



WORKSHOP PROCEEDINGS

STRATEGIC PLANNING WORKSHOP ON KATHMANDU METROPOLITAN CITY RISK-SENSITIVE LAND USE PLANNING

Park Village Hotel Resort, Kathmandu Metropolitan City, Nepal
November 6-7, 2008



**Mainstreaming Disaster Risk Reduction in Megacities:
A Pilot Application in Metro Manila and Kathmandu**

Cross-Cutting Capacity Development (3cd) Program

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Editors: Kristoffer Berse, Winifredo Dagli
Contributors: Mariño Deocariza, Marqueza Reyes
Layout and Cover Design: Jerome Cruz

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An international, not-for-profit, scientific organization dedicated to disaster risk reduction of the world's megacities.

Earthquakes and Megacities Initiative, Inc.
2F Puno Bldg. Annex, 47 Kalayaan Ave., Diliman
Quezon City 1101, Philippines
Telefax: +63-2-9279643, +63-2-4334074
Email: info@emi-megacities.org
Website: <http://www.emi-megacities.org>



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EXECUTIVE SUMMARY

The Earthquakes and Megacities Initiative (EMI) and the Kathmandu Metropolitan City (KMC) conducted a Strategic Planning Workshop as part of the second phase of the KMC Risk-Sensitive Land Use Planning Project on November 6-7, 2008 at Kathmandu, Nepal.

Twenty participants attended the workshop representing KMC, Kathmandu Valley Town Development Committee (KVTDC), Ministry of Local Development (MOLD), National Society for Earthquake Technology-Nepal (NSET-Nepal), and EMI.

On the first day, the land use planning system and practice in KMC were reviewed. The participants revisited the legal mandate in physical planning for the city, building by-laws, as well as the land use and zoning map developed by the Kathmandu Valley Mapping Project in 2001. EMI provided an overview of the Planning Project and its objectives, and presented the earthquake scenario study conducted by JICA and MOHA. EMI also provided examples of partnerships developed for DRM in other cities. It facilitated the discussion on developing a framework for partnership that is integrated, collaborative, participatory, and consensus-driven.

On the second day, a proposed project structure was presented to KMC officials. It was suggested that ward committees be included in the structure since KMC works closely with them in planning activities of the city. The project working team was officially called KMC Project Working Committee (PWC). An advisory group, composed of representatives from

agencies, was also created to provide high level advice and assistance to the PWC in implementation of the project. In the last workshop session, the participants were able to draft a proposed workplan, identify project activities and roles and responsibilities of concerned agencies, and determine resources needed to undertake the activities.

Workshop Objectives

The two-day strategic planning workshop, aimed to:

1. Develop a framework of partnership that is acceptable to all partners;
2. Level-off and establish the institutional arrangements for Phase 2 project implementation;
3. Validate and elaborate the planning system, process and approach of KMC; and
4. Agree on a final Terms of Reference of all partner organizations;

The workshop schedule is presented in Annex B

DAY 1

Opening Ceremony

Mr. Bimal Rijal, Chief of the Urban Development Division of Kathmandu Metropolitan City (KMC-UDD), officially opened the workshop by welcoming the participants and guests. He expressed his enthusiasm with the planning project as he looks forward to the different activities and opportunities for KMC to learn from the experiences of other cities in urban disaster risk reduction.

Mr. Surya Shrestha of NSET-Nepal welcomed the participants and wished for the success of the workshop. He encouraged the participants to be more active, critical and candid in voicing out their opinions in the 2-day workshop.

Dr. Marqueza Reyes of EMI expressed her optimism in the planning workshop. She emphasized the need to build a strong partnership among all project stakeholders and called for all project partners to work together and provide commitment to make the planning project a success.

Ms. Kumari Rai of the Social Welfare and Cultural Division of KMC served as the emcee for Day 1.

Unfreezing Activity/Leveling-off of Expectations

Mr. Marino Deocariza of EMI facilitated the unfreezing activity to jumpstart the workshop. The participants were asked what their expectations from the workshop and from their fellow participants were. The participants were excited and optimistic about the workshop and in developing a risk-sensitive land use plan for Kathmandu. They expected to learn, work, and contribute, as well as have fun in the two-day workshop. They expected their fellow participants to be active, committed, and honest. The activity also gave the participants an overview of the metaplanning technique which was later used in the two-day workshop.

