



# **Pune Metro Rail Project**

Complaint SG/E/2020/16

India

Complaints Mechanism - Complaints Mechanism - Complaints Mechanism - Complaints Mechanism

# **CONCLUSIONS REPORT**

9 November 2021

EIB Complaints Mechanism

# Prepared by

**EIB** Complaints Mechanism

External Distribution Complainants Promoter

#### **Internal Distribution**

Management Committee Secretary General Inspector General EIB services concerned

#### Disclaimer

The conclusions presented in this report are based on information available to the EIB Group Complaints Mechanism up to, and including, October 2021.

# About EIB-CM

The EIB Complaints Mechanism is designed to provide the public with a tool enabling alternative and pre-emptive resolution of disputes in cases in which members of the public feel that the EIB Group has done something wrong, i.e. if they consider that the EIB has committed an act of maladministration. When exercising the right to lodge a complaint against the EIB, any member of the public has access to a two-tier procedure, one internal – the Complaints Mechanism Division (EIB-CM) – and one external – the European Ombudsman.

Maladministration means poor or failed administration. This occurs when the EIB Group fails to act in accordance with the applicable legislation and/or established policies, standards and procedures, fails to respect the principles of good administration, or violates human rights. Some examples, as set out by the European Ombudsman, are administrative irregularities, unfairness, discrimination, abuse of power, failure to reply, refusal to provide information, unnecessary delay. Maladministration may also relate to the environmental or social impacts of the EIB Group's activities and to project cycle-related policies and other applicable policies of the EIB.

The EIB Complaints Mechanism is designed not only to address non-compliance by the EIB with its policies and procedures but also to endeavour to solve the problem(s) raised by complainants such as those regarding the implementation of projects.

For further and more detailed information regarding the EIB Complaints Mechanism, please visit our website: <u>https://www.eib.org/en/about/accountability/complaints/index.htm</u>

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# GLOSSARY OF TERMS AND LIST OF ACRONYMS

Afflux	The increase in upstream water level depth as a result of obstruction of a flow channel
Ft3/s	Cubic feet per second
Discharge	Volume of water flowing through a river, calculated as VxDxW
ESIA	Environmental and Social Impact Assessment
E(S)MP	Environmental and (Social) Management Plan
EIB-CM	European Investment Bank Group Complaints Mechanism
EC	Expert Committee
NGT	National Green Tribunal
Promoter	Maharashtra Metro Rail Corporation Limited (MMRCL)
Project	Pune Metro Rail Project

#### **EXECUTIVE SUMMARY**

In August 2020, the EIB Group Complaints Mechanism (EIB-CM) received a complaint from Indian nationals (hereinafter "the complainants") concerning the Pune Metro Rail Project in India.

The EIB-CM carried out an initial assessment of the concerns raised by the complainants with regard to:

- The compliance of the project with EIB standards 1,3 and 9
- The due diligence and monitoring of environmental impacts referred to by the complainants.

The EIB-CM finds that the project is currently not fully compliant with EIB Standards 1 and 3 since the additional biodiversity impact of the Project has not been assessed by the Promoter in an updated Environmental and Social Impact Assessment (ESIA)<sup>1</sup>. Based on the above, the EIB-CM finds the allegation to be grounded. However, the EIB-CM notes that the EIB has not yet proceeded to disburse under the second finance contract, which requires updated E&S documents.

The EIB-CM finds that whilst the adjudication on the compliance of the operation with national law will be provided by the National Green Tribunal (NGT) the project's potential impact on community health and safety deserves the attention of the Promoter and of EIB's services responsible for the environmental and social assessment and monitoring of the operation. Based on the documentary evidence available, the EIB-CM concludes that the allegation with regards to the role of the EIB is ungrounded.

<sup>&</sup>lt;sup>1</sup> The ESIA document for this project also contains an Environmental and Social Management Plan (ESMP). As such, throughout the report reference to the ESIA also covers the project's ESMP.

Allegation	Outcome	Suggestions for improvement
Non-compliance of the Project with Standard 1 and 3 and EIB's due diligence and monitoring of the project's relevant impacts	Grounded <u>Recommendation</u> : The EIB services engage with the Promoter in order to ensure that the ESIA is promptly updated to adequately reflect and address current and expected loss in biodiversity and consequences associated to that including erosion and increased vulnerability of the river system.	
Non-compliance of the Project with Standard 1 and 9 and EIB's due diligence and monitoring of the project's relevant impacts	Ungrounded	<ul> <li>The EIB-CM suggests that the EIB services:</li> <li>i) keep closely monitoring the ongoing judicial proceeding before the NGT in the light of their review of the conformity of the operation with EIB relevant standards.</li> <li>ii) engage with the Promoter in order to ensure that the Promoter: <ul> <li>a. adequately addresses flood risks related to the metro piers construction within the Prohibitive Zone in the ESIA based on the CPWRS Report; and</li> <li>b. if deemed necessary by the National Green Tribunal, liaises with the Pune Municipal Corporation for the update of the Flood Disaster Management Plan.</li> </ul> </li> </ul>

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#### SG/E/2020/16—Pune Metro Rail Project

Complainants: Indian nationals Date received: 28 August 2020 Confidentiality: Non-confidential

# 1. THE COMPLAINT

- 1.1 On 28 August 2020, Indian nationals (hereinafter, the complainants) lodged a complaint with the EIB-CM concerning the Pune Metro Rail project (hereinafter, the project). The complainants did not request confidentiality.
- 1.2 The complainants allege that the project does not comply with the EIB's environmental standards, including on flood risk management schemes. In particular, the complainants allege that:
  - The massive pillars and the huge pile caps, which are above ground, are causing impediments to the natural flow of the Mutha River. This implies a reduction of the river's flood carrying capacity, which in turn leads to a rise in flood levels<sup>2</sup>. Due to the project construction works, the flow rate of the Mutha was of only 45,474 ft3/s<sup>3</sup> in 2019. In 2020, the metro piers flooded when the river flow was as low as 14,000 ft3/s.
  - Extant biodiversity on the riverbank along the 1.45 km stretch<sup>4</sup> is now irreversibly destroyed due to construction works.
  - Apart from being financially unworkable due to teleworking during the pandemic, the project creates huge risks of frequent and severe flooding in thickly populated residential localities which one day will result in loss of property and life.
- 1.3 The complainants also allege that the Promoter arbitrarily changed the design plans, without any consideration for the precautionary principle. Metro alignment was initially designed on a road along the river, and was shifted to a metro alignment in the riverbed, which will only aggravate flood risks.
- 1.4 Based on the above, the complainants allege that the project would be non-compliant with the EIB's environmental standards and the EIB's commitment to contributing to flood risk management schemes, as stated on the EIB's website<sup>5</sup>.
- 1.5 The complainants also allege that flawed hydrodynamic data was used by the project's Promoter. In this regard, the complainants have filed a case with the National Green Tribunal (hereinafter, NGT) in 2016 against the construction of the project. From the information provided by the complainants, the EIB-CM understands that the NGT appointed an expert committee to look into the matter and report to the NGT. The complainants state that the expert committee based its 2018 report to the NGT on inaccurate hydrological data received by the Promoter; for instance, the width of the river was considered by 25% in excess of actual hydrological measurements recorded by the National Water Resources Department. According to the complainants, this inevitably led to unrealistic low flood levels in the models.

