The Delhi Mumbai Industrial Corridor (DMIC) project is a Japan-India joint development project in Western region of India, with an influence zone of 14% of total land mass and 17% of India’s population. This project aims to build a 1480 km dedicated freight railway line to connect Delhi and Mumbai (with yen loans of 450 billion yen) and develop infrastructure along 150 km on both sides of the line, such as industrial areas, investment regions, distribution centers, new cities, power plants, roads, sea ports, housing, and commercial facilities, with mainly making use of private investments in public–private partnership (PPP) mode.

Japan Bank for International Cooperation (JBIC), a policy-based financial institution of Japan, is investing to the DMIC project, through USD 75 million loans to India Infrastructure Finance Company Limited (IIFCL)\(^1\) and equity participation (JBIC’s share is 26%) to Delhi Mumbai Industrial Corridor Development Corporation (DMICDC)\(^2\). Under these financial supports, 19 projects are listed as prospective projects for Japan’s USD 4.5 billion DMIC facility.\(^3\)

The following problems are related to the JBIC Guidelines for Confirmation of Environmental and Social Considerations\(^4\) in DMIC project. Most of points were found through public documentations and a field visit between June 19 to June 26, jointly carried out by National Alliance of Peoples’ Movements, India (NAPM) and Japan Center for a Sustainable Environment and Society (JACSES).

1. **Social and Environmental Impacts have not been reviewed and addressed appropriately.**

Related Clause of the JBIC Guidelines:

*Environmental impact which may be caused by a project must be assessed and examined from the earliest planning stage possible. Alternative proposals or minimization measures to prevent or reduce adverse impact must be examined and incorporated into the project plan:* (Page 14, JBIC Guidelines)

*Environmental impact to be investigated and examined includes factors that impact human health and safety as well as the natural environment, such as: air, water, soil, waste, accidents, water usage.*

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ecosystem and biota. Social concerns include: involuntary resettlement of the population, the indigenous people, cultural heritage, landscape, gender, children’s rights, communicable diseases such as HIV/AIDS, the working conditions (including occupational safety) and impact that may lead to trans-boundary and global environmental problems; (Page 15, JBIC Guidelines)

Under the DMIC project, 11 Investment Regions (more than 20,000 hectares in each area) and 13 Industrial Areas (more than 10,000 hectares in each area) are projected. Therefore, at least 350,000 hectares will be allocated for the DMIC project, and tremendous environmental and social impacts will be caused. Although the DMIC is a huge and complex project, the following social and environmental impacts have not been considered appropriately:

- **Water Sustainability:** The DMIC project requires tons of natural water for industrial areas. For example, in Pithampur, State of Madhya Pradesh, a water supply project from Narmada River to the Pithampur Industrial Area is planned as a Japanese company’s project. However, most of the area in the influence zone is under severe water distress. As per the current plan for meeting water needs of various projects, existing water infrastructure for irrigation purposes will be diverted. Romi Khosla and Vikram Soni criticized that “all the utilizable flow in the river of the region is already fully utilized by current users. Developing the DMIC will overdraw the water and impact the health of the rivers.” (See Table 1)

### Table 1: Water Resource Potential of Rivers Passing through DMIC Region (Water Volume in Billion Cubic Meters)

<table>
<thead>
<tr>
<th>River Basin</th>
<th>Total Flow</th>
<th>Minimum Flow 50%</th>
<th>Already Utilized</th>
<th>Balance Available For Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yamuna (till Etawah)</td>
<td>13</td>
<td>6.5</td>
<td>9</td>
<td>-2.5</td>
</tr>
<tr>
<td>Chambal (till Etawah)</td>
<td>31.4</td>
<td>15.7</td>
<td>15</td>
<td>+0.7</td>
</tr>
<tr>
<td>Mahi</td>
<td>11</td>
<td>5.5</td>
<td>5</td>
<td>+0.5</td>
</tr>
<tr>
<td>Sabarmati</td>
<td>3.8</td>
<td>1.9</td>
<td>1.4</td>
<td>+0.5</td>
</tr>
<tr>
<td>Narmada</td>
<td>45.6</td>
<td>22.8</td>
<td>23.6</td>
<td>-0.8</td>
</tr>
<tr>
<td>Tapi</td>
<td>14.9</td>
<td>7.5</td>
<td>10.3</td>
<td>-2.75</td>
</tr>
<tr>
<td>Seasonal west flowing rivers of Katch and Aurashtra including Luni</td>
<td>15</td>
<td>7.5</td>
<td>6</td>
<td>+1.5</td>
</tr>
<tr>
<td>Total</td>
<td>134.7</td>
<td>67.4</td>
<td>70.3</td>
<td>-2.85</td>
</tr>
</tbody>
</table>


