People's Republic of China

Ex-Post Evaluation of Japanese ODA Loan

"Inland Higher Education Project (Regional Vitalization, Market Economy Reform Support, and Environmental Conservation (Qinghai Province))"

External Evaluator: Naomi Murayama, OPMAC Corporation

0. Summary

The objective of this project (hereinafter referred to as "the Project") was to improve higher education in Qinghai Province quantitatively and qualitatively by supporting the construction of buildings, the procurement of equipment and the training of teachers in the target universities. This objective was consistent with the China's development plan and development needs as well as with Japan's ODA policy at the time of both the appraisal in 2004 and the ex-post evaluation; therefore its relevance is high. The effectiveness and impact of the Project was high because quantitative indicators (building areas, amount of educational equipment) and qualitative indicators (number of key faculties and laboratories, number of research papers, etc.) have improved. Moreover, there are many cases of good practice in the utilization of buildings, equipment and training provided under the Project. The outputs were essentially completed in line with the initial plans, and the project cost was within the plan. The project period, however, exceeded the plan; therefore the efficiency of the project is fair. No major problems have been observed in all institutional , technical and financial aspects of the operation and maintenance system and its current status is very good; therefore the sustainability of the project effects is high.

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

1. Project Description

Project Location

Teaching Building of Preclinical Medicine at the Medical College, Qinghai University

1.1 Background

As far as the economic situation of Qinghai Province at the time of appraisal is concerned, the GDP per capita (RMB[1] 6,426 in 2002) was below the national average (RMB 7,966 in 2002). "The 10th Qinghai Province Five-Year Plan (2001 - 2005)" had the target of an annual average GDP growth rate of about 9.0% and of a GDP per capita of RMB 8,921 in 2005. In the fields of economic growth and industrial structural adjustment, the processing industry of natural gas and petroleum and drug development were specified as key industries. The Qinghai Provincial government recognized the necessity of expanding higher education for human resource development centering on these sectors in order to attain its objective. It announced a policy to raise the higher education enrollment rate from 11.4% in 2001 to 15% in 2005 and the number of higher education students from around 49,000 (out of this total, 23,000 were ordinary higher education students) in 2001 to about 112,000 (with approximately 38,000 ordinary higher education students) by 2005.

1.2 Project Outline

The objective of the Project was to upgrade higher education in both quality and quantity for four important institutes[2] in Qinghai Province by supporting the construction of school buildings, the procurement of educational equipment and the training of teachers in Japan, thereby contributing to regional vitalization, market economy reform and environmental conservation.

Loan Approved Amount/ Disbursed Amount	2,812 million yen / 2,671 million yen	
Exchange of Notes Date/ Loan Agreement Signing Date	March, 2004 / March, 2004	
Terms and Conditions	Interest rate:	1.5% (0.75% for training component)
	Repayment period:	30 years (40 years for training component)
	(Grace period)	(10 years)
	Conditions for procurement:	General untied
Borrower/ Executing Agency	The Government of the People's Republic of China / Qinghai Province People's Government	
Final Disbursement Date	August, 2011	

[1] Chinese Renminbi.

[2] The target universities at the time of appraisal were 1)Qinghai University, 2) Qinghai Normal University, 3) Medical College of Qinghai University and 4) Qinghai University for Nationalities. However, the target universities at the time of ex-post evaluation had dropped to three due to establishment of new "Qinghai University" as a result of merger between Qinghai University and the Medical College of Qinghai University in 2004.

Feasibility Studies, etc.	1. F/S: "Feasibility Study Report" (Qinghai Engineering Consulting Center, June 2003) 2. JICA report: 1) "FY 2001 Special Assistance for Project Implementation(SAPI) for the Higher Education Project in China" (August 2003) 2) "Special Assistance for Project Implementation (SAPI) for a Higher Education Project in the People's Republic of China" (March 2004) 3) "SAPI for a Higher Education Project in China" (May 2005) 4) "The Supervision Survey Report on JICA Loaned Higher Education Project" (2010)

2. Outline of the Evaluation Study

2.1 External Evaluator

Naomi Murayama, OPMAC Corporation

2.2 Duration of Evaluation Study

Duration of the Study: August, 2013 – November, 2014

Duration of the Field study: December 2, 2013 – December 27, 2013,
March 9, 2014 – March 17,2014

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

3.1 Relevance (Rating:③[4])

3.1.1 Relevance to the Development Plan of China

China was admitted to the World Trade Organization (hereinafter referred to as "WTO") in December 2001 and has been aiming at high rates of economic growth, openness and reform through industrial structural adjustment. Disparities between coastal and inland areas, and between urban and rural areas, have been issues in China. To address increasing environmental issues, not only the government initiatives but also more comprehensive approaches were needed, including human resource development and research on environmental conservation by higher educational institutions.

It was expected that the Project would contribute largely to regional vitalization, market economy reform and environmental conservation by human resource development through supporting tertiary education in one of China's inland areas. The Project objectives complied with "the 10th Five-Year Plan for National Economic and Social Development, "the 10th Five-Year Plan for Education", "China Western Development", "the 10th Qinghai Province Five-Year Plan" and "the 10th Qinghai Province Five-Year Plan for Education" at the time of

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

[4] ③: High, ②: Fair, ①: Low

appraisal.

At the time of the ex-post evaluation, the "National Mid- and Long-Term Reform and Development Plan for the Education Sector (2010-2020)" had been formulated in addition to "the 12th Five-Year Plan for National Economic and Social Development", "the 12th Five-Year Plan for Education", "China Western Development", "the 12th Qinghai Province Five-Year Plan" and "the 12th Qinghai Province Five-Year Plan for Education". In line with these plans, China has been promoting human resource development and regional disparity rectification for further economic growth, together with further openness and reform.

3.1.2 Relevance to the Development Needs of China

At the time of the appraisal, the quantitative demand for higher education was growing, with backing from an increase in the number of secondary graduates and the government policies for the increase in the number of higher education students. However, insufficient capacity of facilities and teaching staff at universities was an issue. In order to address the issue, the enhancement of higher education from the aspects of infrastructure, human resources and finance was needed. The Project supported the enhancement of higher education; therefore it was consistent with the development needs of China.

The increase in tertiary enrollments in Qinghai Province was relatively moderate in comparison with the increase in post-secondary students (Table 1). As of 2012, the numbers of post-secondary students and tertiary enrollments exceeded the targets set at the time of appraisal. Although the number of ordinary tertiary enrollments had not achieved the target as of 2012, it had increased to 16,100 from 11,100 at the time of appraisal. According to the Education Department of Qinghai Province, the number of ordinary tertiary enrollments is controlled in order to avoid deterioration in the quality of education. In addition, universities in Tianjin have started accepting from 1,000 to 1,500 students from Qinghai Province annually since 2009. The slow rate of increase in ordinary tertiary enrollments in Qinghai Province can therefore also be attributed to an increasing number of students who go on to universities outside the province.

