very helpful" and "helpful". So it can be said that the project also has made a certain contribution to the improvement of their research quality.

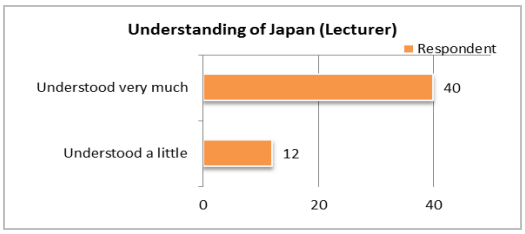




(3) Training

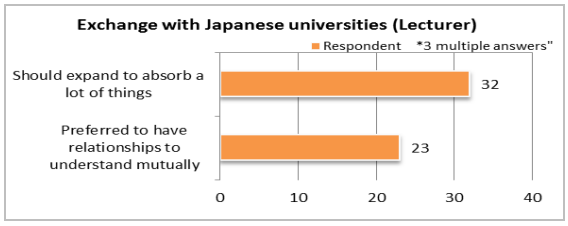
It was asked to lecturers whether the training institutions and training program met with their demands. 92 % of the respondents said "very suitable" and "almost suitable". It shows high level of satisfaction with the training. And all the respondents answered "deepened" to the question on the changes in the understanding toward Japan after participating in the training. The project resulted in significant contributions to the mutual understanding between Japan and China.

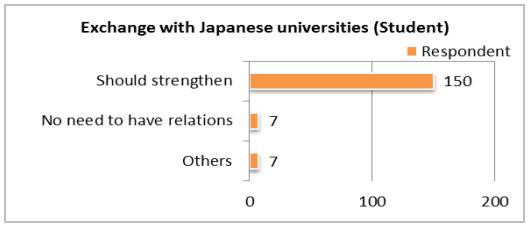




(4) Academic Exchange with Japanese Universities

101 students out of 164 (61.6%) responded as "interested" to the question on their interest in Japan. It greatly exceeded 51 responses of "uninterested" (31.1%). Their interests in Japan are varied: education system and circumstances in Japan (responses: 66), economic policy and Japanese private sector (ditto: 54), fashion and lifestyle of the young Japanese (ditto: 53), acceptance of international students in Japanese universities (ditto: 44), political climate and diplomatic policy (ditto: 42) etc.





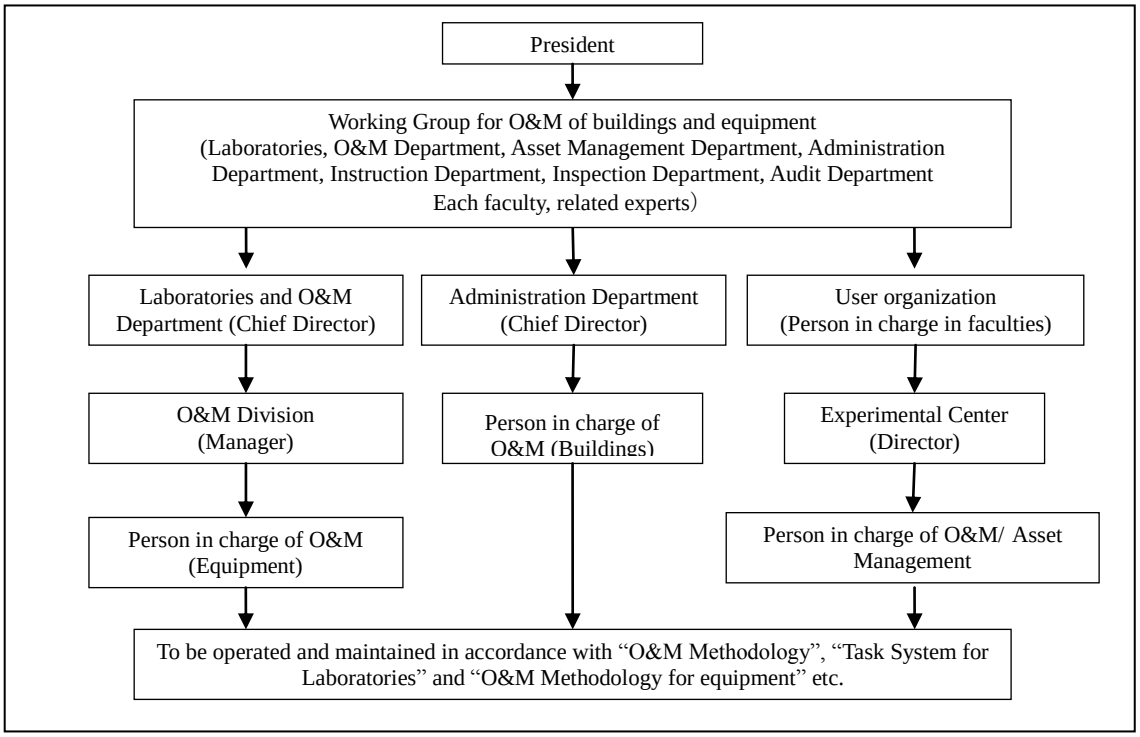
It was asked whether the academic exchange with Japanese universities should be expanded. Most of the lecturers and students recognized that they should expand. The opportunities to exchange with Japanese universities are expected to expand deeper exchange in the future.