METAPLANING: a workshop facilitation technique that collects and process ideas from the participants and validates these ideas to the workshop group. The result of the metaplanning exercise becomes the collective output of the workshop

Presentation of Workshop Objectives

Dr. Reyes presented the objectives of the two-day workshop. Mr. Shrestha asked about the workshop objective no. 3 (i.e. To validate and elaborate the planning system, process, and approach of KMC) saying that KVTDC also have the mandate to plan for the city. He suggested to find the link between KMC and KVTDC as far as land use planning for the city is concerned. Dr. Reyes acknowledged the point and added that the workshop is also designed to know and understand the planning process and the working arrangements between KMC and KVTDC.

Mr. Shrestha further suggested that there should also be a discussion on the challenges that the project may encounter. However, the public is usually restricted in accessing urban plans and thus are perceived to be not implemented. Dr. Reyes agreed to include a discussion of the hindrances and constraints in the 2-day workshop.

Mr. Hem Khanal of KVTDC suggested that the project should be clear with its target group for whom it will make a plan. Asking this question, he said, will make the project more realistic and will facilitate a smooth implementation of the plan. Dr. Reyes explained that the project will employ a participatory planning approach that will include broad range of stakeholders.

Mr. Rijal emphasized the need to elicit the commitment of stakeholders to the project. In particular, the commitment of policy-makers and decision-makers can spell out the success of the project.

SESSION 1-A: REVIEW OF KMC LAND USE MAP/PLAN

Mr. Rijal presented a brief overview of the land use planning practice in KMC. He presented the existing land use map of KMC which was completed in 2008 by KVTDC. He said the existing land use map is a result of the project through the collaboration of several partners including KMC, KVTDC, UN Habitat and the European Commission. The map presents various thematic layers which can be useful for the risk-sensitive land use planning project. He pointed out, however, that the existing land use map failed to identify where the hazardous areas are and where the communities living in vulnerable conditions are in the city.

Mr. Rijal also clarified that KMC has an existing land use map but not a land use plan.

In Nepali, the participants discussed important land use planning concerns in KMC such as the mandate of the government to plan for the common good, land use proposals that run in conflict with private interests, lack of open spaces in the city, need for easements on both sides of the Bagmati River, conflicting and incompatible land uses especially in the agricultural sections of the city, among others. They said that these issues clearly showed the need for a clear land use plan for KMC. Dr. Reyes explained that these are common land use issues anywhere in the world. She assured them that these issues will be resolved in the proposed planning process.

SESSION 1-B: OVERVIEW OF THE PLANNING PROJECT

Dr. Reyes gave a brief overview of the project. She explained that the project is funded by the German Federal Foreign Office (FFO) through the German Committee for Disaster Risk Reduction (DKKV). The project is already in its second phase, the first phase started in



Field Investigation in Kathmandu: EMI's Mariño Deocariza interviewing residents of KMC.

November 2007 and was completed in March 2008. Phase 1 report is already available and will be sent to KMC for distribution. The second phase of the project started only in November 2008 and will end in December 2009. Phase 2 of the project is the analysis and planning stage of the project which will delve in the formulation and development of the risk sensitive land use plan for KMC. The objective of the planning project is to mainstream urban disaster risk reduction in the land use planning of KMC. The role of EMI is to provide technical assistance in the preparation/updating of the land use plan of KMC to incorporate DRR parameters.

Dr. Reyes presented the earthquake disaster scenarios of Kathmandu Valley from the study conducted by JICA and Ministry of Home Affairs on earthquake disaster mitigation in the valley. The study identified four critical earthquake scenarios that may heavily affect Kathmandu Valley. These are:

1. Mid-Nepal Earthquake with magnitude 8.3 or MMI of VIII in Kathmandu Valley
2. North Bagmati Earthquake with magnitude of 5.99 or MMI of VI or VII
3. KV Local earthquake with a magnitude of 5.73 or MMI of IX along the fault, other parts of Kathmandu Valley would experience MMI of VII or VIII
4. 1934 Bihar-Nepal Earthquake with magnitude of 8.2 while most of Kathmandu Valley would experience MMI of VIII and some eastern areas will experience an MMI of IX.

Mr. Rijal inquired whether they can implement the project initially in one ward and have it replicated in the other 32 wards. Dr. Reyes replied that the project is designed to develop the land use plan for the whole city and not at the level of the wards. Mr. Shrestha added that the level of planning will depend on the data available. If data in the wards are available then the effort would be less.

