



Mainstreaming Disability Inclusion in JICA Projects

Sector-Specific Guidance Note

Disaster Risk Reduction through Pre-Disaster Investment and Build Back Better

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Sections [1,2,3](#) provide an overview for those seeking to understand the basics, while Section [4](#) offers specific steps for mainstreaming disability inclusion.

Main Target Areas Covered by this Guidance Note

In line with the Japan International Cooperation Agency (JICA) Global Agenda for Disaster Risk Reduction (DRR), this Guidance Note focuses on the following areas:

- | | |
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| 1. Pre-disaster investment for reducing natural disaster risks | <ul style="list-style-type: none">• Capacity development for formulating comprehensive Disaster Risk Reduction (DRR) plans and master plans• Preparation of project plans for pre-disaster investment• Enhancement of capacity for development and maintenance of disaster prevention facilities |
| 2. Projects and activities for establishing overall governance for DRR | <ul style="list-style-type: none">• Capacity development for formulating DRR plans and strategies• Capacity development of meteorological and related natural hazard observation systems• Improvement of early warning systems• Enhancement of capacity for planning and implementing non-structural measures for DRR |
| 3. Activities for disaster reconstruction | <ul style="list-style-type: none">• Formulation of reconstruction plans• Implementation of projects of housing reconstruction• Implementation of projects on rehabilitation and reconstruction of economic and DRR infrastructure• Implementation of projects to overcome the vulnerability of countries and communities |

For disaster-resilient urban development and reconstruction in urban areas, please also refer to the Guidance Note for the Urban and Regional Development Sector.

1. Basic Understanding of Persons with Disabilities and Disaster Risk Reduction through Pre-Disaster Investment and Build Back Better

This section explains the fundamental concepts essential for promoting disability inclusion in DRR.

(1) Disability-Inclusive DRR through Pre-disaster Investment and Build Back Better (BBB)

- The proportion of people who are injured or die as a result to natural disasters is higher among persons with disabilities than among those without: In one documented case, the injury and mortality rate among persons with disabilities was twice that of the persons without disabilities [1].
- In the field of disaster response and post-disaster reconstruction, the Sphere Standards were established in 1997. The standards were developed in recognition of the need for a human rights-based approach to supporting disaster-affected populations in humanitarian crises such as conflicts and natural disasters. The Sphere Standards clearly stipulate the principle of consideration towards the needs of diverse population groups such as persons with disabilities, older adults, women and children [2].
- The international community has promoted Disability-inclusive Disaster Risk Reduction (DiDRR). The Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) was adopted at the Third United Nations World Conference on Disaster Risk Reduction. The Sendai Framework provides fundamental approaches to disaster risk reduction and reconstruction such as necessity of all-of-society participation and cooperation and inclusive policy formulation and decision-making processes.
- The Sendai Framework identifies the priorities for action as strengthening disaster risk governance to build disaster-resilient societies, enhancing disaster preparedness, and promoting the principle of Build Back Better (BBB). It highlights the responsibility of each country to build inclusive DRR system that addresses the needs of diverse people including persons with disabilities [3].