Table 1: Number of Post-secondary Students and Tertiary Enrollments in Qinghai Province

Unit: thousand

	2007 (Target)	2007 (Actual)	2012 (Actual)
Post-secondary students	31.5	31.8	35.8
Tertiary enrollments	20.6	17.2	21.8
Ordinary tertiary enrollments	19.6	16.6	16.1

Source: Qinghai Province People's government

Note: Higher education institutions (tertiary) include vocational technical schools, short-term higher education, four-year universities, and graduate schools. Ordinary tertiary institutes include only four-year universities and graduate schools. In this chart, these indicate institutions excluding graduate schools.

The target universities were selected in line with provincial development goals such as the provision of human resources for key industries, the fostering of teachers and the fostering of high-ranking minorities. The universities meet the needs for human resource development in these fields.

During project implementation, higher education reforms such as the enhancement of facilities and improvements in teaching and the quality of administration were rapidly taking place. Therefore, the timing of financial support was appropriate. Moreover, higher education reform is still continuing. Thus, the project objectives are consistent with the development needs of universities.

3.1.3 Relevance to Japan's ODA Policy

Japan's ODA Charter at the time of appraisal placed 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, the Country Assistance Program for China, the Medium-Term Strategy for Overseas Economic Cooperation Operations and the Country Assistance Strategy for China at the time of appraisal made human resource development a priority from the viewpoint of support for openness and reform (market rules), environmental conservation, and regional development (including progress in Japan-China exchanges). The project objectives were therefore also consistent with Japan's aid policies.

This project has been highly relevant to the country's development plan and development needs, as well as to Japan's ODA policy. Therefore its relevance is high.

3.2 Effectiveness[5] (Rating: ③)

3.2.1 Quantitative Effects (Operation and Effect Indicators)

In this ex-post evaluation study, the evaluator analyzed the quantitative effects using the indicators directly related to the three project components, i.e. building construction, the provision of educational equipment and training. Specifically, contributions to increases in the number of students were evaluated by analyzing the areas of school buildings (floorage), the monetary value per student of educational equipment and the utilization rate of school buildings and educational equipment for quantitative improvement. For qualitative improvements, the educational environment was analyzed by floorage per student and the monetary value per student of educational equipment. The contribution made by the project to aspects of education and research was then evaluated based on the number of key faculties, key laboratories, research papers, research projects, the number of patents for inventions and so forth.

[5] The sub-rating for Effectiveness is to be dealt with in consideration of Impact.

3.2.1.1 Improvements in Quantity

(1) Changes in the number of students

In China, the number of higher education institutes and university students has sharply increased since the release of the "Action Plan for Educational Vitalization Facing the 21st Century" in 1998, which aimed at an increase in the university enrollment rate from 9.8% in 1998 to 15.0% in 2010. In the meantime, the number of higher education institutes in Qinghai Province fluctuated. The number was ten in 2002, dropping to eight in 2007 due to the merger and abolition of institutes. The number had increased again to eleven by 2012. The number of students in Qinghai Province, as mentioned above, increased only slightly from 62.3 thousand in 2002 to 64.1 thousand in 2012 because of the limiting of recruitment in order to maintain the quality of education.

On the other hand, the growth rate of students at target universities is higher than 2.9% of the province total. According to answers to a questionnaire from each of the target universities, the total number of students at the target universities increased by 9,770 in the last decade (a 35.2% increase) from 27,768 in 2002 to 37,538 in 2012 (Table 2).

Table 2: Increase in students at the target universities

Unit: person

	Baseline (2002)	**Actual (2007)**	**Actual (2012)**	**Increase compared to baseline**	**Growth rate (%) (2002－2012)**
Qinghai University	12,187	11,669	14,598	2,411	19.8
Qinghai Normal University	8,891	12,533	12,721	3,830	43.1
Qinghai University for Nationalities	6,690	9,312	10,219	3,529	52.8
Total	27,768	33,514	37,538	9,770	35.2

Source: Responses to the questionnaire
Note: The baseline number of students at Qinghai University includes the Medical College of Qinghai University.

(2) Changes in school building areas

To meet the increase in university students mentioned above (1), each target university constructed teaching and laboratory buildings, libraries and so on. At Qinghai Normal University and Qinghai University for Nationalities which had small floorages at the time of appraisal, the building areas drastically increased (Table 3). Qinghai University merged with the Medical College of Qinghai University in November 2004. However, the increase of floorage went no further than 23.2%, which is small in comparison with the drastic increase at the other target universities. This is for the following reasons: 1) an old lecture hall that existed at the time of appraisal was demolished and 2) residences for teachers were included in the school building areas before 2004 but these were later excluded from the calculation of floorages at universities based on national regulations.

Although the Project buildings do not necessarily account for a large share of the building

areas of each university, according to answers to questionnaires from each university, all the universities felt that the Project had contributed to a mitigation of the shortage of the school buildings as it had been implemented at a time which coincided with campus expansion or the rebuilding of school buildings. Moreover, these buildings play a significant role in education and research. Therefore, it can be said that construction of school buildings under the Project has contributed to some extent.

Table 3: Changes in school building areas at the target universities

Unit: m^2

	Baseline (2002)	Actual (2012)	Growth rate (%) (2002－2012)	Project area	Project share (%)
Qinghai University (Medical College of Qinghai University)	319,344 (34,806)	436,460	23.2	39,508	9.1
Qinghai Normal University	82,211	246,622	200.0	18,263	7.4
Qinghai University for Nationalities	55,485	427,207	670.0	9,113	2.1

Source: JICA appraisal documents for baseline data, responses to the questionnaire for others

(3) Changes in the monetary value of educational equipment

In Qinghai Province, the monetary value of educational equipment per student increased drastically. The Undergraduate University Establishment Standards of China of the Ministry of Education of the People's Republic of China has the following requirements: that the monetary value of educational equipment per student for science faculties is not less than RMB 5,000; for literature and social faculties, not less than RMB 3,000; for gymnastic and art faculties, not less than RMB 4,000. None of the target universities met this requirement before Project implementation. After Project completion, however, all the target universities met this requirement (Table 4).

Table 4: Monetary value of educational equipment

Unit: RMB

	Baseline (2002)	Actual (2007)	Actual (2012)
Qinghai University	3,067	4,493	9,123
Qinghai Normal University	1,162	10,993	9,488
Qinghai University for Nationalities	762	6,457	7,687

Source: Responses to the questionnaire
Note: The baseline number of students at Qinghai University includes the Medical College of Qinghai University.

