

[TRANSLATION]

Investigation Report

Nagdhunga Tunnel Construction Project

**In
Nepal**

February 2026

**The Examiners for the JICA Guidelines
for Environmental and Social Considerations**

About the Objection Procedures and the Examiners for the Guidelines

To ensure compliance with the “Guidelines for Environmental and Social Considerations” published in April 2010 (hereinafter referred to as the “Guidelines”) of Japan International Cooperation Agency (hereinafter referred to as “JICA”), the President of JICA (hereinafter referred to as the “President”) appointed external examiners for the Guidelines (hereinafter referred to as the “Examiners”), who are independent from the departments of JICA responsible for individual projects and environmental review (hereinafter referred to as the “Operational Departments”) and are to report their findings directly to the President.

The two (2) primary objectives of the Examiners system are as follows:

1. To investigate the alleged non-compliance by JICA to establish the facts of the case and report the results to the President, aiming to ensure JICA’s compliance with the Guidelines.
2. To encourage dialogue between the parties concerned, such as the parties that submitted requests to raise objections (hereinafter referred to as the “Requesters”) and host country governments related to the project including local governments, borrowers and/or project executing agencies (hereinafter referred to as the “Project Proponents”), with their mutual consent, to promptly resolve disputes concerning specific environmental and social problems caused by the projects for which JICA provides assistance, which have arisen due to JICA’s non-compliance with the Guidelines.

The Examiners are required to perform their duties to achieve the objectives in compliance with basic principles set forth in the Guidelines—independence, neutrality, efficiency, promptness and transparency.

Procedures regarding the Request

JICA’s objection procedures are explained in “Objection Procedures Based on the Guidelines for Environmental and Social Considerations” published in April 2010 (hereinafter referred to as the “Objection Procedures”). Upon receipt of a request (hereinafter referred to as the

“Request”), the Examiners shall engage in the following procedures:

1. Acceptance of a Request and Notifications to the Requesters and the Project Proponents

The Examiners shall, so long as the names and the contact information are stated in the Request, notify the Requesters, the Project Proponents, and the Operational Departments of the acceptance of the Request within five (5) business days after the receipt of the Request.

2. Preliminary Investigation

The Examiners shall check the Request, by means of writing, as to whether it includes the contents required in the Objection Procedures. Unless there are any special circumstances that prevent the Examiners from doing so, a preliminary investigation will, in principle, be completed approximately one (1) month after the acceptance of the Request, and a decision whether to commence the Objection Procedures will be made.

3. Decision to Commence the Procedures

Upon the confirmation that the Request satisfies the requirements set out in the Objection Procedures and the descriptions in the Request allege facts that give reasonable cause to commence the Objection Procedures, the Examiners shall decide to commence the Objection Procedures, and send a written notice of said decision to the President, the Requesters, the Project Proponents and the Operational Departments. When the Examiners have decided to reject the Request, a written notice that includes the decision and the reasons for the said decision shall be given to the President, the Requesters, the Project Proponents and the Operational Departments.

4. Investigation of Facts of Alleged Non-compliance with the Guidelines

In order to establish the facts behind JICA’s alleged non-compliance with the Guidelines, the Examiners may meet with the Requesters and interview them on the issues concerning the Request. The Examiners shall interview the relevant persons in the Operational Departments and establish the facts regarding the environmental and

social considerations taken as well as the facts regarding the subsequent monitoring performed prior to the relevant decisions. The Examiners are entitled to access any and all materials used by the Operational Departments in confirming environmental and social considerations and the monitoring. In addition, in order to resolve the disputes, the Examiners may mediate for the purpose of encouraging dialogue among the residents who have been adversely affected by the project, including the Requesters, and the Project Proponents.

5. Report to the President

Within two (2) months after the commencement of the Objection Procedures, the Examiners shall prepare a report on the results of the investigation of the facts behind JICA's alleged non-compliance with the Guidelines, the progress of dialogue, and the agreement reached between the parties concerned, if any, and shall submit the report to the President. If the Examiners believe that more time is required for the investigation or for encouraging dialogue, the Examiners may report to the President the reasons why an extension is indispensable. When the President judges that there is a suitable degree of unavoidable reasons to extend the period, the President may extend the period up to two (2) months. Immediately after the submission of the Examiners' report to the President, the report shall be sent to the parties concerned. The parties concerned may then submit to the Examiners their opinions on the contents of the Examiners' report.

6. Opinions from the Operational Departments

Within one (1) month after the receipt of the report, the Operational Departments may, if deemed necessary, present their opinions on the Examiners' report in writing to the President, and if a non-compliance decision has been made in the report, the measures to achieve compliance with the Guidelines should be set forth in their opinions.

Preface

This investigation report (hereinafter referred to as this “Report”) was prepared in response to the objection request (hereinafter referred to as the “Request”) regarding Nagdhunga Tunnel Construction Project, Nepal (hereinafter referred to as the “Project”).

As stipulated in the Objection Procedures, the objectives of an investigation by the Examiners are (i) to find the facts as to whether or not JICA has complied with the Guidelines and (ii) to encourage dialogue between the parties concerned, to promptly solve specific environmental and social disputes of the projects for which JICA provides assistance, thereby ultimately encouraging JICA’s compliance with the Guidelines. Therefore, the object of investigation is JICA, while the persons, parties and/or organizations concerned with the project, regardless of whether they are for or against the project, are not subject to the investigation. The Objection Procedures require the Examiners to report the investigation findings to the President of JICA within two (2) months (or four (4) months at the longest, if extended), after the commencement of the procedures. Thus, within the limited timeframe and based on the information made available to them, the Examiners prepared an investigation report, which includes the results of fact-finding as to whether there was JICA’s alleged non-compliance, the status of dialogue, and suggestions for encouragement of dialogues between the parties concerned.

The Examiners would like to take this opportunity to thank those who cooperated with us in conducting this Investigation and preparing this Report. In particular, we express our sincere appreciation to the Requesters, the Government of Nepal, the City of Chandragiri, the Ministry of Physical Infrastructure and Transport, the Department of Roads, local stakeholders and JICA’s personnel for their cooperation with us during this Investigation, respectively.

February 2026

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ABBREVIATIONS AND ACRONYMS

EIA	Environmental Impact Assessment
EMP	Environment Management Plan
JICA	Japan International Cooperation Agency

MAPS



Source: Created using Google Maps (Map data ©2026 Google)

Disclaimer: This map is only for illustrative purposes and does not imply any opinion of JICA on the legal status of any country or territory, the border line of any country or territory or its demarcation, or the geographic names.

CHAPTER 1: OUTLINE OF THE REQUEST

An outline of the Request (attached hereto as Annex 1) is provided below.

(1) NAME OF THE COUNTRY

Nepal

(2) AREAS AFFECTED BY THE PROJECT

Kathmandu and Dhading District

(3) NAME OF THE PROJECT

Nagdhunga Tunnel Construction Project

(4) OUTLINE OF THE REQUEST

The Requesters are residents of Ward No. 2, Chandragiri Municipality, Kathmandu district—an area affected by the Project. In the Request, the Requesters assert that they have suffered the following damage as a result of JICA’s non-compliance with the Guidelines, and they request the following solutions.

(I) Loss of Drinking Water

(A) Details of the Damage

- More than 24 natural drinking-water sources on which local residents have relied for generations have dried up.

(B) Requested Solutions

- Establish an appropriate long-term water supply system to provide safe drinking water in the affected areas.
- The Project or the relevant authorities bear the full costs of operating and maintaining such water supply system even after completion of the Project.

(II) Loss of Irrigation Water

(A) Details of Damage

- Critical water sources for irrigation have dried up.

(B) Requested Solutions

- Develop alternative water supply systems to maintain the productivity of cultivated land in affected areas, which may include identifying new water sources or providing technical and financial support for irrigation solutions.

(III) Loss of Livelihoods

(A) Details of the Damage

- The drying up of critical irrigation water sources has severely impacted local agriculture and livelihoods.

(B) Requested Solutions

- During the operational phase of the tunnel, give priority to providing employment opportunities to local residents in the affected areas.

(IV) Damage to Houses and Sinkhole Formation

(A) Details of Damage

- Cracks and structural damage have occurred in 135 houses or more, and sinkholes have appeared on the land.

(B) Requested Solutions

- Conduct a comprehensive damage assessment to the affected houses and land, followed by fair and prompt compensation.

(5) PROVISIONS OF THE GUIDELINES ALLEGED TO HAVE BEEN IN NON-COMPLIANCE

The Requesters assert in the Request that there are non-compliances of the requirements for “Social Acceptability” and “Involuntary Resettlement” in Appendix 1 of the Guidelines. This is interpreted as an assertion that JICA did not comply with Section 1.6 of the Guidelines, which stipulates that JICA shall support and examine appropriate environmental and social considerations undertaken by the Project Proponents, and in doing so, shall examine the requirements that must be met, as mentioned in Appendix 1 of the Guidelines. However, it is unclear whether this assertion implies that there are no other non-compliance issues beyond the above provisions.

Therefore, based on the facts asserted by the Requesters as constituting non-compliances of the Guidelines, the Examiners set out below the key relevant provisions (including Section 1.6 of the Guidelines) and determine whether those provisions were, in fact, not complied with.

(I) Loss of Drinking Water

(A) Facts Alleged by Requesters as Constituting Non-Compliance with Guidelines

- The Project failed to take appropriate measures to prevent, minimize, or restore environmental damage and loss to more than 24 natural drinking-water sources.

(B) Relevant Provisions of the Guidelines

- Section 1.6.2 of the Guidelines (non-compliances pertaining to “Examination of Measures” in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines).

(II) Loss of Irrigation Water and Loss of Livelihoods

(A) Facts Alleged by Requesters as Constituting Non-Compliance with Guidelines

- The Project failed to take appropriate measures to prevent, minimize, or restore environmental damage and loss to more than 24 natural water sources for irrigation.

(B) Relevant Provisions of the Guidelines

- Section 1.6.2 of the Guidelines (non-compliances pertaining to “Examination of Measures” in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines).

(III) Damage to Houses and Sinkhole Formation

(A) Facts Alleged by Requesters as Constituting Non-Compliance with Guidelines

- Tunnel construction caused cracks and structural damage to 135 houses or more, and created sinkholes on the land, yet affected households were not provided with appropriate technical assessments or fair and adequate compensation.

(B) Relevant Provisions of the Guidelines

- Section 1.6.2 of the Guidelines (non-compliances pertaining to “Examination of Measures” in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines).

(IV) Addition of Blasting Method, and Explanation to, and Consultation with, Residents

(A) Facts Alleged by Requesters as Constituting Non-Compliance with Guidelines

- The Requesters did not receive sufficient explanation regarding the use of the blasting method for tunnel drilling.
- If JICA had ensured that residents received sufficient explanation regarding the tunnel drilling method and participated in decision-making, local residents could have raised objections before the harmful method was implemented.

(B) Relevant Provisions of the Guidelines

- Section 1.6.2 of the Guidelines (non-compliances pertaining to “Social Acceptability” in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines).

(V) Disclosure of EIA Report

(A) Facts Alleged by Requesters as Constituting Non-Compliance with Guidelines

- Although a public hearing meeting was held regarding the Environmental Impact Assessment (EIA) for the Project, the EIA report for the Project has not been provided.

(B) Relevant Provisions of the Guidelines

- Section 2.1 and paragraph 2 in “(2) Category B projects” of Section 3.2.1 of the Guidelines.

(VI) Grievance Redress Mechanism

(A) Facts Alleged by Requesters as Constituting Non-Compliance with Guidelines

- After the problems occurred, no meaningful consultations were held to effectively address the related complaints.
- Despite repeated complaints to the implementing agency and other relevant authorities, no clear and accessible grievance redress mechanism was provided, and JICA did not attempt to resolve the concerns by directly holding a consultation meeting with the affected residents.
- JICA failed to establish and oversee an effective grievance redress mechanism.

(B) Relevant Provisions of the Guidelines

- Paragraph 3 in Section 3.2.2 of the Guidelines.

CHAPTER 2: FINDINGS OF THE PRELIMINARY INVESTIGATION

The Examiners conducted the preliminary investigation of the Request, as follows:

- (i) August 7, 2025: Receipt of the Request.
- (ii) August 21, 2025: Acceptance of the Request.
- (iii) August 22, 2025: Commencement of the preliminary investigation.
- (iv) October 24, 2025: Publication of the results of the preliminary investigation (decision to commence the process) as attached hereto as Annex 2.

CHAPTER 3: FINDINGS OF THE INVESTIGATIONS OF THE ALLEGED FACTS

SECTION 1: INTERVIEWS CONDUCTED FOR FACT-FINDING

The Examiners conducted the following interviews for the investigation of the alleged facts concerning the Request after the decision to commence the process (See Annex 3 attached hereto for a summary of the interviews).

(1) Domestic Investigation

- | | |
|--------------------|---|
| November 4, 2025: | Interviews with the Operational Departments |
| November 27, 2025: | Interviews with the consultant (hereinafter referred to as the “Consultant”) of the Project |
| January 15, 2026: | Interviews with the Operational Departments |
| January 19, 2026: | Additional interviews with the Operational Departments |
| February 4, 2026: | Interviews with the Chief Representative of JICA Nepal Office (at that time) |

(2) On-Site Investigation

- | | |
|-----------------------|--|
| December 1 - 4, 2025: | On-site investigation by Examiner Murayama (Interviews with a total of 34 persons, including the Requesters. See Annex 3 attached hereto.) |
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SECTION 2: FACT FINDINGS OF THE INVESTIGATION PERTAINING TO COMPLIANCE OR NON-COMPLIANCE WITH THE GUIDELINES

(1) The Relevant Provisions in the Guidelines for the Investigation

As stated in Chapter 1(5) above, based on the facts asserted by the Requesters as constituting non-compliances of the Guidelines, the investigation was conducted in order to organize the relevant key provisions—including Sections 1.4 and 1.6 of the Guidelines—and to determine whether there had been any non-compliance with those provisions.

