Hanoi Urban Transport Development Project

Report on the First Round of Public Consultations

April 2006

MVA Asia Limited
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### List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRT</td>
<td>Bus Rapid Transit</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>HPC</td>
<td>Hanoi People’s Committee</td>
</tr>
<tr>
<td>HUTDP</td>
<td>Hanoi Urban Transport Development Project</td>
</tr>
<tr>
<td>GOV</td>
<td>Government of Vietnam</td>
</tr>
<tr>
<td>PC</td>
<td>Public Consultation</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>CEETIA</td>
<td>Center for Environmental Engineering of Towns and Industrial Areas</td>
</tr>
<tr>
<td>PMU</td>
<td>Project Management Unit</td>
</tr>
</tbody>
</table>
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1. Introduction

The Hanoi People’s Committee (HPC) proposes to seek as Credit from International Development Association/World Bank (IDA/WB) to finance a program of measures aimed at improving transport in the City of Hanoi. The program, termed the Hanoi Urban Transport Development Project (HUTDP), is under development but could include, *inter alia*, investment in roads, bus ways and other bus priority and physical measures to assist bus operations together with bus reorganization, technical assistance studies and training to support the investment components. The total amount of the credit is expected to be in the range of US$150 – 170 million and total project costs is expected to be in the range of US$170 – 200 million.

The study components of the project include:

*Component BRT:*

- Development of a bus rapid transit (BRT) system
- Reorganization of the bus system
- Development of bus maintenance facilities, and secure ticketing systems

*Components Roads*

- Second Ring Road (approx 7km) from the proposed Phu Thuong Bridge to Cau Giay
- Western extension of Hoang Quoc Viet street (approx 3.4km)

*Component Institutional Strengthening*

- Traffic safety
- Air quality
- Institutional capacity building

*Component BRT Public Consultation*

- Stakeholders feedback
- Brand and identify
- Public involvement strategy
- Media management strategy
2. The Purpose and Methodology of Public Consultation

2.1. Purpose

The public Consultation is a requirement in environmental assessment of WB’s projects. CEETIA coordinated with MVA and PMU to conduct the Public Consultation meeting. The results will be used to build the mitigation measures and show the public opinions and public support to the Project.

Public Consultations (PCs) are required in order to ensure the active participation of stakeholders in the formulation and implementation of the HUTDP. The overall objectives of the PCs are to identify stakeholders, make them aware of the HUTDP, receive their feedback and incorporate these comments in the Environmental Impact Assessment (EIA). This Report on Public Consultation Meetings focuses strictly on aware of residents who are impacted by the construction of Ring Road No.2, Hoang Quoc Viet Extension Road and BRT component

Detail Objectives

The detail objectives include:

- Make all potentially affected parties, organizations and individuals aware Hanoi Urban Transport Development Project, the reasons for it, and the requirements and purpose of the EIA for the Hanoi Urban Transport Development Project.

- Encourage and solicit public input and comment on Hanoi Urban Transport Development Project, so as to assist in the identification of environmental issues, problems, priorities, gaps in the implementation process, and the resolution, mitigation and means of management and monitoring of those issues though the development of Environmental Impact Assessment (EIA) for the project.

- Ensure that everyone interested in Hanoi Urban Transport Development Project, has access to accurate information about it.

- Meet the requirements of the HPC and the WB in respect of public disclosure of information and consultation.

- Establish ongoing contact in stakeholder organizations and community groups to assist with the implementation of the EIA.
• Assist in obtaining broad public acceptance of the Hanoi Urban Transport Development Project.

A key element of HPC’s policy to improve the overall transport in Hanoi city is the development of an efficient:

- Reducing road transit times within selected areas of the Hanoi city
- Reducing vehicle-operating costs through the improvement of selected road segments.
- Increasing public transit capacity.
- Transit safety.

The overall objective of the public consultation is to learn and understand the opinions and concerns of the public about the project, particularly from those to be directly impacted by the project construction and operation. On this basis, these concerns can be addressed properly during project planning, alternatives selection, engineering design and mitigation measures development. More specifically, the public consultation is to:

- Provide a description of the potential impact, mitigation measures already designed and the residual impact to the residents, institutions and organizations that would be impacted by the implementation of the project;
- Conduct on-site surveys, interviews and public meetings/hearings to obtain public opinions and concerns about the project, particularly on concerns on direct impacts to their life;
- Improve the decision making process which may impact to the environment;
- Give the chance to the public for them to express and hear the suggestions of the project;
- Improve the public acceptability of the various kind of mitigation measure;
- Intercede the public's different suggestions or conflicts on the environmental questions and dispel the resistance which to the implementation planning of the government;
- Confirm the rationality and legitimacy of the government decisions;
- Meet various kinds of legal requests of citizen; make the exchange of suggestions
between citizen and the government; and

- Understand the main problems which citizen pay attention and their values;

### 2.2. Approach and Methodology

There are two phases for PC meeting

**The PC meeting first round:** The purposes of the first round of public conclusion were to provide the concerned public a project description and explain the potential impacts of the project to the environment and the communities.

**The PC meeting second round:** The second round of public conclusion was conducted after the draft EA report was prepared. The purposes of the second round of public conclusion were to explain the levels of the impacts and conclusions of the impact assessment. In particular, the second round of public consultation was to explain to the public how the significant impacts including all those raised from the first round of the public consultation were to be addressed. This round of the public consultation was to determine whether the residual impacts would be acceptable to the concerned public following the implementation of the mitigation measures.

* According to the requirements of the World Bank OP4.01, consultations were conducted with affected residents, schools, kindergartens, enterprises, hospitals, restaurants, institutions and service sectors along the roads of the project, as well as the general public in the city.

### 3. Implementation

**3.1. Determine the project areas have to conduct the environmental assessment impact.**

Base on the design options of MVA, the EA group conducted the field work in order to determine the key location of where the project will impact on environment. In BRT component, the EA group already found out the key locations which are three terminals, 7 interchanges, 50 depots (show in table 2). Since the BRT route will pass through 5 urban districts, 2 sub urban districts and Ha Dong Town so to determine exactly the ward where the BRT go along is very important to organize the meeting.

