

Case Studies on Disability Inclusion in JICA Projects

Survey and Analysis on
Promotion of Disability Inclusion in JICA's Operations

August 2023

This report of case studies was prepared under the “Survey and Analysis on Promotion of Disability Inclusion in JICA’s Operations”, conducted from December 2022 to August 2023. The aim of this report is to provide information, measures, and suggestions to promote disability inclusion in JICA projects.

Five ODA projects (loan and grant projects) were selected for the case studies to examine disability inclusion efforts in JICA projects. The report summarizes the efforts, background, and contributing factors to promote disability inclusion in each case based on the literature review and interviews. Based on the analysis of the case studies, key points for mainstreaming disability inclusion in projects are summarized at the beginning of this report.

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2	The Project for the Improvement of Governance and Management Research and Training Facilities, Bangladesh (ODA Grant)	Bangladesh Training Facilities
3	New Ulaanbaatar International Airport Construction Project, Mongolia (ODA Loan)	Mongolian Airport
4	The Project for the Improvement of Facilities for Primary and Secondary Education in Ulaanbaatar City, Mongolia (ODA Grant)	Mongolian Education Facilities
5	Kampala Flyover Construction and Road Upgrading Project, Uganda (ODA Loan)	Kampala Flyover

Abbreviations

ADA	Americans with Disabilities Act
APCD	Asia-Pacific Development Center on Disability
BIGM	Bangladesh Institute of Governance and Management
BNBC	Bangladesh National Building Code
CRPD	United Nations Convention on the Rights of Persons with Disabilities
DET	Disability Equality Training
DMTCL	Dhaka Mass Transit Company Limited
DPUB	The Project for Promoting Social Participation of Persons with Disabilities in Ulaanbaatar City
ICT	Information and Communication Technology
JCAP	JICA Country Analysis Paper
JDS	The Project for Human Resource Development Scholarship
MLSP	Ministry of Labor and Social Protection
MNT	Mongolian Tugriks
MRT	Mass Rapid Transit
NGO	Non-Governmental Organization
NHRC	National Human Rights Commission
NUBIA	New Ulaanbaatar International Airport LLC
ODA	Official Development Assistance
PIDS	Passengers Information Display System
PSD	Platform Screen Doors
STEP	Special Terms for Economic Partnership
START	The Project for Strengthening Teachers' Ability and Reasonable Treatments for Children with Disabilities
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific

Key Points for Promoting Disability Inclusion in Cooperation Projects (ODA Loans and Grants)

Disability Inclusion Measures in Project Management

Disability Inclusion Measures	Example
Planning/ Project Formulation Phase	
<input checked="" type="checkbox"/> Include disability inclusion measures in project planning documents and send them to Social Security Team, Human Development Department for comments.	—
<input checked="" type="checkbox"/> Include barrier-free measures in terms of reference for the project preparatory survey.	<ul style="list-style-type: none"> • Bangladesh Training Facilities • Mongolian Education Facilities
<input checked="" type="checkbox"/> Include disability inclusion measures in terms of reference for the project preparatory survey. <ul style="list-style-type: none"> ➢ e.g.) conduct a consultation workshop involving persons with disabilities for needs assessment 	<ul style="list-style-type: none"> • Dhaka MRT
<input checked="" type="checkbox"/> Conduct a survey on disability and persons with disabilities in the project preparatory survey. <ul style="list-style-type: none"> ➢ Refer to JICA Disability Country Analysis ➢ Conduct needs assessment of persons with disabilities 	—
<input checked="" type="checkbox"/> Consider adaptation of barrier-free and/or universal design in the project preparatory survey.	<ul style="list-style-type: none"> • All cases
<input checked="" type="checkbox"/> Consult with organizations of persons with disabilities and/or persons with disabilities in the planning and design process.	<ul style="list-style-type: none"> • Mongolian Education Facilities
<input checked="" type="checkbox"/> Include barrier-free measures in project appraisal documents and ex-ante evaluations.	<ul style="list-style-type: none"> • All cases
<input checked="" type="checkbox"/> Agree with counterparts on disability inclusion measures and include it in Minutes of Discussion (M/D).	(M/D was not studied in the survey)
Implementation and Monitoring Phase	
<input checked="" type="checkbox"/> Incorporate barrier-free and universal design in architectural design.	<ul style="list-style-type: none"> • All cases
<input checked="" type="checkbox"/> Promote the involvement of persons with disabilities in the implementation and monitoring/ <ul style="list-style-type: none"> ➢ e.g.) Involve persons with disabilities in the accessibility audit 	<ul style="list-style-type: none"> • Mongolian Airport
<input checked="" type="checkbox"/> Consult with organizations of persons with disabilities and/or persons with disabilities.	<ul style="list-style-type: none"> • Dhaka MRT
Evaluation Phase	
<input checked="" type="checkbox"/> Conduct evaluation using disability disaggregated data.	—

Other Key Points

Mainstream disability inclusion from the project formulation phase

It is important to mainstream disability inclusion from the project formation phase, taking into account the nature of the project (e.g., whether the facility is likely to be used by persons with disabilities) and the surrounding environment (e.g., the legal status of the country, understanding of the executing agency). It should be noted that disability considerations, including barrier-free measures and/or universal design, should be considered from the outset and consensus should be reached with counterparts to ensure their implementation.

Promote understanding of counterparts on disability inclusion

Understanding and involvement of counterparts is critical to promoting disability inclusion in projects.

Although many countries have ratified the Convention on the Rights of Persons with Disabilities (CRPD) and have developed laws and legislations in line with the Convention, it is often the case that the understanding of counterparts is insufficient with limited experience in disability inclusion. Therefore, it is crucial for JICA, including local staff and consultants, to understand the trends in policies and regulations related to disability in the target countries, to build consensus with counterparts on the initiatives for disability inclusion, and to promote and foster understanding through the implementation of the project.

Collaborate with other projects and human resources in the disability field to promote disability inclusion

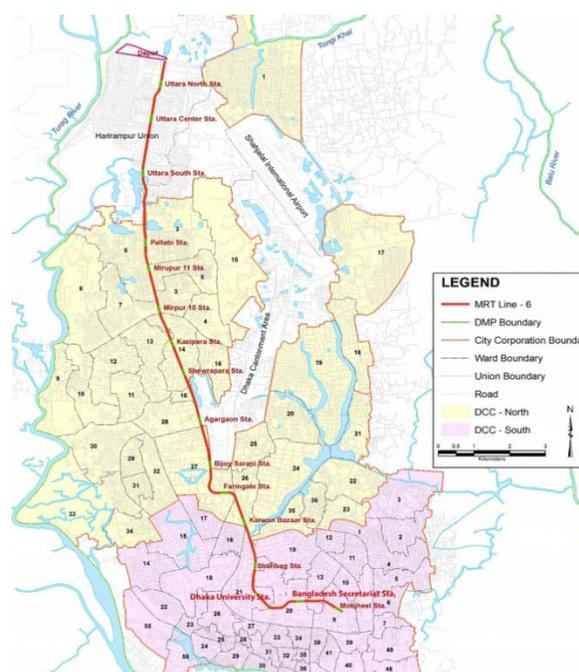
To promote disability inclusion in projects, it is effective to collaborate with JICA projects and human resources (e.g., experts and volunteers) in the disability field. They have accumulated knowledge and experience in the country about disability. Particularly, relationships with relevant local ministries and organizations of persons with disabilities would be valuable to promote the participation of persons with disabilities in the planning and implementation of the projects. To achieve this kind of collaboration, JICA, including project teams, needs to approach other projects and human resources across sectors and cooperation schemes.