Below, for each item from (I) to (VI) in Chapter 1(5) above, the fact findings regarding compliance or non-compliance with the Guidelines are organized into three sections: “Summary of the Requesters’ Allegations,” “Summary of the Operational Departments’ Explanation” and “Facts Confirmed Through the Fact-Finding Investigation.”

(2) Results of the Investigation based on the related Sections of the Guidelines Pertaining to the Compliance or Non-Compliance of the Guidelines

(I) Loss of Drinking Water

(A) Summary of the Requesters’ Allegations

- More than 24 natural drinking-water sources on which local residents have relied for generations have dried up.
- The Project failed to take appropriate measures to prevent, minimize, or restore environmental damage and loss to more than 24 natural drinking-water sources.

(B) Summary of the Operational Departments’ Explanations

- In the survey of water resources mapping conducted in March 2018 (Survey of Water Resources Mapping of Tunnel Alignment Vicinity), geological strata and groundwater conditions, among other matters, were investigated, and areas where groundwater levels could potentially decline due to tunnel construction were identified. In March 2020, Chandragiri Municipality and the Department of Roads signed a Memorandum of Understanding (hereinafter referred to as the “MOU”) regarding the plan to establish alternative water supply facilities (the “Water Supply Project”), which includes the construction of wells, pump platforms, water treatment facilities, and reservoirs, as well as the installation of water transmission and drainage pipelines, and it was scheduled to complete the system in November 2020. However, it was delayed due to COVID-19 lockdowns and floodings, etc. Water supply via water tankers, a part of the Water Supply Project, commenced in November 2019 prior to the signing of the MOU. By December 2021, all water supply facilities under the MOU had been established.
- The Department of Roads conducted the groundwater condition survey from February 2020 to January 2021 in order to update the water supply volumes by the survey of water resources mapping conducted in March 2018, and monitoring the water level of each water source potentially affected during tunnel construction (30 spring sources and 52 groundwater wells) based on the survey of water resources mapping conducted from March 2018.
- With respect to the first well drilled under the MOU, because a decline in the water level was confirmed in February–March 2022, the Department of Roads held consultations with residents on March 20, 2022 regarding a review of the Water Supply Project. In response to residents’ proposals, the Department of Roads had

been supplying water by water tanker; however, it was agreed to install tanks with the capacity required to meet residents' needs and to establish a system for continuous water supply. Subsequently, water was supplied via water tankers, and the drilling of the second and third wells was carried out. In June 2024, it was reported that the water supply facilities (including well construction and a system connecting pipes to each household for water delivery) were completed.

- The Department of Roads and the Consultant explained that no major issues with water supply have been identified in the current operation. Meanwhile, the Operational Department explained that when increasing water supply hours per day, measures such as extending pump operation times and increasing the volume of water delivered to the tank would be necessary, based on the judgment of the Water Management Committee composed of members selected by residents.

(C) Facts Confirmed Through the Fact-Finding Investigation

Damage from Loss of Drinking Water

- We found that (i) from the stage of the preparatory survey and the preparation of the EIA report dated December 2015 (hereinafter referred to as the “2015 EIA Report”), it had been anticipated that the implementation of the Project could result in a decline in groundwater levels; (ii) the groundwater condition survey, which identified water sources to be potentially affected and monitored them over a one-year period beginning in early 2020, confirmed a decrease in the volume of water at certain water sources; and (iii) a document titled “Report on Issues Arising from the Nagdhunga Tunnel Road Construction and Recommendations for Resolution” dated October 11, 2023 submitted by the Project Director of the Project to the Department of Roads (hereinafter referred to as the “Project

Director’s Report”), also assumed that problems occurred in the surrounding area with reduced groundwater levels and decreased water volume in many wells and deep wells as tunnel construction progressed. Therefore, we found that the Project had an impact on water sources. Although there are differences in the explanations provided by the relevant parties regarding the scale of the number of households covered by the water supply, we found that, in general, approximately 300 to 500 households were affected by the decrease in water volumes at water sources caused by the Project.

- The Government of Nepal conducted the survey of water sources mapping and issued the survey report in March 2018. During the consultations with residents conducted in the course of that survey, residents requested that the water supply be secured before any impact on water sources occurred, as described in the report: “They are demanding for the alternative water supply before tunnel excavation. They will not allow tunnel construction excavation until their water supply availability is ensured.” The report also notes that “the ward chairman of ward no 1 [Text omitted] requested to make alternative measures of the water supply before the tunnel excavation.” Based on these views, Chandragiri Municipality and the Department of Roads proceeded to enter into the MOU regarding the water supply system.
- Regarding the timing of damage caused by the reduced water volume, residents, including the Requesters, explained during the on-site investigation that they first reported issues related to the drying up of the water sources around mid-April 2022. On the other hand, the Consultant explained that water supply via water tankers began on May 6, 2021, in response to the residents’ requests. It was also confirmed that a water supply request was made by residents of Ward No. 2,

Chandragiri Municipality via Ward No. 2 to the project personnel on January 2, 2022.

- According to the monitoring reports prepared by the implementing agency, it was reported in the third quarter of 2021 that there had been decreases in the volume of water from water sources and groundwater. It was also reported that, three reservoirs and a water distribution system were installed in Ward No. 2, “(b)ut the developed well yielded 10.5 l/s initially reduced to almost nil. This was not adequate to meet the water demand of the affected people. Water was supplied to community by the water tankers.” Similar statements continued through the monitoring reports for the fourth quarter of 2023, indicating that sufficient water was not being provided through the water supply system covered under the MOU.
- The monitoring report for the first quarter of 2024 states that “third deep tube well is successful and yielding 15 l/s discharge.”
- For a period of more than four years—from November 14, 2019, when water supply by water tanks began in response to residents’ complaints, until the completion timing of the water supply system for affected residents (the first quarter of 2024)—it was not possible to provide sufficient water through the water supply system covered under the MOU.
- Currently, drinking water is supplied from wells, with a pumping capacity of 15 liters per second secured, as reported in the monitoring reports. Based on the water supply design and cost estimation survey conducted in May 2018, the Consultant explains that the required water volume is 7.85 liters per second, assuming a population of approximately 5,398 people in 15 years, and that since the water supply from the well is 15 liters per second, this requirement is met. However,

according to the monitoring report (the fourth quarter of 2024), it was reported that, among the 15 water sources on the eastern side, water flow decreased at 8 locations and increased at 7 locations. We could not confirm whether residents who had relied on the water sources (water supply points) where water flow decreased were able to use the water sources (water supply points) where water flow increased. On the other hand, during the on-site investigation, the Requesters explained that water is supplied for only about 45 to 60 minutes per day. Similarly, the representative of Ward No. 2, Chandragiri Municipality stated that the water supply time is limited.

Measures to Prevent, Minimize, or Restore Damage

- At the preparatory survey stage, it was anticipated that implementation of the Project could potentially cause a decline of groundwater levels. The 2015 EIA Report indicated the need for continuous monitoring and the provision of alternative water sources (deep wells and storage tanks) if impacts on water levels were confirmed. The 2015 EIA Report also states that the analysis of alternatives, including alternative routes, was examined, and the optimal road route was selected after evaluating technical, economic, environmental, social, and road safety factors. (The Consultant explained that it is difficult to propose alternative routes preventing groundwater level decline because the EIA analysis cannot fully identify all aquifers.). Furthermore, in the detailed design, the tunnel route was modified to avoid the portal locating at a lineament (weak geological zone) and to mitigate the possibility of a decline of groundwater levels, including changes to the tunnel alignment.

- As part of the exchange of opinions with residents, the first interaction meeting was held in July 2014 (at two locations), the second interaction meeting was held in September 2014 (at two locations), and a public hearing meeting for residents was held in January 2015. During the Q&A sessions at these interaction meetings, it was explained that if impacts on water sources were observed, alternative measures, compensation measures, or mitigation measures would be implemented. The public hearing meeting was held to share information about the Project, including its preparatory status and the draft EIA report. At this public hearing, the draft EIA report was presented, and a concise explanation of the environmental impacts was provided. Explanations were also given regarding mitigation measures and the monitoring. The number of residents participating in the above interaction meetings and public hearing meeting is as follows.

< First Interaction Meeting >

- ✓ July 12, 2014 (held in Dhading District): 27 men, 6 women.
- ✓ July 19, 2014 (held in Kathmandu District): 56 men, 0 women.

< Second Interaction Meeting >

- ✓ September 2, 2014 (morning) (held in Kathmandu District): 40 men, 0 women.
- ✓ September 2, 2014 (afternoon) (held in Kathmandu District): 48 men, 3 women.

< Public Hearing Meeting >

- ✓ January 2, 2015 (held in Kathmandu District): 40 men, 4 women.

- According to the Operational Departments' explanation, based on the 2015 EIA Report indicating the need to provide alternative water sources if impacts on water levels were confirmed, hydrogeological surveys were conducted during the detailed design phase, identifying areas where groundwater levels could potentially decline.
- In March 2018, the survey of water sources mapping was conducted. Based on these results, in March 2020, Chandragiri Municipality and the Department of Roads signed the MOU concerning the Water Supply Project, which includes the construction of wells, pump platforms, water purification facilities, and reservoirs, as well as the installation of water supply and drainage pipelines. The MOU stipulates that the facilities constructed under the Water Supply Project will be transferred from the Department of Roads to Chandragiri Municipality upon project completion, with the municipality assuming operational management (The Project Director's Report also explains that such a water supply project is positioned as a component of the Project.). The Water Supply Project was explained to residents at a meeting on February 12, 2020 (see the outline of this meeting above in (IV)(D)).
- Water supply via water tankers under the Water Supply Project commenced in November 2019, prior to the signing of the MOU, and activities of the whole project were scheduled for completion in November 2020. However, according to explanations from the Operational Departments and the Consultant, delays occurred due to the spread of the COVID-19 and heavy rains, among other factors, and the water supply facilities under the Water Supply Project were completed in December 2021.

- We found that the well drilled under the Water Supply Project did not supply sufficient water, that water was therefore provided to residents by water tankers, and that additional wells were drilled. The Operational Departments and the Consultant explained to us that (i) a well was drilled under the Water Supply Project in February 2020 but failed to provide sufficient water, (ii) upon the complaints from residents about decreasing water supply between April and May 2021, drinking water supply via additional water tankers was initiated in May 2021, (iii) while continuing water supply via water tankers, drilling for a second well was conducted in December 2022; as this well also failed to yield water, drilling for a third well was conducted in March 2024, (iv) in June 2024, the installation of the water supply pipe connecting the well to the tank was completed, and (v) it is explained that water supply via water tankers has ended because sufficient water is now provided from this third well. The monitoring reports also state that the initial water supply from the first well was 10.5 liters per second but subsequently decreased to nearly zero, that the second well supplied 2.5 liters per second, and that the third well supplied 15 liters per second.
- Currently, a project to pump up and supply water drained from the western portal of the tunnel through additional construction work (hereinafter referred to as the “Lifting Project”) is under consideration, and the budget for the Lifting Project has already been included in the Chandragiri Municipality budget. The Department of Roads explained that the Ministry of Water Supply plans to include a budget for the Lifting Project in 2026. Furthermore, the Operational Departments explained that the Ministry of Water Supply has secured a budget for surveys related to the Lifting Project, that these surveys are expected to confirm water volume and

examine the utilization for irrigation water, among other things, and that JICA will also monitor this closely.

- The Requesters request that free of charge water supply continue even after project completion. However, the Department of Roads responded to the residents that project personnel would find it difficult to satisfy this request because the water supply facilities will be transferred to Chandragiri Municipality upon project completion. During the on-site investigation, when this point was confirmed with the Mayor of Chandragiri Municipality, he responded that as the water supply facilities would be transferred to Chandragiri Municipality after project completion based on the MOU, continuing the provision of free of charge drinking water would be difficult from the perspective of fairness towards local residents. During the on-site investigation interviews, the Department of Roads also stated that Chandragiri Municipality would be responsible for maintaining the water supply facilities after project completion, and that under current laws and regulations, it would be difficult for the Department of Roads to bear the maintenance costs.

Monitoring and Confirmation of Monitoring Results

- Under the Minutes of Discussions (hereinafter referred to as the “Minutes of Discussions”) dated November 13, 2014, on the Project between JICA and the Government of Nepal, it was agreed that “water regime and water use” would be monitored.
- However, in the monitoring reports prepared by the implementing agency, while water quality was reported, there is no description of “water regime and water use” up to the third quarter of 2021. In addition, in the monitoring reports from the third

quarter of 2021 to the first quarter of 2023, only qualitative explanations are provided (including reports that there were impacts on water sources), and there is no numerical data for individual water sources. Such data first appears in the monitoring report for the second quarter of 2023, which presents water volume data for 15 water sources on the eastern side and 15 water sources on the western side, and reports at which locations water volumes decreased and at which locations they increased. We could not confirm any record that JICA requested the implementing agency to take appropriate action, or otherwise confirmed the matter, with respect to the absence of the above monitoring items and the monitoring results.

JICA's Response

- JICA reviewed monitoring reports quarterly. The environmental monitoring plan agreed upon during the review process included monitoring items covering the water regime and water use, including surface water volume. Furthermore, based on the March 2018 survey of water resources mapping, the groundwater condition survey was conducted from February 2020 to January 2021 to monitor water levels at each water source. The monitoring reports describe the results of this survey and the status of the water supply system construction (including reduced water supply from wells and the implementation of countermeasures) regarding the water environment and water usage.
- The Operational Departments explained to us that (i) separate from reviewing the monitoring reports, the JICA Nepal office had confirmed any unclear points or points requiring supplementation in the monitoring reports with the Department of Roads, (ii) staff in charge of infrastructure sector in the JICA Nepal office visited

the Department of Roads at least once a week to check progress, (iii) the Department of Roads provided third-party surveys and other materials, and (iv) the Water Supply Project status was also confirmed through information provided by the Consultant and the contractor of the Project (hereinafter referred to as the “Contractor”).