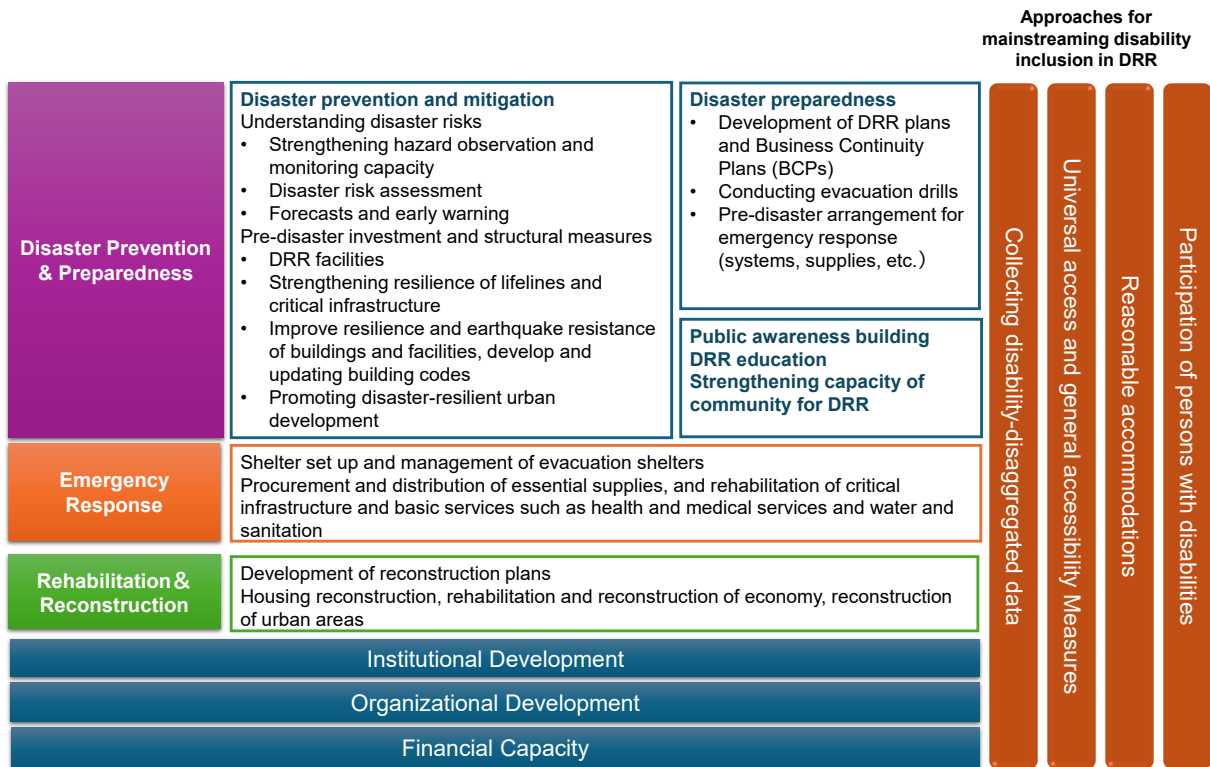
(2) Disability-inclusive Approaches

- JICA promotes disability inclusion across all projects and activities through i) collection and utilization of disability-disaggregated data, ii) ensuring general accessibility, iii) provision of reasonable accommodations, and iv) participation of persons with disabilities in the projects.
- Disability-inclusive approach is based on the “social model of disability”. The model sees social exclusion and limitations to social participation as “disabilities”. Based on this model, Japan has revised its emergency response policies and measures shifting from regarding persons with disabilities as “disaster-vulnerable persons” to recognizing them as “persons requiring special care”, and “residents in need of assistance in evacuation” [4].
- The adequacy and effectiveness of disability-related policies should be strengthened through the meaningful participation of persons with disabilities into the process of policy formulation and action plan development as well as designing of physical facilities and institutional arrangements.

(3) Policy Structure for DRR to Leave No-one Behind

- Based on the multi-hazard approach, policy measures for DRR and disability inclusion should be systematically addressed across the entire disaster management cycle from disaster prevention to response, recovery, and reconstruction. The diagram below shows the relations between these two policy areas.
- Pre-disaster investment for hazard control is significant for effective DRR covering entire geographical areas and people including persons with disabilities. Evidence from the Great East Japan Earthquake showed a correlation between casualty rates among persons with disabilities and factors such as tsunami travel time and the extent of inundation areas [4]. Upon the essential pre-disaster investment, various DRR policies should be implemented incorporating disability-inclusive measures that enable persons with disabilities to participate in the entire policy formulation and implementation process.

Figure: DRR Policies and Disability Inclusion



Source: Adopted from [5]

2. Significance of Disability Inclusion in Disaster Risk Reduction through Pre-Investment and Build Back Better

(1) DRR through Pre-Disaster Investment and BBB Meeting the Needs of Persons with Disabilities [4] [6] [7]

- It is widely recognized that persons with disabilities face not only a higher risk of physical damage during disaster, but also the long-lasting post-disaster impacts and difficulties. Data indicates that 5.1 million persons with disabilities worldwide lost their houses due to natural disasters in 2019. However, this figure is considered as possibly underestimated. The growing impact of climate change poses larger risks to persons with disabilities.
- It is necessary to build the disability-inclusive DRR system in ordinary times. Once a disaster occurs, reconstruction should be guided by the principle of “Build Back Better (BBB)”, with objective of breaking the vicious cycle of disaster damage and poverty, and by promoting inclusiveness and resilience of the society.

(2) Contribution to the Achievement of the Sustainable Development Goals (SDGs) [8]

- Disability inclusion in DRR plays an important role in achieving the Sustainable Development Goals (SDGs). It is particularly expected to directly contribute to the achievement of Goal 1: End poverty in all its forms everywhere; Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable; and Goal 13: Take urgent action to combat climate change and its impacts.
- Target 1.5 under Goal 1 “No Poverty”, Target 11.5 and 11.b under Goal 11 “Sustainable Cities and Communities,” and Target 13.1 under Goal 13 “Climate Action” share common indicators related to disaster risk reduction. These indicators measure the reduction of disaster-related human losses and development of DRR strategies consistent with the Sendai Framework.

Target 1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
Target 1.5.1	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population.
Target 1.5.2	Direct economic loss in relation to global gross domestic product (GDP) attributed to disasters.
Target 1.5.3	Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030.
Target 1.5.4	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies.

(3) Implementation of the Convention on the Rights of Persons with Disabilities (CRPD) [9]

- Article 11 “Situations of risk and humanitarian emergencies” of the Convention on the Rights of Persons with Disabilities (CRPD) stipulates the obligation of the State Parties to take all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk including the occurrence of natural disasters.
- Article 3 “General principles” emphasizes the accessibility of facilities and services, while Article 4 “General obligations” calls for the promotion of universal design in products and services. Article 10 guarantees the “Right to life”. As key guiding principles for policy design and implementation, Article 9 “Accessibility” and Article 19 “Living independently and being included in the community” require the State Parties to ensure accessibility and inclusion.

(4) Contribution to JICA Global Agenda [10]

- The JICA Global Agenda for DRR aims to reduce disaster-related mortality, the number of affected people, and economic losses by establishing organizations responsible for DRR. These organizations are expected to autonomously plan, maintain, and operate pre-disaster investment through their own budget in a self-reliant and sustainable manner. It also envisages collaboration with other sectors in order to reduce the residual risks that cannot be fully mitigated through pre-disaster investment.