1 Dhaka Mass Rapid Transit Development Project, Bangladesh (ODA Loan)

1.1 Overall Project Outline

Executing Agency	Dhaka Mass Transit Company Limited (DMTCL)
Loan Agreement	Dhaka Mass Rapid Transit Development Project (V) March 29, 2022 Dhaka Mass Rapid Transit Development Project (IV) August 12, 2020 Dhaka Mass Rapid Transit Development Project (III) June 14, 2018 Dhaka Mass Rapid Transit Development Project (II) June 29, 2016 Dhaka Mass Rapid Transit Development Project (I) February 20, 2013
Schedule	February 2013 – August 2027 (planned) The Project will be completed upon the opening of all sections (December 2025).
Project Cost (Cumulative Cost)	255,789 million yen
Project Objective	The Project aims to contribute to the economic development and improvement of the urban environment of the Dhaka metropolitan area by constructing Bangladesh's first mass rapid transit (MRT) railway system, MRT Line 6 (total length of approximately 21 km), and forming a public transportation network to meet the transportation demands of the Dhaka metropolitan area.
Project Components	<ol style="list-style-type: none"> 1) Construction of a depot 2) Construction of railway structures 3) Installation of electric and signal systems 4) Procurement of rolling stock 5) Procurement of Enterprise Resource Planning System 6) General consulting services 7) Consulting services for resident resettlement support 8) Consulting services for institutional development support
Status as of April 2023	Ongoing Partial opening in December 2022 (the Uttara North-Agargaon section)

Source: [1] [2] and ex-ante evaluations



Source: [3]

Figure 1 Dhaka Mass Rapid Transit Development Project Route Map

1.2 Disability Related Background

1.2.1 Policy Trends in Bangladesh

The Constitution of Bangladesh (enacted in 1972) enshrines equal rights for all citizens; a 2014 constitutional amendment added consideration for persons with disabilities and prohibition of discrimination. Bangladesh signed and ratified the Convention on the Rights of Persons with Disabilities (CRPD) in 2007. Subsequently, the Persons with Disability Welfare Act (2001) and other related laws and regulations were amended and adapted to the CRPD, leading to the enactment of the Rights and Protection of Persons with Disabilities Act in 2013 [4].

Although Section 32 of the Rights and Protection of Persons with Disability Act directs that 5% of seats in public transportation should be reserved for persons with disabilities, the reality is that this is not the case. For example, bus and train stations do not have the necessary infrastructure and systems for persons with disabilities to use. Vehicles are designed in such a way that most persons with disabilities, especially those who use wheelchairs, cannot get into the vehicles. Therefore, disability inclusion has been a priority for Bangladesh, and the government and civil society organizations have been working on disability inclusion from different dimensions [5].

Against this backdrop, in December 2018, the non-governmental organization (NGO) BRAC and the National Human Rights Commission (NHRC) signed a Memorandum of Understanding to facilitate access of persons with disabilities to public infrastructure, including facilities at the Dhaka MRT [6]. BRAC also held a consultation on ensuring accessibility for persons with disabilities in MRT on the same day as the MOU signing to support the NHRC's initiative and to help the government take policy measures in terms of ensuring accessibility. This is because the MRT project was considered the best starting point to initiate discussions on ensuring accessibility for persons with disabilities in the public transportation system [5]. As described above, this Project has been implemented in the midst of the development of disability-related legislation in Bangladesh and the growing momentum for disability inclusion, including ensuring accessibility in public infrastructure.

1.2.2 Japan's Cooperation Policy

The Country Development Cooperation Policy of the People's Republic of Bangladesh [7], formulated in February 2018, sets "Accelerating sustainable and equitable economic growth and removing poverty in order to become a middle-income country" as its basic policy (overall goal). This Project in the field of economic infrastructure development supports the subsidiary goal of "accelerating economic growth for the benefit of all citizens toward a middle-income country". In particular, ensuring accessibility for persons with disabilities in this Project will contribute to improving the benefit of all citizens.

1.2.3 Related JICA Project

The Preparation of Rules and Regulations under Urban Mass Rapid Transit Act (Dhaka, Bangladesh): Technical Assistance Related to Official Development Assistance (ODA) Loan (September 2013- August 2015) was implemented during the implementation of the Project.

As a background to the implementation of the Preparation of Rules and Regulations under Urban Mass Rapid Transit Act (Technical Assistance Related to ODA Loan), there was a situation in which technical standards that would serve as the basic conditions for the design had to be developed, and appropriate project planning had to be secured in order to ensure the project effectiveness of the MRT Line 6 Project. However, since this Project is the first urban transit (MRT) project for the Bangladesh government, there were no experts or engineers with sufficient knowledge in the country with sufficient knowledge of the Project. Therefore, it was necessary to support the development of technical standards for the Dhaka MRT by the railroad operator, which had prior experience in urban transportation projects, and the Technical Assistance Related to ODA Loan was implemented [8].

In Japan, the “Act on Promotion of Smooth Transportation, etc. of Elderly Persons, Disabled Persons, etc. (Barrier-Free Law)” is in force, but in Bangladesh, there is no law on barrier-free access, and the Bangladesh National Building Code (BNBC) contains only some simple provisions on barrier-free accessibility. Therefore, in order to promote the use of urban transport by vulnerable groups, including older people, “barrier-free facilities” was included as one of the items in the “Technical Standards for the Metrorail in Bangladesh”, which stipulates minimum standards for the installation of barrier-free facilities [8].

1.3 Disability Inclusion Measures

The MRT Line 6 is designed to be barrier-free and universally accessible based on the “Technical Standards for the Metrorail in Bangladesh” developed through the Preparation of Rules and Regulations under Urban Mass Rapid Transit Act (Technical Assistance Related to ODA Loan), BNBC, and the Japanese “Barrier-Free Development Guidelines” for public transportation passenger facilities and vehicles, etc. The accessibility of MRT Line 6 is ensured by installing wide automatic ticket gates, Braille blocks, and spaces for wheelchair passengers and other measures. Specifically, the following measures have been taken to (i) ensure accessibility to stations and (ii) ensure accessibility for station and rail users (see Figure 2) ¹.

(i) Ensure accessibility to stations:

- All stations have elevators accessible from the street and sidewalk below the station
- Drop-off areas for vehicles near the elevator

¹ Information provided by the JICA Bangladesh Office/prepared by Nippon Koei Co., Ltd.; interviews with JICA Bangladesh Office (May 11, 2023) and Nippon Koei Co., Ltd. (May 17, 2023)

- Ramps at elevator entrances and exits (ramp gradient 1:12)

(ii) Ensure accessibility for station and rail users

- Braille tiles for the visually impaired (Guiding the visually impaired person to the boarding position of the train car)
- Elevator car interior equipment (mirrors, voice guidance, etc.)
- Wheelchair-accessible ticket booths (70 cm lower than the general ticket booth height)
- Wide ticket gates (90 cm wide) for wheelchair access
- Information guidance for station users via various bulletin boards and PIDS (Passenger Information Display System)
- Wheelchair-accessible restrooms (all stations)
- Ramps to restroom entrances (ramp gradient 1:12)
- Platform Screen Door (PSD) to improve safety for platform users.
- Designated spaces for wheelchair users and priority seats
- Reduction of gaps between platforms and vehicles to allow wheelchair users to board and get off the vehicles independently.



(i) Example of accessibility measures in station facilities: Elevators on both sides of the station and ramps



(ii) Example of ensuring accessibility for station and rail users: Passenger Information Display System (PIDS), and Platform Screen Door (PSD)

Source: JICA Bangladesh Office, Nippon Koei Co., Ltd.

Figure 2 Examples of Accessibility Measures on MRT Line 6

1.4 Disability Inclusion Efforts in Project Operations

1.4.1 Planning/Project Formulation Phase

The preparatory study for this Project was conducted in two phases: Phase 1 (2009-2010) and Phase 2 (2010-2011). Barrier-free and universal designs were planned from the preparatory survey stage. In the basic design specifications, universal design and barrier-free (elevators, escalators, tactile paving for the visually impaired, ramps, etc.) were listed as considerations for persons with disabilities. In addition, the station building and facilities were planned to be barrier-free for the convenience of passengers and persons with disabilities [9].

The description of disability considerations in the project appraisal documents and the ex-ante evaluations (Table 1) states that barrier-free measures will be implemented based on the “Technical Standards for the Metrorail in Bangladesh” developed through the Preparation of Rules and Regulations under Urban Mass Rapid Transit Act (Technical Assistance Related to ODA Loan), the “National Building Code (BNBC)” which is the national law of Bangladesh, and the “Barrier-Free Development Guidelines” for facilities and vehicles for public transportation systems in Japan.