- Furthermore, the Operational Departments explained to us that (i) when it was confirmed that water supply from wells drilled under the Water Supply Project had decreased, JICA confirmed with the Department of Roads that additional wells were drilled and water was provided via water tankers, and requested the Department of Roads to take prompt action and (ii) whenever complaints were received from residents, JICA confirmed that improvement measures were being implemented each time; however, we could not confirm any record showing that JICA made such a request to the Department of Roads.
- According to the Operational Departments, the JICA Nepal office confirmed that one of the demands raised during the residents’ protest activities in March 2025 was the Lifting Project, and verified the facts with project personnel, including the Department of Roads. The project personnel explained that implementing the Lifting Project requires consultation and agreement with the local governments and residents on the western side. JICA also confirmed that the Ministry of Water Supply has secured a survey budget for the Lifting Project. JICA will continue to monitor the progress of the Government of Nepal’s response and urge the Department of Roads and relevant ministries to take appropriate action.
- JICA’s response regarding consultation meetings with residents when issues arose is described in sub-section (VI) below.

(II) Loss of Irrigation Water and Loss of Livelihoods

(A) Summary of the Requesters' Allegations

- The drying up of critical irrigation water sources has severely impacted local agriculture and livelihoods.
- The Project failed to take appropriate measures to prevent, minimize, or restore environmental damage and loss to more than 24 natural water sources for irrigation.

(B) Summary of the Operational Departments' Explanations

- According to the interview with the Department of Roads, an impact survey of water sources and wells confirmed that seven households were using water for the purposes of cultivating crops in the area above the tunnel. The implementing agency explained that it would provide necessary water supply to residents who formally declared farmland use with its registration. However, no residents formally declared farmland use with its registration. Therefore, no compensation for water supply for farmland was provided. Nevertheless, in response to additional requests from residents, the Department of Roads is consulting with the Ministry of Energy, Water Resources, and Irrigation (hereinafter referred to as "MOEWRI") regarding alternative measures for irrigation water.

(C) Facts Confirmed Through the Fact-Finding Investigation

Damage from Irrigation Water Loss

- As stated in sub-section (I)(C) above, it is acknowledged that the Project has impacted on water sources.

- The survey of water resources mapping conducted in 2018 confirmed that 7 households were using water from water sources potentially affected by the Project for the purposes of cultivating crops. The reason these households did not formally declare farmland use with its registration is explained later.
- Compensation claims were submitted by farmers affected by the Project (according to the Consultant's explanation, the claims were submitted by six farming households in Ward 1, Chandragiri Municipality). Consequently, an independent consultant conducted topographical and geological surveys and an impact assessment from February to July 2024. The results confirmed compensation for three farming households out of such six farming households. Regarding compensation for these three households, a proposal was submitted by the Ministry of Physical Infrastructure and Transport to the Government of Nepal on November 29, 2024. On December 13, 2024, the Government of Nepal issued a cabinet decision requesting implementation in accordance with this proposal. The Operational Departments confirmed that compensation for the above three households had been paid as of May 2025.
- Residents, including the Requesters, explain that 375 to 450 households were affected, and while agriculture was previously possible year-round, it is now impossible during the dry season. Furthermore, the representative of Ward No. 2, Chandragiri Municipality, explains that two residents of Ward No. 2 and two residents of Ward No. 1 were forced to abandon farming due to insufficient irrigation water, and that numerous farmers were displaced from their land due to irrigation water shortages. On the other hand, the Department of Roads and the Mayor of Chandragiri Municipality stated that no formal declaration of farmland use with its registration has been made in Ward No. 2.

- Furthermore, an updated EIA report prepared in January 2020 (hereinafter referred to as the “2020 Updated EIA Report”) stated that (i) the Project is expected to impact the irrigation channel at the western portal, and the Project costs include relocating the irrigation channel, and (ii) the Project’s impacts are expected to affect farmlands and crops, and the Compensation Determination Committee is scheduled to determine compensation for such impacts. This relocation and compensation have already been implemented (for details on the background and content of the 2020 Updated EIA Report, see (IV) (D) below).

Measures to Prevent, Minimize, or Recover from Damage

- Regarding compensation for irrigation water loss, we found that the situation differs depending on whether the formal declaration of farmland use with its registration has been made for the land. During the on-site investigation, when confirming the background for residents, including the Requesters, not having made formal declarations for farmland use with its registration, it was revealed that if they formally declared the farmland use with its registration, they could not divide and sell the land or build houses on it, hence they are treating it as residential land. However, in reality, 375 to 450 households were affected. The specific facts are as follows.
- As stated in the sub-section “Damage from Irrigation Water Loss,” three farming households in Ward No. 1 of Chandragiri Municipality were recognized as affected by the Project and received compensation payments.
- The Department of Roads and the Consultant explained that the Department of Roads would provide necessary water supply or compensation to residents of households using water sources expected to be affected by the Project for

agricultural purposes, if they formally declared the farmland use with its registration, and the Department of Water Resources and Irrigation (hereinafter referred to as the “Department of Irrigation”) of MOEWRI also encouraged residents to formally declare the farmland use with its registration, but explained that residents have not formally declared the farmland use with its registration. The Mayor of Chandragiri Municipality also explains that there is no land in Ward No. 2, Chandragiri Municipality with respect to which the formal declaration for farmland use with its registration has been made. Thus, the Department of Roads is taking the position that it will provide compensation for land with respect to which the formal declaration for farmland use with its registration has been made and is actually responding to compensation claims for such certified farmland, but is taking the position that no formal declaration of farmland use has been made for land not registered as farmland in the first place.

- During the on-site investigation, an inspection of the site confirmed the presence of farmland near the tunnel alignment. Furthermore, during the on-site investigation, when inquiring about the background for not having made formal declarations for farmland use with its registration by residents including the Requesters, it was confirmed that the land is registered as residential because if it were registered as farmland, the land could not be divided and sold or used for building houses.
- Regarding future measures, as described in (I)(B) above, the Lifting Project is currently under consideration.
- Furthermore, according to the Operational Departments’ explanation, the Minister of Physical Infrastructure and Transport has requested MOEWRI to consider and address the construction of alternative irrigation facilities on cultivable land. As of

January 2026, MOEWRI is reviewing this matter. Meanwhile, the Mayor of Chandragiri Municipality explained that the Department of Roads has begun discussions with MOEWRI regarding alternative irrigation water supply, but no specific plans have been communicated. The representative of Ward No. 2, Chandragiri Municipality stated that there are no plans to restore the irrigation water supply in the Project.

- As a livelihood-related measure, the 2015 EIA Report requested that the Project promote employment of local residents. Indeed, the Project has employed local residents, and the Consultant explained that 168 residents were employed during the construction peak in March 2024, and 45 residents were employed as of December 2025. According to the Operational Departments, among residents employed in construction, those from Ward No. 2, Chandragiri Municipality numbered 50-60 at peak and 17 as of January 2026. Additionally, among residents employed for the operation of the water supply system, those from Ward No. 2, Chandragiri Municipality numbered 8 as of January 2026. Furthermore, the Department of Roads explained that it plans to encourage the Contractor to actively hire local residents for the maintenance work after the tunnel construction is completed. On the other hand, the Mayor of Chandragiri Municipality and the representative of Ward No. 2, Chandragiri Municipality stated that affected residents are not being hired in positions which commensurate with their qualifications, and that most local employment is not sustainable.

JICA's Response

- The Operational Departments explained that JICA monitors losses of houses, lands, and crops, compensation for these losses, and the status of resident

resettlement through quarterly progress reports submitted for the Project (but compensation-related reports are not included in the monitoring reports).

Furthermore, while the employment status of residents was not a monitoring target, JICA confirmed through reports from the Department of Roads and the Consultant that many local residents were employed by the Project. It was also confirmed that residents in the vicinity of the Requesters' location were employed for tasks such as operating the water supply system.

- According to the Operational Departments, the 2018 survey of water resources mapping confirmed that seven households were using water from water sources expected to be affected, including by lowered water levels, for agricultural purposes. JICA then confirmed with the Department of Roads regarding compensation for these households. The Department of Roads explained that it had informed the residents of these houses that if they formally declared the farmland use with its registration, the necessary water supply or compensation would be provided. However, the Department of Roads stated that no households formally declared the farmland use with its registration.
- Regarding livelihood compensation, the Operational Departments confirmed that, in addition to the above, livelihood compensation had been decided for 54 households and 70 business entities, and most of the payments had been made (however, this compensation is unrelated to the drying up of water source or house damage), while the detailed records could not have been confirmed.
- According to the Operational Departments, the JICA Nepal Office confirmed that one of the demands raised during the residents' protest activities in March 2025 was the Lifting Project, and verified the facts with project personnel, including the Department of Roads. The project personnel explained that implementing the

Lifting Project requires consultation and agreement with the local governments and residents on the western side.

(III) Damage to Houses and Sinkhole Formation

(A) Summary of the Requesters' Allegations

- Cracks and structural damage have occurred in 135 houses or more, and sinkholes have appeared on the land.
- Regarding the damage to houses and the occurrence of sinkholes, technical assessments have not been adequately conducted, and fair or adequate compensation has not been provided.

(B) Summary of the Operational Departments' Explanations

- Based on the EIA results for the Project, land acquisition for the area above the tunnel was targeted from the planning stage due to anticipated ground subsidence risks within 500 meters of the tunnel portal. Acquisition and compensation for these areas have already been completed.
- Subsequently, during the project implementation phase, residents outside the scope of the land acquisition raised concerns about ground subsidence and damage to houses caused by tunnel construction. Accordingly, discussions were held on June 26, 2023, among the Minister of Physical Infrastructure and Transport, the residents, and project personnel. Based on the decisions made at those discussions, detailed topographical and geological surveys, along with a project impact survey, were conducted, and the results of these surveys were explained to residents in June 2024. The project impact survey concluded that 18 houses were highly likely

to have sustained damage due to ground subsidence caused by tunnel construction and that they remain at risk of future damage. Full compensation for these houses was therefore decided. Additionally, partial compensation was decided for 75 houses for which impacts during Project implementation could not be ruled out. Houses other than the total of 93 houses (*i.e.*, the above 18 houses plus the 75 houses) were determined not to be eligible for compensation, as the cracks were attributable to deterioration over time or had existed prior to the commencement of the construction works (such as cracks caused by the major earthquake in 2015).

(C) Facts Confirmed Through the Fact-Finding Investigation

Damage to Houses and Sinkholes

- Damage to houses in Chandragiri Municipality is acknowledged. In this regard, the Project Director's Report also mentions claims that cracks appeared in houses located near the eastern portal. Regarding the 93 houses for which compensation was claimed in 2023, the Department of Roads conducted surveys on the damage status of these houses from March 2023 to April 2024, and all were assessed as having minor damage.
- It cannot be ruled out that some of the damage to these houses was caused by the Project. At a minimum, with respect to the 18 houses for which compensation was claimed and for which full compensation was approved, an independent consultant, in topographical and geological surveys and an impact assessment conducted from February to July 2024, determined that it could not be ruled out that the damage had occurred due to ground subsidence associated with the Project.

- The Contractor and the Consultant acknowledge that a sinkhole occurred at least in one location and explain that the sinkhole has now been filled. As to the cause of the sinkhole, the topographical and geological surveys and the impact assessment conducted by an independent consultant from February to July 2024 explain that, while the sinkhole cannot be directly linked to the tunnel excavation, it may have been caused by a decline in groundwater levels.
- As described later, full or partial compensation has been approved for some houses. Regarding this compensation, a proposal was submitted by the Ministry of Physical Infrastructure and Transport to the Government of Nepal on November 29, 2024, and the Government of Nepal issued a cabinet decision requesting implementation in accordance with that proposal on December 13, 2024.

Measures to Prevent, Minimize, or Recover from Damage

- The Operational Departments explained to us that (i) based on the EIA results, land within 500 meters of the tunnel portal is subject to land subsidence risk and is therefore subject to land acquisition, which has been completed with payment of compensation, and (ii) as the 2015 EIA Report did not predict impacts on houses located more than 500 meters from the tunnel portal, it was stated, during the residents' consultation, that land acquisition was unnecessary for these houses, but that measures would be considered if damage occurred.
- According to the Operational Departments, during the project implementation phase, the Contractor conducted an inventory survey in March 2020, and this survey identified 19 houses where cracks could potentially develop in their structures during construction. Continuous monitoring was then implemented for these houses.

- According to the Operational Departments, in 2023, compensation claims for 93 houses were submitted to the Ward Office. The Ward Office shared these claims with the Department of Roads, leading to a meeting on June 26, 2023, among the Minister of Physical Infrastructure and Transport, residents, and project personnel. Based on the decisions made at this meeting, an independent consultant conducted topographical and geological surveys and impact assessments from February to July 2024.
- Regarding the above points, the Project Director’s Report also details claims that cracks appeared in houses located near the eastern tunnel portal after construction began, and that measures such as repairs and restoration were implemented for approximately 20 houses. The report further explains in detail the subsequent communications with local residents. Specifically, it described that the following events occurred.

January 5, 2023	Residents requested an investigation into cracks appearing in their homes.
April 21, 2023	The Department of Urban Development and Building Construction conducted a building inspection and prepared an inspection report.
May 15, 2023	<p>The above investigation report was received as an official document dated the same day.</p> <p>All construction work on the east portal side was suspended by local residents due to the lack of an investigation into the damage occurring to the houses. Consultation meetings were held with the local residents. It was agreed that an investigation report on house damage would be provided to the affected area residents within three days, and if the contents of the report were not satisfactory, the necessary procedures for a full</p>

	investigation of all houses would be initiated within 15 days. Construction resumed.
May 16, 2023	A request for a detailed investigation was made to the Department of Urban Development and Building Construction, and an investigation committee including the Department was formed.
June 14, 2023	All construction near the east portal was suspended due to the failure to conduct residential surveys and provide compensation.
June 15, 2023	Consultations and agreement were reached with the Consultant regarding the completion of housing inspections and the provision of a report within approximately 20 to 25 days, and construction resumed.