3.5 Sustainability (Rating: ③)

3.5.1 Structural Aspects of Operation and Maintenance

There are already the operation and maintenance (hereinafter referred to as O&M) systems in every university, although there are some differences in their organization name and department.

Figure 5 is an example of Xiantan University. Other universities also have the similar O&M structure. The responsibilities are clearly shared by departments or persons in charge, in each university. The O&M methods are also systematized and the inspections and maintenance are regularly implemented.



Source: Responses to the questionnaire

Figure 5: Representative O&M Structure

3.5.2 Technical Aspects of Operation and Maintenance

The O&M training has been conducted in six out of nine target universities. It continuously maintains the technical level of their staff. When needed, the repair works are outsourced.

The O&M manuals are prepared in seven out of nine universities. Lecturers and students are familiarized with the user policies and operation procedures due to the posters which are put on the walls by equipment for everybody (photo).

The appropriate quantities of spare parts for major equipment are put in stock in seven out of nine universities. Most of the universities conduct regular maintenance in order to avoid unexpected breakdowns.

Poster on user policies and operation procedures

3.5.3 Financial Aspects of Operation and Maintenance

According to the self-evaluation of each university, the O&M budget is sufficiently allocated. There is no opinion that they have difficulties due to the insufficient O&M budget in the interviews with university staff[18].

Table 9: O&M Budget of the Target Universities

Unit: yuan

Year	2008	2009	2010
Nanhua University	1,126,000	1,071,000	1,379,600
Xiantan University	1,900,000	1,900,000	1,900,000
Hunan Normal University	300,000	300,000	300,000
Changsha University of Science Technology	1,050,000	1,650,000	2,100,000
Hunan University of Science and Technology	2,200,000	2,320,000	2,500,000
Hunan Agricultural University	1,000,000	1,000,000	1,000,000
Central-South University of Forestry and Technology	2,283,455	2,303,178	2,484,394
Hunan University of Technology	3,845,000	3,420,000	1,650,000
Hunan University of Chinese Medicine	500,500	650,000	720,000

Source: Responses to the questionnaire

The increase in the O&M expense is expected after the warrantee expiration of sophisticated equipment procured under the project. According to the target universities and provincial education department, it is not a problem since the budget will be allocated by provincial government or as a part of academic fees in accordance with their maintenance plans.

3.5.4 Current Status of Operation and Maintenance

The utilization ratios of buildings are very high, from 90% to 100%.

The operation rates of equipment are also very high with 82.2% for regular equipment on average and 75.2% for large-scale facilities on average. Generally, there is much special equipment for particular fields in universities so that the operation rate for large-scale facilities tends to be low. However, Hunan Province established common platform on campus LAN and makes an effort to raise the operation rate by open register for all of the equipment in order to avoid low rate of operation. So far, the common platform is established in each university. However, it is now restructured to share the platform over the province. If it is completed, the operation rate will make further improvement.

[18] The budgets are executed as planned. For instance, the average budget execution rate in Hunan University of Science and Technology over the last 3 years is 93.2% and 100% in Hunan Agricultural University, Central-South University of Forestry and Technology and Hunan University of Chinese Medicine. According to these universities, the O&M problems have never been caused by budgetary deficit.