The total amount of educational equipment at each target university increased more than ten times (Table 5). In particular, the amount increased from twofold (at Qinghai Normal University) to twelvefold (at Qinghai University for Nationalities) solely through equipment procured under the Project such as computers and spectrometers. The total amount of the educational equipment procured by the project was JPY 1,358 million and the total number of students at the target universities in 2012 was 37,538. The benefit as of 2012 for the equipment

procured by the project per student was about JPY 36,187 (RMB 2,784, if RMB 1 = JPY 13[6]) as shown by a simple calculation[7] and this accounts for approximately 30% of the monetary value of educational equipment per student. In light of the above, this project can be said to have made a considerable contribution to increases in the monetary value of educational equipment at the target universities.

Table 5: Total amount of educational equipment

Unit: RMB thousand

	Baseline (2002)	Actual (2012)	Growth rate (%) (2002－2012)	Project equipment	Project share (%)
Qinghai University	19,950	149,090	647	52,580	35.3
Qinghai Normal University	10,330	120,700	1,069	23,230	19.2
Qinghai University for Nationalities	2,310	88,890	3,756	28,680	32.3

Source: Responses to the questionnaire
Note: The baseline number of students at Qinghai University includes the Medical College of Qinghai University.

Table 6: Higher Education Budget in Qinghai Province

Unit: RMB thousand

FY 2001	FY 2008	FY 2012
163,980	270,540	948,060

Source: Responses to the questionnaire

Moreover, the Project played a role in the designation of Qinghai University as one of the Project 211 [8] universities, in the accreditation of Qinghai University and Qinghai Normal University for awarding doctorate degrees , in the granting of the honorable title “Excellent University” or “Good University” in the “Undergraduate University Teaching Level Evaluation” conducted by the Ministry of Education of China[9], and in the upgrading from Qinghai “College” for Nationalities to Qinghai “University” for Nationalities in 2009. School facilities were drastically improved by the Project although these had been very limited before project implementation. As a result, the target universities received good ratings, as mentioned above. This led to increases in the budget granted from the government to the target universities (Table 6). Thus, the education and research environments were improved in a virtuous cycle created by the Project.

[6] Annual average exchange rate in 2012: http://www.murc-kawasesouba.jp/fx/yearend/index.php?id=2012

[7] As it was difficult to collect detailed data, the evaluator simply divided the total amount of educational equipment procured under the project by the number of students as of 2012. However, if the amount at the time of procurement completion at each university is divided by the number of students at that time, the benefit per student would be more than the evaluator’s calculation.

[8] Project 211 is a national project, named from an abbreviation of “the 21st century and approximately 100 universities respectively”. A designation as a Project 211 university by the Ministry of Education of the People’s Republic of China means that the university is top level in education, research and management. (Source: Japan Science and Technology Agency China Research Center, 2011, “2010 Current Situation and Trend of Higher Education in China”)

[9] The evaluation system for higher education introduced by the Ministry of Education of China. Once every five years, school operations and the quality of education are evaluated. The first phase of evaluation was conducted from 2003 to 2008. The results are evaluated on a four-point scale.

(4) Utilization rate of school buildings and educational equipment

As mentioned above, the school building areas and the monetary value of educational equipment increased as each target school quantitatively responded to the increase in students. However, effectiveness cannot be discussed if buildings and equipment are not actually utilized.

Table 7 shows the utilization rate of major school buildings. In each university, the utilization rate is more than 90% and thus it can be said that the buildings are sufficiently utilized.

Table 8 shows the utilization rate of major equipment at the target universities. This is also a very high ratio, at more than 90% at all the universities. Since Qinghai University is a research oriented university, the utilization rate of large and sophisticated research apparatus is high. An analysis and testing center was established using equipment procured under the Project. Research results were produced that received the First Prize of Technological Advancement at Qinghai Provincial Level[10] by use of the equipment. At Qinghai Normal University and Qinghai University for Nationalities, multimedia facilities are highly utilized as one of the means of sophisticated education (these include language laboratories, lecture rooms with projectors, computer rooms etc.).

Table 7: Utilization rate of major school buildings

Unit:%

	2007	2012
Qinghai University	100	100
Qinghai Normal University	100	100
Qinghai University for Nationalities	92	95

Source: Responses to the questionnaire

Table 8: Utilization rate of major equipment

Unit:%

	2012 (a)	2012 (b)
Qinghai University	100	100
Qinghai Normal University	100	100
Qinghai University for Nationalities	90	95

Source: Responses to the questionnaire
Note: Equipment in use (a) at price base , and (b) at operation rate

As far as quantitative improvement is concerned, as seen above, the number of students increased more than the provincial average. Nevertheless, the monetary value of educational equipment per student at all the target universities improved. School building areas largely increased, except at Qinghai University. The utilization rates of major school buildings and major equipment were also very high. In light of the above, it can be said that the construction of buildings and the procurement of equipment under the Project contributed largely to quantitative improvement.

[10] A prize at provincial level based on the "Qinghai Province regulations for the encouragement of science and technology" (Qinghai Province People's Government ordinance No. 74) and the "administrative instructions for Qinghai Province regulations for the encouragement of science and technology". The first prize is the highest level prize for the encouragement of science and technology in Qinghai Province.

3.2.1.2 Improvements in Quality

(1) Floorage and monetary value of educational equipment per student

The Undergraduate University Establishment Standards of China required that the 2006 national standard of floorage per student was more than 30 m^2 [11]. Although Qinghai University already had a large floorage, Qinghai Normal University and Qinghai University for Nationalities had floorages which were below the national requirements. However, they had exceeded the national requirements for teaching and administrative buildings by 2012 and the educational environment was widely improved. Having said this, the increase of floorage per student through the Project was limited (Table 9).

Table 9: Floorage per student

Unit: m^2

	Baseline (2002)	**Actual (2012)**	
		Floorage per student	**Increase of the floorage per student through the Project**
Qinghai University (Medical College of Qinghai University)	33.3 (13.3)	29.9	2.7
Qinghai Normal University	9.2	19.4	1.4
Qinghai University for Nationalities	8.2	38.9	0.9

Source: Responses to the questionnaire

On the other hand, the Project had a positive effect in increasing in the monetary value of equipment per student as seen, in Table 4. In light of the above, the educational environment is can be said to be moving toward improvement.

(2) Changes in the number of key faculties and key laboratories

In China, since "Some opinion concerning the development of higher education institutions and key faculties" was proclaimed by the State Education Commission in 1993, the state or provincial governments have designated faculties and laboratories which closely relate to national development strategies and public welfare. These are labeled key faculties and key laboratories and supporting funds are intensively provided by the government in order to raise education and research to an international level (Table 10, Table 11)[12].