- Based on the results of the topographical and geological surveys and impact assessments, out of the 93 houses for which compensation claims were filed in 2023, full compensation for rebuilding was determined for 18 houses, and partial compensation was determined for 75 houses. The Government of Nepal formally decided on this compensation through a cabinet meeting on December 13, 2024. The Operational Departments explained that, as of January 2026, for the 18 houses eligible for full compensation: one house has already received the full compensation amount; 12 houses have already received 50% of the compensation, with the remaining amount scheduled for payment after the rebuilding decision; and compensation amounts for the remaining 5 houses are currently being adjusted between the residents and the Department of Roads. Regarding the 75 houses subject to partial compensation, at the time of the on-site investigation, the Department of Roads and the Consultant explained that compensation amounts pending assessment by the Ministry of Urban Development. As of January 2026,

the Operational Departments explained that compensation applications for 17 houses had been submitted to the Department of Roads and were in the payment process, while payment process for the remaining 58 houses would commence once their applications were submitted.

- According to the Department of Roads, compensation claims had been submitted for 182 houses by the time of the December 2025 on-site investigation. The Mayor of Chandragiri Municipality explained that the additional houses for which compensation claims were submitted are under review subject to undergoing technical evaluation.
- Regarding compensation implementation, the representative of Ward No. 2, Chandragiri Municipality stated that a review is necessary for the assessment of causes in some cases. Meanwhile, the Mayor of Chandragiri stated that the method is appropriate as standard technical criteria for compensation classification are applied according to the guidelines of the Department of Urban Development and Building Construction, but he also noted that there is room for improvement in communications with affected households and transparency.

JICA's Response

- The Operational Departments explained that (i) JICA monitors losses of houses, land, and crops, compensation for those losses, and the status of resettlement through the Project progress reports submitted quarterly, (ii) JICA has held regularly progress discussions with the Department of Roads, urging the early completion of compensation payments, but records on the consultations could not have been confirmed, and (iii) JICA has received the survey results used by the Department of Roads to determine compensation eligibility and is monitoring the

progress of compensation amount decisions by the Compensation Determination Committee and payment by the Department of Roads.

(IV) Addition of Blasting Method, and Explanation to, and Consultation with, Residents

(A) Summary of the Requesters' Allegations

- At the public hearing meeting conducted as part of the EIA, local residents approved the project on the condition that a new, less impactful tunnel construction method would be used. However, the actual construction was carried out using the blasting method. The Requesters believe that this method is the primary cause of the damage suffered by their community.
- The Requesters did not receive sufficient explanation regarding the use of the blasting method for tunnel drilling.
- If JICA had ensured that residents received sufficient explanation regarding the tunnel drilling method and participated in decision-making, local residents could have raised objections before the harmful method was implemented.

(B) Summary of the Operational Departments' Explanations

- One of the EIA implementation policies for the Project states: "In selecting tunnel construction techniques, the aim is to avoid or minimize negative impacts such as fluctuations in groundwater levels and reduction of drinking water sources." Initially, based on geological information identified during the preparatory survey phase, mechanical drilling was anticipated. However, detailed geological surveys

conducted during the detailed design phase revealed harder-than-expected rock, leading to the adoption of the blasting method.

- According to the Consultant, the water level drop was due to the nature of the water veins in the site, it was difficult to make avoidance of their impact regardless of the drilling method. Furthermore, vibration analysis conducted for tunnel drilling in the Project showed no detectable vibration levels that would affect structures above the tunnel. It was therefore determined that there would be no impact on residential damage from vibrations caused by tunnel drilling.
- According to interviews with the Consultant, explanations regarding the detailed design results (including construction methods) were provided by the Consultant to the local governments and residents. At the explanatory meetings, questions were raised about the Project in general, and no opposition regarding the project implementation or construction methods was expressed by residents. Furthermore, prior to the actual commencement of tunnel drilling, notifications were issued before blasting operations commenced, and at that time, no complaints were received by the project office or other relevant parties.

(C) Summary of Explanation in the Investigation by the Relevant Parties including the Consultant

- The New Austrian Tunneling Method (hereinafter referred to as the “NATM”) was adopted as the construction method for tunnel drilling. Within this method, blasting, not mechanical drilling was chosen as the drilling technique—the Operational Departments explained that, strictly speaking, it was a combination of blasting and mechanical drilling because hydraulic breakers were used for some tunnel drilling near the portals. The Consultant explained to us that the NATM

drilling using the blasting method involves drilling holes, filling them with explosives, blasting one meter at a time, and advancing while reinforcing the wall surface with shotcrete and ensuring stability using rock bolts and ribs.

- According to the Consultant's explanation, geological surveys conducted during the detailed design phase revealed the presence of hard rock. After comprehensive consideration of geology, cost, and construction methods feasible on-site, the decision was made to switch to the blasting method. This detailed design was approved by the Department of Roads in April 2018. The Operational Departments further explained that the tunnel route was altered in the detailed design to address traffic safety concerns, etc. The revised route confirmed the presence of hard ground, leading to the conclusion that blasting drilling was necessary. Following the tunnel route change in the detailed design, the 2020 Updated EIA Report was prepared as an internal reference document by the Consultant.
- According to explanations from the Operational Departments and the Department of Roads, generally, when the ground cover is approximately two times or less the tunnel drilling diameter, blasting may cause noise and vibration impacts (this is also explained in the Japan Society of Civil Engineers' "Standard Specifications for Tunneling"). On the other hand, when the ground cover is more than two times the tunnel drilling diameter, impacts are considered less likely to occur, and thus, areas with two times less ground cover were targeted for land acquisition.
- The Consultant and the Operational Departments explained that the impact on water from the NATM method remains unchanged whether mechanical drilling or blasting is used.

- On the other hand, the representative of Ward No. 2, Chandragiri Municipality explained that the farther a location was from the portal, the more vibration and noise were experienced, that during blasting works they felt shock waves even along the alignment, and that, with reference to the locations where blasting was conducted, cracks continued to occur in houses along the alignment.

(D) Facts Confirmed Through the Fact-Finding Investigation

Background of the Addition of Blasting Method

- The final Preparatory Survey Report dated March 2015 stated that while both the drilling and blasting method and the mechanical excavation method were options for tunnel drilling, mechanical excavation using a road-header should be employed due to the soft geological layers.
- The 2015 EIA Report, prepared in December 2015 and approved by the Ministry of Science, Technology and Environment (now the Ministry of Forests and Environment), stated: “Mechanical drilling, rather than blasting, was adopted for tunnel drilling to minimize noise and vibration impacts on the surrounding areas.” While the Consultant noted that the 2015 EIA Report, in its explanation of environmental laws, lists the Explosive Material Act (as a legal provision) on how to use explosive material during the construction stage of the Project, as stated above, the 2015 EIA Report explicitly states that mechanical drilling was adopted.
- Subsequently, based on the detailed design initiated in 2017 and approved in April 2018, the Consultant prepared an updated report of the 2015 EIA Report, which, after incorporating discussions with the Department of Roads and comments from the project personnel, was finalized as the 2020 Updated EIA Report in January

2020. According to the 2020 Updated EIA Report, the detailed design led to design modifications, including changes to the tunnel alignment (specifically, the original alignment featured an S-shaped route crossing weak strata twice; the revised alignment shifts the tunnel route toward the mountain side, reducing the section passing through poor ground). These changes led to the EIA update. However, the report does not list the tunnel drilling method among the detailed design modifications.

- The 2020 Updated EIA Report cites the application of blasting methods as one reason why the construction schedule remained unchanged despite the increased tunnel length resulting from the above design. It also describes the noise impact from blasting operations, 24-hour operation of machinery like compressors, and mitigation measures. However, there is no explanation of blasting as a construction method, nor any description of changing the tunnel drilling method from mechanical drilling to blasting, or the reasons for this change.
- Furthermore, while the JICA Nepal office received the draft version of 2020 Updated EIA Report around 2018, it appears this draft was not shared with either Credit Risk Analysis and Environmental Review Department or South Asia Department of JICA.
- The 2020 Updated EIA Report states that, as there is no major change in the design with environmental implication and requirement of the forest area has been reduced, the supplemental EIA will not be required, and that only updating of the EIA including EMP is being carried out. However, the 2020 Updated EIA Report explains that under Nepal's Environmental Protection Regulations, a supplemental EIA, which requires a 15-day public notice period to solicit opinions from the general public, is required in certain cases, such as when there is partial change in

the physical infrastructure, design, change location of the site or infrastructure; however, given that the Project, at the detailed design stage, (i) shifted the alignment 400 meters northward, (ii) moved the west portal 150 meters northward and the east portal 30 meters eastward, (iii) extended the tunnel length from 2,450 meters to 2,688 meters, (iv) changed the tunnel gradient from 3.22% to 3.5%, and (v) installed an emergency evacuation tunnel for emergency vehicles, the assertions in the 2020 Updated EIA Report appear contradictory.

Explanation to, and Consultation with, Residents

- After the main construction work commenced on November 14, 2019, a project explanatory meeting for local residents regarding the Project was held on December 23, 2019. The Department of Roads provided several photographs taken during the explanatory meeting and the presentation materials, but no participant list or meeting minutes were retained. The presentation materials stated that, (i) a preliminary investigation would be conducted on houses at risk of damage from blasting operations, (ii) soundproof doors would be installed to control noise from blasting operations conducted both day and night, and (iii) a warning siren would sound immediately before blasting operations commenced. No records were found indicating that prior direct explanations or consultations regarding the blasting drilling method were provided to local residents. Based on the above photograph, it is estimated that approximately 50 people attended the explanatory meeting; however, the exact number of attendees and their breakdown (*i.e.*, the number of residents from areas potentially affected by the Project) is unknown. Furthermore, it could not be confirmed whether the aforementioned preliminary investigation was actually conducted or what its results were.

- Although this is not a session held directly for residents, a seminar on the tunnel design for the Project was conducted on April 17, 2018. Participants included representatives from the Ministry of Physical Infrastructure and Transport, the Department of Roads, the Ministry of Finance, the Roads Board Nepal, three officials from Chandragiri Municipality (including the Mayor), two officials from Dhunibesi Municipality (including the Mayor), JICA, and the Consultant. During the seminar, the Consultant provided a detailed explanation of the final tunnel design, including technical matters. One slide in the seminar materials stated: “Excavation Method (by blasting)” and “Excavation method is changed according to the ground classification.” This can be interpreted as an explanation that the drilling method was changed from the mechanical drilling method assumed during the EIA stage to a blasting method. Furthermore, the Operational Departments explained to us that they could not confirm whether explanatory meetings or discussions were held after the above explanatory meeting to share the Project details, including the tunnel drilling method, with residents from both Mayors.
- On February 12, 2020, a meeting titled “Proceedings of Technical Review meeting with Locals of ward-2 of Chandragiri Municipality” was held under the heading “Program schedule of Water supply system Brief Information.” According to the meeting minutes, a resident asked, “What is the rate of compensation of damages occurred during tunnel blasting?”; however, as this meeting was primarily held to explain the water supply system to be provided in Ward No. 2, Chandragiri Municipality, while the presentation materials by the Consultant included an outline of the Project and mitigation measures for water supply, they did not contain explanations regarding the tunnel drilling method or its impacts. According to the meeting minutes, attendees included the Mayor of Chandragiri

Municipality and the representative of Ward No. 2, Chandragiri Municipality. We confirmed that 38 participants are listed in the meeting minutes but could not confirm the composition of attendees (number of local residents from areas potentially affected by the Project).

- Records confirm that two prior notifications were issued regarding the commencement of blasting operations. The first notification, dated January 8, 2021, informed the representative of Ward No. 2, Chandragiri Municipality and the Mayor of Chandragiri Municipality that blasting work would commence on January 11, 2021. The second notification, dated February 5, 2021, informed the Mayor of Chandragiri Municipality, the representatives of Ward No. 1 and No. 2, Chandragiri Municipality, and the relevant Ward Committee for Chandragiri Municipality, stating that blasting work would commence on February 15, 2021.
- The Operational Departments explained that, according to the Department of Roads, during the consultation meetings with residents regarding water supply or house compensation, no complaints had been raised previously that the construction method had not been notified.
- On the other hand, the Mayor of Chandragiri Municipality and the representative of Ward No. 2, Chandragiri Municipality explained that residents were not fully aware of the adoption of the blasting method and that additional explanations to residents were limited.

Impact of Blasting Method

- The Contractor conducted surveys before and after the blasting. We confirmed that the report on the causes of damage to houses on the east side concluded that even if the damage were attributable to the Project, it would be caused by ground

subsidence due to groundwater decline, not by vibrations from the blasting.

Furthermore, we confirmed that while the terrain and geological survey and impact assessment conducted by an independent consultant from February to July 2024 did not specifically focus on the blasting method, it pointed out the possibility that impacts occurred due to ground subsidence caused by a decline in the groundwater level. Beyond these points, no other objective facts or materials related to whether the blasting operations were the cause of the damage claimed by the Requesters could be confirmed.

JICA's Response

- The Operational Departments stated that while no records exist of the Department of Roads consulting JICA specifically regarding the tunnel drilling method, the JICA Nepal office received the detailed design report from the Department of Roads, reviewed the design changes, and agreed to them.
- The Project was classified as Category B in January 2014, and no change in category classification has been made since then. Regarding changes during the detailed design phase, JICA's South Asia Department and JICA's Credit Risk Analysis and Environmental Review Department stated that no records exist confirming that the JICA Nepal office consulted them about adopting the blasting method or its impacts. Furthermore, the JICA Nepal office stated that no documents remain regarding a change in the category classification and that it understood the adoption of the blasting method did not significantly alter the EIA results.
- The Operational Departments confirmed with the Department of Roads that an explanatory meeting regarding the Project outline (including the implementation

details, such as drilling using the blasting method) was held after the detailed design phase. However, no records were found indicating that JICA had confirmed the status of explanations provided to residents at that time.

(V) Disclosure of EIA

(A) Summary of the Requesters' Allegations

- Although a public hearing meeting was held regarding the EIA for the Project, the EIA report for the Project has not been provided.

(B) Summary of the Operational Departments' Explanations

- According to the 2015 EIA Report, a consultation meeting was held on January 2, 2015, to share the project's progress and the contents of the draft EIA report. During this meeting, the draft EIA report was presented along with a concise explanation of the environmental impacts. Mitigation measures, their monitoring, and related costs were also explained.
- The EIA reports for the Project are disclosed to citizens upon request in accordance with the law.