Table 1 Description of Disability Considerations

Project title	Project Appraisal Document	Ex-ante Evaluation Document
Dhaka MRT Development Project (V)	“No change from what was stated in Dhaka MRT Development Project (IV)”	Cross-cutting Issues: In accordance with the Bangladesh National Building Code (BNBC) and the Japanese “Barrier-Free Development Guidelines” for public transportation facilities and vehicles, barrier-free measures are being taken in this Project, including tactile paving for visually impaired persons and ramps for wheelchairs and others.
Dhaka MRT Development Project (IV)	“No change from what was stated in Dhaka MRT Development Project (III)”	None stated
Dhaka MRT Development Project (III)	(Same description as Dhaka MRT Development Project (II))	None stated
Dhaka MRT Development Project (II)	10. Environmental and social considerations, cross-cutting issues, gender classification (2) cross-cutting issues, 4) participatory development / 5) disability considerations, etc.: The station building and facilities of the Project will adopt the “Technical Standards for the Metrorail in Bangladesh” based on the barrier-free standards developed under the Preparation of Rules and Regulations under Urban Mass Rapid Transit Act (Technical Assistance Related to ODA Loan), and will be equipped with ramps and tactile paving for the visually impaired and other disability considerations.	None stated
Dhaka MRT Development Project (I)	9. Environmental and Social Considerations (3) Promotion of social development (gender perspective, countermeasures against infectious diseases such as HIV, participatory development, consideration for persons with disabilities, etc.): The station building and facilities of the Project will be designed to be barrier-free, with elevators, escalators, and tactile paving for the visually impaired.	Promotion of Social Development: Barrier-free design will be introduced in station buildings and facilities, including the installation of elevators and tactile paving for the visually impaired.

Source: Information provided by JICA Human Development Department and ex-ante evaluations

1.4.2 Implementation Phase

The efforts related to disability inclusion in the implementation of the Project are as follows:

- (1) Implementation of barrier-free measures and adoption of universal design
 - The Project adequately applies each of the following: (i) Technical Standards for the Metrorail in Bangladesh, (ii) BNBC, and (iii) Japanese “Barrier-free Development Guidelines”.
 - (i) Technical Standards for the Metrorail in Bangladesh is a standard that should be adhered. It covers basic requirements. (ii) BNBC includes a universal accessibility provision². However, there is no description of content specific to railroad stations as in the Japanese guidelines, so reference is made to (iii) Japanese “Barrier-free Development Guidelines” as necessary³.
- (2) Reduction of gaps between platforms and vehicles to make it easier for wheelchair users to board and get off the vehicles independently.
 - Although not in the original plan, the consultants were aware of the efforts to eliminate the gap between platforms and vehicles for the Tokyo Olympics and Paralympics in Japan⁴, and after reviewing the situation, the consultants worked to reduce the gap as much as possible so that wheelchair users can travel alone on MRT Line 6⁵. Although there are still some areas where it is structurally difficult to reduce the gap, such as curved platforms, the steps and gaps on straight platforms are designed to make it easier for a wheelchair user to board alone⁶.
- (3) Provision of spaces for wheelchair users and priority seats for persons with disabilities, pregnant women and other persons with special needs.
 - Priority seating in the car was to be installed to achieve the Gender Action Plan⁷ and as a proposal from the Project team⁸.
- (4) Presentation on Ensuring Accessibility at the Consultation on Disability Considerations at MRT
 - On December 2, 2018, BRAC held a consultation regarding disability considerations in MRT. About 80 NGO representatives, including persons with disabilities, participated [10]. DMTCL and consultants from the Project participated. The consultant gave a presentation on how to ensure accessibility in the Project, including the installation of wider automatic ticket gates for wheelchair users, Braille blocks, and designated spaces and restrooms for wheelchair users⁹.

² It requires that there be space for a wheelchair to pass and turn, and that Braille blocks be installed.

³ Interview with Nippon Koei Co., Ltd. (May 17, 2023)

⁴ In October 2018, the Ministry of Land, Infrastructure, Transport and Tourism launched the Study Group on Gaps and Steps between Platforms and Train Entrances at Railway Stations” to examine steps and gaps that would allow wheelchair users to board and disembark independently and ensure train safety through demonstration experiments, etc. In August 2019, the guidelines and instructions for maintenance were compiled [42].

⁵ The floor heights of the cars and platforms were set by the consultant team with reference to the barrier-free movement of Japanese railroad operators.

⁶ Interview with Nippon Koei Co., Ltd. (May 17, 2023)

⁷ A Gender Action Plan has been developed for the Project, which defines the actions to be taken toward gender mainstreaming in the detailed design, construction, and operation phases, and the responsible organizations or persons for these actions.

⁸ Interview with Nippon Koei Co., Ltd. (May 17, 2023)

⁹ Ibid.

1.4.3 Monitoring

No disability or disability-related monitoring has been conducted.

1.4.4 Evaluation (after completion)

(Not applicable at this time)

1.5 Impact of the Project from a Disability Perspective

Although it is too early to judge the impact of this Project as some sections have been opened and the Project is still under implementation, it was confirmed that there was a case of positive reaction from a person with disabilities who uses MRT Line 6. According to the interview¹⁰, on the second day of the partial opening of Line 6, a wheelchair user (Figure 3) who had come alone to use the MRT from a distance of 20 km away commented that he was really happy to have a public transportation system that he could use without assistance from other people.



Source: JICA Bangladesh Office

Figure 3 A wheelchair user using Dhaka MRT Line 6

¹⁰ Interview with the JICA Bangladesh Office (May 11, 2023)

1.6 Contributing Factors and Challenges in Promoting Disability Inclusion in Projects

Factors contributing to the promotion of disability inclusion in the Project are summarized as follows:

- Legal and institutional development through Technical Assistance Related to ODA Loan
The “Technical Standards for the Metrorail in Bangladesh” developed under the Technical Assistance Related to ODA Loan played an important role as a concrete standard for promoting barrier-free measures and was effective in achieving universal design. It also raised awareness of the need for public transport operators to consider the rights of persons with disabilities.

- Consultant-initiated efforts
The consultant’s efforts to gather information and technical expertise resulted in efforts to reduce the gap between the platform and the cars, leading to further improvements in accessibility.

However, the following challenges were also identified as follows:

- Involvement of persons with disabilities and organizations of persons with disabilities
In this Project, other than the consultation conducted by BRAC, there was no involvement of organizations of persons with disabilities. In terms of accessibility, it is considered important not only to adopt Japanese standards as they are, but also to localize them, taking into account local culture and the current situation of persons with disabilities. To this end, it is considered necessary to have a system for understanding the needs of persons with disabilities and to consult with organizations of persons with disabilities in the early stages of design.

- System and action plan for disability inclusion
To realize the above system, the Gender Action Plan can be used as a reference. The first step in promoting disability inclusion would be to develop an action plan for universal design and other disability considerations and to establish a system to check it at the time of appraisal.

Although the Gender Action Plan for this Project does not include measures related to persons with disabilities, the Gender Action Plan for the Dhaka MRT Project (Line 5 Northern Route) includes measures to address not only gender but also social issues. In accordance with the plan, the project confirms that the design of vehicles and stations is safe and accessible for passengers, including persons with disabilities, older people, and children [11].

For new projects in the future, one possible strategy would be to integrate disability considerations into the gender action plan, or to develop the gender action plan as an “inclusive action plan” that includes other social considerations.

2 The Project for the Improvement of Governance and Management Research and Training Facilities, Bangladesh (Grant Aid)

2.1 Overall Project Outline

Target Area	Dhaka City, People’s Republic of Bangladesh
Executing Agency	Ministry of Public Administration
Grant Agreement	December 2021
Schedule	December 2021 – January 2026 (planned)
Grant Amount	2,762 million yen
Project Objective	The Project aims to improve and expand the training environment for high-level human resources in Bangladesh and contribute to the improvement of the capacity of the Bangladeshi government to formulate policies and to facilitate cooperation between the public and private sectors by providing facilities and equipment for the Bangladesh Institute of Governance and Management (BIGM) in Dhaka City to offer master's and short-term training courses for the development of senior administrative officials, private sector executives, and others, and for policy research.
Project Components	[Contents of facilities and equipment, etc.] Facilities: Lecture rooms (15), laboratories, library, auditorium, parking lot, administration office, etc. Equipment: Audio equipment for the auditorium, wireless LAN system, and other materials related to the operation of the master's program and public policy research. [Soft components] None.
Status as of April 2023	Ongoing

Source: [12][13]

2.2 Disability Related Background

2.2.1 Policy Trends in Bangladesh

In the “Seventh Five-Year Plan (2016-2020),” which was in operation as of 2018 when the request for this Project was submitted by the Government of Bangladesh, Bangladesh set the goal of “sustainable and equitable economic growth and poverty reduction,” and aimed to become a middle-income country by 2021 and a developed country by 2041 through efforts including promotion of foreign investment and utilization of Information and Communication Technology (ICT). In addition, the “Vision 2021” and “Perspective Plan 2010-2021” indicated that the country would work toward establishing a legacy of good governance, by ensuring the rule of law, avoiding political partisanship, and building a corruption-free society [14]. As for policy trends related to disability, “social inclusion” has been positioned in the social protection sector in the sectoral development strategies of the “Seventh Five Year Plan (2016-2020)”. It states that the inclusion of persons with disabilities is based on the implementation of the Constitution of the People’s Republic of Bangladesh, which provides equal rights and opportunities to all citizens irrespective of race, religion, caste, creed, or profession [15].