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Food Security: Due to the change of extensive agricultural land to industrial areas, local food chain including subsistence farming will be affected significantly. (e.g. If a farmer loses an agricultural land for subsistence farming, the family has to spend for foods additionally.) However, it is unclear whether the impacts are considered or not. 74 villages around the city of Indore in Madhya Pradesh are proposed to be acquired for developing the Pithampur Industrial Area, affecting at least 100,000 people. Most of the proposed land gives at least 2 crops a year, since the land is rich black cotton soil. Similarly, 234,000 hectares are proposed to be acquired around the city of Aurangabad in Maharashtra, where land is also extremely fertile. Unfortunately, no study or estimate of the impacts and alternatives have been prepared by the project authorities and neither this has been a point of concern in project financing.

Loss of Employment: Although the loss of employment of many farmers and related workers will be increased due to the acquisition of agriculture lands, it is unclear whether the loss of employment is considered appropriately. Vijay Diwan states that “According to the report of District Social and Economic Analysis of Aurangabad, the ratio of cultivable land to people dependent on it is 0.24 hectares/capita. It means that 4 persons live by 1 ha of land.” “At Aurangabad, it was announced that 3 lakh (300,000) jobs would be created, but there was no mention of how many jobs in agriculture would be lost.” P. Sainath, a widely respected journalist for his pioneering work on rural affairs, writes, there are nearly 15 million farmers (‘Main’ cultivators) fewer than there were in 1991. Over 7.7 million less since 2001, as the latest Census data show. On average, that’s about 2,035 farmers losing ‘Main Cultivator’ status every single day for the last 20 years. And in a time of jobless growth, they’ve had few places to go beyond the lowest, menial ends of the service sector.7

Disaster Risk Reduction: The DMIC project is a flagship of public–private partnership (PPP). However, United Nations Global Assessment Report on Disaster Risk Reduction 20138 criticizes that “in India, PPPs are emerging where private investment finances publicly managed construction. As Box 8.6 (Delhi metro exposed to multiple risks) shows, these partnerships do not necessarily lead to improved disaster risk assessment and management, and may underplay disaster risks or lead to their transfer as shared costs to the public sector or to city residents.”

2. Alternative project options have not been considered.

Related Clause of the JBIC Guidelines:

Multiple alternative proposals must be examined to prevent or minimize adverse impact and to choose a

7 http://www.thehindu.com/opinion/columns/sainath/over-2000-fewer-farmers-every-day/article4674190.eme
better project option in terms of environmental and social considerations. In examination of measures, priority is to be given to the prevention of environmental impact, and when this is not possible, minimization and reduction of impact must be considered next. Compensation measures must be examined only when impact cannot be prevented by any of the aforementioned measures; (Page 14, JBIC Guidelines)

Involuntary resettlement and loss of means of livelihood are to be avoided where feasible, exploring all viable alternatives. When, after such examination, it is proved unfeasible, effective measures to minimize impact and to compensate for losses must be agreed upon with the people who will be affected; (Page 16, JBIC Guidelines)

It is unclear whether the alternative options are considered appropriately. In Dharnachi Wadi Village, one of affected areas of Dighi Port Industrial Area, State of Maharashtra, 70 people received notifications of land acquisition for DMIC project on February 26, 2013. However, they have not been consulted on any alternative options before the issue of notifications. Similar problems may be raised in other villages, since notifications of land acquisition for DMIC project were also issued for people lived in other villages.