**3.2. Determine the time to implement PC meeting first round.**

EA group set up the schedule of PC meeting first round with districts at least 3 days before. The PC meetings conducted from 1st August to 23rd September (see Table 4)
3. 2.1. Organization the Meeting

EA group had meeting with PMU and MVA to determine the contents, purposes and plan for the first round meeting.

Topic discussion in meeting includes:

- Which impact do you think the construction of the project will be produced to the environment and social development?
- What should the project be pay attention to in the environmental protection during the construction phase and operation phase?
- What suggestions to the mitigation measures?
- Any suggestions and requirements for the projects?
- Support or Object of the Project?

3.2. 2. The first round meetings

12 public meetings were carried out around project area. The EA group, PMU, MVA and the leaders of districts, towns, and many delegates from wards, communes participated in the meeting, especially the residents who will be impacted by the project (see the table 1).

List of the district relevant to the project are shown in the table 1

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of District</th>
<th>Hoang Quoc Viet Extension</th>
<th>Ring Road No.2</th>
<th>BRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ba Dinh</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>Cau Giay</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Dong Da</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ha Dong Town</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>Hai Ba Trung</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>Hoan Kiem</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Tay Ho</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Thanh Tri</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>Thanh Xuan</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Time and venue of PC meetings are shown in below table

Table 2 – Time and venue of the first round PC meetings

<table>
<thead>
<tr>
<th>No</th>
<th>Name of District</th>
<th>Time</th>
<th>Venue</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tu Liem</td>
<td>9 am 1.Aug.2005</td>
<td>District meeting room</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Hai Ba Trung</td>
<td>14:30 pm 2.Aug.2005</td>
<td>District meeting room</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Ha Dong Town</td>
<td>14:30 pm 3.Aug.2005</td>
<td>Town meeting room</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Hoan Kiem</td>
<td>14:30 pm 4.Aug.2005</td>
<td>District meeting room</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Dong Da</td>
<td>8:30 am 5.Aug.2005</td>
<td>District meeting room</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td>Ba Dinh</td>
<td>8:45 am 11.Aug.2005</td>
<td>District meeting room</td>
<td>19</td>
</tr>
<tr>
<td>7</td>
<td>Thanh Xuan</td>
<td>8:35 am 17.Aug.2005</td>
<td>District meeting room</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>Tay Ho</td>
<td>14:15 12.Aug.2005</td>
<td>District meeting room</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>Cau Giay</td>
<td>14:20 19 Aug 2005</td>
<td>District meeting room</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Van Dien Town</td>
<td>14:20 pm 18.Aug.2005</td>
<td>Town meeting room</td>
<td>34 Extra first round meeting</td>
</tr>
<tr>
<td>11</td>
<td>Trung Van</td>
<td>14:20 pm 20.Aug.2005</td>
<td>Commune meeting room</td>
<td>Extra first round meeting</td>
</tr>
<tr>
<td>12</td>
<td>Hang Bac Ward</td>
<td>8:30 am 23.Aug.2005</td>
<td>57 Dinh Tien Hoang</td>
<td>48 Extra first round meeting</td>
</tr>
</tbody>
</table>
The meetings were conducted well because they got full support of the local agencies. All delegates informed before participated the meeting thus they asked many questions and gave comments for Hanoi Urban transport Development Project.

3.3.2.1 The main content of the PC meeting
In the meeting, the PMU and MVA introduced primarily content of the project, the EA group presented the proposed environmental impacted from the project. The contents and comments were noted in the minutes of meeting.

3.3.2.2 The participant of the meeting
- Project Management Unit;
- MVA;
- Center for Environmental Engineering of Towns and Industrial Areas – Hanoi University of Civil Engineering.
- Representatives of the Districts People Committee, Communist Party, and mass organization such as: Father Land, Women Union, Youth Union….
- Representative of the relevant Wards, Communes

3.3.2.3 Document for meeting includes:
- Content of the EIA report,
- The technique design of BRT and Road components;
- Questionnaire.

The questionnaire will be subsequently distributed in the wards and communes potentially affected by the project. Once all information had been disseminated to all identified stakeholders, the PC meetings were conducted.
### Table 3 - Wards and Communes along HUTDP

<table>
<thead>
<tr>
<th>District</th>
<th>Project Components</th>
<th>Wards and Commune</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ba Dinh</td>
<td>Ring Road No.2 and BRT</td>
<td>Cong Vi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dien Bien</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vinh Phuc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thanh Cong</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giang Vo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ngoc Khanh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kim Ma</td>
</tr>
<tr>
<td>Tay Ho</td>
<td>Ring Road No.2</td>
<td>Buoi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nhat Tan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xuan La</td>
</tr>
<tr>
<td>Thanh Xuan</td>
<td>BRT</td>
<td>Nhan Chinh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thanh Xuan Trung</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thanh Xuan Bac</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thanh Xuan Nam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phuong Liet</td>
</tr>
<tr>
<td>Tu Liem</td>
<td>Hoang Quoc Viet</td>
<td>Phu Dien</td>
</tr>
<tr>
<td></td>
<td>Extension Road</td>
<td>Minh Khai</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co Nhue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cau Dien Town</td>
</tr>
<tr>
<td>Dong Da</td>
<td>BRT</td>
<td>Phuong Mai</td>
</tr>
<tr>
<td>District</td>
<td>Project Components</td>
<td>Wards and Commune</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Hoan Kiem</td>
<td>BRT</td>
<td>Hang Trong</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tran Hung Dao</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hang Bac</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cua Nam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hang Bai</td>
</tr>
<tr>
<td>Ha Dong Town</td>
<td>BRT</td>
<td>Van Mo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quang Trung</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yet Kieu</td>
</tr>
<tr>
<td>Hai Ba Trung</td>
<td>BRT</td>
<td>Bach Khoa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pho Hue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bui Thi Xuan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Le Dai Hanh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dong Tam</td>
</tr>
<tr>
<td>Van Dien Town</td>
<td>BRT</td>
<td>Unit 18, resident living around Quang Lai pond</td>
</tr>
</tbody>
</table>