2.2.2 Japan’s Cooperation Policy

In the Country Development Cooperation Policy for the People's Republic of Bangladesh formulated in February 2018, “Accelerating economic growth for the benefit of all citizens toward a middle-income country” and “Overcoming social vulnerabilities” were set as priority areas (subsidiary goals), and the governance sector was positioned as one of the cooperation programs. In addition, the JICA Country Analysis Paper (JCAP) formulated in March 2019 also identified the above two points as priority issues [16]. The JCAP, which was later revised in March 2023, states that “overcoming social vulnerability” remains a priority area, and that in order to strengthen the governance of the Bangladesh government and improve the transparency and efficiency of administrative procedures, JICA continues to provide support for strengthening the public investment management capacity of the central government, the administrative capacity of local governments, and the human resource development of civil servants. In addition, with regard to the disability and development sector, it is stated that JICA will provide assistance to strengthen the government's capacity to promote employment and social participation of people with disabilities, and will consider providing assistance in the social security sector to strengthen the safety net for vulnerable groups such as people in poverty, people with disabilities, women, and children [17].

2.2.3 Related JICA Project

Related to this Project, the following projects had been implemented. As for the disability and development sector, there were no projects implemented.

Table 2 Projects related to “The Project for the Improvement of Governance and Management Research and Training Facilities, Bangladesh”

	Scheme	Year	Project Title
1	Grant Aid	Every year	The Project for Human Resource Development Scholarship (JDS)
2	Loan Assistance	FY2014 – FY2022	Inclusive City Governance Project
3		FY2015 – FY2025	Upazila Governance and Development Project
4	Technical Cooperation	FY2013 – FY2018	The Strengthening Paurashava Governance Project
5		FY2017 – FY2019	Upazila Integrated Development Project
6		FY2018 – FY2021	National Integrity Strategy Support Project Phase 2
7		FY2019 – FY2022	Strengthening Public Investment Management System Project Phase 2

Source: [13]

2.3 Disability Inclusion Measures

As a result of the preparatory survey on this Project, the following measures were planned as accessibility considerations for students and staff with mobility impairments.

- The exterior walkway and the first floor will have ramp access with minimal difference in steps.
- Two elevators, accommodating the size of wheelchairs, will be installed to provide access to each floor.
- In the auditorium, the front row (second-floor level) and the back row (third-floor level) should be

accessible from each floor by wheelchair without any difference in level.

- In the men's and women's restrooms on the lobby floor where the auditorium is located, there will be large booths with wheelchair accessibility.

2.4 Disability Inclusion Efforts in Project Operations

2.4.1 Planning/Project Formulation Phase

In the terms of reference of the preparatory survey of this Project, it is clearly stated in the “Consideration for socially vulnerable groups and gender” that through consultations with BIGM, specific measures should be proposed when designing the BIGM so that these groups are not excluded from the use of the facility¹¹.

In consultation with the BIGM and related agencies, it was requested that consideration be given to the fact that some students, professors, board members, etc. are elderly and use wheelchairs, and that necessary measures such as the installation of elevators be taken regarding physical access to each floor (therefore, there is no special accommodation for visual or hearing impairments). In addition, from a gender perspective, the restrooms were designed to have wheelchair-accessible toilets within each of the men's and women's restrooms, which is common in some countries, instead of having multipurpose toilets for both men and women, as in Japan.

Although the installation of these barrier-free facilities follows the Bangladesh Building Code, it does not provide sufficient content as a barrier-free standard, so international guidelines such as the Americans with Disabilities Act (ADA) of the U.S. are used as references. Regarding Japanese barrier-free standards, they are rarely applied directly because they are highly specific and may cause difficulties for local people with disabilities to use them, or because there are no locally available building materials for maintenance¹².

As for the budget for these barrier-free measures, no additional costs were incurred, as they were limited to general measures such as installation of elevators and provision of restroom space¹³.

2.4.2 Implementation Phase

The Project has just started construction in May 2023. No specific initiatives related to disability inclusion have been implemented so far other than the above-mentioned accessibility measures.

2.4.3 Monitoring and Evaluation (after completion)

Not applicable as this Project is currently under implementation.

¹¹ JICA Competition Instructions “The Preparatory Survey on the Project for the Establishment of Facility for Human Resource Development for Public Policy in Bangladesh”

¹² Interview with Yamashita Sekkei Inc. (June 23, 2023)

¹³ Ibid.

2.5 Impact of the Project from a Disability Perspective

Not applicable as this Project is still in its initiation phase as described above, and no specific impact has been identified.

2.6 Contributing Factors and Challenges in Promoting Disability Inclusion in Projects

Factors contributing to the promotion of disability inclusion in the Project are summarized as follows:

- Matching the needs of the facility's users

Since the users of BIGM are expected to be mainly senior civil servants (older people) and the local stakeholders indicated a clear need for wheelchair access. Therefore, the agreement was reached on incorporating barrier-free access.

- Assignment of Japanese experts with relevant experience in the field of disability

The consultant in charge of the preparatory survey of this Project was before engaged in the construction project of the Asia-Pacific Development Center on Disability (APCD) in Thailand. With such experiences, he has knowledge on how to involve and work with organizations of persons with disabilities in cooperation projects, and is also familiar with the guidelines of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) as well as other relevant standards in the Asia-Pacific region, which enabled the locally appropriate design of the facilities in the Project.

3 New Ulaanbaatar International Airport Construction Project, Mongolia (ODA Loan)

3.1 Overall Project Outline

Project Area	Sergelen District, Tuv Province, Mongolia (about 50 km south of Ulaanbaatar)
Executing Agency/ Project Implementing Structure	1) Borrower: The Government of Mongolia 2) Executing Agency: Ministry of Road and Transport 3) Operation, Maintenance and Management System: Civil Aviation Authority of Mongolia
Loan Agreement	New Ulaanbaatar International Airport Construction Project (I), May 1, 2008 New Ulaanbaatar International Airport Construction Project (II), April 16, 2015
Schedule	May 2008 – December 2017
Project Cost (Cumulative Cost)	75,748 million yen (ODA loan covers approximately 65.7 billion yen. Projects covered by STEP ¹⁴)
Project Objective	The Project aims to improve the safety and reliability of the capital airport and enhance its convenience by constructing a new airport in the suburb of the capital Ulaanbaatar, thereby contributing to the further economic development of Mongolia.
Project Components	1) Airport construction work Passenger terminal buildings, runways, taxiways, aprons, airport control towers, air navigation facilities, airport ancillary facilities, parking lots, aircraft fuel refueling systems, airport maintenance equipment, etc. 2) Consulting services (design, construction management, etc.) Constructor: Mitsubishi Corporation, CHIYODA Corporation Joint Venture Designer: Azusa Sekkei Co., Ltd., Oriental Consultants Co., Ltd. Joint Venture *In July 2019, an airport management business rights agreement was signed between the Mongolian government and a four-company alliance of Mitsubishi Corporation, Narita International Airport Corporation, Japan Airport Terminal Co., Ltd., and JALUX Inc.
Status as of April 2023	Completed. Construction of the main facility began in 2013 and the airport was opened in July 2021.

Source: [18][19][20][21] and ex-ante evaluations

The following four projects were implemented as Technical Assistance Related to ODA Loan for this Project (Table 3).

Table 3 Technical Assistance Related to ODA Loan

Project title	Schedule	Consultant
The project for human resource development and O&M capacity development for New Ulaanbaatar International Airport (NUBIA) (1): Air Traffic Control	January 2015 - September 2021	Japan Radio Air Navigation Systems Association, Air Traffic Control Association Japan Joint Venture
The project for human resource development and O&M capacity development for New Ulaanbaatar International Airport (NUBIA) (2): NUBIA Management	January 2015 - September 2021	Narita International Airport Corporation, JALUX Inc., and Japan Airport Terminal Co., Ltd. Joint Venture
Support for the design of the operation system of the New Ulaanbaatar International Airport	2014-2016	Nomura Research Institute, Ltd.
Support for the formulation of an action plan to prepare for the operation of the New Ulaanbaatar International Airport	2014-2015	Narita International Airport Corporation, JALUX Inc., and Japan Airport Terminal Co., Ltd. Joint Venture

Source: [22] and ex-ante evaluations

¹⁴ STEP (Special Terms for Economic Partnership): Introduced in July 2002, in order to promote Japan's "face-to-face assistance" through technology transfer to developing countries, utilizing Japan's excellent technologies and know-how.