Mr. Ganesh Jimjee of NSET suggested to also consider other hazards such as floods and landslides and not just earthquakes. He

said that the studies on the vulnerability of Kathmandu to other hazards will enable the project to come up with a better land use plan. Dr. Reyes clarified that as much as the Project Implementation Team (PIT) wants to do many things in the project, several limitations abound such as time, resources and data availability. She added that the workshop participants should discuss and agree on the level and coverage of the planning, whether it would be ward-level planning and/or multi-hazard in scope. Mr. Surya, on the other hand, said that the coverage of the planning will depend on the timeframe and the resources. He explained that it would be best to define first what resources they have, as well as identify the potential constraints to the project. With regard to the multi-hazard planning approach, Mr. Surya added that NSET, with assistance from UNSECO, has already produced risk maps using the Radius Tool in 2002. He suggested to revisit these risk maps and see how they can be useful in the risk-sensitive land use planning of KMC.

SESSION 2: DEVELOPING FRAMEWORK FOR PARTNERSHIP

Dr. Reyes opened the session by saying that the project needs to build a strong partnership between and among project partners and stakeholders. She made it clear that in order to make this project work, the partners need to commit time, human and financial resources. Dr. Reyes presented some of the partnership models that EMI has developed with its partner cities such as Makati City (Philippines) and Amman (Jordan) to initiate discussion on the project partnership framework that will be developed in Kathmandu. In Makati, EMI helped develop a PIT comprising of key project partners from the city and national agencies. A Steering Committee (SC) was also created composed of high level city officials to provide policy advice to the project. This project structure enabled Makati City to take ownership of the project which was best illustrated when the City Government of Makati integrated some financial requirements of the project into their city budget. Dr. Reyes said that this model can be replicated and customized for KMC.

Mr. Rijal explained that KMC is a small organization compared to Makati. KMC does not have land use planner and transport planner. Dr. Reyes said that Makati may have more human resources but KMC may also have other kinds of expertise that can be tapped such as experts and personnel from KVTDC, MOLD and other divisions within KMC.

Mr. Rijal proudly announced that KMC has already started something towards partnership building for the project. He said that KMC has signed the tripartite agreement between EMI, NSET and KMC. This agreement will be recognized by whoever will be in charge of the city including the new Executive Officer. In addition, KMC already started organizing a small unit which is called the Disaster Risk Management and Citizen Safety (DRMCS) headed by Mr. Dhruva Kafle. The unit has been approved by the municipal board last year. The city has also identified key personnel to work in the project which include Mr. Rijal



EMI and KMC personnel studied the land use map of the city, 02/06/08

himself as project coordinator, Ms. Rai of Social Welfare Division, Mr. Dhruba Kafle of the DRMCS and Mr. Tribhuvan Pradhan of the Geographical Information System (GIS) section. Dr. Reyes said that this is a good start towards partnership building.

Dr. Reyes explained that whatever kind of structure that KMC will create, it is important to maintain the values of a good partnership that EMI emphasizes, a partnership that is integrated and collaborative; that which strives to work together and learn together and, consensus-driven.

OTHER PARTNERSHIP OPPORTUNITIES for KMC

Dr. Reyes presented other forthcoming and possible partnership opportunities for KMC. These include the proposed City-To-City Sharing Initiative to be supported by the World Bank Global Facility for Disaster Risk Reduction (WB-GFDRR) through its South-South Cooperation Program (SSCP). Mr. Kafle who attended the World Bank briefing on the project proposal writing in New Delhi India last October, presented a brief overview of the proposed initiative. He said that the proposed project is a sharing initiative between the three cities of Makati, (Philippines), Quito (Ecuador) and Kathmandu (Nepal). The objective of the project is to provide a venue for the exchange of experiences, lessons, knowledge, and sound practices among the cities of developing countries in the area of urban DRR. Dr. Reyes added that the proposed project may be tapped to support and complement the activities of the KMC risk-sensitive land use planning project.

Dr. Reyes then presented the CityNet Program on Technical Cooperation between Cities of Developing Countries (TCDC). The TCDC program enables CityNet partner cities to share, collaborate and exchange knowledge, experiences and technical know-how with other member cities in identified areas of common interest. EMI is thinking of developing a proposal of bringing the project

partners from Makati and Kathmandu in Zeytinburnu, Turkey in order for the two cities to learn from the experience on risk sensitive redevelopment planning in Zeytinburnu.