<sup>&</sup>lt;sup>2</sup> Complainants have provided the EIB-CM with photographs, in which the exact date of the photo is not indicated.

<sup>&</sup>lt;sup>3</sup> Complainants stated that "the original flow rate of the river Mutha within the blue flood line is of 60,000 ft3/s".

<sup>&</sup>lt;sup>4</sup> Complainants informed the EIB-CM that "a portion of the project, 1.45km, is being constructed, along with three metro stations, within the "blue flood line" in the nationally designated "Prohibitive Zone of the Mutha River Bed."

<sup>&</sup>lt;sup>5</sup> The complainants refer in particular to the <u>Flood Risk Management Guide</u>.

1.6 The complainants informed the EIB-CM that they had subsequently appealed the 2018 NGT decision before the Supreme Court of India and that the latter had ruled in favour of the complainants and ordered the expert committee to hear the complainants again. According to the complainants, the expert committee, in its 2019 report to NGT, stated that the calculations were based on data provided by the Promoter and that calculations related to afflux, submergence and flood risk had to be carried out again as previous predictions were flawed<sup>6</sup>. At the time of the complaint, the case was pending before the NGT. Further information on the NGT case is available in paragraph 2.2.3 of this Report.

# 2. BACKGROUND INFORMATION

#### 2.1 The Project

- 2.1.1 The borrower is the Republic of India and the project Promoter is Maharashtra Metro Rail Corporation Limited.
- 2.1.2 The project, financed in parallel by the Agence Francaise du Dévelopement (hereinafter, AFD), concerns the construction of two metro lines, North-South and East-West, of about 31.25 km with 30 stations and related purchase of a fleet of about 102 metro cars in the city of Pune, in the State of Maharashtra in Western India.
- 2.1.3 The EIB has committed to finance the project up to EUR 600 million, divided in 4 individual tranches. The credits are to be made available from the Bank's own resources and pursuant to the Climate Action and Environment Facility 2014-2020. For each tranche the EIB will enter into a separate financial contract.
- 2.1.4 The first finance contract between the EIB and the borrower (EUR 200 mil) was signed on 22 July 2019. The second finance contract between the EIB and the borrower (EUR 150 mil) was signed on 7 May 2021.
- 2.2 National judicial proceedings
- 2.2.1 The complainants have submitted three cases regarding the Project before the NGT, respectively in 2013, 2016 and 2019.

0.A No.2/013 (2013 Case)

2.2.2 On 11 July 2013, the Principal Bench of NGT ruled in favour of the complainants who had requested an interim stop of the project as construction was taking place within the blue flood line, leading to increased risks of flood and decreased river bed width. The national judicature stated that: "We direct the said authorities to ensure that no encroachment is permitted and **no construction in future is permitted on and inside the blue flood line of the river Mutha**.<sup>7</sup>" (emphasis added).

<sup>&</sup>lt;sup>6</sup> "The calculations (of flood levels) were based on the data provided by MMRCL."; "MMRCL has to provide the reason and justification for the riverbed widths discrepancies and subsequent calculation of flood level rise due to construction of 59 piers of metro."; "EC also recommends that MMRCL has to inform Hon'ble NGT for any changes in the design.

<sup>&</sup>quot;After hearing to applicants say on discrepancies in the riverbed widths, expert committee strongly recommends a fresh hydrodynamic study to be conducted to assess the impact of metro construction on rise in flood level and submergence." "MMRCL changed the dimensions which require revised afflux and submergence calculation."; "Pune has already experienced many floods in the past (as mentioned by the applicant also) therefore flood frequency analysis as well as hydrologic analysis need to be carried out for afflux and submergence." (2019 Expert Committee Report).

<sup>&</sup>lt;sup>7</sup> Judgement of the NGT

# O.A No.67/2016 (2016 Case)

- 2.2.3 In 2016, the complainants filed a new application before the NGT as pillars were being constructed within the blue flood line, against the NGT's 2013 judgement that no construction in future shall be allowed within the blue flood line of the river. The complainants requested an interim stop of the project, which was granted by the NGT "restraining the respondents from constructing any roads, metro or structures of any other type on Prohibited Zone inside Blue Line in river bed of Mula Mutha within the limits of Pune Municipal Corporation till the next date." (emphasis added)
- 2.2.4 In January 2017, the Promoter challenged the jurisdiction of the NGT, arguing that
  - The 1978 Metro Railways (Constructions of Works) Act applies to the project; section 18 empowers the Metro Rail Administration to make or construct in, upon, across, under or over any rivers, canals, brooks or streams or other waters and even alter or change the course of rivers, canals, brooks or streams or other waters.
  - The reliance placed by the complainants on the NGT Judgment in the 2013 case is incorrect as the said Judgment permits construction over pillars and in case at hand the construction is planned on pillars which will not obstruct the flow of flood water and thus there will be no harm caused to the environment.
  - The State Cabinet has given approval to the project; such approval will have an overriding effect over Irrigation Circular dated 21 September 1989 and therefore the whole objection of the complainants would be pointless.
- 2.2.5 In consequence, the NGT consulted the Supreme Court of India regarding its jurisdiction over the case. The Supreme Court of India ruled that the NGT had the jurisdiction to hear the case, rejecting the Promoter's objection. However, the Supreme Court of India revoked the interim stop of the project and allowed the Promoter to continue its work.
- 2.2.6 On 13 Oct 2017, the NGT appointed an Expert Committee to study the project and its impact on the environment. The Expert Committee's report to the NGT concluded that the impact of the construction of piers on river hydrology was insignificant, as rise in afflux would be from 2 to 12 mm and increased submergence from 3 to 23 mm considering the level of discharge in the river. Recommendations of the Committee that the Promoter has agreed to implement include compensatory afforestation, cleaning of drain and installing dust sensors.
- 2.2.7 On 3 August 2018, the NGT ruled that it was not in the public's interest to stop the project and ruled in favour of the Promoter, allowing the project to continue if all the recommendations of the Expert Committee were taken into account and frequently monitored.