(C) Facts Confirmed Through the Fact-Finding Investigation

- The Operational Departments explained that during JICA's project appraisal for the Project, discussions and agreements were held with the Department of Roads regarding Nepal's EIA formulation process (including consultation meetings and a 30-day comment period prior to EIA approval).

- At a public hearing meeting held on January 2, 2015, the draft EIA report was presented, and a brief explanation was given regarding the environmental impacts, mitigation measures, and monitoring.
- The Operational Departments also confirmed with the Department of Roads that a notice regarding the acceptance of citizen comments on the final draft EIA report was published in the local newspaper on July 14, 2015.
- The Department of Roads explained that the 2015 EIA Report was publicly available at libraries, accessible to all residents, and copies could be obtained for a fee. The Operational Departments stated that it confirmed the report remained publicly available at libraries after its approval in 2015 until September 2025, when an office of the Department of Roads was burned down during a protest activity against the Government of Nepal.
- Regarding the 2020 Updated EIA Report, the Operational Departments explained to us that while Nepalese law requires the implementation of a supplemental EIA if there is a major change in the impacts, including public notices to solicit opinions from the general public, in this case it does not fall under the circumstances requiring a supplemental EIA and it was prepared as an internal reference document (the Operational Departments received its draft version prepared in 2018). The department also explained to us that explanatory meetings with residents since April 2018 have included explanations based on the detailed design (including changes documented in the 2020 Updated EIA Report).

(VI) Grievance Redress Mechanism

(A) Summary of the Requesters' Allegations

- After the problems occurred, no meaningful consultations were held to effectively address the related complaints.
- Despite repeated complaints to the implementing agency and other relevant authorities, no clear and accessible grievance redress mechanism was provided.
- JICA did not engage directly with affected residents to resolve the Requesters' concerns.

(B) Summary of the Operational Departments' Explanations

- In Nepal, the Land Acquisition Act 2034 (1997) stipulates a grievance redress mechanism for land acquisition and resettlement, compensation, or rights. If no agreement is reached with the implementing body of the project, an appeal may be filed with the Compensation Determination Committee. If resolution is not achieved, the matter may be brought before the courts. Specific procedures are published on the website.

(C) Facts Confirmed Through the Fact-Finding Investigation

Grievance Redress System Response Flow

- The Department of Roads explains the response flow of the grievance redress system as follows: (i) if residents have any grievances regarding the Project, they may register such grievances with the Department of Roads headquarters, the Department of Roads office near the site, or the offices of the Consultant or the

Contractor (residents may also lodge grievances directly with the Director General of the Department of Roads or raise issues through politicians), (ii) the registered grievances are reviewed by the Department of Roads' grievance-handling officer, who then requests the responsible department of the Department of Roads or the Project office to consider an appropriate response, (iii) for grievances to be addressed by the Department of Roads and the project personnel, the responsible department of the Department of Roads or the project personnel will consider the response and reply to the residents, whereas for grievances beyond the authority of the Department of Roads and the project personnel, the Department of Roads will request relevant bodies—such as the Compensation Determination Committee, ministries including the Ministry of Water Supply, or local governments—to review the matter and will then respond to the residents with the outcome of that review, and (iv) if residents are dissatisfied with the response of the Department of Roads or other bodies, consultations will continue, and if no agreement is reached, residents will have the option of filing a lawsuit with the court.

- On the other hand, residents, including the Requesters, explain that discussions progress slowly, take a long time, or get passed around without producing results.

Consultation Meeting with Residents Regarding the Issue

- The Operational Departments explained that JICA has identified the following as protest activities from residents regarding issues such as water loss and damage to houses, and the history of consultations with residents. They also explained that regarding the response policy for the Water Supply Project, consultation meetings with residents have been held repeatedly since the survey of water resources mapping in March 2018.

March 20, 2022	Consultation meeting regarding the review of the Water Supply Project. The implementing agency explained matters such as the drilling of additional wells. Furthermore, in response to residents' requests, an agreement was reached to establish a system for supplying water using tanks of the necessary capacity.
April 11, 2022	Residents' protest activities (throwing stones at the Consultant's office), construction suspended.
April 17, 2022	Consultation meeting among the Department of Roads, Chandragiri Municipality, and residents. Installation of water tanks and additional well drilling were reconfirmed.
June 26, 2023	Consultation meeting among the Minister of Physical Infrastructure and Transport, residents, and project personnel regarding concerns over damage to houses.
December 19, 2023	Consultation meeting with residents regarding water supply. Residents pointed out insufficient water supply from the second well, raising the issue of the need for additional wells.
February 18, 2024	Residents' protest activities; construction suspended.
March 18, 2024	Consultation meeting among the Department of Roads, Chandragiri Municipality, and residents.
June 7, 2024	Consultation meeting with residents regarding additional survey results concerning compensation for land and buildings.
September 1, 2024	Residents' protest activities, construction suspended.

September 5, 2024	Consultation meeting between the Department of Roads and residents.
November 24, 2024	Residents' protest activities, construction suspended.
December 4, 2024	Department of Roads and consultation meeting.
March 11, 2025	A letter from residents requested the continuation of the Water Supply Project and the free of charge water supply after project completion. In response, project personnel informed residents that they had requested the Department of Roads to submit a budget application to the Ministry of Water Supply for the Water Supply Project. They also explained that continuing the free of charge water supply would be difficult because the facilities based on this project would be transferred to Chandragiri Municipality after project completion. They further stated they would continue dialogue as necessary.
March 16, 2025	Residents' protest activities, construction suspended.
April 19, 2025	Residents' protest activities (held at night in front of the Contractor's lodgings, with torches).
April 24, 2025	Consultation meeting between the Mayor of Chandragiri Municipality and residents.

- The Mayor of Chandragiri Municipality explained that not all affected residents were able to participate in the consultation meetings or receive detailed information.
- According to the Project Director's Report, in response to residents' complaints and protest activities regarding cracks in houses, the actions taken in the Project

were as follows. It is also noted that, due to residents’ protest activities, the construction works were suspended three times in 2023.

2020 / 2021	“claims that cracks occurred in houses located in areas including Toti Tole of Wards Nos. 1, 2, and 3 of Chandragiri Municipality.”
	“the contractor was requested, based on the claims, to promptly carry out repairs and other remedial works, and such repairs/remedial works were performed for approximately 20 houses.”
January 5, 2023	“because many local residents were not satisfied with the repairs and other remedial works that had been carried out, a request was made to the Department of Urban Development and Building Construction by letter dated January 5, 2023 to conduct an investigation, under the Project, into the cracks occurring in houses.”
May 15, 2023	“the investigation report prepared on April 21, 2023 was received under an official document dated May 15, 2023.”
	“in the meantime, all construction works on the eastern portal side of the tunnel were suspended for approximately two days by local residents on the grounds that no investigation into the damage to houses had been conducted.”
	“consultations were held with local residents on May 15, 2023, and an agreement was reached that an investigation report on housing damage would be provided to the community within three days, and if the report’s contents were not satisfactory, the necessary procedures would be initiated within 15 days to conduct a full inspection of all houses; the construction work was then resumed.”

June 14, 2023	“all construction near the east portal was suspended due to the failure to conduct residential surveys and provide compensation.”
June 15, 2023	“consultations and agreement were reached with the consultant of the Project regarding the completion of housing inspections and the provision of a report within approximately 20 to 25 days, and construction resumed.”
August 15, 2023	“local residents submitted requests for compensation for housing damage, a “one household, one drinking water supply” arrangement, construction of local roads, mitigation of noise pollution, resolution of the drinking water issue, and the provision of employment opportunities for local residents.”
	“consultations were held with local residents, and an agreement was reached to complete the building survey within 45 days, implement noise mitigation measures, and meet the requests related to the tunnel construction, and construction work was resumed.”

JICA Response

- During the review process of the Project, JICA agreed with the Department of Roads that the Department of Roads, the Consultant, and the Contractor would hold ongoing discussions to mitigate opposition to the Project from residents.
- The Operational Departments, upon becoming aware of issues arising with residents, have endeavored to gather information from the Department of Roads and the Ministry of Physical Infrastructure and Transport through routine project supervision, and have requested the continuation of appropriate dialogue with residents and prompt responses.

- The Consultant and the Contractor explained that they regularly reported or consulted with the JICA Nepal office regarding issues such as demonstrations by residents. The Department of Roads also explained that it held meetings with JICA approximately once a month to report on project progress and issues with residents, held more frequent meetings when problems arose, and maintained close communications with the JICA Nepal office regarding solutions when demonstrations occurred, while the records could not have been confirmed.
- According to the Operational Departments, JICA’s main requests were as follows.

April 2022	<p>On April 11, 2022, residents dissatisfied with the water supply response staged a protest activity involving stone-throwing at an office of the Project. Consequently, the JICA Nepal office repeatedly confirmed the situation with the Department of Roads and expressed concern about the incident, requesting the safety of project personnel be ensured. Subsequently, JICA continued to monitor the status of the consultation meetings and the implementation of water supply via water tankers, urging appropriate dialogue and an early resolution.</p> <p>Additionally, following a consultation meeting on the 17th of the same month among residents, the Department of Roads, and Chandragiri Municipality, JICA conducted interviews regarding the meeting’s outcomes.</p>
June 7, 2022	<p>The Senior Representative of the JICA Nepal office requested the Acting Director of the Department of Roads to address residents’ demands, ensure the safety of project personnel, and implement the project smoothly. A similar request was also made on August 16, 2022 and on July 21, 2023.</p>
March 7, 2024	<p>The Senior Vice President of JICA in charge of South Asia and the Vice Minister of the Ministry of Physical</p>

	<p>Infrastructure and Transport held a meeting. The Senior Vice President of JICA in charge of South Asia received an explanation regarding consultations and responses to residents in connection with the protest activities that began on February 18, 2024 and requested measures to resume construction. At this time, the Secretary of the Ministry of Physical Infrastructure and Transport explained that dialogue with residents was ongoing to achieve an early resolution, that geological surveys concerning house damage had commenced in response to residents' requests, and that instructions had been issued by the Minister of Physical Infrastructure and Transport to address the situation promptly.</p>
April 10, 2024	<p>In response to ongoing protest activities by residents, the Chief Representative of the JICA Nepal office met with the Director General of the Department of Roads. The meeting involved hearing the Department of Roads' response status and requesting an early resolution. The Department of Roads explained that a consultation meeting with residents had been held on March 18, 2024; that the survey concerning house damage was approximately 50% complete; and that they had promised residents they would consider additional compensation based on the survey results. Regarding the request for continued free of charge water supply, it was explained that a response and consideration were necessary while consulting with the Ministry of Water Supply and local governments.</p>
July 2024	<p>The Director of the South Asia II Division, JICA South Asia Department, reiterated the request for appropriate dialogue with residents and ensuring safety during discussions with the Department of Roads.</p>
November 24, 2024	<p>Following protest activities by residents on November 24, the JICA Nepal office requested the Department of</p>

	Roads to complete compensation payments for damaged houses at an early date.
December 6, 2024	The Director General of JICA's South Asia Department expressed concern to the Secretary of the Ministry of Physical Infrastructure and Transport regarding the impact of protest activities by residents on project progress and requested that explanations and coordination be provided to residents.
April 23, 2025	Following protest activities by residents on April 19, the Senior Vice President of JICA in charge of South Asia requested the Chief Secretary of Nepal, the Secretary of the Ministry of Finance, and the Minister of Physical Infrastructure and Transport to continue dialogue with residents and ensure the safety of construction personnel.
July 1, 2025	The JICA Nepal office received a letter from resident representatives (this was the first time the Requesters directly requested JICA's response). On the same day, the JICA Nepal office held a meeting with the Department of Roads.
July 4, 2025	The JICA Nepal office requested the Department of Roads in writing to confirm the status of the residents' requests. A response was received on July 11.
July 25, 2025	The Chief Representative of the JICA Nepal office sent a reply letter to the residents' representatives. The letter explained that JICA had requested ongoing dialogue and appropriate action from the Department of Roads and other project-related agencies, and promised to carefully and continuously monitor the implementing agency's actions. Prior to sending this reply letter, the JICA Nepal office had also shared updates on the progress of communications between JICA and the Department of

	Roads with the resident representatives via telephone on an ongoing basis.
August 4, 2025	The Chief Representative of the JICA Nepal office met with the Director General of the Department of Roads. They confirmed the status of the consultation meetings with residents and future actions, and requested an early resolution.

SECTION 3: DETERMINATION OF WHETHER OR NOT JICA IS IN NON-COMPLIANCE WITH THE GUIDELINES BASED ON THE FINDINGS OF THE INVESTIGATION PERTAINING COMPLIANCE OR NON-COMPLIANCE WITH THE GUIDELINES

(1) Loss of Drinking Water

- We found that the Project affected the water sources, and that approximately 300 to 500 households were impacted by reduced water volumes from those water sources.
- The possibility that the Project could affect water sources had been anticipated since the preparatory survey and the EIA stage, and the 2015 EIA Report also pointed out the need to provide alternative water sources. Accordingly, it was planned that the impacts on water sources would be monitored through the groundwater condition survey, and that the development of a water supply system—including construction of wells and related facilities—was to be completed by November 2020, before tunnel excavation commenced. It was also explained to the residents, to some extent, at the EIA stage that alternative measures would be taken if the impacts on water sources occurred, and the residents were also informed of the plan to develop the water supply system.
- However, development of the water supply system was delayed, and problems arose in that the wells drilled under the initial plan of the Water Supply Project which did not provide sufficient water. As a result, water was supplied by water tankers in response to the residents' proposals, and additional wells were drilled. After the third well began providing sufficient water, the necessary works for supplying water from the well were finally completed in June 2024. With respect

to the current water supply situation, it is reported that a pumping capacity of 15 liters per second has been secured; however, the Requesters and other residents point out that, whereas water was previously supplied at all times, water is now available only for about 45 minutes to one hour per day, and it is therefore difficult to say that the situation has returned to the pre-Project level. In addition, while Chandragiri Municipality and the Department of Roads have expressed their view that it would be difficult to continue to supply water free of charge after the completion of the Project, and the transfer of the water supply facilities to Chandragiri Municipality. However, the residents have not accepted the view of the Municipality and the Department of Roads to make them pay for water use fees.