No major problems have been observed in the operation and maintenance system, therefore sustainability of the project effect is high.

Table 10: Operation Rate of Equipment

Unit: %

University	Large-scale equipment	Regular equipment
Nanhua University	85	100
Xiantan University	87	92
Hunan Normal University	86	75
Changsha University of Science Technology	75	80
Hunan University of Science and Technology	62.5	67.5
Hunan Agricultural University	70	80
Central-South University of Forestry and Technology	78.5	Not procured
Hunan University of Technology	62	75
Hunan University of Chinese Medicine	71.5	88

Source: Responses to the questionnaire

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The project objective was to improve higher education in Hunan Province quantitatively and qualitatively by supporting construction of buildings, procurement of equipment and teachers' training in the target universities. This objective has been highly relevant to the country's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high. The outputs were essentially completed in line with the initial plans, but the project cost slightly exceeded the plan, while the project period significantly exceeded the plan; therefore efficiency of the project is low. Based on the information gathered during this evaluation work, although the indicators on educational environment are deteriorating in some universities due to the rapid increase in the number of the students, its effectiveness is high because of improvement of all the indicators on academic performance and research level. No major problems have been observed in the operation and maintenance system; therefore sustainability of the project effect is high.

In light of the above, this project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

Necessary measures for the universities which cannot keep up with increase of the students in terms of development of buildings and equipment and increase of lecturers should be considered in order to maintain the project effect.

4.2.2 Recommendations to JICA

The sustainability is very high in terms of building construction and equipment development because of the proper O&M structure in the executing agency and the target universities and no particular problem with technical and financial aspects. With regard to the training component, however, most of the trainees often cannot maintain the relationships with Japanese researchers, which were built under the project, although there are some cases where the cooperation agreements have been concluded and some trainees have occasional contact with the academic supervisors in Japan. It is advisable to provide support to establish the

framework for enhancement of academic exchange through restructuring of the existing webpage on the Higher Education Development Project for China into the site for information exchange among researchers and organization related to the project.

4.3 Lessons Learned

The training component did not progress as expected at the beginning of the project due to the difficulty of matching between trainees and trainers. It is necessary to incorporate the matching organization into the project structures, if the training is one of the components of a project and if it is necessary.

This project targeted only nine universities (the target universities were 11 at the beginning, but it became nine due to mergers, etc.) out of a total of 100 universities in Hunan Province. Nevertheless, many indicators for effectiveness were set beyond the outcomes of the project at the time of appraisal. In order to measure the primary effectiveness of the project, the indicators should be set properly within the project outcomes. Furthermore, it is necessary to share common perceptions on the indicators with executing agencies and implementing agencies. The monitoring system for the effective indicators should be established during the project implementation.

Generally, there is much special equipment for particular fields in universities so that the operation rate for large-scale facilities tends to be low. However, Hunan Province established common platform on campus LAN and made an effort to increase the operation rate by open register for all the equipment in order to avoid low rate of operation. In the project that the equipment procurement is planned, it is recommended to introduce the similar online reservation system for equipment to the Hunan campus LAN system in order to increase the operation rate.

end

Comparison of the Original and Actual Scope of the Project

Item	Original	Actual
1.Project Outputs (1) Building Construction	11 univeirsities: 238,208m^2	9 univerisites: 257,141m^2
(2) Equipment procurement	10 universities: 2,970 items	9 universities: 2,923 items
(3) Training	11 univerisites: 318 staff	9 universities: 239 staff
2.Project Period	March 2002 – March 2005 (36 months)	March 2002 – Jan 2009 (81 months)
3.Project Cost		
Amount paid in foreign currency	4,682 million yen	4,361 million yen
Amount paid in local currency	2,436 million yen	4,478 million yen
	(162.4 million RMB)	(331.7 million RMB)
Total	7,118 million yen	8,784 million yen
Japanese ODA loan portion	4,682 million yen	4,361 million yen
Exchange rate	1 RMB = 15 yen (As of Sep. 2001)	1 RMB = 13.5 yen (As of Dec. 2009)

Box: Greater Mutual Understanding between Japan and China
— Training in Japanese Universities —

The projects on higher education targeted at 22 provinces, cities and autonomous regions including Shaanxi and Hunan have been implemented with ODA Loan although only sixteen universities in Shaanxi province and nine universities in Hunan province, which had already passed two years since the project completions, were evaluated in this year.