#### O.A 70/2019 (2019 Case)

- 2.2.8 On 5 November 2019, the complainants submitted a new case before the NGT. They challenged the findings of the Expert Committee concerning the environmental impact of the project on river hydrology and flood risks, as the hydrodynamic data used to come to these conclusions was based on data submitted by the Promoter to the Expert Committee.
- 2.2.9 The NGT asked the Expert Committee to reply to these allegations within six weeks. In January 2020, the Expert Committee submitted a second report to the NGT replying to the complainants' allegations. In particular, the second report stated that:
  - The calculations of flood levels were based on the data provided by the Promoter.

- The Promoter has to provide the reason and justification for the riverbed widths discrepancies and subsequent calculation of flood level rise due to construction of 59 piers.
- It was strongly recommended to conduct a fresh hydrodynamic study to assess the impact of metro construction on rise in flood level and submergence."
- The Promoter changed the initial dimensions of the width of the river, which require revised afflux and submergence calculation.
- Since Pune has already experience many floods, flood frequency analysis as well as hydrologic analysis need to be carried out for afflux and submergence.
- 2.2.10 The Promoter commissioned Central Power and Water Research Station (CPWRS) to conduct new hydrodynamic model studies to estimate the afflux and submergence in Mutha River due to the construction of metro pier and allied structures and comply with the Expert Committee's second report. Indeed, this is necessary as per the design, 61 Piers will be constructed along the left bank flood plain of Mutha River'' A preliminary report was submitted on 04 August 2020 and the final report was submitted to NGT on 11 January 2021.
- 2.2.11 Simulations were carried out for the Mutha River considering existing bridges without Metro piers and then including Metro piers to find out the afflux for the discharges of 60.000 ft3/s (blue line) and 100.000 ft3/s (red line). The conclusion of the report<sup>8</sup> is that metro piers have an effect (lesser or greater depending on the alignment location) on afflux and submergence due to extended cross-sections<sup>9</sup>, thus leading to an increase inundation flood extent (depending on the location) at both 60.000 ft3/s and 100.000ft3/s. The below figures illustrate this.

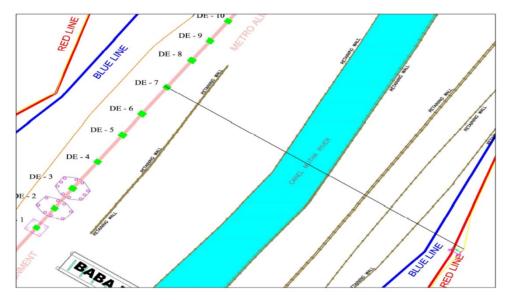


Figure 1: Metro alignment at the 1.45km stretch (source: CPWRS Report, 2020)

<sup>&</sup>lt;sup>8</sup> It was observed that the maximum afflux for the discharge of 100,000ft3/s is about 380 mm in the reach near Sambhaji bridge. This afflux is reduced to 216 mm when the extended cross sections are taken into account. It was observed that the maximum afflux for the discharge of 60,000 ft3/s is about 290 mm in the reach upstream of Sambhaji bridge near pier number P153. This afflux is reduced to 193 mm when the extended cross sections are taken into account.
<sup>9</sup> The results indicate that there is reduction in the afflux in the study reach because of the extended cross sections obtained from aerial survey.

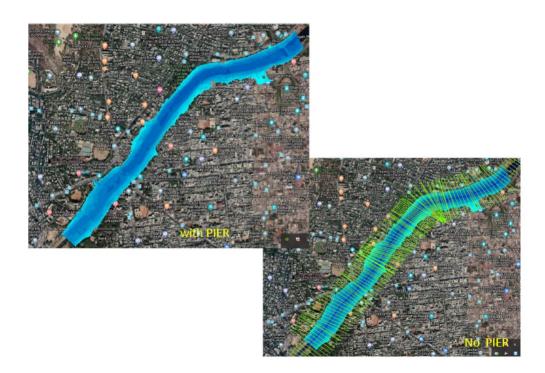


Figure 2: Inundation extent coverage with and without metro piers at the 1.45km stretch (source: CPWRS Report, 2021)

2.2.11 Hearings for the 2019 case have been postponed several times; a hearing is now scheduled on 5 October 2021.

#### 3. APPLICABLE REGULATORY FRAMEWORK

- 3.1 EIB-CM policies and procedures
- 3.1.1 The EIB Complaints Mechanism Policy tasks the EIB-CM with addressing complaints concerning alleged maladministration by the EIB<sup>10</sup>. Maladministration means poor or failed administration. This occurs when the EIB fails to act in accordance with the applicable legislation and/or established policies, standards and procedures. Maladministration may also relate to the environmental or social impacts of the EIB's activities<sup>11</sup>.
- 3.1.2 The EIB-CM Policy specifies the role of the EIB-CM, such as gathering and reviewing existing information on the subject under complaint, conducting appropriate inquiries with a view to assessing whether the EIB's policies and procedures have been followed and promoting adherence to the EIB's policies<sup>12</sup>.
- 3.2 International and national legal framework

International and national law on biodiversity and environmental impacts

3.2.1 The 1992 Convention on Biological Diversity (CBD) has three main objectives, the conservation

<sup>&</sup>lt;sup>10</sup> Section 1 of the EIB-CM Policy (2018)

<sup>&</sup>lt;sup>11</sup> Section 3 of the EIB-CM Policy (2018).

<sup>&</sup>lt;sup>12</sup> Section 6, Paragraph 6.1.1 of the EIB-CM Policy (2018).

of biological diversity; the sustainable use of the components of biological diversity; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Articles 6 (a) and (b) in particular demand for the conservation of biodiversity and its sustainable use in cross-sectoral projects.