The meeting programs and participants are listed in the minutes of the meetings.
4. Summary the Comments and Suggestion of Participation in PC Meetings

In the meeting the leader of districts focused into some issues:

4.1. Significant and Purpose of PC Meeting.

The delegates of the district, wards, and communes highly appreciated the PC meeting on environmental impacts. The meetings emphasized the active role of community to comment on the potential environmental impacts that will be created from construction phase of road component and BRT component as well as proposed the relevant mitigation measures. Additionally, on the meetings, the delegates highly appreciated the public consultation process that focused on environmental protection and people’s quality of life. Many the comments shown that compare with the previous projects this project implements by scientific way with the responsibility of the project management unit and design consultant unit (Trung Van Commune, Ba Dinh District).

4.2. Evaluate the Transport Situation of Hanoi City.

All delegates agree that, in recent years, the Hanoi authority has been concerned much about transport management, especially focus into strengthening capacity of bus system to improve the public travel. In addition, some new roads are constructed in order to create the connection of city road network. Therefore the urban transport has changed into the new appearance for the city.

However the improvement has not met the public travel yet. The traffic jams still happen and impact on activities of people.

The organizing a mass transit system with high capacity is need of Hanoi transport. Especially the bus rapid transit with high capacity is match with economic condition and infrastructure of Hanoi in recent and future. People acclaim the city policy and hope that it will be conducted soon

4.3. The Comments and Main Concerns in the Meeting:

- The traffic and traffic management are a concern in Hanoi. For example, construct BRT system, Buoi Cau Giay interchange, Ring road No. 2, ...
- Dedicated bus lanes in the traffic system;
• Not enough greens on both side of the road.
• Motor vehicle emissions and air quality is not up to the standards
• Concerns of dust and noise during the construction phase;
• The traffic lights should show second;
• Support public transport, more buses
• All participants showed their understanding of and support to the project;
• Better co-ordination between the government departments and agencies during construction;
• Strengthen the pollution control for noise, dust and waste water.

4.4. Detail Suggestion for the Project

4.4.1. Bus Transit Rapid System

+ Many questions asked about the depot located in middle of the road, how can passenger access the depot? In the fact these roads are crowded (Nguyen Trai road, Giai Phong, Lang Ha…). Does it ensure safety for passenger?

+ The narrow roads such as Hue, Ba Trieu with high vehicle flow how is the speed of BRT? …

+ There are some roads have underground technique facilities as Nguyen Trai, how is surface structure of road if BRT system operates the loading capacity of BRT with 180 passenger impact to underground facilities?

+ In the meeting with Hoan Kiem leaders and Hang Bac Ward, the delegates commented that the design of BRT route around Hoan Kiem lake should be considered carefully. This area is center of City where are crowded, whether BRT system operation is suitable with city policy or not? On the other hand, this area is public place to perform many cultural – social activities where will allow pedestrian. Therefore, setting up a new bus system is opposite with City policy. The delegates suggested that the BRT system should avoid the old street area, BRT only operate in new road.

+ Some comments from hang Bac Ward suggested that the new system doesn’t call bus transit rapid because the route of bus will go through many intersection and crowded road which is cause to reduce the bus speed, thus the name of system should change to high capacity loading bus.
+ City should have a good plan for new roads where is enough wide for BRT operating. It is the important plan to avoid traffic jam like the roads in central area currently

+ In the meeting with Ha Dong Town, Mr. Vice president of Town commented that the Ministry of Transport conducted the survey and determined the landmark of Hanoi – Ha Dong urban railway. The route of the urban railway overlaps with BRT route. Therefore the MVA should consider designing a best option.

4.4.2. Depot, Interchange and Terminal

4.4.2.1. The Depots along the Route

The delegates of the first round PC meeting concerned about the capacity of BRT system. BRT operation whether is feasibility and “rapid” with 180 passengers per trip. The depots whether supply the large amount of passengers or not?

The project should study to select depot location that minimizes the influences directly to activities of resident. BRT depot should occupy less area as possible to avoid impact to trade activities because the route pass through to many narrow street in down town such as Hue, Ba Trieu…

4.4.2.2. The Location of Interchange

In the meeting with the leaders of Hoan Kiem District, they said that the interchange location near Hoan Kiem lake is the sensitive area. Following their comments, the proposal interchange location will impact on Hoan Kiem lake water by oil discharge and toilet wastewater. The around area will be impacted by dust, gas emission and noise so the project must have measure to solve these problem. The delegates also wonder about the area of the interchange which is quite large with 1000 m² whether enough for facilities of the interchange.

In the meeting with Hang Bac Ward, many comments shown that the location of interchange near Hoan Kiem Lake is not suitable because this area is narrow and historical signification. The interchange will break the landscape. Although, the CEETIA gave the mitigation measured but residents still worry about the economic capacity and technique mitigation. Some comments proposed that the interchange should move to Bac Co is suitable and feasibility.
In the meeting with Ha Dong Town, the delegates said that need to determine correctly location of BRT depot because in the list of BRT depot noted that “Ha Dong A and Ha Dong B is located outside Ha Dong railway station”. In the fact, this area is bus station but the Ha Dong railway station will be constructed in Ba La – Bong Do later.

4.4.2.3. Bus Terminal

In the meeting with Van Dien Town, the comments said that the location of terminal in Quang Lai will create employment for people but high pressure into infrastructure, environment and security for the area. For environment aspect, the people concerned as below:

- Flooding situation: Currently, the flood is occurring in the area after 1A construction period. When BRT component start construction, it will fill up the Quang Lai pond thus the flood status is more serious. The delegates also reminded the elevation of the terminal compare with around areas. In the construction phase, the noise and flood must be controlled tighten.