3.2 Disability Related Background

3.2.1 Policy Trends in Mongolia

Mongolia acceded to the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2009 [23], and adopted the “Incheon Strategy for the Realization of the Rights of Persons with Disabilities in Asia and the Pacific” in 2012 [24]. After the inauguration of the new government in 2012, the Ministry of Population, Development, and Social Security (currently MLSP: Ministry of Labor and Social Protection) was established, and the Social Security Law and the Social Welfare Law were revised. In addition, on February 5, 2016, the Act on the Rights of Persons with Disabilities was enacted based on the principles of the CRPD, and a national program for persons with disabilities (2016-2020) was formulated [25].

As for barrier-free infrastructure, the Ministerial Decree of Construction and Urban Development “Guaranteeing the Rights of Persons with Disabilities and Improving Physical Accessibility,” enacted on June 28, 2017, instructed the Land, Survey and Map Agency to work with local governments to check the barrier-free status of public facilities, conduct accessibility surveys, and report on improvement measures within 2017 [26].

As described above, this Project has been implemented in the midst of the development of disability-related policies and legislations and the growing momentum for disability inclusion in Mongolia.

3.2.2 Japan’s Cooperation Policy

This Project was positioned as one of the priority issues “Strengthening Ulaanbaatar's Urban Function” (medium objective) in the Country Development Cooperation Policy of Mongolia formulated in April 2012, and supported “Infrastructure Development and Improvement of Urban Planning and Management Capacity” (sub-objective). In the Country Development Cooperation Policy for Mongolia in December 2017 set as one of the priority areas to “support the achievement of healthcare standards compatible with social conditions, improve the quality of basic social services, and promote social participation and social inclusion of people with disabilities” toward the realization of an inclusive society under the basic policy “Achieving Economic Growth and Stable Social Development.” In addition, the JICA Country Analysis Paper (September 2017) pointed out the need to realize an inclusive society by promoting social participation and inclusion of persons with disabilities as one of the priority issues for assistance to Mongolia.

3.2.3 Related JICA Project

The following two JICA technical cooperation projects were implemented during the Project period.

- ◆ The Project for Promoting Social Participation of Persons with Disabilities in Ulaanbaatar City (DPUB) (2016-2020)
- ◆ The Project for Strengthening Teachers' Ability and Reasonable Treatments for Children with Disabilities (START) (2015-2019)

In addition to the above, in order to ensure the effectiveness and sustainability of the support for the hardware side (infrastructure development) of this Project, the four technical assistance projects related to ODA Loan were implemented to improve human resource development and maintenance and management capabilities (Table 3).

3.3 Disability Inclusion Measures

Article 20 of the “Urban Development Law” in Mongolia, under the section on infrastructure development for persons with disabilities, states that “no permit shall be issued for urban planning, building design, and blueprints that do not provide a smoothly accessible environment for persons with disabilities” [27]. In addition, in the standards and rules related to construction, ten standards and rules include items on disability considerations, such as “Design Standards Indicating Requirements for Persons with Disabilities in Public Building Structures,” “Design Standards Indicating Needs of Persons with Disabilities,” and “Manual for Designing Sidewalks for Pedestrians and Persons with Disabilities” [26]. Based on these relevant laws and standards, the Project adopted universal design with consideration for people with disabilities and mobility issues. For example, there is no stairway movement from the international check-in counter to the departure gate. Other disability considerations are as follows [21] [28] [29] [30];

- Removing steps for wheelchair users, persons with visual and hearing impairments, etc.
- Installation of easy-to-understand information signage for wheelchair users and persons with visual and hearing impairments
- Installation of multi-purpose toilets

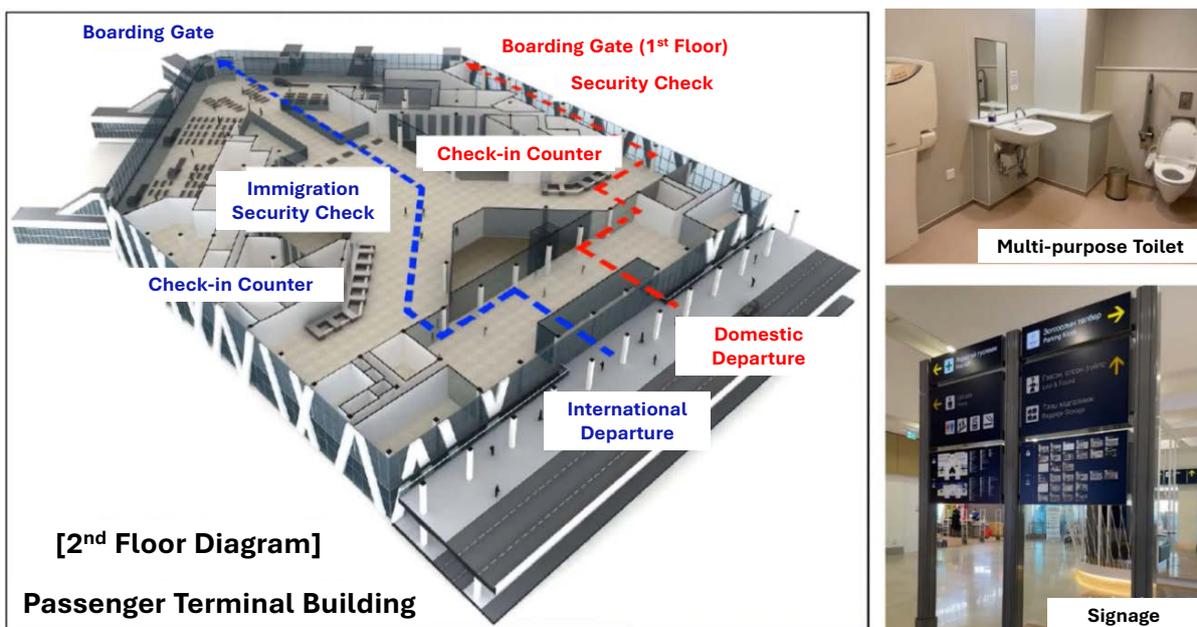


Figure 4 Examples of universal design

Source: [30]

3.4 Disability Inclusion Efforts in Project Operations

3.4.1 Planning/Project Formulation Phase

The ex-ante evaluations (“New Ulaanbaatar International Airport Construction Project”) state that “the Project will consider universal design for the elderly and for persons with disabilities during the design phase, in accordance with national laws and international standards”. In addition, in the ex-ante evaluations (“New Ulaanbaatar International Airport Construction Project (II)”), the Project is described as setting up accessible restrooms and ensuring accessible traffic flow lines for persons with disabilities.

3.4.2 Implementation Phase

Accessibility audit and training were conducted in collaboration with “The Project for Promoting Social Participation of Persons with Disabilities in Ulaanbaatar City (DPUB),” which was being implemented at the same time as this Project, as an initiative for disability inclusion. The outline is as follows¹⁵.

1) Accessibility audit

Accessibility audit was conducted on April 19, 2017 by the Ministry of Roads and Transport Development to enhance the accessibility of the new airport. The implementation was supported by organizations of persons with disabilities, the MLSP, and the DPUB project.

The Director General of the Ministry of Roads and Transport Development, who proposed this accessibility audit, participated in the JICA Country-focused Training “Japanese Welfare System and Policy Committee for Persons with Disabilities” conducted by the DPUB project in February 2017. The training in Japan contributed to promote disability inclusion in the Project. Additionally, several accessibility audits and evaluation meetings were held with persons with disabilities prior to the opening of the new airport with regard to hearing, visual, and physical disabilities. Through these accessibility audits, the DPUB project prepared recommendations¹⁶ for improving accessibility of infrastructures, and submitted them to the Ministry of Roads and Transport Development.

2) Training

To improve airport staff's understanding of disability inclusion, the training was conducted in 2018 at the request of the airport, in collaboration with DPUB and DET Forum Mongolia. The background to this implementation was the holding of the 4th Asia-Pacific Community-Based Inclusive Development Congress (2019) in Ulaanbaatar. Since many persons with disabilities from abroad were scheduled to visit Mongolia for the Congress, the MLSP requested the NUBIA LLC, the Civil Aviation Authority of Mongolia, and other relevant organizations of the new Ulaanbaatar International Airport, to strengthen their disability inclusion. The contents of the training are summarized in Table 4 [25] [31] [32].