3.2.2 Directive Government Circular 1089/243/89 with respect to land use in flood prone zones of 3 May 2018 (hereinafter the Directive) demarcates flood lines and establishes Prohibitive and Restrictive Zones on the Mutha River. The Directive establishes the Prohibitive Zone to be "the area between the blue flood line on the right bank of the river to riverbed to the other blue flood line on the left of the bank of the river." The Restrictive Zone is described as being "the area between the blue flood line of the river and the red flood line on the same bank." An illustration of blue and red flood line is shown in Figures 1 and 2 hereunder.

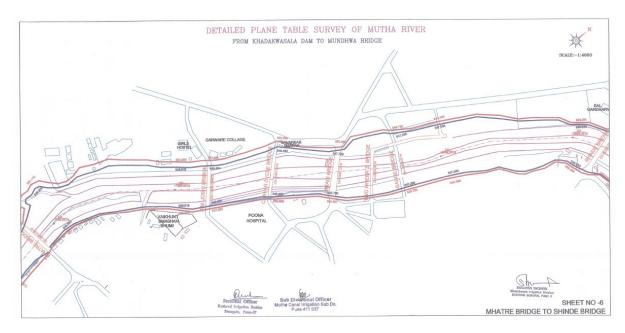


Figure 3: blue and red flood lines

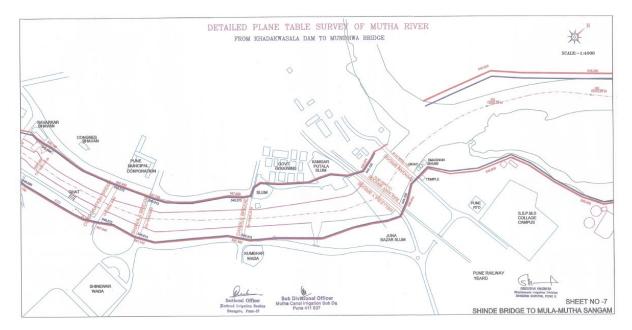


Figure 4: blue and red flood lines

- 3.2.3 Article 7 of the Directive states that the Prohibitive Zone shall only be used in the form of open land (gardens, play grounds) so that "there won't be any obstruction to the flow of the river, there will not be any reduction in the carrying capacity of the river and there will be no changes in the cross section of the river."
- 3.2.4 Article 8 of the Directive states that the Restrictive Zone should only be used for "public roads unavoidable in public interest; provided the top level of such road shall be above the level of the Blue Flood line".

# National law on community health and safety

- 3.2.5 The 1978 Metro Railway Act as amended in 2002 and 2009 (hereinafter, Metro Act) originally covered only the metropolitan city of Calcutta. Chapter 1(3) however states that "this Act shall also apply to such other metropolitan city and with effect from such date as may be specified in that notification and thereupon the provisions of this Act shall apply to that city accordingly by notification in the Official Gazette after official approval from the Central Government". On 20 October 2014, the Central Government gave its approval and published the authorization in the Official Gazette, now extending the legality of the Metro Act to Pune metropolitan area.
- 3.2.6 Chapter IV, Article 18 (a) of the Metro Act stipulates that for the purpose of constructing any metro railway "make or construct in, upon, across, under or over any (...) rivers, canals, (...) as the metro railway administration thinks proper." Article 18(b) states that for any work connected to the metro railway it shall be allowed to "alter the course of any rivers, canals, streams for the purpose of constructing tunnels, passages or other works, (...) as the metro railway administration thinks proper."
- 3.2.7 Article 19(2) of the Metro Act further clarifies that "the metro railway administration in exercising the powers conferred to it shall take such precautionary measures as are necessary, shall do as little damage as possible and shall be liable only for the damage or cost actually suffered or incurred by any person as a result of the exercise of such powers."
- 3.3 EIB Policies and Standards applicable to the Project

# The EIB Statement

- 3.3.1 The EIB Statement of Environmental and Social Principles and Standards<sup>13</sup> (hereinafter the Statement) requires that all projects financed by the EIB must at least comply with:
  - Applicable national environmental law;
  - EU environmental standards and requirements.
- 3.3.2 In the Statement, the EIB recognises the need for a proactive approach to ensure that environmental and social considerations are taken into account during the early stages of strategic decision-making by promoters so as to have a real influence on the choice of alternative developments. The EIB requires the application of the precautionary principle<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> The EIB's Statement on the Environmental and Social Standards (2009) is available here:

https://www.eib.org/en/publications/environmental-and-social-principles-and-standards

<sup>&</sup>lt;sup>14</sup> The precautionary principle is detailed in Article 191 of the Treaty on the Functioning of the European Union. It aims at ensuring a higher level of environmental protection through preventative decision-taking in the case of risk. As such, the EIB considers the need for applying the precautionary principle when there is a risk that a project may cause significant and irreversible damage to the environment. In such cases, in line with the principle and EU law, measures should be taken by the developer to avoid in the first place and if a feasible alternative is not available to reduce that risk to an acceptable degree.

through the mitigation hierarchy in order to promote more sustainable patterns of developments in the regions it operates. The assessment of environmental and social impacts and risks, including their significance and materiality, as well as the development of adequate management plans and programmes are key tools for achieving sound environmental and social performance. In this respect, all EIB-financed operations shall comply with national legislation and international conventions and agreements ratified by the host Country.

#### The EIB Environmental and Social Standards

- 3.3.3 The EIB's Environmental and Social Principles and Standards<sup>15</sup> (hereinafter the Standards) provide an operational translation of the overarching policies, principles and standards put forward in the Statement.
- 3.3.4 The EIB's Environmental and Social Standards<sup>16</sup> are applicable to the project. Standard 1 (Assessment and Management of Environmental and Social Impacts and Risks), Standard 3 (Biodiversity and Ecosystems), and Standard 9 (Occupational and Public Health, Safety and Security) were identified as relevant for the present inquiry.

# Standard 1

- 3.3.5 The overall objective of Standard 1 is to outline the promoter's responsibilities in the process of assessing, managing and monitoring environmental and social impacts and risks associated with the EIB-financed operation. Standard 1 requires that all projects comply with national legislation and regulations as well as obligations and standards in the relevant international treaties, conventions and multilateral agreements.
- 3.3.6 For projects outside of the EU, the ESIA must be consistent with the principles contained in the EU EIA Directive and best international practice. Specific attention should be given to integrating the impacts on human rights, biodiversity, climate change, cultural heritage, and disaster risks into the overall ESIA.