3. Public consultations have not been held, and the project social and environmental information have not been disclosed.

Related Clause of the JBIC Guidelines:

Projects must be adequately coordinated so that they are accepted in a manner that is socially appropriate to the country and locality in which the project is planned. For projects with a potentially large environmental impact, sufficient consultations with stakeholders, such as local residents, must be conducted via disclosure of information from an early stage where alternative proposals for the project plans may be examined. The outcome of such consultations must be incorporated into the contents of the project plan; (Page 16, JBIC Guidelines)

For projects that will result in large-scale involuntary resettlement, resettlement plans must be prepared and made available to the public. In preparing a resettlement plan, consultations must be made with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people. It is desirable that the resettlement plan include elements laid out in the World Bank Safeguard Policy, OP4.12, Annex A. (Page 17, JBIC Guidelines)

In none of the areas in the influence zone, democratically elected local government institutions or elected representatives have been consulted at any step of the project design, implementation or finalization. People's protest rallies against DMIC project were raised in Raigad (State of Maharashtra), Mandal
Becharaji (nearby Ahmedabad, State of Gujarat), Bawal (nearby Rewari, State of Haryana), Bodaki (nearby Greater Noida, State of Uttar Pradesh), etc.. In addition, affected people expressed their deep concerns on land acquisitions in Bidkin (nearby Aurangabad, State of Maharashtra), Kali Billod (nearby Pithampur, State of Madhya Pradesh), etc..

Especially in Raigad district, people from more than 40 villages held several public meetings and many protest rallies against the Dighi Port Industrial Area (e.g. They conducted a long protest from April 10 to May 6, 2013), where the Japanese Government and companies visited and showed their interests to build a gas-thermal power plant in February 2011.

In Dharnachi Wadi Village, one of the affected areas of Dighi Port Industrial Area, 70 people received notifications of land acquisition for DMIC project on February 26, 2013, and all of them raised objections to land officials. People stated that there was no consultation before the issue of notifications. Land records have been marked by the district officials as “reserved for DMIC,” which means people can no longer enact any transaction of their property.

**4. Information on rehabilitation has not been provided to affected people.**

Related Clause of the JBIC Guidelines:

| People to be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported by the project proponents, etc. in a timely manner. Prior compensation, at full replacement cost, must be provided as much as possible. The project proponents, etc. must make efforts to enable the people affected by the project, to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels. Measures to achieve this may include: providing land and monetary compensation for losses (to cover land and property losses), supporting the means for an alternative sustainable livelihood, and providing the expenses necessary for relocation and the re-establishment of a community at relocation sites; (Page 16, JBIC Guidelines) |

It is unclear whether people can get an alternative sustainable livelihood for rehabilitation as required in the JBIC Guidelines. In Dharnachi Wadi Village, one of the affected areas of Dighi Port Industrial Area, people only obtained information on prices of compensation for the loss of lands. Similar problems may be raised in other villages, since notifications of land acquisition for DMIC project were also issued for people lived in other villages.

India doesn't have a central legislation for resettlement and rehabilitation. As of now 2007 National Policy

on R&R has been used, which is not legally binding on project proponents which could give some relief to PAFs. As a result today nearly 100 million people have been displaced due to various development projects since 1947, when India got independence.

5. Operational capacities on social and environmental consideration of implementation agencies have not been reviewed appropriately.