¹⁵ Interview with Chief Advisor, DPUB, JICA (May 15, 2023) and shared documents.

¹⁶ Ibid.

Table 4 Training for airport staff

Contents	AM	Disability Equality Training (DET)
	PM	Training on customer service (supporting methods, etc.)
Schedule	Five days session, 3 times in total (held in May, August, and November)	
Trainees	Of the airport staff (approximately 800 people), 97 participated in the first session (Customer Service Department, Safety Department, Human Resources Department, Planning and Development Department, Accounting Department, etc.). Some workshops were also conducted for executives.	
Cost	DET Forum Mongolia was contracted to implement the training and the airport (NUBIA LLC) paid 500,000 MNT (about 24,000 yen) per day. Necessary expenses such as honorarium for lecturers and caregivers were paid by DET Forum Mongolia to each person from this income.	

Source: Prepared by the Survey Team with reference to [25], [31], [32], and DPUB Report on the Training of Staff at Chinggis Khan International Airport

3.4.3 Monitoring Evaluation (after completion)

Although interviews with NUBIA were conducted in the FY2020 ODA evaluation, there is no information on the implementation of disability-related monitoring and evaluation by the executing agency.

3.5 Impact of the Project from a Disability Perspective

This Project received Excellence Award in the FIDIC Project Awards 2022¹⁷ and the 2021 Japan Society of Civil Engineers Technology Award for its overall efforts including adaptation of universal design [30] [33]. In addition, the improvement in understanding of disability inclusion among government and airport officials through accessibility audits with persons with disabilities, as well as the nurtured relations with organizations of persons with disabilities, will have a positive impact on the future promotion of disability inclusion in Mongolia.

3.6 Contributing Factors and Challenges in Promoting Disability Inclusion in Projects

Factors contributing to the promotion of disability inclusion in the Project are summarized as follows:

- Alignment with Mongolian policy trends

The Project started in the growing momentum of promoting the rights of persons with disabilities and the development of disability-related laws and legislations in Mongolia, which encouraged the mainstreaming of disability inclusion in this Project.

- Collaboration with technical cooperation project in the disability sector

In this Project, the participation of persons with disabilities in the accessibility audit was realized in collaboration with DPUB, a JICA technical cooperation project in the disability sector. Through the accessibility audit, the relevant ministries and airport officials were able to confirm the specific needs of persons with disabilities. Moreover, this disability inclusion effort resulted in building

¹⁷ FIDIC Project Awards recognize projects that have contributed to economic development and improved the standard of living of local communities around the world.

relationships between government officials and organizations of persons with disabilities.

○ Understanding of the social model of disability by relevant ministries

As was emphasized in the interview with the DPUB Chief Advisor¹⁸, the understanding of the social model of disability among relevant ministries through the DPUB project was a critical contributing factor in promoting disability inclusion in the Project. Without a sufficient understanding of the social model of disability among the counterparts, it would be difficult to conduct the accessibility audit involving persons with disabilities. From this case analysis, it can be said that the development of social infrastructure based on the social model of disability is crucial to promote disability inclusion in cooperation projects.

However, the following challenge was also identified:

● Involvement of persons with disabilities and organizations of people with disabilities from Planning/Project Formulation Phase

In this Project, accessibility audits were conducted with the participation of persons with disabilities after the airport was constructed; however, it has not been confirmed that persons with disabilities participated or were consulted at the time of project formulation. It would be effective to involve persons with disabilities from the project planning/ formulation stages to ensure that their needs are reflected in the plan of the project.

¹⁸ Interview with Chief Advisor, DPUB, JICA (May 15, 2023) and shared documents

4 The Project for the Improvement of Facilities for Primary and Secondary Education in Ulaanbaatar City, Mongolia (ODA Grant)

4.1 Overall Project Outline

Target Area	Ulaanbaatar City, Mongolia
Executing Agency	Ministry of Education, Culture, Science and Sports
Grant Agreement	November 2017
Schedule	December 2017 – July 2021
Grant Amount	2.379 million yen
Project Objective	The Project aims to contribute to improving the quality of the primary and secondary education environment by constructing quality schools that will serve as models to be replicated by Mongolia. The model schools adopt universal design and incorporate consideration of three issues: children with disabilities, disaster prevention, and the environment friendly.
Project Components	Construct new and expand primary and secondary education facilities in four locations. (Soft Components) <ul style="list-style-type: none">• Conduct seminars and workshops, including visits to completed facilities, for education and building officials.• Develop and distribute publicity materials (booklets, etc.) that summarize examples of universal design in the Project.• Conduct energy management training and support development of optimal operation models for heating operation.
Status as of April 2023	Construction completed in August 2020 (3 schools) and February 2021 (1 school)

Source: Prepared by the Survey Team with reference to the Ex-Ante Evaluation and Preparatory Survey Report of this Project

4.2 Disability Related Background

4.2.1 Policy Trends in Mongolia

In 2016, the Mongolian government launched the “Sustainable Development Vision 2030” to advance its development policy ahead of other countries. One of the goals was to “improve the general education system to the international benchmark levels and ensure impartation of quality education,” focusing on the quantitative expansion of educational facilities and creating “a healthy, safe and student-friendly environment at all levels of education”.

Since the “Inclusive Education Program of Children with Disabilities” was introduced in 2003, Mongolia has worked towards fulfilling the rights of children with disabilities to access to quality education. As part of these efforts, the Law on the Rights of Persons with Disabilities was revised in 2016, stipulating “providing education for children with disabilities in a well-considered environment” as one of the reasonable accommodations for persons with disabilities. Also, the “Government Action Program for 2016-2020” included “the development of an environment in which children with disabilities can learn together with other children” [34]. Against the backdrop of these policies, the need for disability-friendly educational facilities was growing in Mongolia at the time.

4.2.2 Japanese Cooperation Policy

The Country Development Cooperation Policy of Mongolia, formulated in 2012, sets “support for achieving growth that benefits all people” as a priority area, including “strengthening basic social services, particularly in the areas of health care and education to contribute to improving the living standards of the poor.” The JICA Country Analysis Paper for Mongolia, formulated in September 2017, indicated that the deterioration of the educational environment, particularly in Ulaanbaatar was an urgent issue in the field of basic education. The Paper further noted the need for seamless support for children and persons with disabilities as well as for children with disabilities to receive appropriate early childhood development and education services [35].

4.2.3 Related JICA Projects

The following technical cooperation projects related to disability were in place at the start of this Project.

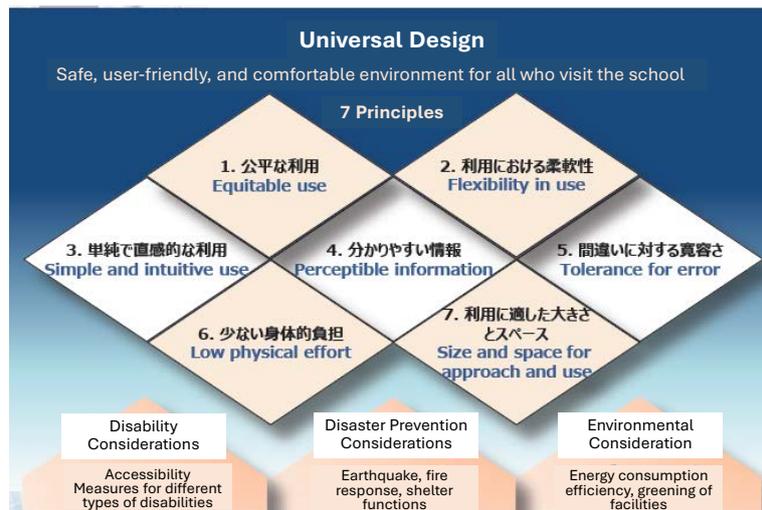
- ◆ The Project for Promoting Social Participation of Persons with Disabilities in Ulaanbaatar City (DPUB) (2016-2020)
- ◆ The Project for Strengthening Teachers' Ability and Reasonable Treatments for Children with Disabilities (START) (2015-2019)

In addition to the above, prior to this Project, four grant aid projects for the improvement of primary education facilities were implemented (1999-2013), and a total of 55 schools were constructed.