[11] For education and administration buildings at ordinary universities, the floorage per student for departments of science, engineering, agriculture and medicine is more than 20m^2, the floorage per student for departments of humanities, social sciences, and management is more than 15m^2, and the floorage per student for departments of physical education and arts is more than 30m^2.

[12] National key faculties are designated by the State government. Provincial or ministerial key faculties are designated by provincial governments, while ministerial key faculties are designated by provincial governments or ministries such as the Ministry of Education.

Table 10: Number of key faculties

	Baseline	Target	Actual	
	2002	2007	2007	2012
Qinghai University (Medical College of Qinghai University)	NL: 0 PML: 8 (NL: 0 PML: 2)	NL: 2 PML: 15 (NL: 2 PML: 6)	NL: 0 PML: 17	NL: 2 PML: 19
Qinghai Normal University	NL: 0 PML: 4	NL: 0 PML: 11	NL: 0 PML: 7	NL: 0 PML: 12
Qinghai University for Nationalities	NL: 0 PML: 3	NL: 1 PML: 7	NL: 1 PML: 7	NL: 1 PML: 8

Source: Responses to the questionnaire
Note: NL (National Level): National key faculty, PML (Provincial or Ministerial Level): Provincial or ministerial key faculty

The target universities had not achieved the target as of 2007 but all had achieved it as of 2012. In particular, a teacher who had participated in training played a leading role in the accreditation of the key faculty of internal medicine (high altitude medicine) at Qinghai University.

Table 11: Number of key laboratories

	Baseline	Target	Actual	
	2002	2007	2007	2012
Qinghai University (Medical College of Qinghai University)	NL: 0 PML: 2 (NL: 0 PML: 2)	NL: 7 PML: 8 (NL: 0 PML: 2)	NL: 0 PML: 12	NL: 2 PML: 44
Qinghai Normal University	NL: 0 PML: 3	NL: 1 PML: 7	NL: 0 PML: 6	NL: 2 PML: 14
Qinghai University for Nationalities	NL: 0 PML: 0	NL: 0 PML: 0	NL: 0 PML: 1	NL: 0 PML: 8

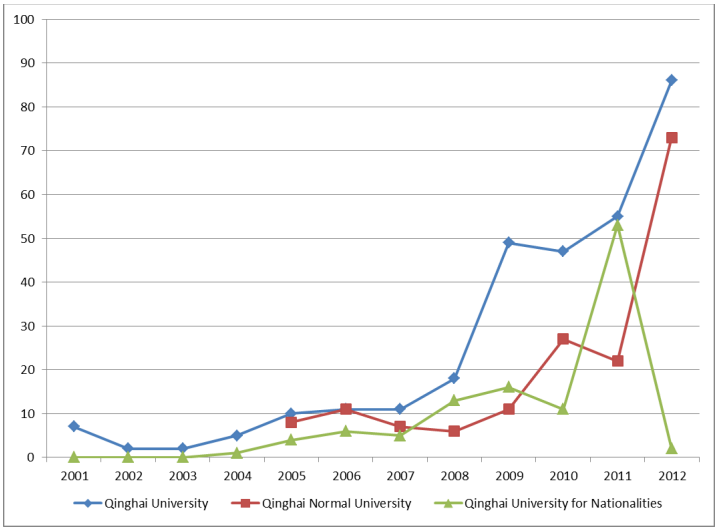
Source: Responses to the questionnaire
Note: NL (National Level): National key laboratories, PML (Provincial or Ministerial Level): Provincial or ministerial key laboratories

The number of provincial or ministerial key laboratories largely increased in each target university although these universities were not able to achieve their targets in terms of the number of national key laboratories. The recent drastic increase in number can be attributed to the government's support for the establishment of key laboratories and research funding in the Midwestern China, based on government policy. In the accreditation of key faculties and key laboratories, the development of facilities including libraries etc. is one of the qualification criteria. Therefore, the development of school buildings and facilities under the Project has contributed to these accreditations to some extent.

At Qinghai University, a teacher who participated in training in Japan played a leading role in establishing the "National Level Experiment and Education Pilot Center: Experiment and Education Pilot Center for Tibetan Medicine". Apparatus procured under the Project has played an important role in establishing the "Ministry of Education Key Laboratory for Environment and Resources in the Tibetan Plateau" at Qinghai Normal University and the "Qinghai Province Key Laboratory for Applied Physics", the "Key Laboratory on the Tibetan Plateau for Botanical Resources Research" and the "Key Laboratory for Drug Analysis" at Qinghai University for Nationalities.

(3) Number of research papers, research projects, prizes awarded etc.

The number of research papers published in international scholarly journals such as Science Citation Indicators (SCI) has been increasing at all the target universities (Figure 1). Although the number was less than ten at the target universities before the project implementation, a drastic increase in articles since 2009 has been an outstanding feature. More high-quality research papers have been written thanks to facilities being expanded by the Project and larger research budgets being allocated than before Project implementation. As mentioned before, the Project has had a relatively large effect on the expansion of facilities and it is clear therefore that the Project has contributed to the increase in research papers to some extent.



Source: Responses to the questionnaire
Note: SCI (Science Citation Indicators), EI (Engineering Index), ISTP (Index to Scientific & Technical Proceedings)

Figure 1: Number of articles in SCI, EI, and ISTP

Examples of notable research papers using equipment procured under the Project are as follows: “Cluster Location Control and Adaptive Routing” (Computer engineering) and “Physiographic Condition and Impact on the Environment of Primitive Ecological System Tourism Resources in Qinghai Lakeside” at Qinghai Normal University.

The number of research projects has drastically increased in the last decade at all the target universities (Table 12). The Ministry of Science and Technology of China, International Science Technological Cooperation Project “Research on the creation technology of fertilized eggs from excellent cattle by in vitro fertilization” (Qinghai University: from 2008 to 2010) was one of these research projects and equipment procured by the Project was utilized.

Table 12: Number of research projects

	Baseline (2002)	Actual (2007)	Actual (2012)
Qinghai University	NL: 4 PML: 27	NL: 20 PML: 53	NL: 37 PML: 124
Qinghai Normal University	NL: 2 PML: 5	NL: 9 PML: 18	NL: 31 PML: 43
Qinghai University for Nationalities	NL: 0 PML: 4	NL: 13 PML: 21	NL: 14 PML: 35

Source: Responses to the questionnaire
Note 1: The baseline number of students at Qinghai University includes the Medical College of Qinghai University.
Note 2: NL (National Level): National research project, PML (Provincial or Ministerial Level): Provincial or ministerial research project

The number of social services, one of the so-called "university's three missions" (education, research and social service), has also been on the increase (Table 13). For example, "Research on the desertification process of land around the lake" has played a role in anti-desertification measures around Qinghai Lake utilizing equipment procured under the Project at Qinghai Normal University.