- In order to establish holistic DRR institutions and organizations which can effectively reduce the casualty of disasters, it is important to promote inclusive DRR approaches that ensure participation of all population groups including persons with disabilities. Such approaches support reconstruction process that adhere to the Build Back Better (BBB) principle, leave no-one behind, and strengthening societal resilience.
- Disability-inclusive DRR through pre-disaster investment and BBB contribute to effective disaster risk reduction and management for diverse population groups, including older adults and children. In the implementation of structural measures, the life cycle cost of infrastructure can be reduced through the application of universal design in the initial designing and planning.

(5) Achievement of the Sendai Framework for Disaster Risk Reduction 2015-2030 [3]

- The Sendai Framework was adopted at the Third United Nations World Conference on Disaster Risk Reduction in Sendai. Its Guiding Principles (Paragraph 19) stipulates the needs of all-of-society engagement and partnership, multi-hazard approach, inclusive risk-informed decision making based on accessible information with data disaggregated by sex, age, and disability.
- Among the Sendai Framework's priorities for action, Priority 4 "Enhancing disaster preparedness for effective response and to 'Build Back Better' in recovery, rehabilitation, and reconstruction" raises the empowerment of women and persons with disabilities, and promotion of response, recovery, rehabilitation, and reconstruction that ensure gender equality and universal access. The Sendai Framework also underscores the importance of collaboration among stakeholders in conducting appropriate disaster risk assessment and in the design and implementation of disaster risk reduction plans, explicitly recognizing persons with disabilities and their representative organizations as critical stakeholders in meeting requirements such as the application of universal design principles.

3. Challenges in the Disaster Risk Reduction Sector from a Disability Perspective

(1) High Disaster Risks Faced by Persons with Disabilities¹

- A strong correlation between disability and poverty is widely recognized. This relationship contributes to heightened disaster risk among persons with disabilities, as they often encounter increased levels of both “exposure” and “vulnerability”.
- Persons with disabilities may be forced to reside in areas with inadequate living conditions including disaster-prone environments because of socio-economic situations such as limited access to education and employment opportunities, as well as stigma and discrimination. They may be also exposed to other dangers by way of destruction of houses during disasters events such as earthquakes as a result of substandard housing quality and insufficient structural resilience of their houses [6] [11].
- Persons experiencing poverty are widely regarded as being “vulnerable” to disasters as they may face disproportionately large and long-lasting impacts relative to their limited pre-disasters asset base [11]. Persons with disabilities frequently face constraints in accessing various opportunities including medical services, education and employment due to institutional, physical/environmental, and communication barriers. Persons with disabilities may be living in a situation with high disaster risks where multiple factors such as living in the disaster-prone areas (high exposure), and disadvantaged economic situations, and limited capacity of quick recovery (high vulnerability), interact in a complex manner.

¹ Disaster risks in the Sendai Framework are understood that they are determined by a function of hazard, exposure, vulnerability and capacity. Hazard is defined as a phenomenon which may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. Exposure defined as the situation where people, infrastructure, housing and other assets are located in the hazard-prone areas. Vulnerability is defined as the conditions with the susceptibility of individual, community, assets or system to the impacts of hazard or system. Capacity indicates the combination of strengths and resources of a community or society to manage disaster risks and strengthen their resilience [3].

(2) Understanding Disaster and Disasters Preparedness

- The research conducted by the United Nations Office for Disaster Risk Reduction (UNDRR) indicates that many persons with disabilities can evacuate with fewer difficulties when adequate early warning is provided. On the other hand, there are a certain number of persons with disabilities who face difficulties even with early warnings (Those who answered as “No difficulties” of evacuation with early warning was 39% whereas those answered as “a lot of difficulties” and “cannot evacuate” was 17% and 6%, respectively).
- A large proportion of persons with disabilities do not have personal preparedness plans including the plan for evacuation upon disasters (84% answered as “No” to the questions “Do you have a personal preparedness plan for disasters?”) [12].

- Persons with disabilities have limited opportunities to acquire knowledge on DRR as a result of the limited opportunities of participating in school or community activities, and limited availability of accessible information and various supports. Therefore, it is difficult for them to prepare for disasters sufficiently with personal preparedness plans.
- It has been reported that persons with disabilities have limited opportunities to participate in evacuation drills conducted by schools and communities [13].

- According to the survey done by UNDRR, 44% of the respondents “Don’t know” the availability of accessible disaster information whereas 12% answered that the information is not available “ [12].

- DRR-related information such as weather updates and early warnings that is disseminated in inaccessible formats may fail to prompt timely evacuation, as the information may not be effectively received and recognized to trigger actions well in advance.

(3) Insufficient Accessibility to Facilities, Services and Information for Emergency Response [7] [14] [15]

- Evacuation may not be feasible unless the necessary assistive devices and assistance are available to meet the specific needs of individuals with disabilities.
- At the time of emergency response, government authorities may not be able to take necessary measures swiftly. Confronted with multiple problems simultaneously, public entities at the national and municipal levels, may also suffer infrastructure damage and destruction. Under such circumstances, disaster-affected persons with disabilities may be unable to communicate vital information on their status such as their safety and impact of damages to external responders.

- As a result, persons with disabilities may be left in the situation without access to information necessary for maintaining life under emergency, ensuring quality of living environment in shelters, and access to necessary supplies.
- The risks of violence especially against women and children can increase under emergency situations with mental stress and inadequate physical environment.