- When the terminal begins operation, the volume of passenger and vehicle flow in the area are crowded lead to air and noise pollution. It also impacts to office building of Town and increase insecurity in the area.

In the meeting with Ha Dong Town, the leaders of Town proposed to study again the location of the terminal because of the current option will overlapped in new resident area. Furthermore, the Ha Tay province and Ministry of Transportation planned to construct a bus station near Ba La – Bong Do, thus the BRT terminal should be suitable with local master plan.
In the meeting with Trung Van Commune where will construct a repair and maintenance bus station, the delegates asked that whether this station is terminal to collect passenger or not? They suggested that the mitigation measure for water pollution of Phung Khoang Lake should be done well because the lake is near Me Tri Park.

4.5 Questionnaires

4.5.1 Surveying time

EA team sent Questionnaires on Hanoi Urban Transportation Development Project to relevant areas in Hanoi city from August 1st to 28th 2005. Total number of 700 questionair papers were sent and there were 604 replies.

4.5.2. Contents of questionairs

Questions mainly included transportation situation, environmental issues and mitigation measures, etc. Questionairs are included int he annexes.

4.5.3. Results

EA team recieved 604 replies. The results are good and as what expected, comprising:

Participants

♂ Sex: Male: 364 or 60.26%; Female: 240 or 39.74%
♀ Occupation: Fulltime staffs: 45.86%; small scale business: 19.66%; workers: 16.21% and others: 18.28%
♀ Education: University:48.85%; high school: 33.46%; data collected for uneducated people is low at 0.77%

Results

♂ There were 58.63% of the opinion that Hanoi transportation is normal and should be improved, a rather high ratio of 30.52 of the opinions that the current situation of transport in Hanoi is bad;
♂ Being asked about the measures for transportation improvement, 27.04% of the people answers that transportation planning should be pushed up; 26.65% shoed the need to decrease the number of motorbikes in the city; 26.07 % of the people said that new road should be provided and the rest of 20.23% presented the need on increase of public transport means;
♂ Most of the opinions agreed with the major environmental issues during construction and operation of the project which are dust and exhausted gas pollution which is 36.06% and 36.17% correspondingly. Attention should be paid
to mitigation measures to pollution like dust decrease and regular watering and 52.59% of the replies agreed with this solution;

41.52% of the opinion showed the need for implementation of mitigation measures to noise pollution by tree planting along road sides;

61.47% of the replies there are solutions to avoid impacts to plants and domestic animals;

The answers to the fact that project area cover the sensitive targets like cemeteries, schools, the opinion to agree on removal and compensation accounts for 40.87% of the total replies;

The awareness of the interviewed people on Hanoi Urban Transportation Development Project are rather equal with 34.63% of the people who thinks the project implementation would contribute to the improvement of current transportation situation and socio-economic improvement of Hanoi Capital; 34.02% of the replies agreed that the project would contribute to creation of convenience in transportation within the cities and 28.48% of the replied agreed that the project would help to make the city more beautiful;

96.43% of the replies showed support to the project implementation.

5. Comments and Suggestions

5.1 General Remarks

The Delegates from Districts, Wards and Communes highly appreciated the PC meetings on the environmental impacts issues associated with the Project. The meetings highlighted the positive role of community in assessing the potential negative impacts of the proposed road construction, BRT components and in suggesting related mitigation measures.

Delegates were generally in favor of the project, acknowledging the economic development benefits that arise from improved transportation links. However, they did caution that repeated improvement initiatives on the same roads created a great deal of insecurity for road area residents. Participants called for this project to be part of a long-term strategic development plan that avoided project overlap, the waste of national resources, and continual disturbances to people’s daily lives and economic activities.
5.2 Remarks on Environmental Impacts

5.2.1 Pre-construction Period

The main environmental concerns of the participants for the pre-construction period focused on the following issues:

- Impacts on water systems and utility infrastructure;
- Impacts on landscape; and,
- Road Access

Participants were very concerned over the potential impact of road construction activities on existing water systems, particularly drainage systems and flooding, as well as to utility infrastructure and the management of solid waste that create from BRT’s operation. They cautioned that at any disruptions to the full functioning of these systems could negatively impact productive activities in the road areas and/or lead to flooding. Beyond compensation for any land acquisition affecting these systems, residents requested assistance in form of labor and technical design in order to reconstruct any water systems or utility infrastructure altered by HUTDP. Residents were also concerned on how water runoff from the new road surface could potentially overwhelm existing drainage systems. They requested that the road construction design include a drainage component.

The participants of the first round PC concerned about BRT capacity whether with 180 passengers per trip is ensured feasibility and “rapid” in Hanoi current condition? Whether the design depot meet the large amount of people or not?

The participants from Wards also concerned about the location of BRT depots that impact on their living environment. The construction and operation of depot will create the environmental problems such as solid waste, waste water, air pollution especially effect on landscape in central area (Hoan Kiem Lake). They asked many times that how the transportation managers will control the environmental pollution caused by BRT. To what extend BRT improvement compare with existing bus? Some Delegates from Thanh Xuan District haven’t understood on the new bus system yet. They worried about the BRT lane will make narrowest the existing road lead to block the traffic and unsafe transit.
Road area inhabitants had concerns about the impact of road construction activities on the natural landscape. They said that it was essential to conserve on the number of trees cut down and to recover any landscape destroyed during construction period. PC participants recommended that landscaping, including tree planting, be arranged on both sides of the road to ensure that their communities enjoyed an aesthetically pleasing environment (Cau Giay District).

The participants of the first round PC concerned about BRT capacity whether with 180 passengers per trip is ensured feasibility and “rapid” in current condition? Whether the design depot meet the large amount of people or not?

Finally, the Delegates from Wards and Communes felt that any changes in road elevation must take into account the fact that many households along the proposal roads of the project are built on land with a lower elevation that the existing alignments. They requested that curbs and other structures be installed to facilitate access to the new roads for road area communities. Road area residents also requested that they receive assistance to raise the elevations of their homes and access roads to the same level as the improved roads (Van Dien Town and Cau Giay District).