Cooperation from institutions such as universities and municipalities is essential in training in Japan. Training has been conducted in 311[1] national, public and private universities and research institutions. With the cooperation of such institutions, the projects make great contributions to mutual understanding between Japan and China.

1. Questionnaire Survey of Japanese Universities

The questionnaire was sent to a total of 259 universities, all the national universities and the member universities of Japan Association of Municipal and Prefectural Colleges and Universities and Association of Private Universities of Japan Information, excluding universities located in disaster-affected areas (Iwate, Miyagi, Ibaraki, and Fukushima), and 89 responses (collection rate: 34%) were received.

Of these, 27 universities have accepted trainees from China under the Project. To accept the trainees under the Project is different from the acceptance of international students or visiting researchers under the existing system for many Japanese universities. Therefore, 12 out of 27 universities have established new systems for the Project such as preparation of "Regulations for Higher Education Project for China"

Most responses to the question on difficulties concerned trainees' language abilities. There were a number of answers like "if the trainee had an ability of Japanese or English, the training would be more fruitful", in the open-response. There were also many responses that the training was not very fruitful due to the research level. It is because the target universities were chosen from the universities located in inland areas in accordance with the project objectives of the disparity improvement between the economically-advanced coastal area and the inland area. On the other hand, the results of the interviews with Chinese lecturers who participated in the training program showed their satisfaction with their experiences of studying both mental side such as research attitudes and technical side such as research methods from Japanese researchers.

Unit: Respondent (multiple-choice/ multiple answers were allowed)

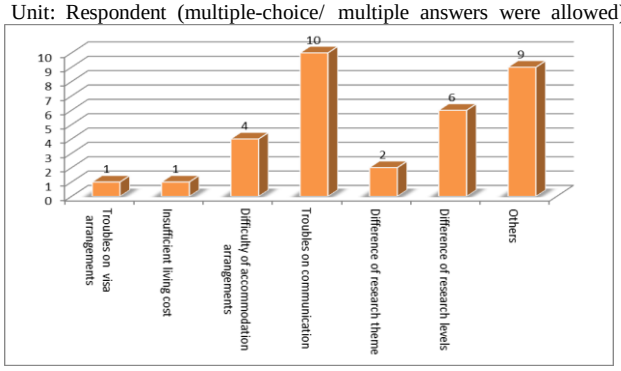


Figure 1: Difficulties in Accepting Trainees

Unit: Respondent (multiple-choice/ multiple answers were allowed)

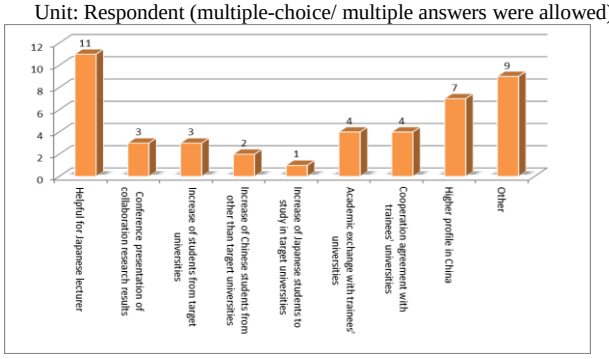


Figure 2: Advantages of Acceptance

To the question about universities' advantages of trainee acceptance, the answer, "it was helpful for the professors in charge of the acceptances", was the majority, followed by

[1] As of September, 2010. JICA documents.

"the university became more popular in China". There are 86,173 Chinese students, or 60% of all international students studying in Japan as of May 1, 2010[2]. Recently, China overtook Germany and was ranked second internationally in terms of the number of publicized science research papers[3]. Under these circumstances, it is assumed that the importance of collaboration with Chinese universities has been growing in Japanese universities. 37 out of 47 universities which answered "they did not know the Project" said that they were interested in accepting trainees under the Project. It demonstrates the high level of interest in China among Japanese universities.

27 universities accepting the trainees under the Project were asked whether the Project contributed to mutual understanding between Japan and China. Of these, 20 universities answered "yes" and 7 universities answered "yes and no". From this, it is considered that the Project has made a certain contribution to mutual understanding between Japan and China".