- It has also been noted that multiple COVID-19 lockdowns between 2020 and 2021 (for example, from March to July 2020 and from April to September 2021), as well as flooding in the Project area, hindered development of the water supply system.
- The Lifting Project—to pump up and supply water discharged from the western portal of the tunnel through additional works—is currently under consideration, however, the Government of Nepal has not specified a completion timeline.
- JICA had been informed of the impacts on water sources and progress updates, including delays in developing the water supply system by the monitoring reports, and also obtained information from the Department of Roads, the Consultant, and the Contractor as necessary. When the problems arose with the water supply under the initial plan of the Water Supply Project, JICA confirmed with the Department of Roads that alternative measures would be implemented and requested a prompt response. When the residents raised complaints or demands in or after 2022, JICA

confirmed with the Department of Roads the relevant facts and whether improvement measures were being taken, and when residents staged protest activities, JICA requested that the Department of Roads continue appropriate dialogues with the residents and pursue an early resolution. However, although the Project’s impacts involved drinking water and irrigation water—both essential to sustaining life and agriculture—JICA did not provide any particular guidance beyond the above confirmations and requests, even though the implementing agency’s response was largely reactive and taken only after the residents complained that water sources had “decreased” or “dried up,” and the residents’ opinions were not reflected. Moreover, although JICA repeatedly requested continued appropriate dialogues and early resolution in response to residents’ protest activities and construction suspension, the residents continued to protest and repeatedly suspended the construction thereafter (for example, to the extent known to JICA, construction was suspended due to the protest activities three times in 2024), indicating that residents’ dissatisfaction persisted.

- Based on the foregoing:
 - It is acknowledged that, while wells were drilled to supply water to the area based on the survey of water resources mapping conducted from March 2018, an adequate water supply was not provided during the period from the third quarter of 2021—when a decline (to nearly drying up) in the water level of the first well was reported through the monitoring report of 3rd quarter in 2021—until June 2024, when drilling of the third well and the series of facilities constituting the water supply system were completed.
 - In light of the prevailing social conditions at that time, certain force majeure factors—such as COVID-19 lockdowns and flooding—should be taken into

account, however, during the above period, only emergency water supply by water tankers was provided, and the Project Director's Report indicates that, compared to the water volume estimated under the original water supply plan, adequate water supply was not provided.

- In general, it is not easy to predict groundwater reserves and behaviors, and where a drilled well fails to secure sufficient water supply, it is necessary to consider alternative measures of water supply. In this respect, it is assessed that the Project did not sufficiently consider such alternative measures at the planning stage of the water supply program.
- Accordingly, with respect to the examination of compensation measures required when impacts cannot be avoided by any of the minimization and reduction of impacts—as set out in paragraph 1 of “Examination of Measures” section in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines—confirmation with the Project Proponents was insufficient. We are of the view that this constitutes non-compliance with the Guidelines.
- In relation to the above, “water regime and water use” are included among the monitoring survey items for the planning/construction stage, however, at least in the monitoring reports prepared for the period from the third quarter of 2020 to the second quarter of 2021, the survey results for these items were not included, and we could not confirm any record indicating that JICA requested the implementing agency to report such information.
- After completion of the water supply system in June 2024, a certain level of water supply has been provided, however, compared to the pre-Project

situation, certain restrictions remain on water use in the area. Because groundwater that originally flowed within the area is being discharged to the adjacent western area, it is strongly requested that support will be provided—through coordination with relevant agencies and local organizations—for the Lifting Project, which is being considered to return this water to the eastern area.

(2) Loss of Irrigation Water and Loss of Livelihoods

- It is acknowledged that the Project affected water sources.
- With respect to compensation for crop losses resulting from reduced irrigation water, the Government of Nepal's response differed depending on whether the formal declaration for the farmland use with its registration has been made.
- The Department of Roads explained to residents that, where residents use water from sources expected to be affected by the Project for agricultural purposes, the Department of Roads would take measures such as compensation if the residents register their land as farmland use with its registration. In fact, when farmers sought compensation, an investigation was conducted by an independent consultant, as a result of which compensation for three farming households was approved and paid.
- However, although explanations regarding compensation were provided, it appears that, except for the above households, compensation for losses of irrigation water has not been provided because the residents have not registered their land as farmland. This may be attributable in part to the fact that, if the residents register their land as farmland, they may not be able to subdivide and sell the land, build houses on it, or conduct other related activities.

- As measures to address the irrigation water issue, construction of alternative irrigation facilities and the Lifting Project are currently under consideration, however, the Government of Nepal has not specified a completion timeline.
- As a livelihood-related measure, the 2015 EIA Report requested that the Project promote employment of local residents, and it appears that a certain number of local residents have in fact been employed under the Project, however, we could not confirm the detailed information—including the extent to which residents from the areas affected by the drying up of water sources have been employed.
- Through the Project progress reports, JICA has monitored the status including losses caused by the Project, and compensation for such losses. With respect to compensation for households identified through the survey of water resources mapping as use for agricultural purposes, water from sources predicted to decline their water levels, JICA inquired with the Department of Roads and confirmed that the Department of Roads explained it would take measures such as compensation if the residents formally declared the farmland use with its registration, but, other than the aforementioned three farming households that no such formal declaration for farmland use with its registration was made. With respect to the Lifting Project, because it was included among the residents' demands in their protest activities, JICA also confirmed the relevant facts with the project personnel, including the Department of Roads. In addition, although residents' employment status was not an item for monitoring, JICA confirmed with the Department of Roads and the Consultant the status of employment of the local residents.
- Based on the foregoing:

- A mechanism is in place to provide compensation if local residents register their land as farmland. In this respect, in relation to paragraph 1 of “Consideration of Measures” section in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines, it is considered that at least compensation measures in the form of monetary compensation have been contemplated. Accordingly, we are unable to conclude that there was a clear non-compliance with the Guidelines on this point.
- However, given that (as indicated in the EIA in 2015) farmland is widespread in the area and that farmland registrations would impose restrictions on land use, and taking into account the social circumstances in which residents are hesitant to make such registrations, it is considered that compensation measures in the form of monetary compensation alone would not be sufficient. Therefore, it is necessary to re-assess the status of farmland use and irrigation water in the area and to provide support to restore their conditions to the extent possible, to those existing prior to Project implementation.
- To achieve the above, as with the response to the loss of drinking water discussed in the preceding section, because groundwater that originally flowed within the area is being discharged to the adjacent western area, it is strongly requested that support will be provided—through coordination with relevant agencies and local organizations—for the Lifting Project, which is being considered to return this water to the eastern area.

(3) Damage to Houses and Sinkhole Formation

- It is acknowledged that there is damage to houses and the presence of sinkholes, and that it cannot be ruled out that at least some of such damage occurred as a result of the Project. However, as described in (4) below, it is difficult to determine whether such damage was caused by the adoption of the blasting method.
- In the EIA, impacts on houses in areas located more than 500 meters from the tunnel portal do not appear to have been anticipated (although it appears that monitoring was conducted for certain houses that were identified during the implementation-stage surveys as potentially susceptible to cracking). However, following residents' protest activities and compensation demands in 2023, the project personnel held consultations with residents, and, based on decisions made at those consultations, an independent consultant conducted topographical and geological surveys and an impact assessment. As a result of those surveys and assessment, full compensation or partial compensation was approved for certain houses; at present, partial payments of the full compensation have been made, and, with respect to partial compensation, procedures to determine compensation amounts are underway. It is also understood that newly submitted compensation claims for other houses are currently under review.
- JICA had obtained information regarding losses to houses and related compensation, received the survey results used in determining eligibility for compensation, and is monitoring the progress of compensation amount decisions by the Compensation Determination Committee and payment by the Department of Roads. In addition, JICA has held regular progress discussions with the

Department of Roads and has requested, among other things, that compensation payments be completed at an early stage.

- Based on the foregoing:
 - Given that investigations into impacts on houses were conducted based on on-site investigations and that compensation is being advanced in accordance with the degree of damage, we conclude that JICA's response does not constitute a clear non-compliance with the JICA Guidelines.
 - However, the areas where partial damage to houses appears to have occurred after the Project works were implemented extend across the vicinity of the Project site. Accordingly, it is desirable to continue monitoring the status of compensation for house damage and to support the appropriate consideration of compensation measures under paragraph 1 of "Consideration of Measures" section in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines.

(4) Addition of Blasting Method, and Explanation to, and Consultation with, Residents

- In the Request, the Requesters assert, in substance, that local residents agreed to the Project on the condition that modern tunnel construction methods with less destructive impact would be used, but that, in fact, construction was carried out using blasting method, and that the adoption of blasting method was the primary cause of the alleged damage. However, as a result of the investigation, no objective facts or materials have been confirmed that demonstrate that the adoption of blasting method was a direct cause of the damage alleged by the Requesters. Because this issue involves technical evaluation, it is difficult to make

an analysis as to whether the adoption of blasting method can be regarded as the cause. Accordingly, in the following, the assessment of compliance or non-compliance with the Guidelines is made on the premise that it is unclear whether each alleged damage was caused by the adoption of blasting method, focusing instead on whether residents were provided with sufficient information and understood it, and whether social consensus was obtained.

- In general, in areas where the ground cover is more than two times the tunnel drilling diameter, noise and vibration impacts from blasting method are considered to occur unlikely (while areas with lower ground cover were subject to land acquisition). The 2020 Updated EIA Report, which assumes the use of blasting methods, does not address impacts from vibration or related mitigation measures, either.
- Blasting excavation methods were explained directly to residents at explanatory meeting with the residents held in December 2019, and nearly five years had passed since the public hearing on the 2015 EIA Report in January 2015; accordingly, it is acknowledged that residents' information was not necessarily up to date and that there was an information gap.
- Specifically, at the preparatory survey and the EIA stage, it was assumed that mechanical excavation would be adopted as the tunnel excavation method. However, in the detailed design carried out from 2017 and approved in April 2018, the tunnel route was changed due to ground conditions. Ground investigations revealed the presence of hard bedrock along the revised route, and as a result, after comprehensive consideration of geology, cost, and construction methods feasible on site, blasting method was added as an excavation method.

- Because the tunnel design was revised as a result of the detailed design, a seminar for government-related agencies, the Mayor of Chandragiri Municipality, the Mayor of Dhunibesi Municipality, and JICA was held in April 2018; however, it was not a seminar for residents. It could not be confirmed whether both Mayors shared with residents, after that seminar, the contents of the explanations given there, including the addition of blasting as an excavation method.
- The number of residents participating in the project explanatory meeting held in December 2019 was also limited. Thereafter, warning notices of the commencement of blasting works were issued twice to the Mayor of Chandragiri Municipality and ward representatives of Chandragiri Municipality; however, no consultations were held to explain the excavation method to residents or to obtain their understanding. In this manner, information was not shared directly by notifying residents as a whole in the potentially affected areas.
- In addition, because there was no sharing or updating of information with residents for approximately five years (excluding matters related to impacts on water sources), sufficient social acceptability was not formed, which led to residents' protest activities and, ultimately, obstruction of the works and temporary suspension.
- It has not been confirmed that the South Asia Department or the Credit Risk Analysis and Environmental Review Department of JICA received consultations from the JICA Nepal office regarding the addition of blasting method and its impacts. JICA confirmed with the Department of Roads that an explanatory meeting was held after the detailed design regarding the project outline, including the Project's implementation plan (including excavation by blasting method).

However, no record could be confirmed indicating that JICA verified, at that time, the status of explanations provided to residents.

- Based on the foregoing:
 - With respect to the addition of blasting as a tunnel construction method, it is assessed that no major change in terms of environmental and social considerations was recognized, and that at least minimum opportunities for explanation were provided to relevant parties and local residents; accordingly, there is insufficient evidence to conclude that there was a clear non-compliance with the Guidelines.
 - However, because information is extremely limited for assessing whether the opportunities for explanation—particularly to local residents—were sufficient, it is strongly recommended to confirm, in light of “Social Acceptability” section in Appendix 1 of the Guidelines, as referenced in Section 1.6.2 of the Guidelines, that sufficient consultations were conducted with stakeholders such as local residents.

(5) Disclosure of EIA

- In JICA’s appraisal of the Project, JICA discussed and agreed with the Department of Roads on the EIA preparation process, including resident consultations and the 30-day public comment period prior to approval of the EIA.
- In the course of the EIA process, the (draft) EIA report was presented at a public hearing, and notice inviting public comments on the final draft EIA report was published in local newspapers.

- The public hearing was reported in the 2015 EIA Report, and JICA also confirmed with the Department of Roads that notice inviting public comments had been issued.
- The 2015 EIA Report was also made available at libraries, and it is stated that all residents could access it and could obtain copies (for a fee).
- The 2020 Updated EIA Report was also prepared in light of the design changes in the detailed design; however, according to the Ministry of Physical Infrastructure and Transport, it is positioned as an internal reference document prepared by the Consultant.
- Based on the foregoing:
 - The 2015 EIA Report was disclosed in 2015 in accordance with the then-applicable system in the host country, and, in light of, among other things, Section 2.1 and paragraph 2 in “(2) Category B projects” of Section 3.2.1 of the Guidelines, we conclude that there was not a clear non-compliance with the Guidelines.

(6) Grievance Redress Mechanism

- With respect to the response flow of the grievance redress mechanism, residents were able to register grievances, and the Department of Roads had a framework under which, taking such grievances into account, it would consider responses in cooperation with the responsible department within the Department of Roads, the project personnel, and other ministries or local governments, as applicable.