Dr. Reyes also mentioned the proposed projects of the Cities Development Initiative for Asia (CDIA) in Kathmandu. CDIA already indicated their plan to assist KMC in conducting pre-feasibility studies and investment programming. These studies seek to complement with the implementation of the KMC land use plan, particularly in infrastructure development. Dr. Reyes wrapped up the discussion by saying that there are many partnership opportunities for KMC and these opportunities can be tapped to support the risk sensitive land use planning project and other thrusts of the city.



LUP Workshop: Participants from KMC and EMI during the First LUP workshop held in February of 2008

SESSION 3: Land Use Planning in KMC

Mr. Rijal of KMC briefly explained the land use planning system and practice in Kathmandu. He said that the legal mandate in the physical planning of Kathmandu City is embodied in the 1988 Kathmandu Valley Town Development Act (KVTDA). The act presents the roadmap to follow in preparing the land use plan of the five municipalities and 52 village development councils within Kathmandu Valley. The act also presents the elements of land use plans, by-laws and regulation of cities and municipalities in the valley. Mr. Rijal explained that there is a hierarchy of plans in KMC. KMC has a city development strategy which was prepared with assistance from the World Bank. KMC also has a transportation plan, zoning map and transportation map. Moreover, KMC has ward profiles which were prepared in 2001.

Mr. Rijal mentioned that in KMC, land use plans are prepared in collaboration with KVTDC. KVTDC also prepares the building by-laws which is used to regulate municipalities. The building by-laws need to be endorsed in the cabinet. Mr. Rijal explained that the planning of Kathmandu needs to consider the adjoining municipality of Lalitpur which together with KMC is considered as the Greater Kathmandu.

In the planning of KMC, it was pointed out that there is a need to look at the National Constitution of 1987, the Natural Calamity Act of 1982, Building Act of 1998, the Local Administration Act of 1971 and the Nepal government rules for the allocation of funds. Nepal also has the Apartment Act, and the Environment and Conservancy Act. There is also a need to consider the Local Self Governance Act (LGSA) of 1999 which presents the provision on preparing land use plans for municipalities. Most towns however, according to Mr. Rijal, have not prepared their land use plan as directed by the LGSA. In 1999, there was a change in Nepal's political system which somehow slowed down the implementation of the LGSA Act including the

preparation of land use plans.

When it comes to disaster risk management, KMC has also developed institutional relationships with other government agencies, such as the Risk Reduction Committee which is under the Ministry of Home Affairs (MOHA). Then there is the District Disaster Management Committee, and the District Disaster Management Team which is headed by the Chief District Officer.

KMC LAND USE MAP and ZONING MAP

Mr. Tribhuvan Pradhan, the GIS manager-specialist of KMC presented the land use and zoning maps of 2001. His paper entitled "Building Spatial Information Infrastructure for Kathmandu Metropolitan City" discussed how the city developed GIS databases to support service delivery, planning and decisions in the city. He explained that the 2001 KMC land use map was a result of the Kathmandu Valley Mapping Project funded by the European Union. The 2001 Land Use Map also produced the 2001 Land Use Plan which was based on a previous plan. The 2001 KMC land use plan was proposed for five years and was developed by experts. Unfortunately, the plan was not adopted and implemented. Mr. Pradhan noted the following issues that KMC has encountered in preparing the mapping database:

- Lack of political commitment and knowledge about spatial/non-spatial information system to among policy-makers;
- Complexity of spatial data sets and its geo-references with coordination between line agencies, such as Government / NGO / INGO;
- Difficulty in managing and funding spatial information infrastructure development due to the financial, human, and social constraints.

Mr. Rijal added that the European Union withdrew from the Kathmandu Valley Mapping

Project because of political instability and the lack of elected representatives in KMC. The project was stalled for six years but KMC has allocated funding to finish this project. He said that KMC is producing a cadastral map and they have completed three wards. They could not finish on time though because of the lack of expertise.

With regard to issues confronting the planning process, Mr. Rijal admitted that Nepal does not have a concrete planning process as most plans are stacked only on paper. One plan is developed by one political party and then comes another party who do not use the plan. This, he said, makes physical planning quite difficult in KMC and in most cities, as well. Implementation is difficult as there is no legal framework to tie up and link the plan with the people. He added that the plans are not made at the grassroots level in the community.