Table 13: Number of social services

	Baseline (2002)	Actual (2007)	Actual (2012)
Qinghai University	19	48	70
Qinghai Normal University	0	3	9
Qinghai University for Nationalities	2	7	11

Source: Responses to the questionnaire
Note 1: The definition of social services is in accordance with the Higher Education Law in China (passed by the 4th meeting of the 9th Standing Committee of the National People's Congress, on August 29, 1998).
Note 2: The baseline number of students at Qinghai University includes the Medical College of Qinghai University.

As for the number of prizes awarded, each target university has received awards for Technological Advancement at Qinghai Provincial Level and other awards. In each case, research utilized equipment procured under the Project (Table 14). Examples include "Research on Tibetan Genetics Mechanisms Adapted to High Altitude" (the first prize in 2011) at Qinghai University, "Research on segmentation labeling rule for Tibetan corpus and its supplemental tool" at Qinghai Normal University (the third prize in 2009) and "New Chemical Compounds from Caragana Jubata (pall) Poir" at Qinghai University for Nationalities (Qinghai Province Natural Science Excellent Research Paper in 2011).

Table 14: Number of prizes awarded

	Actual (2007)	Actual (2012)
Qinghai University	NL: 0 PML: 10	NL: 3 PML: 19
Qinghai Normal University	NL: 0 PML: 5	NL: 0 PML: 13
Qinghai University for Nationalities	NL: 5 PML: 15	NL: 0 PML: 20

Source: Responses to the questionnaire
Note 2: NL: National Level, PML: Provincial or Ministerial Level

Table 15: Number of undergraduate faculties and graduate courses

	Undergraduate			Master's course			Doctoral course		
	Baseline	Actual		Baseline	Actual		Baseline	Actual	
	2002	2007	2012	2002	2007	2012	2002	2007	2012
Qinghai University	46	55	67	6	27	56	0	2	5
Qinghai Normal University	35	43	58	7	23	65	0	0	0
Qinghai University for Nationalities	18	24	54	5	8	78	0	0	0

Source: Responses to the questionnaire
Note: The baseline number of students at Qinghai University includes the Medical College of Qinghai University.

Faculties at undergraduate schools and courses at graduate schools have also shown an upward trend (Table 15). At undergraduate level, numbers have moderately increased due to

limited recruitment in order to maintain or improve the quality of education. However, courses at graduate schools drastically increased at all the target universities as they have been aiming for higher education which is research-oriented. As of 2012, only Qinghai University had doctoral courses but in 2013 Qinghai Normal University was also accredited as an institute able to award doctorate degrees in Tibetan, history, geography and biology. Qinghai Normal University is starting to recruit ten students from 2014.

In light of the above, as far as qualitative improvement is concerned, the educational environment is gradually improving and floorage and the monetary value of equipment per student show an upward trend. As for the development of school buildings and equipment such as electron scanning microscopes, there has been a substantial improvement, especially in educational equipment. Meanwhile, the project has contributed to the improvement of floorage to some extent. The project has had a profound effect on the increase in the designation of key faculties and laboratories. The project also contributed to the increase in the number of research papers, prizes awarded etc. as many of these used equipment procured under the Project. Therefore, the Project has played a significant role in improving the quality of education and research.

3.2.2 Quantitative Effect

Qualitative effects of the project are (1) the enhancement of the reputations of schools through an upgrade in the educational environment (effects of building construction and equipment procurement) and (2) improvements in the education system with institutional change (the effects of training).

(1) Effects of building construction and equipment procurement

Effects of building construction and equipment procurement include 1) good results on the “Undergraduate University Teaching Level Evaluation”, 2) upgrades from college to university, 3) accreditation for institutes awarding doctorate degrees, and 4) designations as universities of “Project 211” through upgrading of the educational environment. In the “Undergraduate University Teaching Level Evaluation” conducted by the Ministry of Education of the People's Republic of China, each target university received good results due to improvements in floorage per student and in the rate that experiments are conducted through enhancements of equipment. Qinghai “College” for Nationalities was upgraded to Qinghai “University” for Nationalities as through the implementation of the Project the institute was able to meet the requirements for the quantity of experimental apparatus established by the Ministry of Education of China. Furthermore, new faculties at Qinghai University for Nationalities were accredited and the institute was accredited for the awarding of master degrees. Qinghai University and Qinghai Normal University were accredited as institutes awarding doctorate degrees. The Project indirectly contributed to the designation of Qinghai University as one of the universities of

"Project 211" by the development of facilities under the Project.

(2) Effects of training

Many teachers who participated in mid- and long-term training have been using Japanese methods of research and education since returning to their universities. For instance, when he was studying in Japan, a teacher of human anatomy at Qinghai University was very impressed with the courteous treatment of donors' bodies at Japan's College of Medicine (donors' bodies are buried one by one in Japan, while this is generally not the case in China). Having returned to his university, the teacher submitted a proposal for the treatment of donors' bodies, preparing rules and adopting the Japanese way of treating donors' bodies.

3.3 Impact

3.3.1 Intended Impacts

(1) Impact on higher education at provincial level

Quantitative indicators, such as the number of higher education institutions and the number of students at higher education institutions as a whole in Qinghai Province, decreased in 2007, returning almost to the same level as the baseline in 2012 (Table 16). The number of higher education institutions temporarily decreased because of mergers. As for the number of students, according to the Education Department of Qinghai Province, recruitment is controlled to prevent deterioration in the quality of higher education. Although floorage per student and the monetary value of educational equipment per student in 2012 largely increased from the baseline, it decreased compared with the actual data in 2007. While new school buildings were constructed, old ones were demolished. Therefore, according to the Education Department, data fluctuated widely depending on when it was gathered.

In light of the above, the effects of the Project might not have had a great impact on the whole province.