# Standard 3

- 3.3.7 The EIB acknowledges the intrinsic value of biodiversity and that its operations may have a potential impact on biodiversity ecosystems. Therefore it has taken a balanced approach to managing its operations in order to avoid and minimise any adverse impacts on biodiversity by applying the precautionary principle and to enhance positive impacts on biodiversity and ecosystems whenever possible so as to secure favourable economic, environmental and social outcomes of its operations.
- 3.3.8 The EIB is committed to the respect of all relevant instruments of European and international law. The European Union and all its member states are party to the CBD which seeks to protect and sustain the rich diversity of life forms at the genetic, species and ecosystem levels.
- 3.3.9 A biodiversity scoping must be carried out for all projects as part of the overall ESIA process regardless of the prima facie natural value of the project site. The scoping must, to the extent possible, fully characterise the biodiversity and ecosystems present on the site (and at landscape level if required) prior to the project, their value for nature conservation and

<sup>&</sup>lt;sup>15</sup> The EIB's Environmental and Social Standards (2018) are available here:

https://www.eib.org/attachments/strategies/environmental\_and\_social\_practices\_handbook\_en.pdf <sup>16</sup> The EIB Environmental and Social Standards (2018) available <u>here</u>

scientific purposes (diversity of species and ecosystems), both actual and potential, however commensurate to the impacts and risks of the project.

- 3.3.10 The promoter should consider the differing values attached to particular biodiversity and ecosystem attributes by relevant local, national and international stakeholders. The perspectives to be taken in account include those of local communities, indigenous peoples, governmental officials, academic and research institutions, recognised experts for the biodiversity attributes of concern and national and international conservation NGOs, as appropriate.
- 3.3.11 Where practical and feasible, a screening (ecosystem baseline) of the dependency of important ecosystem services on biodiversity provided by the site and the larger region in which it is integrated should be included. This screening should distinguish between the services with local benefits and those with benefits at the global scale.
- 3.3.12 As for those ecosystem services with local benefits and on which the promoter has sufficient management control, a baseline should be established identifying:
  - a) the nature and extent of ecosystem services in the project site and its area of influence;
  - b) the condition, trends and external (non-project) threats to such services;
  - c) the beneficiaries of such services;
  - d) the extent to which the project depends upon or may impact identified services.
- 3.3.13 Working towards a policy of averting the loss of biodiversity, and in some cases a policy of no net loss (inherent in the EU Nature legislation<sup>17</sup>), requires that impacts on biodiversity and ecosystems be mitigated through avoidance, minimisation and compensation not only on sites of outstanding ecological value but anywhere where biodiversity is measurable.

#### Standard 9

- 3.3.14 Standard 9 applies to all sectors of activity, both public and private. In the light of the nature of the activities and size of the projects, the extent of applicability of the requirements described in Standard 9 will be flagged in discussions between the promoter and the EIB as early as possible, to be further explored during the assessment process. Based upon international best practice and the EIB's recommendations, the promoter will agree with the EIB on (i) the level of comprehensiveness of the assessment of the health, safety and security risks and (ii) how public health and safety requirements will be best addressed and managed as part of the promoter's overall environmental and social management plan (ESMP).
- 3.3.15 Accordingly, the promoter will identify and evaluate public health and safety risks and potential adverse impacts arising directly or indirectly from the project as early as possible, on a continuous basis throughout the entire project life cycle and along its supply chain. The promoter will promptly develop and implement appropriate and adequate measures aiming at avoiding or preventing, or as a last resort, minimising or reducing, the identified risks and potential adverse impacts. The promoter shall document robust justification for choosing to minimise or reduce impacts rather than avoiding or preventing them.

<sup>&</sup>lt;sup>17</sup> Further information on the topic is available on the website of the European Commission: <u>Nature and biodiversity law -</u> <u>Environment - European Commission (europa.eu)</u>

#### 3.4 Role of the EIB

3.4.1 The EIB's Environmental and Social Handbook (hereinafter, Handbook)<sup>18</sup> explains how the EIB conducts its work on environmental and social matters throughout the project cycle and specifies documentation/information required from the promoter for the purpose of the EIB's due diligence. Whether the project meets the project applicable standards is established as part of the EIB's project appraisal and monitoring.

#### Project Appraisal

- 3.4.2 The appraisal takes place prior to the approval of the operation by the EIB governing bodies and the signature of the finance contract<sup>19</sup>. It aims at, inter alia, assessing (i) the project's compliance with the applicable standards<sup>20</sup> and (ii) the project's impact<sup>21</sup>. The Handbook also details the assessment procedure<sup>22</sup>. During appraisal, the EIB identifies the main environmental legal and regulatory framework relating to the project and any legal issues<sup>23</sup>. The EIB needs to take into account residual impacts, i.e. the adverse environmental impacts caused by the operation that will remain after mitigation and after impact management measures have been applied (e.g. air emissions)<sup>24</sup>. This information is taken into account when judging the overall acceptability of the project<sup>25</sup>.
- 3.4.3 The appraisal may result in conditions to ensure the Environmental and Social acceptability of the project during implementation and operation. These include, among others: (i) conditions for disbursement, and (ii) particular undertakings. Once approved by the EIB governing bodies, the conditions for disbursement and the particular undertakings are included in the finance contract<sup>26</sup> and the promoter must complete them to the satisfaction of the EIB<sup>27</sup>.
- 3.4.4 When adverse Environmental and Social impacts and risks are anticipated, the Environmental and Social Management Plan (ESMP) for mitigating and managing the Environmental and Social impacts shall be referred to by the finance contract.<sup>28</sup>

#### Project Monitoring

3.4.5 The Statement stipulates that the EIB monitors the environmental and social performance of the projects it finances, especially the fulfilment of any specific obligations described in the finance contract<sup>29</sup>. The monitoring aims to ensure that the project complies with the EIB's approval conditions<sup>30</sup>. The extent of physical monitoring depends on the characteristics of the project, the capacity of the promoter and the country context. The EIB monitors projects on the basis of reports provided by the promoter, as well as EIB visits, information provided by the local community, etc.<sup>31</sup>. Close follow-up of environmental and social actions that are

<sup>&</sup>lt;sup>18</sup> The EIB Environmental and Social Handbook (2013)

<sup>&</sup>lt;sup>19</sup> <u>https://www.eib.org/en/projects/cycle/index.htm</u>, accessed on 11 November 2019.

<sup>&</sup>lt;sup>20</sup> Section 90, indent 2, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>21</sup> Section 90, indent 2, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>22</sup> Section 12 of the Background and Section 17 of the EIB Statement of Environmental and Social Principles and Standards available here.