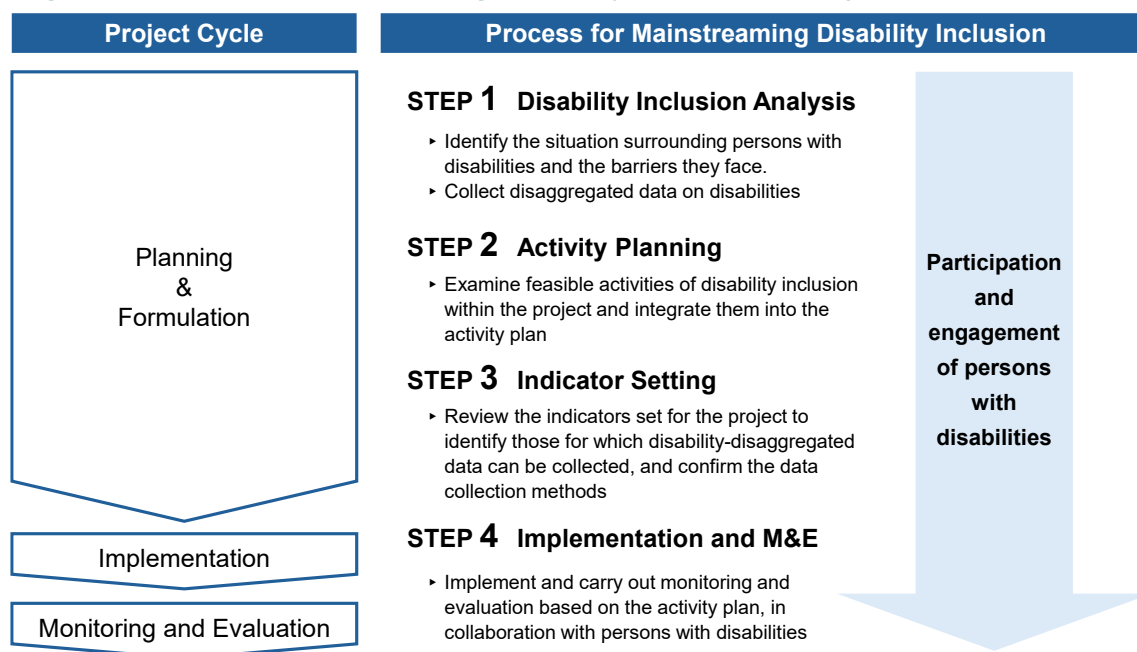
(4) Problems upon Disaster Reconstruction [7] [15] [16] [17]

- Destruction of physical infrastructure may cause difficulties in mobility and exacerbate economic conditions such as unemployment. As a result, disaster-stricken persons may face challenges in housing reconstruction and restoring proper living conditions, which may even force them to relocate in other areas.
- There were cases in the past where public housing for disaster affected persons with disabilities was not provided. Even if housing was provided, the houses lacked barrier-free design features necessary for easy internal movement and accessible sanitary facilities such as toilets and bathrooms.
- Not all disaster-affected persons may be granted public support and compensation. Even if they are entitled, some persons with disabilities may find it difficult to physically present themselves and take the necessary administrative procedures at the concerned public offices unless with necessary support.
- Limited participation of persons with disabilities in the planning process for reconstruction plans may hinder the realization of Build Back Better (BBB) principles, including reconstruction with accessible infrastructure and housing as well as facilitating inclusive DRR measures within the communities.

4. How to Mainstream Disability Inclusion in Projects: Steps for Implementation

- Mainstreaming disability inclusion in projects means incorporating and implementing a disability perspective at all stages of project planning, implementation, monitoring, and evaluation. This Guidance Note introduces methods for mainstreaming disability inclusion in the four STEPs as shown in the figure below.
- STEPs 1-3 correspond to the project formulation stage of the project cycle, and STEP 4 to the implementation and post-completion stage. While keeping all STEPs through project completion in mind, it is particularly important to work on disability inclusion at **the project formulation stage**.
- At the stage of obtaining the Official Request Letter from the partner government, it is important to consult with counterparts and the JICA local office to ensure that efforts for disability inclusion are included and that there is no risk of excluding persons with disabilities.

Figure: Process for Mainstreaming Disability Inclusion in Projects



- The table below shows when each STEP applies within the project cycles for technical cooperation, official development assistance (ODA) loans, and grant aid.

Scheme	Project Cycle	STEP
Technical Cooperation	At the time of preparing the Terms of Reference (TOR) for the data collection survey, detailed or basic planning survey	STEP 1 (Analysis)
	At the time of drafting Main Point Discussed in the Record of Discussion (R/D) (activities related to disability inclusion), PDM, and Ex-ante Evaluation document	STEP 2 (Activity Planning) STEP 3 (Indicator Setting)
	At the time of preparing the TOR of the project, implementing the project, and reviewing a monitoring sheet	STEP 4 (Implementation, Monitoring & Evaluation)
ODA Loans	At the time of preparing the TOR for the data collection survey and preparatory survey, and drafting Project Planning Document (1)	STEP 1 (Analysis)
	At the time of preparing the Minutes of Discussion (M/D), Project Planning Document (2)/(3), appraisal document, and drafting Ex-ante Evaluation document	STEP 2 (Activity Planning) STEP 3 (Indicator Setting)
	At the time of supervising the project and reviewing Project Status Report	STEP 4 (Implementation, Monitoring & Evaluation)
Grant Aid	At the time of preparing the TOR for the data collection survey and Preparatory Survey, and drafting Project Planning Document (1)	STEP 1 (Analysis)
	At the time of preparing the Minutes of Discussion (M/D), Project Planning Document (2)/(3), appraisal document, and drafting Ex-ante Evaluation document	STEP 2 (Activity Planning) STEP 3 (Indicator Setting)
	At the time of supervising the project and reviewing Project Status Report	STEP 4 (Implementation, Monitoring & Evaluation)