5.2.2 Construction Period

The main environmental concerns of the participants for the construction period focused on the following issues: Dust, noise, and traffic controls.

The PC participants viewed dust, noise, vibration, gas emissions, and added traffic congestion to be the most serious potential negative impacts of the proposed road construction period. Minimizing these impacts - particularly in densely populated areas and in areas containing ancient buildings, sensitive places (churches, pagodas, etc.), schools, offices, and hospitals - was considered essential. Following their experience with other road construction projects, they felt that good preparation, coordination with local authorities, and the implementation of impact mitigation measures were all necessary to achieve the goal. Participants suggested that construction materials be adequately covered during transport and that construction sites be frequently sprayed water to prevent excessive dust.

Delegates recommended that construction should start soon and that it is completed within the shortest amount of time possible in order to minimize social disruptions and
any adverse affects on local economic activity. They commented that the BRT system should be completed in order to diminish the overloading of Hanoi transportation. To avoid added traffic congestion, participants suggested that in construction phase of part of BRT system should be maintain and control transit reasonably. To prevent the incidental accidents, the delegates requested the constructor set signals and notices in construction sites to aware the road users. Ensuring traffic safety during this period was important for road area inhabitants.

The positioning of construction material storage and worker accommodations within the road improvement area was also a strong concern among stakeholders. Therefore, the road area inhabitants requested a suitable location for both and felt it necessary to carefully monitor construction activities to ensure safety and avoid environmental contamination, particularly of water supply. They cautioned that asphalt heating must be carried out far from residential areas to avoid the negative health effects of resulting smoke. Residents also asked that adequate measures be taken to remove all waste material and excess construction material from the road improvement area as soon as possible.

Finally, residents highlighted the importance of strictly supervising contractors during the construction period to avoid materials being stolen, and to ensure quality of construction work.

5.2.3 Operational Period

Traffic safety was the main environmental concern of the participants for the operational period. Previously, the ward and commune peoples’ committees had coordinated with functional agencies in implementing decree no. 36/CP of the GOV and set up traffic safety corridors. Participants recognized that the proposed road construction and bus system improvements would allow vehicles to travel at greater speeds and were concerned that this could potentially increase the incidence of traffic accidents. Therefore, the participants considered it necessary to prepare adequate measures to prevent this potential negative impact, including monitoring of post-construction traffic conditions. Particularly, road area inhabitants requested that adequate signage, road marking, pedestrian crossings be included within the context of the transport improvement project in order to promote traffic safety. Finally, they felt
that reduced traffic speed should be mandated in residential areas and that enforcement of traffic law and regulations should be strengthened on the improved road segments.

5.3 Remarks on Social Issues

Although this PC meeting focused only environmental issues but Delegates from Wards and Communes regarded to land acquisition and compensation. PC participants expressed concern about how compensation was to be calculated (Cau Giay District).

Besides the direct compensation for private land and structure acquisitions, road area inhabitants requested that they receive adequate compensation for any damage to public structures and vegetation, in particularly the ancient banian tree in Nghia Do ward where the Ring Road No.2 will be constructed. The Delegates from wards and commune said that residents in the proposal project areas very worried about the plan of land acquisition of this project. Residents didn’t know exactly how much and when their land will be acquired. The Delegates from Quan Hoa Ward and Nghia Do Ward said that in their area have had too much projects that related to land acquisition and compensation. These matters have been sensitive and complex. It also created an anxious situation for residents and pressured on their living condition. Additionally, the previous projects have not finished yet (Cau Giay district).

Finally, the delegates highly appreciated this project with PC process and hoped that it will conduct perfectly because the other road project in their area seemed uncompleted and made inconvenient for them especially the water discharge and flooding (Tay Ho district).

6. Conclusion

The PC meetings have reflected the active interests of HPC and WB are residents in all of the potential impacts of the HUTDP. The residents are well aware of existing social and environmental conditions in the areas along the roads where the project will conduct and they are well informed regarding the proposed construction activities. They have illustrated their hopes and apprehensions about the proposed road construction and BRT through their numerous and varied suggestions and comments.

Overall, the Delegates of Districts and Wards wanted the potential impacts of the project to be more clearly determined and for appropriate measures to be put into place to mitigate any potential negative impacts. Their comments and suggestions will be
taken into account during the detailed design, construction, and implementation phases of the Project. After incorporating the findings of the PC meetings into the EIA these documents will be shared for review by the stakeholders. In a second round of PCs, they will be given the opportunity to address how well the Project’s impact assessments and mitigation measures address their initial concerns and to present any further concerns. By fostering the active interest and involvement of the stakeholders in the proposed project, the PC process will ultimately increase the effective progress and development of the Project.

Finally, the delegates hoped that the mitigation measures of CEETIA must be applied seriously by PMU, the design unit, construction units, and relevant agencies.
Report on the Second Round of Public Consultations
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Appendix 1 - Pictures of second round PC Meetings
Appendix 2 - Minutes of Public Consultation Meetings
Appendix 3 - Presentation of the EIA team and Presentation of the road and BRT components
**List of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BRT</td>
<td>Bus Rapid Transit</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>HPC</td>
<td>Hanoi People’s Committee</td>
</tr>
<tr>
<td>HUTDP</td>
<td>Hanoi Urban Transport Development Project</td>
</tr>
<tr>
<td>GOV</td>
<td>Government of Vietnam</td>
</tr>
<tr>
<td>PC</td>
<td>Public Consultation</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>CEETIA</td>
<td>Center for Environmental Engineering of Towns and Industrial Areas</td>
</tr>
<tr>
<td>PMU</td>
<td>Project Management Unit</td>
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</tbody>
</table>
List of Tables

Table 1 - Schedule of the second round PC meetings
1. Introduction

The Hanoi People’s Committee (HPC) proposes to seek as Credit from International Development Association/World Bank (IDA/WB) to finance a program of measures aimed at improving transport in the City of Hanoi. The program, termed the Hanoi Urban Transport Development Project (HUTDP), is under development but could include, \textit{inter alia}, investment in roads, bus ways and other bus priority and physical measures to assist bus operations together with bus reorganization, technical assistance studies and training to support the investment components. The total amount of the credit is expected to be in the range of US$150 – 170 million and total project costs is expected to be in the range of US$170 – 200 million.