There are 32 universities which know the Project out of all respondents. It is still only 42 even if the universities which know only the project name are included and is less than 47 universities which answered "they did not know the Project at all". It shows that the Project is not known commonly. There are some opinions like "although the Project has profound significance in cultural exchange, the problem is that it is not popularly recognized. It needs more publicity activities". Ten years have passed since commencement of the first higher education project for China. During this time, personnel changes in Japanese universities were made so that the administration staff who answered the questionnaire might not be familiar with the Project. The survey result may be affected by this. However, the Project is still implemented in some provinces. Moreover, the mutual understanding and exchange between Japan and China are major impacts of the Project. Therefore, it is very important to make more people recognize the Project itself and its outputs. In the conduct of the exchange program, public relations play an important role. It is recommended that more effective public relations will be implemented in future similar projects by leveraging this experience.

2. Training Programs in Japanese universities [4]

4,434 Chinese lecturers and administration staff have participated in training programs in about 300 Japanese institutions[5]. Around one third of these trainees took special courses[6], established in some Japanese universities for the Project, and the others took tutorials at universities or research institutions.


Ritsumeikan University: Management Special Program

910 trainees attended at the University Management Special Program for executives in Chinese universities, established in Ritsumeikan University (as of the end of March, 2010). It is considered that the program met the Chinese needs to learn how to manage universities under the higher

[2] Japan Student Services Organization http://www.jasso.go.jp/statistics/intl_student/data10.html (As of July 14, 2011)
[3] Thomson Reuters, 2009, "Global Research Report China".
[4] The cooperation of Kyoto Prefectural University, Chuo University, Tokyo Keizai University and Ritsumeikan University could be gained for the ex-post evaluation.
[5] As of September, 2010. JICA documents.
[6] JICA accepted the proposals on the preparation of special courses for Higher Education Project for China as a part of promotion of project implementation. As a result, the special courses were established in Kyushu University, Kyoto Prefectural University, Kobe University, Chuo University, Teikyo University, Tokyo Keizai University, University of Toyama, Hokkaido University, Ritsumeikan University, Yamaguchi University and so on.

education reform, which has been promoted since the late 90s in China. The program consists of lectures and fieldwork in Japanese enterprises as well as active exchanges with the university staff such as welcome party where the staff and the trainees sing famous songs from both countries. Chuo University and Tokyo Keizai University also conducted training programs on university management for executive staff such as chancellors and deans with consideration of Chinese demands. Chuo University has accepted 8 groups, or a total of 167 trainees from Yunnan Province and Xinjiang Uyghur Autonomous Region. And Tokyo Keizai University has accepted 15 groups, or a total of 378 trainees from Guizhou Province, Yunnan Province and Jiangxi Province.

Kyoto Prefectural University developed the special course on regional development. Unfortunately, the university could not continue to open the course because the administration cost for the preparation of the program was bigger than the capacity of the implementation structure in the university. After that, however, Kyoto Prefectural University concluded the exchange agreement with universities in Yunnan Province, in the wake of the relationships established through the Project, and accepts two students from Yunnan every year while sending Japanese students to Yunnan. Like this, the exchange between Japan and China has been deepened in Kyoto Prefectural University. It was a common problem among universities, which developed courses for specific themes, that they often could not continue the courses because they had difficulties recruiting trainees who wanted to study in the same theme.

A lot of time and cost are needed for the preparation of the training course. Under this circumstance, there is a homelike example that Tokyo Keizai University invited the trainees to the home party so that the trainees could stay more comfortably in Japan and go back home with sweet memories. Many universities mobilized students as assistants of the training course. It promoted deeper exchange between Japan and China and provided good experiences for Japanese lecturers and students.

The Project has made positive impacts on strengthening structure and internationalization in Japanese universities through revision of decision making process and enhancement of international exchange departments for special causes. Furthermore, universities located in Tama area including Chuo University and universities in Yunnan province have begun to discuss wide-area collaboration. They are considering the experimental student exchange at the moment.

Although the Higher Education Project in China will be finished in a few years, there are some self-sustaining examples such as Ritsumeikan University, which has started to accept trainees attending the program at their own expense in response to Chinese demands. It is expected that the relationships between Japanese universities and Chinese universities established by the Project will expand and deepen in such a self-sustaining manner from now on.