I. Project Outline

In China, the number of the persons with disability (PWD) was rapidly increasing due to the fast-paced increase of the traffic and industrial accidents which were caused by the economic development and increase of the traffic volume. The population of PWDs was estimated 82.96 million (6% of the total population) in 2006. And, the population of the elderly was estimated to reach 250 million by 2020, suggesting a massive increase of the rehabilitation needs. The Government of China established the rehabilitation centers nationwide, but which was not sufficient to fill the expanding needs, and human resource development was one of the issues. The Government of Japan provided grant aid for construction of the China Rehabilitation Research Centre (CRRC) (1988) and establishment of the professional departments. However, the human resources for rehabilitation in the rural area were not sufficient in terms of both quality and quantity, and there were great needs for expansion of the services and experience in the service and capacity building accumulated in Beijing to the rural area.

Objectives of the Project

1. Project site: Three sites in the Central and Western Region (Shaanxi Province, Chongqing City and Guangxi Zhuang Autonomous Region)
2. Main activities: Installation of the remote education system (curriculum, materials, lecturers, network system), training of the provincial level personnel, training of the provincial level personnel who train the community level personnel (core personnel), trial training of the community level personnel, etc.
3. Inputs (to carry out above activities) (at the terminal evaluation)

<table>
<thead>
<tr>
<th>Japanese Side</th>
<th>Chinese Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Experts: 46 persons</td>
<td>1) Staff allocated: 17 persons</td>
</tr>
<tr>
<td>2) Training in Japan: 61 persons</td>
<td>2) Facility and equipment</td>
</tr>
<tr>
<td>3) Equipment for remote education, etc.</td>
<td>3) Local Cost: LAN, PC, travel expenses, etc.</td>
</tr>
</tbody>
</table>
4) Expenses for the project operation |

Ex-Ante Evaluation

<table>
<thead>
<tr>
<th>Year</th>
<th>Project Period</th>
<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>April 2008 to March 2013</td>
<td>(Ex-ante Evaluation) 480 million yen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Actual) 414 million yen</td>
</tr>
</tbody>
</table>

Implementing Agency

China Disabled Persons’ Federation, China Rehabilitation Research Centre (CRRC), Shaanxi Disabled Persons’ Federation, Chongqing Disabled Persons’ Federation and Guangxi Disabled Persons’ Federation

Cooperation Agency in Japan


II. Result of the Evaluation

1 Relevance

<Consistency with the Development Policy of China at the time of ex-ante evaluation and project completion>

The project was consistent with Chinese development policies, as the support for PWDs were prioritized in the 11th and 12th Five-Year National Economic and Social Development Plan (2006-2010, 2011-2015), along which the programs for facility development and capacity building were promoted.

<Consistency with the Development Needs of China at the time of ex-ante evaluation and project completion>

Due to the increase of the traffic and industrial accidents and aging, the number of PWDs was increasing (82.96 million in 2006), and many of them suffered from poverty. There were needs for expansion of the rehabilitation service in the areas where many PWDs reside, such as the economically less developed Central and Western region till the time of the project completion.

<Consistency with Japan’s ODA Policy at the time of ex-ante evaluation>

The Economic Cooperation Program for China (2001) put emphasis on environmental protection, livelihood improvement and social development in the inland area, human resource development, institutional development, technical transfer, etc., among which the project was in accordance with the human resource development.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

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1 “Provincial level personnel” mean the rehabilitation personnel who work for the province level. All of the project target sites are at the province level.
2 “Community level personnel” mean the rehabilitation personnel who work for organizations at the levels of county, district and county-level city.
The remote education provided by CRRC for the provincial level course, the same course was conducted for 490 hours per year to 640 hours per year, as mostly planned (600 hours per year). 61 core personnel were trained through the 500-hour remote education per year, and their capacity was highly evaluated by JICA experts and CRRC lecturers. Thus, it can be said that the model system of remote education for capacity building of the rehabilitation personnel was developed.