STEP 1 Disability Inclusion Analysis

- During project planning and formulation, conduct disability inclusion analysis to assess the situation of persons with disabilities within the sector and identify the barriers they face. Additionally, collect disability-disaggregated data regarding target groups.
- Use the disability inclusion analysis to ensure that the project design does not pose any risk of excluding persons with disabilities or create disadvantages or negative impacts for them. Carefully review and confirm these aspects during the planning process.

[JICA Country-Specific Disability-Related Information](#) (currently available in Japanese language only) contains disability-related information for each of the 55 countries where JICA implements projects. If information exists for the target country, it is recommended to check it first.

As an English-language information source, the [World Bank Group's Disability Data Hub](#) provides country-specific data.

1) Reflect: The relationship between the project and disability

- Clearly define how disability intersects with the project. Identify the components of the project that have the strongest relevance to persons with disabilities.

2) Ask: Consult with persons with disabilities or their representative organizations to understand the barriers they encounter

- Engage and consult with persons with disabilities and/or their representative organizations about the kind of barriers that prevent access to and participation in Disaster Risk Reduction (DRR) programs and services targeted by the project. Make sure to seek input from a wide range of individuals, including persons with diverse types of disabilities and women with disabilities.
- Then, request their participation in STEPs 2-4 described in the following sections.
It is crucial to involve persons with disabilities at all stages.

CHECK

Including methods for engaging organizations of persons with disabilities, the **Guidance Note for Across All Thematic Areas** introduces the following under “Section 4: Specific Approaches for Mainstreaming Disability Inclusion.”

- Methods for Engaging with Persons with Disabilities
- Forms of Participation of Persons with Disabilities
- General Accessibility Measures and Reasonable Accommodations
- Information and Communication Accessibility
- Inclusive Events (Meetings, Seminars, Training, etc.)

- Below are sample questions. Additionally, please refer to Appendix 1 for examples of barriers.

Barriers	Example Questions
Institutional Barriers	<ul style="list-style-type: none"> • What barriers exist in the current DRR program implementation and service delivery systems that prevent participation of persons with disabilities? (For example, current national DRR legislations do not explicitly address consideration for persons with disabilities, DRR and reconstruction planning process does not encompass a mechanism to enable participation of persons with disabilities/their representative organizations) • Are services in the reconstruction phase accessible to persons with disabilities? If not, what are the major barriers that impede service access?
Physical Barriers	<ul style="list-style-type: none"> • What barriers prevent persons with disabilities from accessing DRR facilities such as evacuation shelters? • What kind of problems exist in evacuation shelters and support systems for persons with disabilities to stay in adequate conditions? • Do disaster recovery housing and other public facilities apply accessible design standards? What types of facilities require the application of accessible design? • Do rehabilitation and reconstruction plans of roads, transport and other major infrastructures apply universal design principles? • Is the mechanism enable persons with disabilities to participate in the planning process of DRR infrastructure development?
Communication Barriers	<ul style="list-style-type: none"> • Is information on hazards, weather, and early warning provided in formats that are accessible to persons with disabilities? • Are DRR plans and information on community activities for DRR available and accessible to persons with disabilities?

Attitudinal Barriers	<ul style="list-style-type: none"> • What are the attitudes and awareness of administrative officials of municipalities and the communities toward disaster preparedness of persons with disabilities? • What are the attitudes and awareness of municipal administrative officials and community members toward the participation of persons with disabilities in activities such as evacuation drills and other daily activities to enhance disaster preparedness?
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3) Check: Collection of disability-disaggregated data²

Data	Information Sources
<ul style="list-style-type: none"> • Data on the ratio of persons with disabilities in the target population of DRR projects (For example, number of persons with disabilities living in hazardous areas, ratio of persons with disabilities in the recipients of early warnings and other related information, the number of households with family members with disabilities residing in disaster recovery houses) • Disability-disaggregated data of target groups in project target areas 	<ul style="list-style-type: none"> • Government statistics • Reports from ministries and agencies related to persons with disabilities • Interviews with persons with disabilities and their representative organizations

4) Explore: Situation of persons with disabilities within the sector

Key Information to Identify	Information Sources
<ul style="list-style-type: none"> • Existence of content addressing persons with disabilities or disability inclusion perspectives in DRR-related laws, policies, strategies, action plans, etc. • Existence of disability inclusion policies and strategies in DRR sector 	<ul style="list-style-type: none"> • Government documents
<ul style="list-style-type: none"> • Descriptions related to Article 11 in CRPD Concluding Observations 	<ul style="list-style-type: none"> • CRPD Concluding Observations * On the search page of the CRPD (States Parties Reporting), specify the country and the type of document.

² Data disaggregated by disability status and type of functional limitation, comparable to sex- and age-disaggregated data.