- On the other hand, in fact, residents requested consultations to the Project office from time to time, and it appears that consultations with residents were often held in response.
- At the time of JICA’s appraisal of the Project, JICA agreed with the Department of Roads that, in order to mitigate opposition to the Project from residents, the Department of Roads, the Consultant, and the Contractor would conduct continuous consultations.
- JICA held regular meetings with the Department of Roads (and, when issues arose, more frequent meetings) and received reports regarding issues with residents. JICA also obtained information regarding issues with residents and demonstrations from the Minister of Physical Infrastructure and Transport, the Consultant, and the Contractor. When demonstrations occurred, JICA communicated closely with the Department of Roads regarding possible resolutions and also received consultations from the Consultant and the Contractor. In addition, on multiple occasions—such as after demonstrations occurred—JICA requested them to have appropriate dialogue with residents, to make early resolution, and/or to ensure the safety of persons involved in the works.
- Based on the foregoing:
 - Because the Project appears to have sought to respond to local residents’ grievances through multiple channels, it is assessed that, in light of, among other things, paragraph 3 in Section 3.2.2 of the Guidelines, we are unable to conclude that there was a clear non-compliance with the Guidelines.
 - However, because local residents staged protest activities on multiple occasions under the Project—and because protest activities recurred multiple

times even after JICA encouraged the implementing agency to take action— it is expected in the future that a better mechanism will be established for dialogue with residents and for grievance redress.

(7) Final Conclusion

As set forth above, based on the Request, the Examiners conducted broad reviews and investigations, and determined that there were deficiencies in the consideration of alternative measures at the planning stage of the water supply program based on the survey of water resources mapping conducted in March 2018, and that confirmation with the project proponents was insufficient with respect to the consideration of compensation measures required under paragraph 1 of “Consideration of Measures” section in Appendix 1, which is referred to in paragraph 2 of Section 1.6 (Requirements of project proponents etc.) of the Guidelines. We are of the view that this constituted non-compliance with the Guidelines during some periods mentioned the above.

On the other points, we are unable to conclude that there was a clear non-compliance with the Guidelines, however, a number of areas for improvement were identified, including support toward the realization of the Lifting Project to restore groundwater discharged to the area adjacent to the western side of the affected area back to the eastern side, as well as improvements relating to information disclosure, consultations with the local residents, and encouragement to the implementing agency to ensure the confirmation of monitoring results and any follow-up actions. These points are set out in Chapters 4 and 5.

CHAPTER 4: CURRENT STATUS ON THE ENCOURAGEMENT OF DIALOGUES

As discussed in Chapter 3, local residents have repeatedly staged protest activities in 2022, 2023, 2024, and 2025 in connection with the issues arising from the Project, including the loss of water and damage to their houses. It is acknowledged that, on each such occasion, JICA Headquarters and the JICA Nepal office—while also obtaining information from the Consultant and the Contractor, as necessary—requested the Department of Roads and other project-related agencies, to continue dialogues with the residents and to ensure the safety of personnel involved in the works. In response to these requests, consultation forums were convened between the Department of Roads and the local mayors, on the one hand, and the residents, on the other. In this respect, it can be assessed that JICA played a certain role in facilitating dialogues.

On the other hand, particularly with respect to the Water Supply Project, it commenced in November 2019 and was initially planned to be completed in November 2020. In fact, the development of the water supply facilities under the Water Supply Project was not actually completed until December 2021. Moreover, sufficient water was not supplied soon thereafter from the wells drilled under the Water Supply Project, and it became necessary to drill additional wells, among other measures. As a result, it took a further period of approximately three years, until June 2024, for the work necessary to supply water from the wells to finally be completed. In these respects, it appears that a gap arose between the residents' expectations based on the initial explanations and the actual progress of the Water Supply Project. The Requesters also request the authorities concerned for the continuation of free water supply even after the completion of the Project, however, they have not received a satisfactory response from the Department of Roads.

In addition, regarding the tunnel excavation method, at the explanatory meeting with

residents held in December 2019, the residents were informed of the Project including the use of blasting method. However, it is not clear if sufficient explanation was provided to the residents regarding the impacts of using blasting method. Therefore, the Requesters have come to suspect that the adoption of blasting method was the cause of the respective alleged damages.

In light of such dissatisfaction and concerns expressed by the Requesters and other residents, the above-described measures taken by JICA to promote dialogues are assessed to have achieved some effects, while there remains room for improvement in the following respects.

First, it is considered that the implementing agency in the host country should establish opportunities for regular meetings with local residents living around the tunnel alignment, including the Requesters. In particular, the area has a history of managing water use through a community-based organization as water source management committee. Taking this background into account, it is expected to build a better relationship by establishing continuing forums for dialogues between the implementing agency and local community organizations.

Second, it is expected to facilitate the dialogues among the relevant stakeholders toward the implementation of the Lifting Project to pump up and supply groundwater that is being discharged from the western portal. Based on the field survey, no particular technical issues were identified, and it was confirmed that the Government of Nepal and Chandragiri Municipality understood the need, and have been considering the Lifting Project to some degrees. At the same time, some issues were identified, including the budget allocation for its implementation and coordination with the local governments adjacent to Chandragiri Municipality and the residents on the western side. As discussed in the previous chapter, the Lifting Project is considered as the most reasonable measure to restore water use in the area to the status similar to that existed before the Tunnel Construction Project. Accordingly, support by JICA is expected, including support for establishing forums for dialogues among the

relevant stakeholders, toward implementation of the Project.

CHAPTER 5: EXAMINERS' RECOMMENDATIONS TO JICA

(1) PROMOTING COOPERATION IN A MANNER THAT FULLY CONSIDERS THE LIVES AND LIVELIHOODS OF LOCAL RESIDENTS AND IS ATTENTIVE TO AFFECTED RESIDENTS

Impacts on drinking water and irrigation were anticipated at an early stage and have, in fact, materialized in this Project. The countermeasure of establishing a water supply system was determined from the outset and was implemented, but it was delayed. With respect to a water supply project for drinking water as a compensation measure—which directly affects people's lives and health—the system should first be completed before the problems such as decreases in groundwater or drying up of well water arise, and only thereafter should the Project activities be commenced. For this Project, it is recommended that JICA request the implementing agency to continue monitoring and also to ensure there are no issues on the water supply system for affected residents for a certain period after the handover of the Project, and to confirm that such monitoring is being carried out.

(2) RESTORING ACCESS TO GROUNDWATER AND WATER SOURCES FOR DRINKING WATER AND IRRIGATION, AND WATER USE CHARGES

Access to the groundwater and water sources for drinking water and irrigation should, to the extent possible, be restored to the same level as before the construction of the Project. It is recommended that JICA continue confirming the progress and to engage, through dialogues, and provide necessary support, so that the “Water Lifting Project” planned by the implementing agency proceeds without delay.

In addition, regarding the introduction of the water fees related to the “Water Lifting Project”, and the Water Supply Project implemented pursuant to the MOU between the

Department of Roads and Chandragiri Municipality, taking into account the background that these water supply projects were required due to the Tunnel Construction Project, it is recommended that JICA confirm the progress of the consultation process both in “Water Lifting Project” and Water Supply Project, based on the continuing dialogues between the relevant government agencies and the residents concerned in order to realize them as sustainably operating water supply projects respectively with the consent of all the stakeholders concerned, and provide necessary advice to the relevant government agencies.

(3) IMPACTS ON IRRIGATION AND COMPENSATION FOR CROP LOSSES (INCLUDING COMPENSATION FOR LOSSES EVEN ON “NON-FARMLAND”)

The Department of Roads and the Department of Irrigation have stated that they have accepted and already addressed the compensation claims where losses occurred on the land where officially declared and registered as farmland. On the other hand, agricultural activities conducted on land where officially not declared, nor registered as farmland are included in the scope which the Guidelines need to consider if any adverse impacts on employment and means of livelihood occurred by the Project. Therefore, it is recommended that JICA request the implementing agency and other relevant agencies to consider measures to take care of these impacts, and also to confirm such measures to be taken by them. In addition, it is recommended that JICA request the implementing agency and other relevant agencies to ensure that such measures will be duly implemented.

(4) REVIEW AND REVISION OF MONITORING ITEMS BASED ON THE NEEDS, AND IMPROVEMENT OF FORMAT OF MONITORING REPORT

It is strongly recommended that JICA review and revise the monitoring items (i.e. any added items for monitoring) as needed with the special attention to the socio-economic

aspect of the project-affected residents through the regular monitoring although the scope and items for monitoring were agreed between JICA and relevant government agencies in the Minutes of Discussions. As the monitoring to be continued for the approximately next two years after the handover of the Project, it is strongly recommended that JICA discuss with the implementing agency the reporting format which draws an attention more easily from JICA staff who check the monitoring report to the risks in addition to the reporting of the data being monitored. In particular, regarding the monitoring items, for instance, some revisions in adding the headings such as “items/ activities which were different from the workplan”, or “items/issues which the Project urgently dealt with (or “items/issues which required urgent measures”)) are likely to draw more attention from JICA staff who are in charge of the Project management. Therefore, it is strongly recommended that JICA discuss the format and appropriate ways of reporting with the implementing agency.

**CHAPTER 6: LIST OF MAIN DOCUMENTS PRESENTING THE
RATIONALE FOR THE DECISIONS OF THE
EXAMINERS**

No.	Title of the Documents
1	Guidelines for Environmental and Social Considerations, JICA (April 2010)
2	Objection Procedures based on the Guidelines for Environmental and Social Considerations, JICA (April 2010)
3	The Request (August 7, 2025) (including 6 annexes)
4	Presentation materials by the Operational Departments
5	Preparatory Survey for Nagdhunga Pass Tunnel Construction Project in Nepal Final Report (March 2015)
6	Environmental Impact Assessment (EIA) of Nagdhunga Tunnel Construction Project (December 2015)
7	Environmental Monitoring Report (Quarterly, September 2019 to March 2025)
8	Ground Water Survey in the vicinity of the proposed tunnel alignment (January 2021)
9	Report on Issues Arising from the Nagdhunga Tunnel Road Construction and Recommendations for Resolution (October 11, 2023) (Prepared by the Project Director.)
10	Letter from the representative of Ward No. 2, Chandragiri Municipality (January 2, 2022)
11	Response from the representative of Ward No. 2, Chandragiri Municipality (December 2, 2025)
12	Updated EIA Study of Nagdhunga Tunnel Road Project (January 2020)
13	Survey of Water Resources Mapping of Tunnel Alignment Vicinity (draft) (March 2018)
14	Contract letter between Nagadhunga Tunnel Construction Project Road Department, and Chandragiri Municipality (March 2020)
15	Record of the February 12, 2020 resident meeting (February 16, 2020)
16	Minutes of Discussion (November 13, 2014) and Environmental Monitoring Plan attached thereto
17	Study on the Influence of Tunnel Construction and Provide Mitigation Measure Final Report (July 2024)
18	Written Response from the Mayor of Municipality (Received in December 2025)
19	Report: Field Investigation, Damage Assessment Report, Repair System Recommendation and Preparation of Cost Estimate for Repair Works of Residential Building at Ward No. 1,2, 3 Toti Tole, Chandragiri Municipality (Report on the Survey

	Conducted from March 2023 to April 2024)
20	Record of Proceedings for Seminar on Final Outcome of Tunnel Design for Nagdhunga Tunnel Construction Project (record of seminar held on April 17, 2018)
21	Presentation materials and photographs from the project explanatory meeting held on December 23, 2019
22	Minutes of the technical review meeting with residents of Ward No. 2, Municipality held on February 12, 2020 (February 16, 2020)
23	Notice Regarding the Commencement of Blasting Work (January 8, 2021)
24	Notice regarding request for necessary cooperation due to upcoming blasting work (February 5, 2021)
25	Report on Physical Survey of Existing Building around East and West Portal (December 2, 2019)
26	Study of the cause of house damage in East side (February 2022)
27	JICA's letter to the Nagdhunga Sisne Khola Tunnel Road Affected Area Drinking Water Consumer Committee (July 25, 2025)
28	Minutes of Discussions between JICA and the Government of Nepal (November 13, 2014)

Annexes

- Annex 1 Objection Request (the Original Prepared in English)
- Annex 2 Results of the Preliminary Investigation
- Annex 3 Summary of the Interviews Conducted for the Investigation of the Alleged
Facts Concerning the Request After the Decision to Commence the Process
- Annex 4 Outline of the Nagdhunga Tunnel Construction Project

Request regarding JICA's non-compliance with its Guidelines for Environmental and Social Considerations in Nagdhunga Tunnel Construction Project in Nepal

Date: 7 August 2025

To: The Examiners for the JICA Guidelines
Japan International Cooperation Agency (JICA)
CC: Advisory Committee for Environmental and Social Considerations

Names of the Requesters:

On behalf of the Nagdhunga Sisne Khola Tunnel Affected Area Drinking Water Consumers Committee -

Gopi Surkheti

Krishna Bahadur Subedi

Ram Prasad Bhurtel

Sarita Sigdel

Contact information of the Requesters:

[Redacted contact information]

Our names should be kept confidential and not passed to the Project Proponents, government agencies, or JICA's Operational Departments.

No

1. Project with respect to which the objections are submitted

- Country name: Nepal
- Project name: Nagdhunga Tunnel Construction Project
- Project site: Central Development Region, Bagmati Zone, Kathmandu, Dhading Districts
- Project outline:

This complaint concerns the Nagdhunga Tunnel Construction Project, being implemented with a loan from the Japan International Cooperation Agency (JICA)¹, in collaboration with the Government of Nepal through the Department of Roads under the Ministry of Physical Infrastructure and Transport. The project involves the construction of a 2.68 km road tunnel connecting Nagdhunga (Kathmandu) and Sisne Khola (Dhading)², with the stated goal of improving traffic congestion and enhancing transportation infrastructure in the region. Construction began in October 2019 and is ongoing. We, the affected individuals, have reported issues such as depletion of water sources for drinking water and irrigation, construction-related damages to homes and farmlands, and disruption of local livelihoods and economy. These impacts contravene the 2010 JICA's Guidelines for Environmental and Social Considerations,

¹ See

https://www.jica.go.jp/english/about/policy/environment/id/asia/south/a_b fi/nepal/c8h0vm000090s28i.htm

, Also see https://www2.jica.go.jp/yen_loan/pdf/en/6822/20161222_01.pdf

² See <https://kathmandupost.com/national/2024/04/15/nepal-s-first-tunnel-road-makes-final-breakthrough>

including those concerning information disclosure and consultation with local stakeholders, environmental protection, social acceptability and involuntary resettlement. Despite repeated efforts to raise concerns with the local and national authorities and project contractors as well as with the JICA Nepal office, we have not received satisfactory responses or remedies. Thus, we, more than 650 households of Kathmandu district's Chandragiri Municipality Ward No. 2 (formerly Badbhanjyang VDC Wards 1, 2, 3, and 5) associated in the Nagdhunga Sisne Khola Tunnel Affected Area Drinking Water Consumers Committee, submit this complaint to request that the Examiners investigate compliance of the project with the JICA Guidelines and mediate to resolve disputes for ensuring remedies to the affected communities.