Related Clause of the JBIC Guidelines:

| In light of the Guidelines and taking into account the characteristics of the project and the particular circumstances of the country and its location, JBIC confirms in its environmental reviews: 1) whether appropriate and sufficient consideration is given to environmental and social issues before the implementation of the project, 2) whether appropriate environmental and social considerations can be expected after JBIC makes decisions on the funding of the project in light of such factors as the state of preparation by the project proponent and host government, their experience, operational capacity, and the state of securing funds, as well as external factors of instability. (Page 4, JBIC Guidelines) |

Maharashtra Industrial Development Corporation (MIDC), which is one of the state level implementation agencies of the DMIC project, made fake documentations on land acquisition in another project in Shendra, State of Maharashtra, and 8 landowners filed complaints on the forgeries by MIDC to a court. It is clear that MIDC does not have a capacity to implement the resettlement work under DMIC project. Nevertheless, it is unclear whether JBIC has reviewed the agency’s record of implementation. It is to be noted that new special purpose vehicles (SPVs) or existing agencies like MIDC or Gujarat Industrial Development Corporation (GIDC) have been engaged for implementing the projects, but their capacity to fulfill requirements have not been assessed adequately.

6. The JBIC investment to DMICDC is miss-classified as Category C.

Related Clause of the JBIC Guidelines:

| Category C: A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impact. Projects that correspond to one of the following are, in principle, classified as Category C, with the exception of projects with sensitive characteristics and projects located in sensitive areas as indicated in Section 3 of Part 2:

1) Projects for which the JBIC’s share is not above SDR 10 million;

2) Sectors or projects in which no particular environmental impact would be normally expected (e.g., support for international balance of payments, maintenance of existing facilities, acquisition of rights and interests without additional capital investment); or

3) Cases in which there is only minor involvement of the project by the borrower or JBIC, such as the export/import or lease of items of machinery or equipment that is not connected with a particular |
project, and where there would be little reasonable significance in JBIC’s conducting an environmental review. (Page 7, JBIC Guidelines)

Category FI: A proposed project is classified as Category FI if it satisfies all of the following: JBIC’s funding of the project is provided to a financial intermediary etc.; the selection and assessment of the actual sub-projects is substantially undertaken by such an institution only after JBIC’s approval of the funding and therefore the sub-projects cannot be specified prior to JBIC’s approval of funding (or assessment of the project); and those sub-projects are expected to have potential impact on the environment. (Page 7, JBIC Guidelines)

JBIC’s investment in DMICDC is classified as Category C, since the DMICDC is not an implementation agency (only planning and advisory works). However, DMICDC is involving in social and environmental assessment/planning, and there is a possibility of significant impact on the environment and large-scale involuntary resettlement as a result of the investment. Therefore, it should be classified as Category A or Category FI, as well as a categorization system under the Japan International Corporation Agency (JICA)’s Guidelines.

7. If a displacement work is conducted by a State government under DMIC, not a company, JBIC should consider the impact due to the displacement as a cumulative impact.

Related Clause of the JBIC Guidelines:
In addition to the direct and immediate impact of projects, derivative, secondary and cumulative impact are also to be examined and investigated to a reasonable extent. It is also desirable that the impact which can occur at any time during the duration of the project be continuously considered throughout the life cycle of the project. (Page 15, JBIC Guidelines)

JBIC also ascertains whether a project meets the relevant aspects of World Bank Safeguard Policy regarding environmental and social considerations. On the other hand, for private sector limited or non-recourse project finance cases, or for where appropriate, JBIC ascertains whether the project meets the relevant aspects of International Finance Corporation Performance Standards. In addition, where appropriate, JBIC also uses, as reference points or benchmarks, standards established by other international financial institutions, other internationally recognized standards and/or good practices established by developed countries such as Japan regarding environmental and social considerations. (Page 6, JBIC Guidelines)

According to a JBIC staff, all displacement works will be conducted by State governments’ agencies in DMIC project. If JBIC provides a fund to a company using the land, the displacement work should not be excluded from the scope of the JBIC’s social and environmental consideration. JBIC should consider the
impact due to the displacement work as a cumulative impact as required in the JBIC guidelines. In addition, under the International Finance Corporation (IFC)'s Performance Standards, which JBIC has to use a reference point, if measures by a government do not meet the requirements of Performance Standard 5 of IFC, the client has to prepare a Supplemental Resettlement Plan, together with the documents prepared by the responsible government agency, will address the relevant requirements of this Performance Standard. (See paras. 30-32, Performance Standard 5)

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