In addition, the JICA study “Comparative Analysis of Donor Schemes for Increasing Added Value of Primary and Secondary School Construction” was conducted in 2015. It summarized measures to promote inclusion, including children with disabilities, as one of the initiatives that would contribute to increasing the added value of school construction. The study was commissioned and conducted by Matsuda Consultants International Co., Ltd., a consultant agency responsible for the preparatory survey and its implementation of this Project.

4.3 Disability Inclusion Measures

The Project adopted universal design principles and incorporated consideration of three issues: children with disabilities, disaster prevention, and the environment. The introduction of universal design in the Project made the educational facilities inclusive for all children, not just those with disabilities. Disability inclusion measures in the Project are listed below [34] [36].



Source: [36]

Figure 5 The Project Concept and Considerations

- Gentle slope ramps in accordance with international standards connecting each floor, making all floors, including the existing building, accessible and creating a barrier-free environment in the new part of the building.
- Braille blocks and braille display boards for children with visual impairment.
- Horizontal handrails on the walls of common areas to support children with visual impairment and wheelchair users.
- Wheelchair-accessible multifunctional toilet on each floor.
- Classrooms that are particularly inclusive for children with disabilities on each floor (placement of classrooms, use of sliding doors that are easy for wheelchair users to maneuver, wheelchair-accessible desks, etc.).
- Resource rooms (child development center) to meet the special needs of children (social workers are expected to be on site, with partitions, cushioned chairs, and other equipment to allow for a variety of learning styles).



Gentle slope ramps for accessible buildings



Wheelchair-accessible classrooms

Figure 6 Examples of disability inclusion measures

Source: [36]

4.4 Disability Inclusion Efforts in Project Operation

4.4.1 Planning/ Project Formation Phase

At the time this Project was planned, Mongolia was in the process of transitioning to a medium-developed country and was therefore no longer eligible for ODA grant assistance. On the other hand, there was a strong request from the Mongolian government to meet the high demand for school construction in Ulaanbaatar city. Against this background, a decision was made between the Ministry of Foreign Affairs of Japan and JICA to develop a high value-added project that was different from the previous school construction projects; constructing value-added schools that would serve as model schools in Mongolia.

Four main reasons were identified as a background that disability inclusion was incorporated in the Project from the planning stage¹⁹.

- JICA officer in charge of this Project at the time was also in charge of inclusive education projects in JICA and recognized the low enrollment rate of children with disabilities as an issue in Mongolia.
- Two technical cooperation projects in the field of disability were underway in Mongolia, and the situation and issues were recognized within JICA.
- Disability was recognized as a major social issue within Mongolia.
- There was a growing attention to inclusive education worldwide at the time. As for in Japan, inclusive education practice had been accumulated with relevant laws and policies. These backgrounds gave a good explanation to the Ministry of Foreign Affairs of Japan and JICA to approve the Project.

As a result, the terms of reference for the preparatory survey of the Project (September 21, 2016) included the disability inclusion measures as indicated in the Table below.

Table 5 Disability inclusion measures in the terms of reference of the preparatory survey of the Project

<p>5. Implementation Policies and Considerations (1) Survey Policy (4) Construction Plan</p>	<p>The goal is to construct school facilities that incorporate universal design principle.</p> <p>In the construction of school facilities based on universal design, information to be collected and analyzed in this survey regarding the demand for and access to schooling for children with diverse educational needs, including children with disabilities.</p> <p>In facility plans, consideration should be given to cold-weather facilities, gender disparity, children with disabilities, and disaster prevention.</p>
<p>6. Tasks and Duties</p>	<p>(1) Preparation in Japan: 3) Visit educational facilities for children with disabilities in Japan to gather information on facility design innovations that Japan can offer, especially school construction based on universal design.</p> <p>(2) Field Survey I: 2)-2 Educational and Social Survey; Conduct survey on the following items, including perspectives on gender disparities and enrollment of children with disabilities, etc.</p>

¹⁹ Interview with Matsuda Consultants International Co., Ltd. (May 10, 2023) and JICA officer in charge of this Project at the time (May 12, 2023).

	<p>(3) Field Survey II: 1) Educational and Social Survey, and Environmental Survey: The survey should identify the situation including the following: “Situation of children and students with disabilities”.</p>
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Source: Prepared by the Survey Team with reference to the terms of reference of the preparatory survey of this Project

In the Ex-Ante Evaluation of this Project, the concept of universal design and the disability inclusion measures above were described under “(7) Environmental and Social Considerations, Poverty Reduction, and Social Development 3) Promotion of Social Development” [35].

As for the budget, since the Project objective was to build a value-added school that included consideration for children with disabilities, the necessary budget was secured to accommodate universal design. At the same time, the Project consultants intended to develop appropriate design that was not overly burdensome or budgetary, and to allow local contractors to build their own schools based on the Project model schools. As a result, the construction cost was only about 15% higher than the cost of the preceding projects for the improvement of primary education facilities²⁰.

4.4.2 Implementation Phase (including preparatory survey)

The disability inclusion measures undertaken in the preparatory survey include the following [34].

- 1) Site visit to schools for special needs education in Japan
- 2) Assignment of a survey team member with expertise in the field of disabilities (inclusive education)
 - A team member of the START project, which was under implementation at the time, joined the survey team as “Education Plan/Facility Plan 1”.
- 3) Incorporation of disability perspectives in site selection criteria
 - The necessary conditions for site selection included that “the parties concerned are willing to receive children with disabilities and to open school facilities as a temporary shelter in case of emergency” and that “there are no surrounding environmental conditions inappropriate for children with disabilities”.
 - Site prioritization criteria included “school officials are willing to accept children with disabilities or to use school facilities in the event of a disaster” and “sites with adequate infrastructure such as surrounding roads suitable for accepting children with disabilities”.
- 4) Conduct a survey on practices of education for children with disabilities in the country
 - With the support of the START project, a survey was conducted on education practices for children with disabilities including operation and facilities used in regular and special schools.
 - In cooperation with the Mongolian Wheelchair Association and the DPUB project, the Project conducted accessibility audit involving persons with disabilities (wheelchair users and a person with visual impairment) to study accessibility measures and disability considerations.

²⁰ Interview with Matsuda Consultants International Co., Ltd. (May 10, 2023)



Source: [36]

Figure 7 Disability audit by persons with disabilities

According to the interview²¹, it was particularly useful to understand the needs of persons with disabilities and the standards for disability considerations in Mongolia through the efforts described in 4). Specific advice from the persons with disabilities involved enabled the preparatory survey team to reflect improvements related to disability considerations in the design.

No additional measures, such as assigning additional personnel specializing in the field of disabilities, were necessary in designing the facilities to adopt universal design with considerations of children with disabilities. The implementation (construction) phase could also be handled with a general implementation structure, and equipment for disability considerations could be procured through local dealers²².

4.4.3 Monitoring and Evaluation

The post-evaluation is scheduled in 2024. The preparatory survey report of this Project indicates the following indicators related to children with disabilities for evaluation [34].

(Qualitative impact)

The acceptance of children with disabilities in general schools will be promoted with the aim of providing learning opportunities meeting to each child's individual needs. It will also promote reasonable accommodation of children with disabilities in schools.

4.5 Impact of the Project from a Disability Perspective

A seminar was held for school officials, building officials, and the National Audit Office upon completion of the Project. There were positive feedbacks from the participants about the Project that they would be able to refer the model schools with universal design in Mongolia without having to go abroad²³. The construction of the model schools with disability considerations contributes to the further promotion of inclusive education in Mongolia.

²¹ Ibid.

²² Ibid.

²³ Ibid.

4.6 Contributing Factors in Promoting Disability Inclusion in Projects

Factors contributing to the promotion of disability inclusion in the Project are summarized as follows:

- Consistent with Mongolian policy trends

At the time of the Project formation, Mongolia's policy on improving the education of children with disabilities was in place, which encouraged the disability inclusion measures of the Project.

- Cooperation with technical cooperation projects

As was emphasized in the interviews, two technical cooperation projects in the field of disability contributed a lot to promote disability inclusion in the Project. The technical cooperation projects built the foundation for support children with disabilities and also enabled the involvement of persons with disabilities in the planning phase of the Project.