The study components of the project include:

\textit{Component BRT:}
- Development of a bus rapid transit (BRT) system
- Reorganization of the bus system
- Development of bus maintenance facilities, and secure ticketing systems

\textit{Components Roads}
- Second Ring Road (approx 7km) from the proposed Phu Thuong Bridge to Cau Giay
- Western extension of Hoang Quoc Viet street (approx 3.4km)

\textit{Component Institutional Strengthening}
- Traffic safety
- Air quality
- Institutional capacity building

\textit{Component BRT Public Consultation}
- Participants feedback
- Brand and identify
- Public involvement strategy
- Media management strategy
2. The Purpose and Methodology of Public Consultation

2.1. Purpose

The public Consultation is a requirement in environmental assessment of WB’s projects. CEETIA coordinated with MVA and PMU to conduct the Public Consultation meeting. The results will be used to build the mitigation measures and show the public opinions and public support to the Project.

Public Consultations (PCs) are required in order to ensure the active participation of participants in the formulation and implementation of the HUTDP. The overall objectives of the PCs are to identify participants, make them aware of the HUTDP, receive their feedback and incorporate these comments in the Environmental Impact Assessment (EIA). This Report on Public Consultation Meetings focuses strictly on aware of residents who are impacted by the construction of Ring Road No.2, Hoang Quoc Viet Extension Road and BRT component

Detail Objectives

The detail objectives include:

- Make all potentially affected parties, organizations and individuals aware Hanoi Urban Transport Development Project, the reasons for it, and the requirements and purpose of the EIA for the Hanoi Urban Transport Development Project.

- Encourage and solicit public input and comment on Hanoi Urban Transport Development Project, so as to assist in the identification of environmental issues, problems, priorities, gaps in the implementation process, and the resolution, mitigation and means of management and monitoring of those issues though the development of Environmental Impact Assessment (EIA) for the project.

- Ensure that everyone interested in Hanoi Urban Transport Development Project, has access to accurate information about it.

- Meet the requirements of the HPC and the WB in respect of public disclosure of information and consultation.

- Establish ongoing contact in stakeholder organizations and community groups to assist with the implementation of the EIA.
• Assist in obtaining broad public acceptance of the Hanoi Urban Transport Development Project.

A key element of HPC’s policy to improve the overall transport in Hanoi city is the development of an efficient.

- Reducing road transit times within selected areas of the Hanoi city
- Reducing vehicle-operating costs through the improvement of selected road segments.
- Increasing public transit capacity.
- Transit safety.

The overall objective of the public consultation is to learn and understand the opinions and concerns of the public about the project, particularly from those to be directly impacted by the project construction and operation. On this basis, these concerns can be addressed properly during project planning, alternatives selection, engineering design and mitigation measures development. More specifically, the public consultation is to:

- Provide a description of the potential impact, mitigation measures already designed and the residual impact to the residents, institutions and organizations that would be impacted by the implementation of the project;
- Conduct on-site surveys, interviews and public meetings/hearings to obtain public opinions and concerns about the project, particularly on concerns on direct impacts to their life;
- Improve the decision making process which may impact to the environment;
- Give the chance to the public for them to express and hear the suggestions of the project;
- Improve the public acceptability of the various kind of mitigation measure;
- Intercede the public's different suggestions or conflicts on the environmental questions and dispel the resistance which to the implementation planning of the government;
- Confirm the rationality and legitimacy of the government decisions;
- Meet various kinds of legal requests of citizen; make the exchange of suggestions
between citizen and the government; and

understand the main problems which citizen pay attention and their values;

2.2. Approach and Methodology

There are two phases for PC meeting

The PC meeting first round: The purposes of the first round of public conclusion were to provide the concerned public a project description and explain the potential impacts of the project to the environment and the communities.

The PC meeting second round: The second round of public conclusion was conducted after the draft EA report was prepared. The purposes of the second round of public conclusion were to explain the levels of the impacts and conclusions of the impact assessment. In particular, the second round of public consultation was to explain to the public how the significant impacts including all those raised from the first round of the public consultation were to be addressed. This round of the public consultation was to determine whether the residual impacts would be acceptable to the concerned public following the implementation of the mitigation measures.

* According to the requirements of the World Bank OP4.01, consultations were conducted with affected residents, schools, kindergartens, enterprises, hospitals, restaurants, institutions and service sectors along the roads of the project, as well as the general public in the city.

3. Implementation

3.1. Determine the project areas have to conduct the environmental assessment impact.

Base on the design options of MVA, the EA group conducted the field work in order to determine the key location of where the project will impact on environment. In BRT component, the EA group already found out the key locations which are three terminals, 7 interchanges, 50 depots. Since the BRT route will pass through 5 urban districts, 2 sub urban districts and Ha Dong Town so to determine exactly the ward where the BRT go along is very important to organize the meeting.

3.2. Determine the time to implement PC meeting second round.

EA group set up the schedule of PC meeting second round with districts at least 3 days before. The PC meetings conducted from 13th January to 25th February (see Table 1)
3. 2.1. Organization the Meeting

EA group had meeting with PMU and MVA to determine the contents, purposes and plan for the second round meeting.