2. Substantial damage actually incurred or likely to be incurred by the Requesters as a result of JICA's non-compliance with the Guidelines:

Due to the Nagdhunga Tunnel Construction Project, we have been experiencing substantial harms. As a result of the tunnel construction, more than two dozen natural drinking water sources which our communities have depended on for generations, have dried up. In addition, key water sources used for irrigation have also dried up, severely affecting local agriculture and livelihoods. Over 135 houses have developed structural cracks or suffered damage, and sinkholes have appeared in our lands. Although the Environmental Impact Assessment (EIA) process included a public hearing in which local residents conditionally agreed to the project based on assurances that modern, less destructive tunneling technologies would be used, the actual construction was carried out using drilling and blasting methods. We believe these methods are the primary cause of the damage now affecting our communities. The situation has been particularly severe along the affected stretch from Basandol to Nagdhunga, where the water crisis has intensified and the responsible authorities, including the project implementing agencies, have shown indifference toward addressing the harms. These impacts represent substantial and ongoing damage to our health, safety, housing, and livelihoods, and further harms are likely unless corrective actions are taken.

3. Resolution desired by the Requesters:

As we have demanded with the concerned authorities and the JICA Nepal office, we seek the following resolution:

1. Drinking Water Restoration

Due to the complete drying up of traditional water sources and wells caused by tunnel construction, the project must make adequate and long-term arrangements for safe drinking water in the affected areas. One practical solution for that could be to divert and distribute the water currently flowing in the tunnel's western portal in our communities. It must also be guaranteed that the project or the concerned implementing agency will cover all operational and maintenance costs for this water supply system, even after the project construction is completed.

2. Alternative Irrigation Measures

As irrigation sources have also been lost with the drying up of water sources, alternative systems must be developed to ensure that cultivable land in the affected area remains productive. This could include identifying new water sources or providing technical and financial support for irrigation solutions.

3. Compensation for Damages to Houses and Lands

More than 135 houses have developed cracks or been structurally damaged, and sinkholes have appeared in lands in several locations. We request a full assessment of the damages followed by fair and timely compensation for affected houses and lands

4. Local Employment Opportunities

Residents of the affected area should be given priority for employment opportunities during the operational phase of the tunnel. This would help to restore livelihoods that have been disrupted and contribute to community recovery.

We request that the Examiners put equal focus on both compliance review and dispute resolution measures to facilitate corrective actions so that our above-mentioned demands are addressed and ongoing harms caused by the project are remedied.

4. Requesters' efforts to engage with the Project Proponents (including grievance redress mechanisms):

Since April 2022, we, the residents of the project affected areas, have made sustained efforts to raise concerns and resolve the serious impacts caused by the Nagdhunga Tunnel Construction Project. Initial attempts included public protests, which escalated into clashes with police and damage to the consultant's office, reflecting the deep frustration of communities whose water sources had dried up. Following this, a dialogue was held at the District Administration Office, Kathmandu, where it was agreed that a water supply project would be immediately initiated, funded by the project, to address the urgent needs of affected households. However, instead of implementing this agreement, the project distributed water by tanker services and reportedly engaged in inflated billing practices, rather than investing in sustainable water infrastructure.

Later, the then Prime Minister of Nepal directed that a report be submitted within a week to address the issues of the affected communities. The project's report admitted that it could not provide a long-term water solution due to its limited scope and recommended additional drinking water and irrigation projects. However, those recommendations were not acted upon. As a result, on 27 September 2023 (10 Asoj 2080 BS), further protests resumed when the promised third deep boring (borewell drilling) for water extraction was not initiated. Although a small amount of water is now being supplied from that borewell, it remains inadequate, and the issues of irrigation loss and housing damage remain unaddressed.

After years of struggle of the affected communities, on 29 January 2024 (15 Magh 2080 BS), an agreement was negotiated after rounds of discussions with the then Minister of Physical Infrastructure and Transport and the Deputy Prime Minister. Based on this, the Secretary of the Ministry of Physical Infrastructure and Transport submitted a proposal to the Council of Ministers on 29 July 2024 (14 Shrawan 2081 BS), affirming that the demands of the affected residents were valid. The Council of Ministers approved the proposal on 13 December 2024 (28 Mangsir 2081) and instructed the Ministry to implement it. Despite this formal decision, no substantial progress has been made while the project construction has continued ignoring the commitments made with the affected communities. In response, we initiated a peaceful protest movement on 16 March 2025 (3 Chaitra 2081 BS) to demand implementation of the government's own decision for addressing our demands.

Unfortunately, instead of honoring these agreements and resolving the long-standing grievances, the project authorities and concerned bodies proceeded with construction under heavy security

presence and suppressed the community's peaceful protests.³ At present, the construction has reached its final stage without addressing our legitimate and unresolved issues.

5. Requesters' efforts to engage with JICA's Operational Departments:

On 1 July 2025, we submitted a petition (sent along with this request) with our above-mentioned demands to the JICA's Nepal Office requesting JICA to address them or get them addressed by the authorities. We asserted that the project construction without addressing our legitimate demands would not comply with the JICA Guidelines. We had strongly called on JICA to take concrete steps to address our demands within a week. However, there has been no response from the country office as of yet.

Representatives of the project contractor, the Japanese company Hazama-Ando Corporation, have also been present in our various meetings with the concerned authorities, including at the ministry level. However, they have not made any independent effort to address our concerns.

6. If the Request is submitted by a representative, explanation on the necessity for submitting the Request through the representative, with an attachment of evidence that the representative has been duly authorized by the Requesters:

This request is submitted by the representatives of the Nagdhunga Sisne Khola Tunnel Affected Area Drinking Water Consumers Committee, which is composed of the project affected households of Chandragiri Municipality Ward No. 2 in Kathmandu district at the eastern portal of the tunnel. We are sending along the relevant minutes of a gathering of the Committee on 14 June 2025 authorizing those representatives to file this request.

We have also authorized Prabindra Shakya (shakya.prbn@gmail.com) to advise us in relation to this Request, including to help us during the compliance investigation and dispute resolution processes of the Examiners. We ask that the advisor is copied in all communications from the Examiners.

Formal communications about the complaint should be sent in both English and Nepali. Additionally, we urge you to conduct in-person information sharing with us as the affected communities in our area, when releasing key documents related to this request.

7. Provision of the JICA Guidelines breached by JICA and facts constituting the JICA's noncompliance, as alleged by the Requesters.

The following provisions of the JICA Guidelines for Environmental and Social Considerations have been violated in the Nagdhunga Tunnel Construction Project:

- **Information Disclosure and Community Consultation:** While public hearings for an Environmental Impact Assessment (EIA) for the project were conducted, we have not been provided a copy of the EIA report and have not been fully informed about the drilling and blasting methods used, and consultations have not been meaningful once problems emerged towards effectively addressing our grievances. These are violations of requirements in 5. Social Acceptability and 7. Involuntary Resettlement, Appendix 1, JICA Guidelines (April 2010).

³ See <https://kathmandupost.com/valley/2025/03/16/locals-obstruct-nagdhunga-sisnekhola-tunnelway-construction-again>, Also, see <https://www.youtube.com/watch?v=EwPJGJFofCk>

- **Natural Environment:** The project caused the drying up of over two dozen natural water sources used for drinking and irrigation, without taking adequate steps to prevent, minimize, or restore the environmental damage and loss of those sources for our drinking water and irrigation. These are violations of requirements in 7. Involuntary Resettlement, Appendix 1, JICA Guidelines (April 2010).
- **Involuntary Resettlement:** More than 135 houses have developed cracks and been damaged while sinkholes have also appeared on our lands due to tunnel construction. Yet, no proper technical assessment and fair or adequate compensation has been provided to the affected households. These are violations of requirements in 7. Involuntary Resettlement, Appendix 1, JICA Guidelines (April 2010).
- **Grievance Mechanism:** Despite repeated attempts to raise grievances with the concerned authorities and the project, they have not provided a clear or accessible process for redress to us, nor did JICA engage directly with the affected people to resolve our concerns. These are violations of requirements in 7. Involuntary Resettlement, Appendix 1, JICA Guidelines (April 2010).

8. Cause-and-effect relationship between JICA's non-compliance with the JICA Guidelines and the damage.

There is a direct cause-and-effect relationship between JICA's non-compliance with its Environmental and Social Guidelines and the damage suffered by our community. If JICA had ensured proper implementation of its Guidelines, particularly regarding information disclosure, environmental protection, and effective grievance redress, the serious harms we have experienced could have been avoided or at least minimized and managed.

For example, the project's use of drilling and blasting methods caused the drying up of over two dozen water sources and structural damage to more than 135 houses. If JICA had adequately monitored project activities and enforced its Guidelines' requirements on environmental protection and involuntary resettlement, it would have identified these risks early and required the project to use less harmful technologies or take preventative measures.

Similarly, if JICA had ensured that local communities were fully informed and involved in decisions about tunneling methods—as required by the Guidelines on consultations with stakeholder, residents could have raised objections before the harmful construction methods were used. Furthermore, JICA's failure to establish or oversee an effective grievance redress system meant that our repeated complaints went unheard, allowing the damage to continue and worsen.

Therefore, the harm we suffered is not just the result of the project itself, but of JICA's failure to enforce its own policies that are designed to prevent exactly this type of impact.

The Requesters hereby certify that all the matters described herein are true and correct.

Documents attached (all in Nepali language):

1. *Petition submitted by the Nagdhunga Sisne Khola Tunnel Affected Area Drinking Water Consumers Committee to the JICA Nepal office on 1 July 2025*
2. *Minutes of the gathering of the Committee dated 14 June 2025 (31 Jestha 2082 BS)*
3. *Letter received from the project regarding addressing the demands of the Committee and enclosed documents dated 8 April 2025*
4. *Letter received from the project regarding addressing the demands of the Committee and enclosed documents dated 27 March 2025*
5. *Letter submitted by the Committee to the project dated 11 March 2025*
6. *Decision made after the discussion at the Ministry of Physical Infrastructure and Transport dated 18 March 2024, proposal submitted by the Secretary of the Ministry regarding agreement in principle for compensation to the locals and resolution of problems dated 30 November 2023, and letter sent by the Chief Secretary of the Cabinet of Ministers of the Government of Nepal with the Cabinet decision to endorse/implement the proposal dated 14 December 2023*

Results of Preliminary Investigation

1. Formal requirements of the Request

All items are written in English.

2. Requirements to commence the Procedures

(1) Requirements regarding the Requesters

The Request has been submitted by more than two residents of the country where the project is implemented.

(2) Project with respect to which the objections are submitted

After identifying the project from the Request, it was confirmed that the project is supported by JICA.

(3) Period

The Request was submitted after JICA disclosed the result of the categorization of the project and before the project is completed.

(4) Actual damage incurred or likely to be incurred by the Requesters as a result of JICA's non-compliance with the Guidelines

Actual damage incurred is described. However, further investigation is needed.

(5) Relevant provisions of the Guidelines considered to have been violated by JICA and the facts constituting JICA's non-compliance alleged by the Requesters

Provisions and facts that the Requesters consider to be not complied with are described. However, further investigation is needed.

(6) Causal nexus between JICA's non-compliance with the Guidelines and the substantial damage

Causal nexus between what the Requesters consider to be JICA's non-compliance with the Guidelines and the actual damage incurred is described. However, further

investigation is needed.

(7) Facts concerning the Requesters' consultations with the Project Proponents

It is described that the Requesters have endeavored to have dialogues with the Project Implementing entities.

(8) Facts concerning the Requesters' consultations with JICA

The Requesters have communicated with JICA's Operational Departments.

(9) Prevention of abuse

There is no concern that the Request was submitted for abusive purposes.

[END]

Annex 3

Summary of the Interviews Conducted for the Investigation of the Alleged Facts

In accordance with the Objection Procedures, the Examiners conducted the following investigations:

1. Interviews with the Operational Departments regarding the Request (November 4, 2025)
Interviewee: South Asia Department of JICA (present), the JICA Nepal Office (present)
2. Interviews with the Consultant (November 27, 2025)
Interviewee: The Consultant
3. On-site investigation by Examiner Murayama (December 1 - 4, 2025)
Interviewee: local stakeholders including the Requesters, the Ministry of Physical Infrastructure and Transport including the Department of Roads and the project office, the Consultant, the Contractor, Chandragiri Municipality, Ward No. 2, Chandragiri Municipality, the JICA Nepal office
4. Additional interviews with the Operational Departments (January 15, 2026)
Interviewee: Credit Risk Analysis and Environmental Review Department (present)
5. Additional interviews with the Operational Departments (January 19, 2026)
Interviewee: South Asia Department of JICA (present)
6. Additional interviews with the Operational Departments (February 4, 2026)
Interviewee: the JICA Nepal Office (at that time)

Annex 4

Outline of: Nagdhunga Tunnel Construction Project

Project Name	Nagdhunga Tunnel Construction Project
Exchange of Note date	December 22, 2016
Date of L/A	December 22, 2016
Loan Amount	16,636 million yen
Executing Agency	Department of Roads, Ministry of Physical Infrastructure and Transport: DOR
Consultant	Nippon Koei Co., Ltd., Eight-Japan Engineering Consultants Inc., and Nippon Civic Consulting Engineers Co., Ltd. JV
Contractor	Hazama Ando Corporation
Objective of the Project	.By constructing a tunnel at the Nagdhunga Pass on the arterial road connecting Kathmandu and major cities, and by improving the smooth flow of the transport network along that section, the Project aims to respond to rapidly increasing traffic demand, reduce travel time, and enhance traffic safety, thereby contributing to the promotion of social and economic development in the region.
Scope of Work	Tunnel construction (about 2.7km) Approach road (about 2.9km) Bridge development (3 bridges) Construction of distribution line (about 4.2km) Construction of toll facility and control office