- Mainstreaming disability inclusion from the project formulation phase

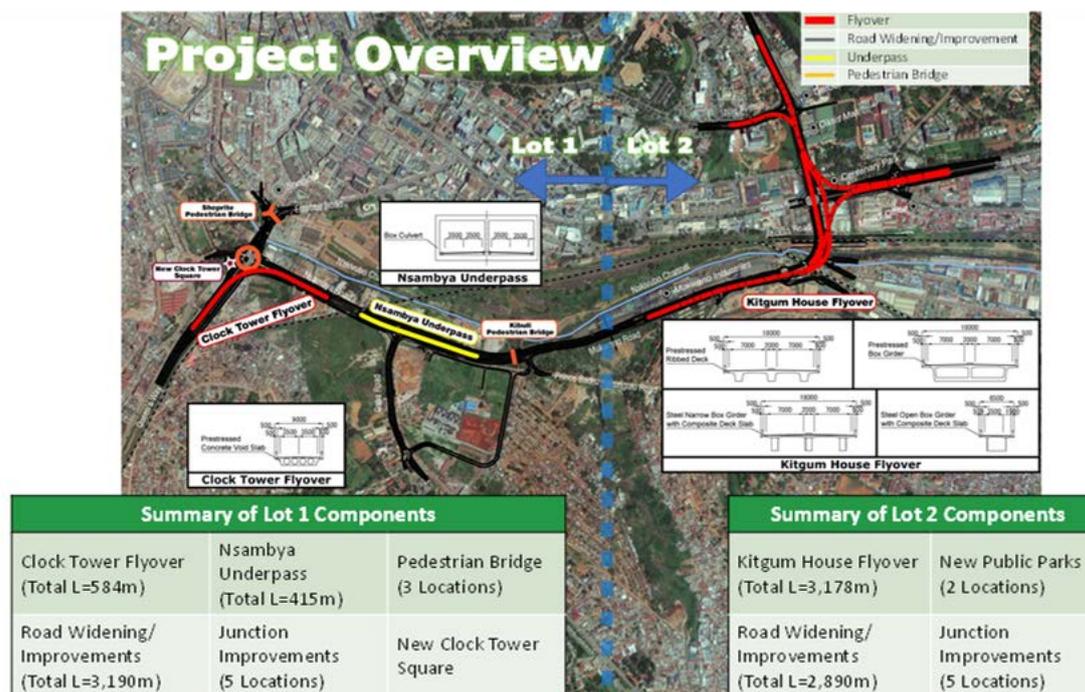
As the JICA officer in charge of this Project had sufficient knowledge of inclusive education, the Project design incorporated the perspective of disability inclusion from the project formation phase. This has resulted in various efforts to mainstream disability inclusion, including securing budgets. As pointed out in the interview, it is not easy to incorporate disability inclusion perspectives into projects that have already been planned. Therefore, it is important for JICA staff to have a good understanding of disability and to incorporate disability inclusion perspectives from the project formulation phase.

5 Kampala Flyover Construction and Road Upgrading Project, Uganda (ODA Loan)

5.1 Overall Project Outline

Target Area	Kampala City, the Republic of Uganda
Executing Agency	Uganda National Roads Authority
Loan Agreement	September 11, 2015
Schedule	September 2015 – December 2020 (planned)
Loan Amount	19,989 million yen
Project Objective	The Project aims to contribute to the improvement and revitalization of the flow of goods and traffic in Kampala City by constructing flyovers, widening roads and upgrading junctions to mitigate traffic congestion.
Project Components	Construction of flyovers at Clock Tower and Kitgum House Widening and bypassing major roads connecting the junctions (Mukwano Road) Upgrading to signalized junctions
Status as of April 2023	Ongoing

Source: Prepared by the Survey Team with reference to the Ex-Ante Evaluation and Preparatory Survey Report of this Project



Source: Materials provided by Nippon Koei Co., Ltd

Figure 8 Project overview

5.2 Disability Related Background

5.2.1 Policy Trends in Uganda

Uganda ratified the Convention on the Rights of Persons with Disabilities (CRPD) in 2007. As for accessibility, the “Disability Act” (2006) establishes measures for accessibility of buildings, information, public transportation, public roads, and highways. In addition, the “National Policy on Disability in Uganda” (2006) identified accessibility as one of the priority policy issues and directed to promote the design of facilities and infrastructure that were user-friendly for people with disabilities. Subsequently, “Accessibility Standards: A practical guide to create a barrier-free physical environment in Uganda” was developed in 2010 as a unified standard for ensuring accessibility for people with disabilities, and in 2013 it was made statutory as an annex to the Building Control Act 2013 [37] [38].

In addition to the above, the “Design Manual for Roads and Bridges” (2010) and the “Non-Motorized Transport Policy” (2013) were developed specifically related to this Project.

5.2.2 Japanese Cooperation Policy

The Country Development Cooperation Policy of the Republic of Uganda, formulated in June 2012, sets “support for poverty reduction and correction of regional disparities through economic growth” as its basic policy (principal goal). This Project supports one of the priority areas of “environmental improvement to realize economic growth”. The policy does not include statements related to vulnerable groups, including people with disabilities [39].

5.2.3 Related JICA Projects

JICA technical cooperation project “The Project for Capacity Enhancement of KCCA in Management of Traffic Flow in Kampala City” (2015-2021) was implemented during the implementation of this Project, providing technical assistance in the formulation of standard designs for intersection improvements and maintenance of traffic signals to improve traffic congestion; however, there were no specific disability-related measures taken in the project [40].

5.3 Disability Inclusion Measures

The flyovers (pedestrian bridges), which are under construction in the western section (Lot 1) of Figure 8, were designed to install ramps. The flyovers are intended to create a multi-level pedestrian intersection to ease traffic congestion, and it is expected to be used by all non-motorized transport users, including bicycles and wheelchairs, in addition to pedestrians. This was the reason behind that the decision was made to install ramps on the flyovers.



Clock Tower Flyover



Slope of Clock Tower Flyover



Kibuli Flyover



Slope of Kibuli Flyover

Source: Provided by Nippon Koei Co., Ltd.

Figure 9 Flyovers under construction in the Project

5.4 Disability Inclusion Efforts in Project Operation

5.4.1 Planning/ Project Formation Phase

Barrier-free measures in the construction of the flyovers were considered from the preparatory survey stage. The preparatory survey report stated that it was desirable to install ramps at all entrances to the pedestrian bridge as considerations for people with disabilities [41].

The project planning documents did not mention any specific barrier-free measures nor disability considerations. Based on the preparatory survey report above, the project appraisal document and the ex-ante evaluation (Phase 1: May 2015) included a statement that the design of flyovers would consider wheelchair users under the “Environmental and Social Considerations, Poverty Reduction, and Social Development” section²⁴.

Consultations with persons with disabilities or related organizations were not conducted during the planning phase.

5.4.2 Implementation Phase

The specifications and slope of the ramps were considered based on the aforementioned “Design Manual for Road and Bridges” (2010) and “Non-Motorized Transport Policy” (2013) as well as Japanese standards. In addition, the Project consultants examined existing ramps of pedestrian bridges and shopping centers in the country. In discussions with the concerned parties (did not include persons with

²⁴ Information provided by JICA Human Development Department.

disabilities), there was a request to reduce the slope of the ramp, but due to land restrictions, a gentle slope would have resulted in a long ramp, so it was decided to use a slope of 12%, the maximum value of the Japanese standard, for the convenience of all users.

There was a possibility of opposition from the executing agency (Uganda National Roads Authority) due to the increased costs associated with the installation of the ramp; however, the agency smoothly approved its installation, as they had some understanding of barrier-free access²⁵.

5.4.3 Monitoring and Evaluation

There are no plans for accessibility audit of the flyovers by users, including persons with disabilities.

5.5 Impact of the Project from a Disability Perspective

(Not applicable at this time)

5.6 Contributing Factors and Challenges in Promoting Disability Inclusion in Projects

Factors contributing to the promotion of disability inclusion in the Project are summarized as follows:

- Understanding of barrier-free concept and disability considerations by project counterparts
Since barrier-free measures often increase costs, it is important that counterparts and executing agencies understand the barrier-free concept and disability considerations. In this case, the Project counterparts had a certain degree of understanding on disability inclusion as law and policies related to disability were already established to ensure accessibility for persons with disabilities including the Disability Act (2006) and the National Policy on Disability (2006).

In addition to the above, the following challenge was identified:

- Integrating disability inclusion from the planning phase

In this Project, the barrier-free measures were accepted smoothly because of the understanding of the counterparts. However, if similar conditions are not in place, it is highly likely that it would be difficult to ensure the implementation of barrier-free measures due to the cost. Therefore, it would be critical to specify disability inclusion measures and agree on them with counterparts or executing agencies at the stage of determining the scope of the preparatory survey and detailed design of projects.

²⁵ Interview with Nippon Koei Co., LTD. (June 26, 2023)

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