More specifically, the second round public consultation is to:

- Determine the existing environmental quality of proposed project area such as: air, noise, vibration, surface water, ground water, fauna and flora, etc.
- Provide a description of the potential impact, mitigation measures already designed and the residual impact to the residents, institutions and organizations that would be impacted by the implementation of the project;
- Improve the decision making process which may impact to the environment;
- Give the chance to the public for them to express and hear the suggestions of the project;
- Improve the public acceptability of the various kind of mitigation measure;
- Intercede the public's different suggestions or conflicts on the environmental questions and dispel the resistance which to the implementation planning of the government;
- Confirm the rationality and legitimacy of the government decisions;
- Meet various kinds of legal requests of citizen; make the exchange of suggestions between citizen and the government; and
- Understand the main problems which citizen pay attention and their values;

3.2.2. The second round meetings

The four public meetings were carried out around project area. The EA group, PMU, MVA, press agencies such as: Hanoi Television, Ha Tay Television, and the leaders of districts, towns, and many delegates from wards, communes participated in the meeting, especially the residents who will be impacted by the project.

Time and venue of PC meetings are shown in below table

<table>
<thead>
<tr>
<th>No</th>
<th>Name of District, ward</th>
<th>Time</th>
<th>Venue</th>
<th>Number of participants (people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ha Dong Town</td>
<td>2:15pm, 13 Jan 2006</td>
<td>Town meeting room</td>
<td>83</td>
</tr>
<tr>
<td>2</td>
<td>Dien Bien Ward</td>
<td>14:30</td>
<td>Ward meeting</td>
<td>75</td>
</tr>
</tbody>
</table>


The meetings were conducted well because it got full support of the local agencies. All delegates were informed before participate the meeting thus they asked many questions and gave comments for Hanoi Urban transport Development Project.

3.2.2.1 The participant of the meeting

- Project Management Unit
- MVA
- Center for Environmental Engineering of Towns and Industrial Areas – Hanoi University of Civil Engineering.
- Representatives of the Districts People Committee, Communist Party, and mass organization at local level such as: Father Land, Women Union, Youth Union, etc
- Press agencies
- Representative of the relevant Wards,Communes
- Residents directly affected from project.

3.2.2.2 Information Disclosure

The EA team invited reporters from Hanoi and Ha Tay television on January 13, 21, 2006 to participate in the public consultation meeting. The reporters were introduced of the project contents, the development, the environmental assessment contents and the meaning and contents of the public consultation. Ha Tay and Hanoi Television is
the local television. The news of public consultation meetings were broadcasted on television immediately after the meeting day.

There are a lot of press agencies have informed about the project contents, especially the BRT.

3.2.2.3 The main content of the PC meeting

In the meeting, the PMU and MVA introduced primarily content of the project, the EA group presented the proposed environmental impacted from the project and mitigation measures. The contents and comments were noted in the minutes of meeting.

3.2.2.4 Document for meeting includes

- Content of the EIA report including: the existing environmental quality, outcome with project and without project, proposed mitigation measures;

- The technique design of BRT and Road components.

The meeting programs and participants are listed in the minutes of the meetings.

A summary of the remarks and suggestions of the all PC participants are presented in the following part.

3.2.2.5 Response to Public Concerns

For public concerns raised in the two rounds of consultation including public meetings, consultation meetings, the EA team, together with the PMU has provided response either directly at the time of consultation included in the EIA and EMP. The main such responses are:

- Regarding the lack of information on the project, the PMU and the EA team will further enhance the effort of public disclosure. In addition, such disclosure will be advertised in local media such as major newspaper so that residents will have the knowledge about project information.

- Regarding urban road planning, the PMU will take the public concern into considerations when developing the Hanoi transport strategy. In particular, the strategy will give sufficient considerations to needs of pedestrians, bicycles and public transportation.
transport. The PMU will further convey the public comments concerning the transport planning to the Hanoi Department of Planning and senior government agencies.

- Regarding lost of trees and green areas to the project, the EA team will include in its EMP a detailed mitigation and compensation figure. In total, 476 new trees will be planted along the project roads to compensate the roughly 238 trees to be cut for the project construction and upgrading.

- Regarding the noise and dust issues, the EA team has conducted a detailed modeling for noise and air quality for both the construction and operation phases. The results show that in most cases, noise is to increase at the sensitive receptors such as residential housing although in some very busy and noisy intersections the noise will decrease. Double glazed windows will be installed at the sensitive receptors which will have high incremental increases in noise levels such as those in new project roads. Construction dust will be controlled through regular site watering and other dust control measures.

- Regarding traffic signaling and lighting, the PMU will have careful considerations in the project design for these issues.

- Regarding deteriorating air quality and motor vehicle emission, the EA team has conducted a detailed air quality modeling. With the more stringent motor vehicle emission control standards in place in the future, the individual motor vehicle emission intensity will decrease. However as the traffic volume will increase substantially along the project roads, the road side air quality in many of the project roads will deteriorate as the project is in operation. However, from a city wide perspective, the total air emission will decrease and air quality will improve as motor vehicle average speeds will increase and will be operate more efficiently after the project completion.

4. Summary the Comments and Suggestion of Participation in PC Meetings

4.1 General Remarks

The participants of Project-affected Town and Wards generally appreciated the second round of PC meetings on the environmental impacts. The meetings highlighted the positive role of participants in assessing the potential negative impacts of the proposed project and in suggesting related mitigation measures.
In virtual all PC meetings, especially the PC meeting at Tu Liem District and Xuan La Ward, attending participants favored the road project, noting that improved and constructed new roads would promote economic development, growth of businesses and better access to transportation systems. Although respondents were supportive of the road and BRT project but they stressed the need for project works to be completed in a timely manner to limit disruption to their daily lives and economic activities and allow them to return to their normal lives as quickly as possible.

Similar to the first round PC meetings, participants recommend that design and construction be done in a way that land cutting and construction will not need to be repeated in order to avoid further environmental impacts in the future.

4.2 Remarks on Environmental Impacts

4.2.1 Pre-construction Period

The main environmental concerns of the participants for the pre-construction period focused on the following issues:

- Impacts on water systems and utility infrastructure;
- Impacts on landscape; and,
- Road Access

Participants were very concerned over the potential impact of road improvement activities on existing water systems, particularly irrigation and drainage systems, as well as to utility infrastructure. Respondents stated that sidewalks, water pipes, irrigation canals, electricity and cable lines should be part of the road improvement designs and preparation. They stressed the need for enough culverts (appropriately located) for adequate drainage and maintenance. Participants said that in populated areas, culverts and drainage systems by the roads should be covered to reduce smell and stagnant water (PC second round in Tu Liem district).