Table 16: Impact on higher education at provincial level

Purpose	Indicators	Baseline (2002)	Target (2007)	Actual (2007)	Actual (2012)
Quantitative improvement	Number of higher education institutions	10	11	8	11
	Number of students at higher education institutions (thousands)	62	140	51	64
	Higher education enrollment ratio (%) (=Appropriate age enrollment/ Appropriate age population)	13.0	18.0	22.4	31.6
Qualitative improvement	Floorage per student (m^2/student) (=floorage/number of students)	17.6	30.0	34.3	25.1
	Monetary value of educational equipment per student (RMB)	1,663.5	—	7,314.2	7,104.2

Source: Responses to the questionnaire

(2) Impact on regional vitalization

At the time of appraisal, an impact on regional vitalization was expected through the dispatch of school teachers and doctors to rural areas, the provision of human resources to key industries, and the development of human resources through vocational training and adult education. As far as the dispatch of human resources is concerned, a system for dispatch to rural areas already existed so there had been some examples of the dispatch of teachers and doctors to rural areas. In the case of Qinghai Province, following an earthquake in Yushu[13] the target universities supported reconstruction, and conducted vocational training in areas of poverty, including Yushu, through which medical human resources were developed at the target universities. School buildings and equipment supported by the Project were utilized for these human resource development activities.

As for providing human resources to key industries, statistical data only exists at a few institutes. However, in response to questionnaires from the target universities, many universities said that the employment rate in key industries had been raised, by enhancing students' practical abilities through the use of the equipment procured under the Project. For example, much of the apparatus at the College of Science and Engineering, Qinghai University was procured under the Project and graduates from the college account for approximately 60% of the engineers in science and engineering research institutes and the enterprises of key industries throughout the whole province. The major facilities in the College of Chemistry and Biology, Qinghai University for Nationalities, also were procured under the Project and many graduates now work for potassium fertilizer plants and pharmaceutical companies.

As for vocational training and adult education, there are some connections to the Project. For example, teachers who participated in training in Japan are now in charge of courses and the equipment procured or school buildings and libraries constructed under the Project are being utilized. However, the evaluator could not confirm whether human resources fostered through the Project had had an impact on regional vitalization.

(3) Impact on the strengthening of market rule

The number of graduates from faculties of accounting, law and financial management increased (Table 17). At Qinghai University, the Project directly contributed to the development of human resources in this field as the school building for the College of Economic Management was constructed under the Project. Furthermore, the College

Table 17: Number of graduates from faculties of accounting, law and finance

	Baseline	Actual	
	2002	2007	2012
Qinghai University	39	779	603
Qinghai Normal University	n.a.	90	121
Qinghai University for Nationalities	127	160	193

Source: Responses to the questionnaire

[13] Tibetan Autonomous area in southern part of Qinghai Province. It is one of the poverty areas in the province.

of Finance and Economics has conducted thirteen projects in the Western area of the National Social Science Foundation[14] since 2010. At Qinghai Normal University, the Secretariat Division of the Qinghai Province Legal Advertisement Education Leading Group held the course on the "Improvement of leaders' problem-solving abilities by the rule of law" in October 2013. A professor from the College of Politics and Law, Qinghai Normal University took this course and gave lectures to more than 200 officials and leaders of each department of provincial commissions, provincial institutions, people's groups, the Qinghai Province State-owned Assets Supervision and Administration Commission, provincial offices of central government[15] as well as to department leaders of Xining. The trainees play an important role in the economy and society of Qinghai Province.

(4) Impact on environmental conservation

There is no obvious evidence of a direct contribution by graduates on environmental conservation and public health. However, each target university has conducted some activities, as shown in Table 18. The connection with the Project is the utilization of equipment procured under the Project in all cases.

Table 18: The contributions of the target universities to environmental conservation and public health

University	Good practices
Qinghai University	Qinghai University provides expertise to enterprises and projects conducted by the Xining Department of Environmental Protection, the Penyao sewage plant and the Jieshen group. Some equipment procured under the Project such as microcomputers metal phase diagram measurement systems are utilized for technical assistances.
Qinghai Normal University	In the "Pilot project on remotely-real-time monitors and intelligent skills in decision-making through internet for ecosystem protection in Samjiangyuan" by the Department of Science and Technology of Qinghai Province (2012), equipment procured by the Project was utilized for ecosystem protection in Samjiangyuan, which is in the middle of the Qinghai-Tibet Plateau (a site where the headstreams of three big rivers, the Yangtze River, the Yellow River and River Mekong converge in the southern area of Qinghai Province).
Qinghai University for Nationalities	Qinghai University for Nationalities focused on the promotion of energy saving and carbon dioxide emission reduction activities in several manufacturing industries, and provided advice on effluent, solid waste and effluent gas from manufacturers. In particular, apparatus procured under the Project such as preparative liquid chromatography and ultra-violet and visible spectrophotometric were utilized. Furthermore, the university, together with a company, developed recycling technology to extract pigment from the peel of hippophae rhamnoides which are dumped after the production of fruit juice thus contributing to waste reduction.

Source: Responses to the questionnaire

[14] The National Social Science Foundation was established in 1991 to provide subsidies for social science research projects. It has an open application system and tends to concentrate on the adoption of proposals from universities in Beijing and coastal areas. Therefore, "Western project" targets universities in the Western area of China in order to create a balance between coastal areas and inland areas.

[15] Branch office or liaison office in Qinghai Province of central government agencies and foundation etc..

3.3.2 Other Impacts

(1) Impacts on the natural environment

The Environmental Impact Assessment (hereinafter referred to as “EIA”) was conducted prior to project implementation in accordance with Chinese regulations. “Three-Stage Simultaneous” implementation was envisioned (i.e. the regulation that environmental protection facilities should be designed, constructed and put into production simultaneously with the main construction structures). Based on this regulation, noise-abatement measures, and measures for 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 before project completion, as necessary, and these environmental facilities were operated at the same time as the buildings and equipment were put into use. All the target universities took the necessary environmental protection measures, including environmental monitoring, at each stage, namely the design, construction and operation stages. In this way, “Three-Stage Simultaneous” was smoothly implemented.

At the time of the ex-post evaluation, no negative impact on the environment was observed, according to responses by the universities to the questionnaire, to interviews with the those in charge, and by visual confirmation at the sites by the evaluator.

(2) Land Acquisition and Resettlement

The project was carried out on existing university properties, and thus there was no land acquisition or relocation of residents.

(3) Mutual understanding between Japan and China

It can be said that participants in the training in Japan were able to gain a deep understanding of Japan. They renewed their perception of Japan through not only research and education but also through small events in daily life. As for research and education, many lecturers were impressed with Japanese educational methods, philosophy, and attitudes toward research and put them into practice. At the level of daily-life, many trainees renewed their perception of the Japanese as they were really touched by Japanese kind-heartedness as they communicated through participation in Japanese language classes operated by community volunteers. They were also touched when they were supported by their academic supervisors in their acquisition of status of residence and by the daily care that their supervisors provided.

Exchange between each target university and Japanese universities is shown in Table 19.