The effects of the model system for human resource development established by the project have continued. Though the remote education for capacity building of the new provincial level and core personnel has not conducted at the three target sites because they were already trained during the project period, the core personnel trained by the project have functioned as lecturers of the training for the community level personnel till the time of the ex-post evaluation. For example, in Shaanxi Province, all of the core personnel trained by the project have continued their work. Twice a month, two to three core personnel are dispatched to the rehabilitation facilities at the county and lower levels to train the community level personnel. In Guangxi Zhuang Autonomous Region, the core personnel train the technicians newly hired by the rehabilitation center to expand the team of the core personnel. These core personnel receive the trainees from the rehabilitation facilities, schools for special education and hospitals at the prefecture and district level within the Region to conduct the training, and also they give lectures in the provincial level training course outside the region. In Chongqing City, the core personnel get engaged in editing work of the training materials of PWDs’ Federation and function as lecturers in the rehabilitation-related training organized by the city.

The Overall Goal has been partially achieved. The number and scale of the rehabilitation facilities have increased, though they vary among the three target sites. Also, the number of the rehabilitation personnel who completed CRRC training or professional training, and the service provided by them have improved compared to before the project. For example, more emphasis has been put on the communication with the patients and their parents in child rehabilitation, and it has been possible to conduct home rehabilitation for the patients with cerebral palsy with the use of the new rehabilitation techniques. On the other hand, the rehabilitation patients have been increasing and the needs for professional techniques have been expanding. The rehabilitation center of Guangxi Zhuang Autonomous Region has only three rehabilitation personnel equipped with professional techniques in the section of community rehabilitation support and some are transferred to other places after the training. Thus, the number of the professional rehabilitation personnel is not necessarily sufficient.

CRRC has received consultation from other regions besides the three target sites which would like to introduce the similar system as the remote education model developed by the project, but the model has actually not been expanded yet as it requires infrastructure development such as server and communication equipment and cost for communication. No natural and social negative impact caused by the project has not been confirmed.

In light of the above, through the project, the Project Purpose was achieved by the project completion and the effects have continued. However, the achievement of the Overall Goal has been partial. Therefore, the effectiveness/impact of the project is fair.

<table>
<thead>
<tr>
<th>Aim</th>
<th>Indicators</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Project Purpose) Establishment of a new model system for human resources development for the rehabilitation service serving three target sites with the CRRS acting as the core base.</td>
<td>1. Length of the remote education training course for the 3 target sites (approx. 600 hours per year)</td>
<td>(Project Completion) Mostly achieved. - In 2012, the 1st course for the provincial level personnel was conducted for 640 hours per year. After the 2nd course, the same course was conducted for 490 hours per year. The training course for the core personnel was conducted for 15 hours. The total is more than 500 hours per year in 2011. The course duration of the training for the provincial level was shortened based on the feedback from the 1st course participants.</td>
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<tr>
<td></td>
<td>2. Recognizability of the provincial level personnel as core personnel trained with the comprehensive remote education course</td>
<td>(Project Completion) Achieved. - The provincial level personnel was highly recognized as the core personnel in all of the target sites, according to the interviewed JICA experts, CRRC lecturers and management in each site. (Ex-post Evaluation) Continued. - The core personnel trained through the remote education course during the project period has functioned as the lecturers for the community level personnel at the time of the ex-post evaluation.</td>
</tr>
<tr>
<td>(Overall goal) Improvement of the quality of the rehabilitation service provided and increase of the number of disabled people receiving the said service at three target sites.</td>
<td>1. Number of the PWDs who received the service at the three target sites</td>
<td>(Ex-post Evaluation) Achieved. - Shaanxi Province: The number of the daily outpatients for rehabilitation increased to 400 in July 2016 from 150 during the project period. - Guangxi Zhuang Autonomous Region: The number of the yearly acceptable patients for the rehabilitation program increased to 500 (2015) from 350 (2012). - Chongqing City: The number of the yearly acceptable patients for the rehabilitation program was approximately 200 (till 2015), 230 (2016), 265 (planned for 2017), among which 165 is planned for the hearing training in 2017.</td>
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<tr>
<td></td>
<td>2. Number of the facilities which provide the service at the three sites</td>
<td>(Ex-post Evaluation) Achieved. - Shaanxi Province: The number of the rehabilitation facilities has increased, though the data was not available. The rehabilitation building was constructed in the rehabilitation</td>
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</tbody>
</table>
target sites | center in 2015, and the facility area increased to 20,690 m² from 6,000m².  
- Guanxi Zhuang Autonomous Region: The rehabilitation center was upgraded to the facility with 5 departments from that with 2 departments. The number of the facilities was not available in the region.  
- Chongqing City: There are 53 facilities in the city, and the number has increased, though the data before 2015 was not available.  
* The above information was based on the interview with the rehabilitation center in each site.  