Key Information to Identify	Information Sources
<p>Stakeholders: Resources and Partners for Implementation</p> <ul style="list-style-type: none"> Ministries and departments responsible for persons with disabilities Organizations of persons with disabilities JICA's experience in disability and development (technical cooperation, JOCV, grassroots projects, etc.) International and bilateral agencies with experience related to mainstreaming disability inclusion in DRR sector 	<ul style="list-style-type: none"> JICA Country-Specific Disability-Related Information (currently available in Japanese language only) World Bank Group Disability Data Hub >> Economies Websites such as those of UNDRR

STEP 2 Activity Planning

(see Appendix 2 for Examples of Good Practices)

- Based on the situation and barriers faced by persons with disabilities in the sector identified through the disability inclusion analysis in STEP 1, consider feasible activities within the project and incorporate them into the activity plan.
- Furthermore, when planning the overall project, ensure that the project's objectives and plans promote the inclusion and participation of persons with disabilities and do not promote their segregation or exclusion.

Examples of Activities to Promote Disability Inclusion

Note: Priority and feasible activities should be determined through consultation with stakeholders, including persons with disabilities or their representative organizations.

Barriers	Example Activities
Institutional Barriers	<ul style="list-style-type: none"> Ensure participation of persons with disabilities in legislative process for DRR-related laws. Develop and update building codes and standards and operational rules for accessible infrastructure with participation of persons with disabilities. Formulate and revise of DRR and reconstruction plans with participation of persons with disabilities. Include current status, needs, and countermeasures for disability and persons with disabilities in DRR and reconstruction policies and plans. Participation of persons with disabilities in disaster-related activities, such as evacuation drills Allocate budgets for ensuring accessibility for persons with disabilities, application of universal design principles, and

Barriers	Example Activities
	<p>covering additional costs required for applications and procedures for policy formulation, trainings, and awareness buildings.</p> <ul style="list-style-type: none"> • Develop disability statistics disaggregated by age, gender, and socioeconomic indicators.
Physical Barriers	<ul style="list-style-type: none"> • Make DRR-related facilities barrier-free. • Develop disability-inclusive DRR facilities as evacuation shelters, and develop the standards and rules for operationalization with the participation of persons with disabilities. • Ensure accessible design, and apply universal designs to facilities developed upon reconstruction such as disaster recovery houses.
Communication Barriers	<ul style="list-style-type: none"> • Provide information in accessible formats (Braille, audio narration, videos with subtitles or sign language interpretation, easy-to-understand expressions using illustrations, etc.) • Provide information through diverse means (e.g., emergency radio, applications of smartphones, internet, information dissemination through organizations, information of persons with disabilities dissemination through outreach by social workers).
Attitudinal Barriers	<ul style="list-style-type: none"> • Conduct training on human rights and disability for DRR program stakeholders and administrative officers (rights of persons with disabilities, principles of inclusion, methods of non-discriminatory and accessible service provision, etc.).

Source: Developed based on [18], etc.

STEP 3 Indicator Setting

- Among the indicators set for the project (indicators for project purpose and outputs), review which indicators can collect disability-disaggregated data and confirm the data collection methods.

Example 1:

If the “number of times (or days) when DRR-related information disseminated” is set as a project output indicator, then set the “number of times (or days) when DRR-related information disseminated in accessible formats” as disability-disaggregated data.

Example 2:

If “(draft) building codes and a technical manual in place” is set as a project output indicator, then set “(draft) building codes and a technical manual with the due consideration of accessibility of persons with disabilities in place” as disability-disaggregated data.

Example 3:

If the “number of rehabilitated schools (or hospitals, houses etc.)” is set as a project output indicator, then set “number of rehabilitated schools (or hospitals, houses etc.) with the due consideration of accessibility of persons with disabilities” as disability-disaggregated data.

- Also, consider indicators to measure outputs (changes) expected from activities planned in STEP 2, and integrate them into existing indicators or add them. Below are examples of indicators incorporating a disability perspective.

Example Indicators

- Whether consultation with persons with disabilities was conducted during the development process of policy document (systems, strategies, guidelines, etc.); overview of consultation, if conducted.
- Existence or number of policy documents reflecting disability perspectives (e.g., ensuring accessibility for persons with disabilities, budget allocation for additional costs for access, etc.).
- Whether DRR and reconstruction plans include concrete measures and actions with the consideration of needs and accessibility of persons with disabilities
- Whether consultation with persons with disabilities was conducted in the development of evacuation plans, evacuation routes, and disaster-related facility development plans and designs; overview of consultation, if conducted.
- Number of DRR facilities (and their information) such as evacuation shelters with the consideration of accessibility of persons with disabilities.
- Existence/number of DRR-related information in accessible formats (e.g., hazard maps, information on evacuation and other DRR facilities).
- Whether measures have been taken to ensure the accessibility of early warning systems
- Whether the training materials for administrative personnel include the contents on rights of persons with disabilities.

STEP 4 Implementation and Monitoring & Evaluation

- When implementing and monitoring activities, collaborate with persons with disabilities (and/or organizations of persons with disabilities) to confirm whether activity content is appropriate, and whether activities, deliverables, and services being implemented are accessible and user-friendly.
- Also, pay close attention to whether the promotion and implementation of project activities respect the diversity of persons with disabilities and are conducted in a manner that promotes their dignity, rights, and potential.
- During evaluation, assess the achievements of activities from a disability inclusion perspective, their implementation process, and outcomes. Below are sample questions designed from a disability inclusion perspective.