<sup>&</sup>lt;sup>23</sup> Section 90, indent 2, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>24</sup> Sections 221 and 222, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>25</sup> Sections 223 and 232, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>26</sup> Section 7 of the EIB Statement of Environmental and Social Principles and Standards (2009).

<sup>&</sup>lt;sup>27</sup> Paragraph 255 and 256, indent 2, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>28</sup> Paragraph 261, page 147, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>29</sup> Section 8 of the EIB Statement of Environmental and Social Principles and Standards (2009).

<sup>&</sup>lt;sup>30</sup> Paragraph 270, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>31</sup> Section 8 of the EIB Statement of Environmental and Social Principles and Standards (2009).

required as part of the finance contract (in particular, those related to disbursement conditions) is essential<sup>32</sup>.

- 3.4.6 On top of the general requirements, environmental and social requirements include evidence on fulfilment of appropriate environmental and social legislation, respect of contract conditions and undertakings related to the environment and social matters, if any; and, implementation of agreed mitigation and compensation measures, if any<sup>33</sup>.
- 3.4.7 If a project includes the implementation of mitigation measures, it should not be considered complete until these measures are implemented, even if the remainder of the project is complete. The EIB's monitoring should continue until all mitigation and compensation measures, as detailed in the ESMP, are implemented. For instance, it may continue after the borrowers/promoters provide the project completion report<sup>34</sup>.

#### EIB Flood Risk Management Guide

- 3.4.8 The EIB Flood Risk Management Guide was published by the EIB in December 2007. The Guide is not an EIB standard, however it reflects what EIB considers best practice in the preparation of flood risk management schemes. The Guide provides advice related to fluvial flood risk management that addresses strategic planning, environmentally sensitive design and the implementation of works. The purpose of the guide is that it should provide approaches to ensure compliance with EU standards and environmental practices.
- 3.4.9 In some rivers, urbanisation may have the potential to increase flood risk downstream. Where structural measures are used then the residual risk of flooding should be assessed and appropriate precautions taken as necessary, such as the provision of flood warning.
- 3.4.10 Sustainable spatial planning should be based on promoting building development outside of the flood-prone area as often as possible, avoiding or stopping building development on flood plains (land-use control) and developing appropriate building codes or zoning ordinances to reduce flood damage.
- 3.4.11 Assessments should be made of the flood risk under present conditions. This should establish the areas that are liable to flooding for events with selected probabilities and the characteristics of that flooding in terms of depth of flooding and flow velocities.
- 3.4.12 Any assessment of flood risk requires hydrological data, which should be the subject of a programme of flow data collection, archiving and analysis.
- 3.4.13 Modelling requires detailed topographic and bathymetric data. This data should be collected as required. The nature of the model and the corresponding data requirements depends upon the purpose of the modelling and complexity of the system to be modelled. The following data would probably be required for any modelling study: Hydrological data on rainfall and/or river flows; Channel bathymetry data as required; Data on flood defences; Data on hydraulic structures; Topography of floodplains.

<sup>&</sup>lt;sup>32</sup> Paragraph 272, EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>33</sup> Paragraph 271, page 148 of the EIB Environmental and Social Handbook (2013).

<sup>&</sup>lt;sup>34</sup> Paragraph 275, page 149, the EIB Environmental and Social Handbook (2013)

#### 4. EIB Project's Cycle

- 4.1 *Project Appraisal and Approval*
- 4.1.1 The EIB completed the project's appraisal on 19 September 2018.
- 4.1.2 During the appraisal, the EIB noted that the project is consistent with the 2006 National Urban Transport Policy, the City's draft Revised City Masterplan to 2041 and the 2008 Comprehensive Mobility Plan.
- 4.1.3 On 13 November 2018, the EIB published the Environmental and Social Data Sheet (ESDS), recording its E&S due diligence of the project.
- 4.1.4 In the ESDS, the EIB noted that, as per provisions of the Indian EIA Notification dated September 2006, any new project or the expansion or modernization of any existing industry or project listed in Schedule I of the Notification shall submit an application for clearance to the Indian Ministry of Environment and Forests (MOEF). Since metro rail projects are not included in Schedule I of the Notification, the project did not require an environmental clearance certificate from the MOEF nor a related EIA procedure.
- 4.1.5 Nevertheless, the Promoter has voluntarily carried out an Environmental Impact Assessment (EIA) in line with EIB standards and prepared an EIA report consistent with the requirements of the Notification. The ESIA report has been disclosed locally and on the EIB website.
- 4.1.6 Among the main residual negative environmental impacts of the project, the ESDS identifies the building within the 'blue line' (flooding area) of the river Mutha and cutting down of about 685 trees. In fact, the East-West corridor has a 1.45 km stretch along the Mutha river bed. After consultation showed concerns regarding this stretch, the impacts were analysed in more depth (which included field-testing) and were reported in a separate EIA document. The findings were that the design metro on pillars, which will not obstruct the flow of water, sufficiently mitigates the identified risks of erosion, higher risks of flooding, water and air pollution, damage to biodiversity and trees.
- 4.1.7 The Promoter has performed several rounds of administrative consultation as well as several rounds of public consultation during the preparation of the various design and EIA reports in 2017 and 2018.
- 4.1.8 The ESDS states that environmental measures are documented in an Environmental Management Plan (EMP) and as appropriate, have been and will be included as part of the works contract conditions. Moreover, an independent monitoring and evaluation consultant will be commissioned, who will periodically monitor and report on delivery of the EMP.
- 4.1.9 As regards conditions to disbursement, the ESDS states that the Promoter will ensure that the project implementation team includes environmental experts to implement the EMP. In addition, the Bank will seek commitments from the Promoter to: (i) ensure that the EMP and relevant EIB standards are included in the tender documents of the main work contracts; (ii) implement the project in accordance with the agreed EMP; (iii) report regularly on the status of EMP implementation; (iv) comply with EIB standards and will monitor and report on its implementation regularly, to the Banks satisfaction.
- 4.1.10 The EIB's Board of Directors approved the project on 13 November 2018. The Board Report refers to the ESDS for environmental and social conditions for disbursement.

