

EXECUTIVE SUMMARY OF INITIAL ENVIRONMENTAL EXAMINATION OF WATER SUPPLY TRANCHE-2 SUB PROJECT OF GANGTOK UNDER ADB ASSISTED NERCCDIP PROJECT

1. The North Eastern Region Capital Cities Development Investment Program (NERCCDIP) envisages achieving sustainable urban development in the Project Cities of Gangtok, Aizawl, Kohima, Gangtok and Shillong through investments in urban infrastructure sectors. NERCCDIP will be implemented over a six year period beginning in 2010, and will be funded by a loan via the Multitranches Financing Facility (MFF) of the Asian Development Bank (ADB).
2. The Executing Agency (EA) is the Urban Development Department (UDD) of the Government of Sikkim (GoS); and the Implementing Agency (IA) is the Investment Program Coordination cell. The Project Management and Implementation Unit of the NERCCDIP is the State-level Investment Program Management and Implementation Units (SIPMIU).
3. ADB requires the consideration of environmental issues in all aspects of the Bank's operations, and the requirements for Environmental Assessment are described in ADB's SPS (2009). This states that ADB requires environmental assessment of all project loans, program loans, sector loans, sector development program loans, loans involving financial intermediaries, and private sector loans.
4. This Initial Environmental Examination (IEE) has been prepared for the Gangtok Water Supply Subproject, specifically for the (i) de-bunching existing pipelines with standard size and quality; (ii) extending water supply to peripheral areas by providing feeders; (iii) construction of storage reservoirs (SRs) and provision of bulk and consumer metering.
5. An Environmental Management Plan (EMP) is proposed as part of this report which includes (i) mitigation measures for significant environmental impacts during implementation, (ii) environmental monitoring program, and the responsible entities for mitigation, monitoring, and reporting; (iii) public consultation and information disclosure; and grievance redress mechanism.
6. Detailed design has been prepared and the DPR was submitted to ADB in January 2011. Upon approval of DPR the bidding process will be initiated. Construction work is likely to start in September 2011, and will take around 24 months. All civil works will be completed by August 2013.
7. The subproject locations are located in the built-up area of Gangtok. Located in Shivalik Hills of the eastern Himalayan range, Gangtok is a hill town. It lies on one side of a hill and flanked on east and west by two streams. Most of the roads are steep, with the buildings built on compacted ground alongside them. The subproject locations are generally undulating but are not located in areas prone to water-logging, and flash flood. There are no protected areas, wetlands, mangroves, or estuaries in or near the subproject location. There are forest areas within the town however none of the components are located in these areas. Except one water reservoir, none of the subproject components are located in or near any historically-, culturally-, archaeologically- or architecturally-significant or tourists area. One of the existing reservoirs is located adjacent to a monastery it is proposed to construct a new reservoir at this location.
8. Potential negative impacts were identified in relation to construction and operation of the infrastructure. A number of impacts and their significance have already been reduced by amending the designs thus no impacts were identified as being due to the project design or location. Mitigation measures have been developed to reduce all negative impacts to acceptable levels.

9. During the construction phase, impacts mainly arise from the need to dispose of moderate quantities of waste soil; and from the disturbance of residents, businesses, and traffic. These are common impacts of construction in urban areas, and there are well developed methods for their mitigation.

10. Once the system is operating, most facilities (SRs and meters) will operate with routine maintenance, which should not affect the environment. The area is isolated and hence direct impact to nearby environment is minimum. The main impacts of the operating water supply system will be beneficial to the citizens of Gangtok. They will be provided with a constant supply of water thus improve the quality of life of people as well as benefit individual and public health with improvements in hygiene. This will reduce the incidence of disease associated with poor sanitation. This will also lead to economic gains as people will be less away from work and indirectly increase their income.

11. There were limited opportunities to provide environmental enhancements, but certain measures were included. For example it is proposed that the project will employ in the workforce people who live in the vicinity of construction sites to provide them with a short-term economic gain; and ensure that people employed in the longer term to maintain and operate the new facilities are residents of nearby communities.

12. Mitigation will be assured by a program of environmental monitoring conducted during construction and operation to ensure that all measures in the EMP are implemented and to determine whether the environment is protected as intended. This will include observations on and off-site, document checks, and interviews with workers and beneficiaries, and any requirements for remedial action will be reported to the SIPMIU. There will also be longer-term surveys to monitor the expected improvements in the quality of domestic water and the health of the population.

13. The stakeholders were involved in developing the IEE through face-to-face discussions on site and public meeting held in the city, after which views expressed were incorporated into the IEE and the planning and development of the project. The IEE will be made available at public locations in the city and will be disclosed to a wider audience via the ADB website. The consultation process will be continued and expanded during project implementation, when a nationally-recognised NGO will be appointed to handle this key element to ensure that stakeholders are fully engaged in the project and have the opportunity to participate in its development and implementation.

14. Therefore the subproject is unlikely to cause significant adverse impacts. The potential adverse impacts that are associated with design, construction, and operation can be mitigated to standard levels without difficulty through proper engineering design and the incorporation or application of recommended mitigation measures and procedures. Based on the findings of the IEE, the classification of the Project as Category "B" is confirmed, and no further special study or detailed EIA needs to be undertaken to comply with ADB SPS (2009) or GoI EIA Notification (2006).