Table 19: Exchange between each target university and Japanese universities

University	Good practices
Qinghai University	Qinghai University and the University of Miyazaki concluded an agreement for cooperation agreement in 2009 and accomplished results in human resource development, the mutual visiting of staff and collaborative research. Two students from Qinghai University have been enrolled at doctoral courses at the University of Miyazaki. One student graduated from the master course at the University of Miyazaki. In total, five researchers have studied at the University of Miyazaki. Four researchers from Qinghai University Hospital were trained at the University of Miyazaki Hospital. Some professors and researchers from the University of Miyazaki conducted collaborative research at Qinghai University. A researcher from Qinghai University and a professor from the University of Miyazaki conducted a collaborative project of the Ministry of Science and Technology of China and the Ministry of Science and Technology of Japan on "Epidemiological research and the establishment of preventive measures against amphixenosis, dermatobiasis, in Qinghai Province". This was a chance to enhance cooperation with other universities in Japan. These activities strengthen further friendship between Qinghai University and the University of Miyazaki as well as between Qinghai University and other universities in Japan. The base for further cooperation of research activities has thus been established.
Qinghai Normal University	Qinghai Normal University established a relationship with Ritsumeikan University, Suzuka Junior College and Musashi-Urawa Japanese Language Institute through the Project. The teachers who participated in training in Japan were able to get an opportunity to broaden their views by learning about Japanese society and the situation of higher education. After they returned, three teachers out of seven participants went on to doctoral courses and one works as a graduate educator. They published papers more than once annually and frequently participate in academic conferences. Generally, each participant has accomplished good results in each respective research area.
Qinghai University for Nationalities	Through visiting or academic exchanges with Ritsumeikan University, Tokyo University of Foreign Studies, Kobe University and Chukyo University, Qinghai University for Nationalities has gained mutual understanding with these institutions as well as establishing collaborative relationships. It has played a positive role in promoting exchange with universities in Japan. The Qinghai University for Nationalities International Exchange Center sends exchange students and there are mutual visits with universities in Japan on an irregular basis.

Source: Responses to the questionnaire

This project has largely achieved its objectives. Therefore its effectiveness and impact is high.

3.4 Efficiency (Rating:②)

3.4.1 Project Outputs

The Project included the construction of school buildings, the enhancement of educational and research equipment, and the training of higher education personnel. The outputs of each component are as follows:

Table 20: Comparison of Outputs (planned and actual)

Items	Planned	Actual (achievement rate)
Buildings	4 universities total: 55,748 m^2	3 universities total: 66,904 m^2 (120.0%)
Equipment	4 universities	3 universities: mostly as planned
Training	4 universities total: 58 staff	3 universities total: 82 staff (141.4%)

Source: JICA appraisal documents for the planned, Responses to the questionnaire for the actual data

There was no drastic re-examination of the plan for building construction although floorage was expanded according to the needs of each university. An exception was that the plan for the Comprehensive Building of the Library of the Medical College of Qinghai University was changed into the Teaching Building of Preclinical Medicine of the Medical College at Qinghai University (see photo on the first page) due to a merger of Qinghai University with the Medical College of Qinghai University in 2004. Qinghai University already had libraries so there was no problem with the change of plan. On the other hand, Qinghai University did not have school buildings for a medical college and needed to construct them. Therefore, this change of plan was reasonable.

As for educational equipment, there is no big difference between the plan and the actual, although the model was changed for some of the digital equipment due to production ending during the process of procurement.

As regards the training component, staff had some problems with displacement such as the language barrier and in personnel transfer. The number of participants in mid- and long-term training (three to twelve months) decreased in comparison with the plan. On the other hand, two groups of administrative staff were dispatched to Ritsumeikan University and Kobe University, respectively, with the concurrence of JICA, in order to enhance the exchange between universities in Japan universities and the target universities in China. The training period was two to three weeks and the main content was Japan's higher education policy, the reform of university education, university operation, fund management, asset management, student management and so on. The participants had a good opportunity for interdisciplinary exchange through participating in training in these areas.

3.4.2 Project Inputs

3.4.2.1 Project Cost

Actual project costs amounted to 3,457 million yen (of this, the actual loan disbursement amounted to 2,669 million yen[16]) against the estimated costs of 3,573 million yen (of this, the planned loan amounted to 2,812 million yen). The actual costs were lower than planned (97%). While the appreciation of the yen against Chinese yuan was about two yen during project implementation, there was an average inflation rate of 3 % in China. Therefore, the Project was conducted mostly as planned in an efficient way.

3.4.2.2 Project Period

The project period planned at the time of appraisal was 61 months, or from March 2004 to March 2009. The actual project period was 90 months, or from March 2004 to August 2011,

[16] According to data provided from the executing agency, this was JPY 2,669 million. As the executing agency received the fund in Chinese yuan through the Central government, the difference between this and the data provided by JICA depends on what the exchange rate was when the executing agency closes an account.

which was longer than planned : equivalent to 148 % of the original plan. The reasons for the delays are as follows: 1) it took time to get domestic approvals from the National Development and Reform Commission etc. with regards to changes in planning from the Comprehensive Building of the Library of the Medical College of Qinghai University to the Teaching Building of Preclinical Medicine of the Medical College at Qinghai University due to the merger, 2) bidding was delayed as the procurement of various types of equipment started at the same time causing shortages of working capital on the part of suppliers and leading to delays in the arrival of shipments, and 3) regarding the training component, candidate trainees had to find and make contact with academic supervisors in Japan directly by themselves and sometimes had a trouble with language making it difficult to make smooth contact with universities in Japan. Although the Project was not completed within the defined project period[17], it is particularly worth noting that Qinghai Province completed the project by the planned final disbursement date without an extension of disbursement expiry date. Since Qinghai Province had not had any experience of loan projects with external institutions such as JICA, the executing agency used their own funds to visit other provinces whose governments had already conducted JICA projects where they made inspections of implementation methods including the necessary regulations and the composition of a project implementation team. They also conducted study meetings on procedures for Japanese ODA Loan projects. They contrived ways, though with some difficulties, to implement the Project smoothly and effectively (Box). As a result, although the Project was not completed as scheduled, their efforts were highly appreciated.

Box: For smooth and effective implementation of the Project

The Project Management Office of the Education Department of Qinghai Province organized a project implementation team composed of selected human resources from the Education Department and the target universities at the time of project planning. As far as the Education Department of Qinghai Province was concerned, the Project was its first foreign and official loan. Therefore, the project management was conducted with some difficulties. It was fortunate that the Project belonged to the third batch among Higher Education Projects being implemented in China and that similar projects were being implemented in other provinces. In order to draw on the experience of other provinces such as in the methods of making regulations for the implementation of the Project, making documents for JICA, selecting and packaging equipment, visits were made to Gansu Province and Jilin Province where projects had already been implemented. Also, there was participation in seminars and workshops held by JICA and in study meetings within the project implementation team. In Gansu Province, two people in charge of the Project in the Education Department dealt with the Project from the beginning to the end which eliminated project delay caused by personnel transfers. So, in Qinghai Province, the core members selected from the target universities stayed active on a consistent basis aiming at smooth implementation. They established rules for the Project in Qinghai Province using examples from Jilin Province. Moreover, they provided pre-departure training in Japanese to trainees in order that the teachers and administrative staff from the target universities could undergo training effectively in Japan.