#### 4.2 *The Finance Contracts*

- 4.2.1 The first Finance Contract was signed on the 22 July 2019 between the Republic of India and the EIB. The environmental and social conditions to disbursement identified in the ESDS are mirrored in the finance contract. Additional environmental and social undertakings are detailed in the finance contract, namely the duty to:
  - (i) implement and operate the project in compliance with Environmental and Social Standards; and
  - (ii) obtain, maintain and comply with requisite Environmental or Social Approvals for the project.
- 4.2.2 The second Finance Contract was signed on 7 May 2021. In addition to the conditions for disbursement and undertakings identified in the first Finance Contract, the second Finance Contract requires that, prior to first disbursement, the Borrower provides a copy of the up-to-date EMP.
- 4.3 Project monitoring
- 4.3.1 The Finance Contracts, as well as the ESDS state that an independent third party shall report periodically to the Bank on evaluation and monitoring of the EMP. The Finance Contracts establish that the reporting on the status of the EMP shall occur quarterly.
- 4.3.2 The EIB-CM notes that as per the finance contracts, an independent third party has conducted period monitoring (quarterly) on the evaluation and monitoring of the EMP and this has been submitted to the EIB.

# 5. <u>METHODOLOGY OF THE INQUIRY</u>

- 5.1 Following the admissibility of the complaint and in line with Article 2.2 of the EIB-CM Procedures, the EIB-CM carried out an initial assessment. The objective of the assessment was to clarify the concerns raised by the complainants and to determine if further work was necessary to address the issues raised by the complainants.
- 5.2 Over the course of the initial assessment, it became apparent that certain claims made by the complainants required further inquiry. Therefore, the EIB-CM decided to carry out a compliance review with regard to the following:
  - i. Compliance of the project with EIB standards 1, 3 and 9 (assessment and management of environmental and social impacts and risks; biodiversity; community health and safety);
  - ii. Due diligence and monitoring of environmental impacts referred to by the complainants.
- 5.3 With regard to allegations that were manifestly ungrounded or beyond the EIB-CM's mandate in accordance to its Policy<sup>35</sup>, the EIB-CM communicated the outcome of the inquiry in its Initial Assessment Report.
- 5.4 The compliance review assessed the allegations in the context of potential maladministration, including whether the EIB complied with the applicable regulatory framework (chapter 3 of

<sup>&</sup>lt;sup>35</sup> Section 4.3 of the EIB-CM Policy (link)

this Report). The review assessed the project documentation and the due diligence carried out by the Bank in the areas related to the complainant's concerns.

- 5.5 As part of the inquiry, the EIB-CM reviewed documents submitted to the EIB by both the Promoter and the complainants, and analysed relevant international and national legislation, including relevant national court findings.
- 5.6 In order to form its reasoned conclusions, the EIB-CM liaised with the Promoter and the complainants, requesting additional documents, including :
  - CPWRS Report
  - Directive 1089/243/89 establishing the Prohibitive Zone and delineating the Blue and Red Flood Lines
  - Hydrological maps of Mutha River
  - Overview and judgements of NGT cases

#### 6. <u>FINDINGS AND CONCLUSIONS</u>

6.1 Allegation concerning the non-compliance of the Project with Standard 1 and 3 and EIB's due diligence and monitoring of the project's relevant impacts

Project's compliance

- 6.1.1 The complainants state that extant biodiversity along the 1.45km stretch is now irreversibly damaged and that the Promoter arbitrarily changed the design plans, without any consideration for the precautionary principle.
- 6.1.2 Standard 1 stipulates that for projects outside of the EU, the ESIA must take care to integrate the impacts on human rights, biodiversity, climate change, cultural heritage, and disaster risks (emphasis added) into the overall ESIA.
- 6.1.3 Under EIB standard 3, the precautionary principle should be applied when a project may cause significant or irreversible damage to the environment. Moreover, a biodiversity scoping must be carried out for all projects as part of the overall environmental and social assessment (ESIA) process regardless of the prima facie natural value of the project site. Additionally, where practical and feasible, a screening (ecosystem baseline) of the dependency of important ecosystem services on biodiversity provided by the site and the larger region in which it is integrated should be included.
- 6.1.4 The ESIA prepared for the project contain a biodiversity scoping and an ecosystem baseline as required by EIB Standard 3. In line with the precautionary principle, the Promoter has considered how to avoid unnecessary cutting of trees, alignment has been shifted slightly so as to have a lesser impact on the number of trees impacted, and robust transplantation and afforestation measures are in place.
- 6.1.5 The ESIA recognizes that for the project as a whole, about 166 trees are likely to be cut and 959 trees are likely to be transplanted from the two corridors and two depots. Moreover, prior to transplant/cut the affected trees, permission from Pune Municipal Corporation (PMC) Tree authority department is being insured.

6.1.6 However, from the EMP monitoring reports as mandated by the finance contracts it appears that far more trees (2018 trees as of March 2021) have been transplanted than initially accounted for.

# EIB's role

- 6.1.7 The EIB requires as part of the monitoring of its Projects that environmental and social requirements include evidence on fulfilment of appropriate environmental and social legislation, respect of contract conditions and undertakings related to the environment and social matters, if any; and, implementation of agreed mitigation and compensation measures, if any<sup>36</sup>.
- 6.1.8 The EIB's monitoring should continue until all mitigation and compensation measures, as detailed in the ESMP, are implemented.
- 6.1.9 EMP Progress Reports have been submitted by an independent consultant quarterly since July 2019 and cover biodiversity mitigation and compensation. The EMP Progress Reports show that the impact on biodiversity is currently higher than was originally accounted for in the ESIA.

# Conclusion

- 6.1.10 Concerning the project's compliance with EIB standards, the EIB-CM notes that the number of trees impacted by the project is higher than previously submitted figures: the ESIA mentions 1125 trees to be affected by the project (166 to be cut and 959 trees to be transplanted) while the EMP 3<sup>rd</sup> Progress Report states that as of March 2021, 2018 trees have been transplanted while no tree had been cut. As such, the project is currently not compliant with EIB standards since the impact on biodiversity is higher than what was initially accounted for. The actual impact should be assessed and addressed in the updated ESIA.
- 6.1.11 Concerning the EIB's role, the EIB-CM did not receive documentary evidence showing that the above-mentioned discrepancies and the altered biodiversity impact of the project had been followed up, in particular following the submission of the complaint. While the second finance contract stipulates as a condition for first disbursement that all E&S documents (including the ESIA) shall be up to date, the EIB-CM notes that the EIB has not yet proceeded to disburse under that contract.
- 6.1.12 Based on the above, the EIB-CM finds the allegation to be grounded and issues a recommendation.
- 6.2 Allegation concerning non-compliance of the Project with Standard 1 and 9 and EIB's due diligence and monitoring of the project's relevant impacts

# Project's compliance

6.2.1 The complainants state that the metro alignment in the 1.45km stretch will lead to severe flooding in thickly populated residential localities which one day will result in loss of property and life. This is according to the complainants because "the massive pillars and the huge pile caps, which are above ground, are causing impediments to the natural flow of Mutha River. This implies a reduction of the river's flood carrying capacity, which in turn leads to a rise in

<sup>&</sup>lt;sup>36</sup> Paragraph 271, page 148 of the EIB Environmental and Social Handbook (2013).

flood levels." Moreover, "metro alignment was initially designed on a road along the river, and was shifted to a metro alignment in the riverbed, which will only aggravate flood risks."