Guiding Questions from a Disability Inclusion Perspective

Six Evaluation Criteria	Sample Questions
Relevance	<p>Counterpart Country's Development Policies and Needs</p> <ul style="list-style-type: none"> • Do disability inclusion activities align with priority issues and contents stated in the counterpart country's disability policy or sector policy? <p>Appropriateness of Project Plan and Approaches</p> <ul style="list-style-type: none"> • Was mainstreaming of disability inclusion considered during project formulation? • Was information collected from persons with disabilities and organizations of persons with disabilities during project formulation? • Was participation of persons with disabilities promoted in the project implementation process? • Were methods employed to avoid excluding specific types of disabilities or specific groups of persons with disabilities (e.g., women with disabilities, ethnic minorities, or other minorities)?
Coherence	<p>Consistency with Japanese Government/JICA Development Cooperation Policies and Coordination with Other JICA Projects</p> <ul style="list-style-type: none"> • Were disability inclusion activities consistent with Japanese government and JICA policies? • Was coordination with other JICA projects undertaken to promote disability inclusion activities? <p>Coordination with International Frameworks</p> <ul style="list-style-type: none"> • Was the project consistent with the CRPD? • Did disability inclusion activities contribute to achieving global goals such as SDGs?

Six Evaluation Criteria	Sample Questions
Effectiveness	<ul style="list-style-type: none"> • To what extent were outcomes achieved for persons with disabilities through disability inclusion activities? • Did disability inclusion activities contribute to achieving project purpose and outputs?
Impact	<ul style="list-style-type: none"> • Can positive long-term or indirect effects be expected from disability inclusion activities? For example, fostering leadership of persons with disabilities, participation of persons with disabilities in decision-making processes, and institutional reforms. • Have any negative indirect effects emerged because disability inclusion activities were not implemented or because disability inclusion analysis was insufficient? For example, exacerbating discrimination or stigma against persons with disabilities.
Efficiency	<ul style="list-style-type: none"> • Were disability inclusion activities conducted within the planned budget and timeframe? • Was project efficiency being prioritized at the expense of excluding specific groups such as persons with disabilities?
Sustainability	<ul style="list-style-type: none"> • Will persons with disabilities and their representative organizations continue to be involved in the disability inclusion process? • Is continuation of outcomes achieved for persons with disabilities appropriately planned? • Will the services and systems established in the project continue to be expanded and maintained in a manner that ensures equality and participation of persons with disabilities?

Appendix 1: Barriers to Access and Participation for Persons with Disabilities in Disaster Risk Reduction through Pre-Disaster Investment and Build Back Better

In accessing and utilizing DRR programs, persons with disabilities face institutional, physical (environmental), communication, or attitudinal barriers, including negative attitudes, discrimination, and lack of understanding. Multiple barriers interact to create complex situations depending on context. DRR through pre-disaster investment and build back better (BBB) should consider the needs of persons with disabilities not only in time of emergency but also during normal times. It is also necessary to recognize possible barriers for persons with disabilities to access supplies and support throughout the time of emergency response to reconstruction. Main barriers preventing access to DRR programs for persons with disabilities and their examples are shown below.

Main Barriers Preventing Access to DRR Programs for Persons with Disabilities and Examples

Barriers	Example
Institutional Barriers	<p>Institutional and Legal Systems:</p> <ul style="list-style-type: none"> • Insufficiency and ambiguity of DRR-related legislations regarding the consideration for persons with disabilities • Rules, regulations, and operational procedures not in place to enforce necessary laws and to implement and operationalize the policies for consideration of persons with disabilities and disability-inclusive DRR • Insufficiency of protection and recognition of rights of persons with disabilities to receive necessary compensation and support • Problem in institutional design to ensure the independence of persons with disabilities based on the premise where the support does not depend on their own family members <p>Policies and Planning:</p> <ul style="list-style-type: none"> • Lack of concrete measures and actions in consideration for disability in the DRR and reconstruction plans • Lack of participation of persons with disabilities and their representative organizations in the policy formulation and planning process of DRR and reconstruction <p>DRR Governance</p> <ul style="list-style-type: none"> • Lack of governance mechanism for disability-inclusive DRR coordination among diverse actors such as relevant line ministries, central and sub-national governments, communities,

Barriers	Example
	<p>and persons with disabilities and their representative organizations</p> <p>Compensation and Support Services for Reconstruction</p> <ul style="list-style-type: none"> • Inaccessible procedures for receiving compensation and support from government due to the problems of formats for application requirements <p>Finance</p> <ul style="list-style-type: none"> • Insufficient budget for implementation of disability-inclusive DRR
Physical Barriers	<p>Means of Transportation</p> <ul style="list-style-type: none"> • Barriers to physical access to safe places for evacuation • Barriers to physical access to participating in DRR education due to lack of means of accessible transportation, routes, and accessible buildings • Barriers to physical access to services and supplies at the time of emergency response and reconstruction due to reasons such as mobility with disrupted infrastructure and physical locations of distributions <p>Design of Infrastructure and Buildings</p> <ul style="list-style-type: none"> • DRR facilities such as education and medical facilities, evacuation shelters, and buildings of public administration are not designed in accessible manner • Insufficient consideration on accessibility in design of temporary and permanent reconstruction houses and their interior facilities <p>Disaster Preparedness of Individual Houses</p> <ul style="list-style-type: none"> • Insufficient consideration on accessibility and disaster risk reduction of individual houses of persons with disabilities (e.g., installing accessible facilities and earthquake resistant structures) <p>Support Mechanism</p> <ul style="list-style-type: none"> • Lack of critical support to maintain essential activities such as taking foods and using toilets as well as mobility at the time of emergency and reconstruction phases.
Communication Barriers	<p>Information on Hazards and DRR Plans</p> <ul style="list-style-type: none"> • Lack of accessibility to information on hazards and DRR plans (inadequate information provision in subtitles, sign language, audio, Braille, plain language, etc.) <p>Information on Weather, Disasters and Early Warnings</p> <ul style="list-style-type: none"> • Lack of accessibility to information on weather, disaster and early warnings