As in the first consultations, respondents were concerned about the impact of the road works on the natural landscape. Many emphasized the need to recover any land destroyed during road construction to return it to its original surface. Respondents stressed that plans to replace cut trees should be incorporated into the program. In
addition, respondents encouraged the general practice of planting shade trees along the road.

Concerns about traffic safety in the road and BRT design were brought up during the second round PC meetings. In particular a number of respondents suggested that road widths, the speed of BRT be controlled at junctions to reduce traffic accidents.

Similar to comments in the first consultations, residents urged that the design include asphalted taper roads into residential areas in order to facilitate their access to the road.

The participants of the first round PC concerned about BRT capacity whether with 180 passengers per trip is ensured feasibility and “rapid” in Hanoi current condition? Whether the design depot meet the large amount of people or not? During the second round meeting, participants emphasized again these issues. Especially in the PC second round meeting in Dien Bien ward, participants suggested a new depot position for BRT No.B17. They said that the depot No.B17 will be located in front of Phan Chu Trinh primarily school is not convenient for pupil, it should be to replace to the new place to avoid impacting to the primarily school. In addition the size of depot is too high and large. It will be located in front of resident houses, how residents can access to their house.

4.2.2 Construction Period

Respondents agreed with the proposed mitigation measures related to the construction period, although many noted the need for more measures to limit the impact of construction. The main environmental concerns of the participants for the construction period focused on the following issues:

- Quality of life of local residents during construction
- Construction pollution
- Location of construction materials, equipment and storage

The PC participants were greatly concerned about limiting the impact the road project would have on their quality of life during the construction period, particularly in regards to noise, dust and safety. As much as possible, construction activities should be conducted in a manner to that minimizes the disruption to their daily lives. For example, construction should not interrupt sleeping or resting times; construction work
in schools should be planned around times when students are not in session. To mitigate noise pollution, respondents suggested that ‘silencers’ be fitted on construction vehicles. In order to reduce dust, water should be sprayed on the road twice a day.

In regards to safety, respondents suggested proper signs, barriers and signal lights around the construction area and noted that traffic controllers should be present during construction to guide traffic and enforce safety regulations. Participants suggested implementing measures to ensure that schoolchildren could safely travel to and from school, even when going through the construction area. Participants recommended that contractors take measures so local people can travel conveniently and safely along the road and the construction area. This would involve a right of way (ROW) for vehicles and pedestrians, with proper signage, to allow part of the road to be operational during construction.

During the second round PC meetings, the participants were apprehensive about pollution or related impacts resulting from construction activities. One main concern was that construction materials would spread into agricultural areas and irrigation canal. Thus, some suggested that ditches and canals be covered in areas where construction activities are underway. To avoid contamination from leaks, waste liquids should be collected in a specific disposal site away from agricultural areas. Participants also suggested that trucks carrying earth, soils and other material be rigged with tarps to avoid spillage. As in the first consultations, participants cautioned that asphalt heating must be carried out far from residential areas to avoid the negative health effects of resulting smoke. Residents also asked that adequate measures be taken to remove all waste material and excess construction material from the road improvement area as soon as possible.

The positioning of construction materials and equipment was a major concern for residents. Apprehensive of the possibility of a dangerous accident, respondents requested that flammable and explosive materials be 500 meters away from local residents with preventive measures but in place to avoid harmful accidents. Participants noted that borrow pits must not be located along the road (for both safety and environmental reasons) and that construction materials only come from equipment is stored away from residential area and off the road to avoid traffic when construction activities are not taking place.
Although they were not as concerned as in the first round PC meetings, some respondents wanted measures to ensure the sanitation of work camps and the respect of workers towards landowners and their property.

Finally, residents highlighted the importance of strictly supervising contractors during the construction period to ensure that contractors comply with the environmental mitigation measures and ensure quality of the road.

4.2.3 Operational Period

Compared to the first round consultations, respondents gave fewer comments concerning the operational period of the road project. Residents urged that contractors immediately cleanup the construction area job completion to return surfaces back to normal, including re-vegetation along roadsides and tree planting. Since water pollution is a major concern for local residents, participants recommended measures to stabilize the road (to avoid run-off) and repair any drainage systems that had been damaged during the construction process.

To enhance safety along the improved roads, area inhabitants requested that adequate signage and road marking be included as part of the road program. In addition, some recommended measures to improve knowledge of traffic regulations as well as better enforcement of these regulations.

Some participants remarked on the need to limit residential encroachment on the road.

Finally, residents emphasized the need for a periodic program to maintain the road and keep it operational. Because of the environmental impacts and disruption on people’s daily lives, a proper maintenance program could help avoid the need for another similar project in the future.

5. Conclusion

The PC meetings have reflected the active interests of government officials and road are residents in all of the potential impacts of the HUTDP. The PC participants are aware of existing social and environmental conditions in the areas along the HUTDP and appear to be well informed regarding the proposed construction activities. In general, participants agree with the mitigation measures laid out in the EIA and EMP, and have shown no indication to suggest they feel their comments and suggestions from the first round of consultations were not incorporated sufficiently.
Although road area residents greatly anticipate the benefits they expect the road to bring, they continue to have apprehensions of the impacts the road project will have on their lives. Further PC meetings, residents are recommended to review the effectiveness, implementation and enforcement of agreed mitigation measures, the extent to which they address their initial concerns as well as to address new that may arise. By fostering the active interest and involvement of the stakeholders throughout the entire road works program, the PC process will ultimately increase the effective progress and development of the HUTDP.

Finally, the delegates hoped that the mitigation measures of CEETIA must be applied seriously by PMU, the design unit, construction units, and relevant agencies