3. Percentage of the rehabilitation personnel and those who received professional education or the training from CRRC or other high level institutions  
- Shaanxi Province: According to the rehabilitation center, many rehabilitation personnel has participated in various academic conferences and CRRC trainings, but the number of the rehabilitation physicians is not sufficient.  
- Guanxi Zhuang Autonomous Region: All of the rehabilitation technicians (47) completed the training, but the number is not sufficient to meet the needs in the region.  
- Chongqing City: The data was not available.  

4. Improvement of the evaluation after the rehabilitation service  
- Shaanxi Province: Hospital management has participated in the business management training of CRRC, and the number has increased, though the data before 2015 was not available.  
- Guanxi Zhuang Autonomous Region: 53 families have participated in the education for children with cerebral palsy (CP) provided at the newly established department of rehabilitation engineering. The study on the Community-Based Rehabilitation for the child with cerebral palsy (CP) was evaluated as the best in the country. Rehabilitation at home for the children with CP is possible with the new techniques.  
- Chongqing City: The rehabilitation centers have improved the evaluation after the rehabilitation service. They reflect the need of the patients and their families.  

Source: CRRC and rehabilitation centers at the three target sites.  
Note: Indicators 1 and 3 of the Project Purpose were not used for verification continuation at the ex-post evaluation. The remote education course for the target sites was mostly undertaken during the project period, and there was no plan for the same course after the project completion.

3 Efficiency  
Both the project period and cost were within the plan (ratio against the plan: 100% and 86%, respectively). Therefore, the project efficiency is high.

4 Sustainability

<Policy Aspect>  
In 2015, the State Council announced the government objective which is to finish building a moderately prosperous society for the people including PWDs by 2020. Support for PWDs and capacity building of the rehabilitation personnel are prioritized in the 13th Five-Year National Economic and Social Development Plan (2016-2020). This plan includes the program for free rehabilitation services. Besides, the Government has the national training program for real-name rehabilitation professionals (2016-2020) to train 30,000 rehabilitation personnel.  

<Institutional Aspect>  
The organizational structure for capacity building of the rehabilitation personnel remains the same as that during the project period. CRRC not only provides rehabilitation services but also functions as the core institution for research, training and information dissemination. In each province, PWD’s Federation is in charge of the planning and budget allocation, based on which the rehabilitation centers provide rehabilitation services and conducts research and training. CRRC has constructed the International Center for Telemedicine and Conference and plans to train all the provincial level personnel other than the three target sites based on the model developed by the project. Clinicians of CRRC are appointed as lecturers of the remote education. Since the patients has been increasing, the clinical work has been expanding as well. Therefore, the number of the lecturers who are also responsible for revision of the curriculum and materials and maintenance of the system is not sufficient. CRCC mostly understands the situation of the capacity building of the rehabilitation personnel through SNS (social network service). 61 core personnel of the three target sites were trained during the project period, and most of them (29 of Shaanxi Province, 14 of Guangxi Zhuang Autonomous Region and 16 of Chongqing City) have continued the work. In Shaanxi Province, it is planned that 100 community level personnel from 30 facilities are trained after 2015, and the rehabilitation center regularly monitors the rehabilitation service of the trained personnel and its effects. In the three target sites, the curriculum and materials of the training of the community level personnel have been revised, and the personnel-in-charge have been assigned. However, in Shaanxi Province and Guangxi Zhuang Autonomous Region, the needs for the rehabilitation personnel who completed CRRC training or other professional education are growing, and the number of such personnel is not sufficient to meet the needs.  