Barriers	Example
	<p>Information on Public Support, Services and Supplies for Emergency and Reconstruction</p> <ul style="list-style-type: none"> • Lack of accessibility to critical information during the period of emergency and reconstruction such as provision of services, supplies, various compensations, etc.
<p>Attitudinal Barriers (Negative attitudes, discrimination, lack of understanding)</p>	<ul style="list-style-type: none"> • Insufficient understandings of the situations of persons with disabilities and recognition of importance of disability-inclusion in DRR among local administrations, DRR-related organizations, and communities • Insufficient capacity and knowledge of administrative personnel in charge of DRR for provision of services corresponding to the needs of persons with disabilities • Prejudice, discrimination, and negative attitudes hinder participation of persons with disabilities into the DRR and reconstruction activities

Appendix 2: Examples of Good Practices in Mainstreaming Disability Inclusion in Disaster Risk Reduction through Pre-Disaster Investment and Build Back Better

(1) Capacity Building for DRR-related Information Dissemination with Participation of Persons with Disabilities (Indonesia) [19]

JICA implemented a technical cooperation project named the “Capacity Development on Operation of Earthquake and Tsunami Analysis and Warning Dissemination” (2020-2025). The project was designed to strengthen the capacity of the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG) to carry out the full process from earthquake and Tsunami observation and monitoring to delivering warnings and related information.

The activities include capacity building for earthquake and tsunami warning dissemination from local governments and transmission to village level recipients. With participation of persons with disabilities, the project conducted warning drills and development of information and education materials for persons with visual impairments.

(2) Development of System for Disaster Risk Management with Participation of Persons with Disabilities (Bangladesh) [20] [21]

In Bangladesh, activities have been conducted to establish the system for disaster risk management with participation of persons with disabilities. Gaibandha District in the northern Bangladesh is located in the flood-stricken areas during the monsoon seasons. In 2009, a long-term program was launched comprising five key activities; i) capacity development of persons with disabilities and their representative organizations, ii) advocacy to the local government for disability-inclusive disaster risk management, iii) infrastructure development and establishment of system of community-level systems for disaster risk management, iv) household-level awareness building for disaster risks in collaboration with schools, and v) sustainable and resilient livelihood development and support. The program is a collaborative effort implemented by Christian Blind Mission (CBM) and Bangladeshi partners, Centre for Disability in Development (CDD) and Gaya Unnayan Kendra (GUK).

This program provides insights for development of disability-inclusive DRR organizations from community levels to broader institutional areas. Some activities have been recognized as good practices in areas, such as policy formulation, advocacy activities for

investing in DRR facilities, and establishment of collaborative systems that engage key stakeholders such as government authorities and persons with disabilities.

During the planning of activities, the program conducted a detailed baseline survey and situational analysis to assess communities and identify the barriers encountered by persons with disabilities. The program facilitated the formation of self-help groups through awareness raising and capacity building activities. Community disaster management committees were established based on these self-help groups. Through these organizations, advocacy activities toward local governments are done addressing issues such as the rehabilitation of damaged river embankments near a community and improving physical accessibility of the local government buildings contributed to the establishment of a collaborative relationship between community organizations and local governments.

(3) Disability-Inclusive Disaster Reconstruction Plans and Implementation (Philippines and Indonesia) [22] [23]

JICA-supported reconstruction initiatives in the Philippines and Indonesia are good examples of “Build Back Better” (BBB) approach through reconstruction of socio-economic infrastructure and housing for disaster-damaged population including persons with disabilities. The initiatives also implemented measures for risk reduction against future disasters. The planning and implementation of the projects incorporated participation of persons with disabilities and integrated reasonable accommodation measures.

“The Project on Rehabilitation and Recovery from the Philippine Typhoon Yolanda” took participatory approaches for consensus building. Involving diverse people including persons with disabilities, the rehabilitation and reconstruction plans were developed. In the activities of rehabilitation and reconstruction of infrastructure, the project improved accessibility of facilities to persons with disabilities. For example, the project installed disability-accessible toilets at the provincial health offices. It also re-designed an evacuation route to ensure accessibility by persons with disabilities.

In the post-disaster cooperation in the aftermath of the Central Sulawesi Earthquake, the project supported the training for spatial plans development. The project undertook the activities to enhance awareness and understanding of residents in the communities on mechanisms, rules and regulations for spatial planning. Persons with disabilities are also included in the target population for the activity. A pilot project implemented under the project sought to collect data on the situation of persons with disabilities in order to ensure inclusiveness in the project.

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