#### *Compliance with national law*

- 6.2.2 As per the Directive (see paragraphs 3.2.2 3.3.4 of this Report), the Prohibitive Zone shall only be used in the form of open land (gardens, play grounds) so that "there won't be any obstruction to the flow of the river, there will not be any reduction in the carrying capacity of the river and there will be no changes in the cross section of the river."
- 6.2.3 However, the 1978 Metro Act (see paragraphs 3.2.5 3.2.7 of this Report) stipulates that for the purposes of Metro construction, construction shall be allowed in a river, even if doing so would alter its course.
- 6.2.4 Furthermore, the EIB-CM notes that there is an ongoing court case concerning negative environmental impact of the project on flood risks and river hydrology before the NGT.

#### Compliance with EIB standards

- 6.2.5 The ESIA states in the paragraph on maximum flood frequency that for the 1.45km stretch "all constructions need to be kept beyond the flood line". As such, construction within the Prohibitive Zone is not accounted for nor is it in the ESIA, which consequentially does not contain any information on flood disaster management.
- 6.2.6 Moreover, the ESIA mentions that "the afflux has been calculated only for the 100,000<sup>37</sup> cusecs discharge in the river. These values are very small compared to water depth. Values of lesser discharge will be even smaller and would be insignificant."
- 6.2.7 The ESDS clearly recognizes that there would be construction within a Prohibitive Zone and Standard 1 stipulates that for projects outside of the EU, the ESIA must take care to integrate the impacts on human rights, biodiversity, climate change, cultural heritage, and disaster risks (emphasis added) into the overall ESIA.

The ESDS also states that, regarding the EIA "the findings were that the design metro on pillars which will not obstruct the flow of water sufficiently mitigates the identified risks of erosion, higher risks of flooding, water and air pollution, damage to biodiversity and trees".

6.2.8 Additionally, the NGT's Expert Committee requested the Promoter to conduct a new hydrodynamic study to assess the impact of metro construction on rise in flood level and submergence (see paragraphs 2.2.9 and 2.2.10 of this Report). The study submitted to the NGT's Expert Committee establishes a direct effect between metro pier construction in the Prohibitive Zone and increased inundation risks, including through extended cross-sections.

<sup>&</sup>lt;sup>37</sup> Calculations for 60,000 cusecs were not carried out because "under these conditions, hydrological calculations for the river discharge become meaningless because the river discharge is fully controlled manually. Since the discharge in Mutha River is not a function of natural parameters, there is no need to get any data on rainfall, infiltration etc.<sup>37</sup>" The EIB Flood Risk Management Guide (see paragraph 3.4.12 of this Report) advises the collection of present data on rainfall and infiltration as necessary parameters for hydrological models and calculations. Moreover, the CPWRS collected data on rainfall and infiltration and computed calculations for a discharge of 60,000 cusecs which led to identify a causal link between the project and rise in afflux.

# Risks to population

- 6.2.9 Standard 9 requires the Promoter to identify and evaluate public health and safety risks and potential adverse impacts arising directly or indirectly from the project as early as possible, on a continuous basis throughout the entire project life cycle and along its supply chain.
- 6.2.10 The ESIA concluded that there were no risks of flooding due to the project.
- 6.2.11 However, the CWPRS report acknowledges a causal link between the project and rise in afflux of the Mutha River. From the information gathered during the inquiry, the EIB has not been provided with a flood disaster management plan adequately covering impact on population safety as per EIB standards, in line with CPWRS report findings.

EIB's role

- 6.3 The EIB services have been closely monitoring the cases before the NGT.
- 6.4 The Promoter does not consider potential flood risks, which the new submission of the CWPRS report to the NGT acknowledges. In line with EIB standards, such risk should be duly considered as part of the EIB's review of the quality of the ESIA.

# Conclusion

- 6.4.1 The EIB-CM notes that the decision of the NGT will clarify the compliance of the contested operation with national law and that EIB services are closely monitoring the developments of this case.
- 6.4.2 Meanwhile, based on the information gathered as part of the EIB-CM's inquiry, it appears that minor risks of flooding due to the project are acknowledged by the new information submitted by the Promoter to the NGT but are not yet accounted for in the ESIA. The same is valid for the risk of erosion resulting from the greater number of trees removed from the riverbanks. The EIB was not provided with a flood disaster management plan, addressing project's potential impact on health and safety of population.
- 6.4.3 While the EIB-CM concludes that the adjudication on the compliance of the operation with national law will be provided by the NGT, the project's potential impact on community health and safety deserves the attention of the Promoter and of EIB's services responsible for the enhanced environmental assessment and monitoring of the operation. Based on the documentary evidence available the EIB-CM concludes that the allegation with regards to the role of the EIB is ungrounded.

# 7. <u>RECOMMENDATIONS AND SUGGESTIONS FOR IMPROVEMENT</u>

- 7.1 Based on its findings and conclusions, the EIB-CM recommends that the EIB services engage with the Promoter in order to ensure that the ESIA is promptly updated to adequately reflect and address current and expected loss in biodiversity and consequences associated to that including erosion and increased vulnerability of the river system.
- 7.2 Based on its findings and conclusions, the EIB-CM suggests that the EIB services:

- i) keep closely monitoring the ongoing judicial proceeding before the NGT in the light of their review of the conformity of the operation with EIB relevant standards.
- ii) engage with the Promoter in order to ensure that the Promoter:
  - a. adequately addresses flood risks related to the metro piers construction within the Prohibitive Zone in the ESIA based on the CPWRS Report; and
  - b. if deemed necessary by the National Green Tribunal, liaises with the Pune Municipal Corporation for the update of the Flood Disaster Management Plan.

**Complaints Mechanism**