Dr. Reyes asked KMC what they want to do to with the 2001 Land Use Plan. Mr. Bimal Rijal answered that they want to update, adopt and use it. Dr. Reyes said this makes it easier for the project because there is no need to make a new land use plan from scratch. She said the planning project can update the 2001 Land Use Plan and integrate risk parameters to make it risk-sensitive. It was finally decided and approved by the workshop participants to update and use the KMC Land Use Plan for the project.

Day 1 of the strategic planning workshop ended with Ms. Kumari Rai presenting a brief synthesis of the day's discussions and accomplishments.

DAY 2

Ms. Rai again served as the emcee of the second day of the strategic planning workshop. She provided a brief recap of the activities, discussion points and key results of Day 1 of the workshop.

SESSION 4: KMC Project Structure

Mr. Deocariza facilitated the workshop session to create the KMC project structure. He presented the Makati PIT as an example which can be replicated or modified for KMC. Mr. Rijal reiterated his suggestion to involve the wards because KMC works closely with them in the planning of the city. He also suggested to involve the KVTDC as the coordinator between KMC and the central government and its ministries.

The participants discussed and commented on the proposed project structure and recommended focal persons in each section

of the structure. The project working team was officially called KMC Project Working Committee (PWC). An advisory group was also created, which is composed of representatives from agencies, to provide high level advice and assistance to the PWC in the implementation of the project.

Some of the action points identified at the workshop were as follows:

1. Mr. Rijal will write an invitation to the agencies that were included in the PWC and Advisory Group;
2. UDD will finalize the composition of the PWC and Advisory Group within a week's time;
3. The project organizational structure will be formalized by requesting the Executive Officer of KMC to issue a memorandum order to officially create the KMC Project Working Committee and Project Advisory Group and designate focal person and budget in support of the project.

The result of the session is presented in Figure 1 below:

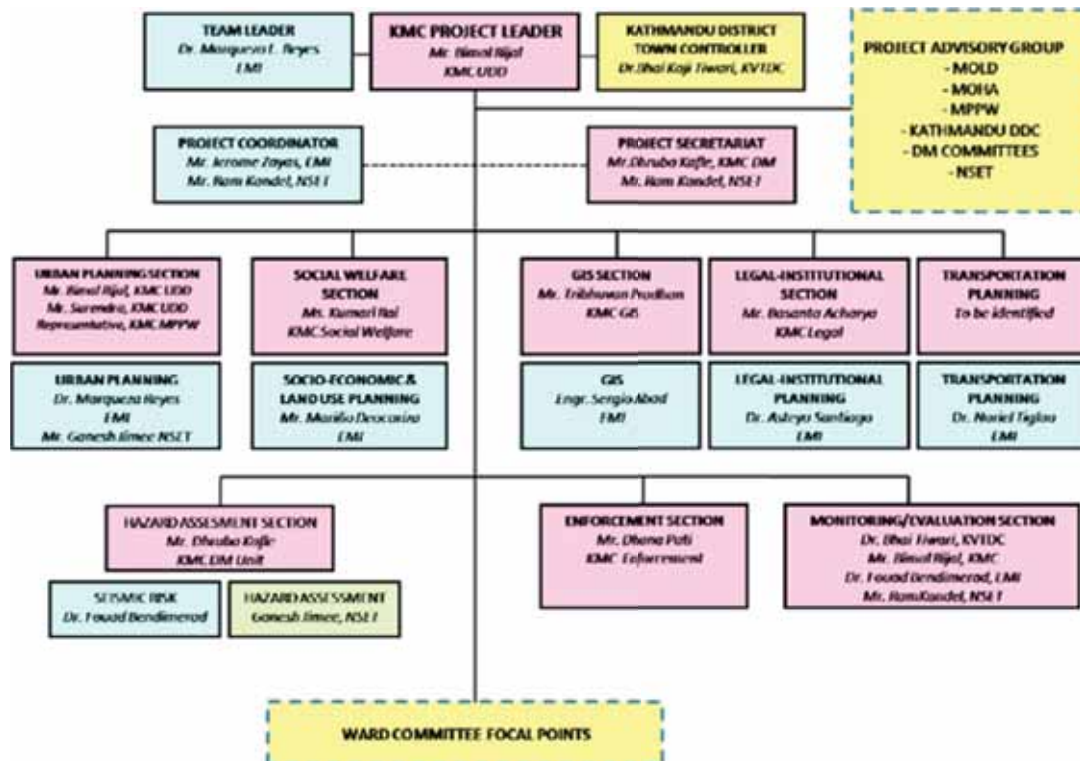


Figure 1. KMC Project Working Committee Structure

SESSION 5: Developing the Project Workplan and Determining Roles, Responsibilities and Resources