[17] The completion of the project was defined as completion of three components at the time of appraisal: teaching and /or research buildings, educational and/ or research equipment, and personnel training. The definitions of each component as follows: 1) completion of building construction, 2) completion of equipment installation and 3) return of Chinese trainees or Japanese experts.

3.4.3 Results of Calculations of Internal Rates of Return

Due to the nature of the Project, a quantitative analysis of the internal rate of return was not possible.

In light of the above, although the project cost was within the plan, the project period exceeded the plan. Therefore efficiency of the project is fair.

3.5 Sustainability (Rating: ③)

3.5.1 Institutional Aspects of Operation and Maintenance

Each target university has a department of building management and a department of facility management. The former department conducts the management of construction and various inspections of the construction. The latter department prepares and implements related rules and systems for the management of equipment and facilities and the establishment of laboratories. In addition, they consider the allocation of equipment and evaluate the effect of utilizing equipment. They are in charge of allocation, breakages, review of the repair and abolishment of facilities and applications for permits from laboratories. These asset managements are supervised periodically by the provincial government (the education department). The department of education conducts annual inspections of the management of each university and the supervision of the audit office.

Basically, the hard assets, such as buildings constructed and equipment procured under the project, are managed as planned. Daily operation and maintenance systems have been well established at each target university and there are no problems.

3.5.2 Technical Aspects of Operation and Maintenance

All the target universities have set up regulations and conduct maintenance and inspection periodically at each laboratory or maintenance center. If necessary, they ask suppliers or manufacturers to perform maintenance for them. There is no particular problem with the technical aspects.

3.5.3 Financial Aspects of Operation and Maintenance

The budget for operation and maintenance at each university is allocated annually from the provincial financial budget. If there is a shortage in the budget for operation and maintenance, the shortage is made up using the revenue of the universities.

There is no evidence that the equipment lies neglected without maintenance and therefore, it is thought that the necessary resources for operation and maintenance are being provided.

Table 21: Operation and maintenance costs at each target university (annual)

Unit: RMB ten thousand

	2010	2011	2012
Qinghai University	IC : 30,612 EX : 27,932 (O/M: 1,020)	IC : 34,763 EX : 39,104 (O/M: 1,060)	IC : 40,863 EX : 39,460 (O/M: 1,210)
Qinghai Normal University	IC : 18,345 EX : 17,504 (O/M: 54)	IC : 23,562 EX : 24,180 (O/M: 124)	IC : 42,134 EX : 41,427 (O/M: 602)
Qinghai University for Nationalities	IC : 22,526 EX : 24,282 (O/M: 367)	IC : 39,007 EX : 37,468 (O/M: 224)	IC : 25,417 EX : 21,7958 (O/M: 354)

Source: Responses to the questionnaire
Note1: IC= income
Note2: EX= expenditure
Note3: O/M＝Operation and Maintenance cost

3.5.4 Current Status of Operation and Maintenance

At all the target universities, the buildings and equipment are well maintained. All the universities have inventory books and maintenance logs for the major equipment.

End-of-life equipment, such as PCs, has already been replaced by their own fund. However, valuable equipment is well maintained and the utilization ratio (100% in all the target universities) is high (actual (a) in Table 8). In order to raise the utilization ratio, the education department has established a platform for sharing equipment and this is open to other universities.

No major problems have been observed in the institutional, technical and financial aspects of the operation and maintenance system. Therefore sustainability of the project effect is high.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The Project objective was to improve higher education in Qinghai Province quantitatively and qualitatively by supporting the construction of buildings, the procurement of equipment and the training of teaches in the target universities. This objective was consistent with China's development plan and development needs as well as with Japan's ODA policy at the time of both appraisal in 2004 and ex-post evaluation; therefore the relevance of the Project is high. The effectiveness and impact of the Project was high because both the quantitative indicators (building areas, amount of educational equipment) and qualitative indicators (number of key faculties and laboratories, number of research papers, etc.) have improved. Moreover, there are many examples of good practice in the utilization of the buildings, equipment and training provided under the Project. The outputs were essentially completed in line with the initial plans, and the project cost was within the plan. The project period, however, exceeded the plan;

therefore the efficiency of the project is fair. No major problems have been observed in all institutional , technical and financial aspects of the operation and maintenance system and its current status is very good; therefore the sustainability of the project effects is high.

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

4.2 Recommendations

None.

4.3 Lessons Learned

[Capacity building of the executing agency]

In the case where it is the first experience of a Japanese ODA Loan project for an executing agency without project management consultants, it is desirable that a support system, such as On-the-Job training, is designed at the planning stage of the Project. In case of the Project, the executing agency made efforts to implement the Project smoothly and effectively by themselves. However, as they did not have sufficient experience or knowledge of a Japanese ODA Loan, in the end, they were unable to conduct things as scheduled. If some kind of support at the commencement stage of the Project had been built into the project component, it would have been possible to implement the Project more smoothly and effectively.

[Consideration at the time of bidding]

At the procurement stage of the Project, the shortage of working capital on the part of suppliers led to delays in the arrival of shipments. In order not to affect implementation of the Project, it is necessary to take measures such as confirming the financial ability of bidders during the tender process.

End

Comparison of the Original and Actual Scope of the Project

Item	Original	Actual
1.Project Outputs	4 target universities	3 target universities (due to merger)
1) school buildings	5 buildings such as libraries 55,748 m^2	5 buildings such as libraries 66,904 m^2
2) equipment	function generator, solubility measuring equipment, computer basic experimental facility, multimedia class equipment etc.	Mostly as planned
3) training	58 staff from 4 target universities	82 staff from 3 target universities
2.Project Period	March 2004 – March 2009 (61 months)	March 2004 – August 2011 (90 months)
3.Project Cost		
Amount paid in foreign currency	2,812 million yen	2,669 million yen
Amount paid in local currency	761 million yen (53.2 million RMB)	788 million yen (65.4 million RMB)
Total	3,573 million yen	3,457 million yen
Japanese ODA loan portion	2,812 million yen	2,669 million yen
Exchange rate	1 RMB= 14.3 yen (As of July 2003)	1 RMB = 12.0 yen (As of August 2011)