<Technical Aspect>  
CRRC does not conduct the remote education at the time of the ex-post evaluation, but has provided practical training for the core personnel. Every year, CRRC lecturers give training on the nerve growth factor and Bobath method for rehabilitation personnel and also invite Japanese professionals as lecturers with its own budget. Also, CRRC lecturers conduct weekly study meeting, and CRRC considers the lecturers have mostly have sufficient rehabilitation techniques and training know-how, though they vary among the lecturers. The materials for the remote education developed by the project have been utilized till the time of the ex-post evaluation. The core personnel at the three sites, as mentioned in the Effectiveness/Impact section, they have functioned as lecturers of the training of the

3 Bobath method is a rehabilitation method for the central nervous system disorder developed by Mr. and Mrs. Bobath of England in 1940s.
community base personnel. They have made efforts to sustain the knowledge and skills by attending various academic conferences and CRRC training and workshops, but they still have needs for the follow-up for further upgrading their technical level. The materials for the training of the community level personnel have been utilized for the practical training in Guangxi Zhuang Autonomous Region and Chongqing City till the time of the ex-post evaluation.

<Financial Aspect>

CRRC receives little budget allocation from the central government and is basically run on a stand-alone basis. Though the financial data was not available, CRRC says that it is in the black. Much money is needed for the remote education (100 thousand yuan⁴ per year, during the project period). CRRC plans to secure the budget for communication after launching the International Center for Telemedicine and Conference, there is no plan yet for the remote education at the three target sites. The financial data was not available from the rehabilitation center of the three target sites, either, but according to each rehabilitation center, the budget is secured for capacity building and upgrading of the equipment. The rehabilitation center of Shaanxi Province constructed the building for rehabilitation with its own fund and subsidy in 2015. The rehabilitation center answered that it allocates the fees for training to each of 30 facilities (100 thousand yuan) and for equipment maintenance (400 thousand yuan) as the special budget for rehabilitation training of the PWDs’ Federation of Shaanxi Province. Thus, the budget for capacity building is sufficient, but it is not sufficient for service delivery since the rehabilitation center is a general hospital run on a stand-alone basis. In case of Guangxi Zhuang Autonomous Region and Chongqing City, according to each rehabilitation center, the rehabilitation center is not a hospital but rehabilitation-specific institute, and therefore the services are provided at no charge and the sufficient budget is distributed from the central government as per the number of the patients to be received.

<Evaluation Result>

In light of the above, political and technical sustainability are secured, but slight problems have been observed in terms of the institutional and financial aspects of the implementing agency. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The Project Purpose aimed improving the rehabilitation service in terms of both quality and quantity, through the model system in which the provincial personnel of the three target sites were trained through the remote education and then the core personnel trained the community base personnel. By the project completion, the core personnel were trained as planned and they have functioned as lecturers for the training of the community base personnel. Besides the capacity building, the number and scale of the facilities have increased. The rehabilitation service has expanded, but they have not been sufficient to fill all of the professional needs. The model system developed by the project has not been diffused to other regions yet. Regarding the sustainability, the number of CRCC lecturers is not sufficient as they are also responsible for clinical works. Professional personnel are not sufficient at the target sites, either. The budget for capacity building is sufficient at the target sites, but not for the service delivery to meet the growing needs.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:
- The equipment for the remote education (communication facility, server, etc.) provided by the project has not been utilized at CRRC and three target sites. When the International Center for Telemedicine and Conference is launched, it is recommended to CRRC to utilize this facility and equipment for capacity building of the rehabilitation personnel through the remote education (model system developed by the project).

Lessons learned for JICA:
- The provincial personnel including the core personnel of the three target sites received the remote education course during the project period, and it was supposed that they would train the community level personnel in each site. Therefore, the remote education has not been conducted since the project completion. The project, as the Super Goal, aimed at capacity building of the rehabilitation personnel through the remote education in the Central and Western Region excluding the three target sites, but it has not been realized yet. It is even not unknown how much the remote education would been promoted by the new center constructed by CRRC. One reason is that it is difficult to secure the budget for the equipment and communication cost at both CRRC and receivers’ side. For diffusing the remote education for other sites, it is effective to obtain cooperation from the three target sites in getting the feedback to CRRC, experience-sharing with other sites, etc. Also, It may have been easier to promote the diffusion to other sites with CRRC’s existing system, by continuing the remote education such as the advanced course which was requested by the personnel who completed the course. With regard to the remote education, the project should have examined the utilization of the remote education system not only during the project period but after the project completion, and it should have taken any measures for ensuring the continuity.

⁴ 100 thousand yuan is equivalent to 1.5 million yen, converted at 1 yuan to 15 yen.
(Equipment for the remote education in Shaanxi Province)

(Hearing rehabilitation program for children in Chongqing City)