Dr. Reyes facilitated the development of the project workplan. She led the session to discuss and identify the project activities and the roles, responsibilities and resources needed to undertake each activity. Potential issues and constraints that the project needs to confront were also discussed. The session output is presented in Figure 2 below:

Activities	Nov	Dec	Jan 09	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Formalization of the KMC Project Working Committee and Advisory Group		▲	Organizational meeting of the PWC and AG											
Collection and compilation of available documents, data, maps, etc.														
a. Building by-laws, zoning maps														
b. Copy of relevant laws, rules, and acts														
c. KMC profile														
d. City development strategies														
e. 2001 land use plan and map														
f. JICA digital data and maps														
g. Satellite images														
h. Traffic data, traffic management system														
i. Digital data on utilities, lifeline systems														
j. Hazard data and risk maps														
Review and validation of data and maps					▲	Final data review by PWC								
Updating of KMC city profile based on ward profiles					▲	KMC city profile								
Updating KMC maps					▲	Updated maps								
Updating and preparation of hazard and risk maps					▲									
Analysis of data														
Stakeholder consultation (2) at the ward level and with multi-sectoral stakeholders								▲	Participatory analysis and validation					
Setting the goals and objectives								▲	Participatory goal and objectives setting					
Identification of alternative spatial strategies based on results of data analysis, goals and objectives, and existing land use														
Study visit to Makati City, Philippines									▲					
Evaluation and selection of preferred spatial strategy														
Stakeholder consultation (1) at the ward level														
Study visit to Zeytinburnu, Istanbul, Turkey														
Detailing and refinement of selected spatial strategy														
Formulation of risk-sensitive land use policies														
Presentation of draft risk-sensitive land use plan to concerned authorities														
Finalization of KMC Risk-Sensitive Land Use Plan														▲

Figure 2. KMC Risk Sensitive Land Use Planning Work Plan

CLOSING REMARKS

Dr. Reyes congratulated the participants for their active participation in the workshop. She said the workshop objectives including the expectations of each participants were met in the two-day workshop. Mr. Hem Khanal of KVTDC also commended the workshop as it provided the KVTDC an opportunity to learn about risk-sensitive land use planning, despite the fact that they have done several land use planning activities before. He assured the project partners that KVTDC will carry out its tasks. Mr. Surya Shrestha of NSET congratulated all the participants for a productive two-day workshop. He said that the KMC risk sensitive land use planning project is a good start for urban DRR that can be replicated in other cities of Nepal.

Mr. Bimal Rijal delivered the final words congratulating everyone for accomplishing the goal of the workshop. He said he is very grateful and happy about the sincerity and the concern of the project partners such as EMI, NSET, KVTDC and MOLD for KMC. And lastly, he thanked all the project partners on behalf of KMC, for working really hard to create a safer Kathmandu Metropolitan City.

ANNEX A

Participants

Name	Institution/Organization
1. Bimal Rijal	KMC
2. Kumari Rai	KMC
3. Tribhuvan Pradhan	KMC
4. Dhruva Kafle	KMC
5. Indra Suwal	KMC
6. Archana Shrestha	KMC
7. Surendra Rajkamikar	KMC
8. Hem Khanal	KVTDC
9. Karuna Ratna Shakya	KVTDC
10. Bisheswor Subedi	MOLD
11. Ilsmila Kapule	MOLD
12. Surya Naraya Shretha	NSET
13. Ram Chandra Kandel	NSET
14. Ganesh Kumar Jimjee	NSET
15. Kalyan Bista	NSET
16. Surya Acharya	NSET
17. Adutiya Kantha	NSET
18. Marqueza Reyes	EMI
19. Tabassam Raza	EMI
20. Marino Deocariza	EMI

ANNEX B

Workshop Schedule

	DAY 1 - November 6, 2008	DAY 2 - November 7, 2008
AM	<p>Opening Remarks Mr. Bimal Rijal, KMC Mr. Surya Shrestha, NSET Dr. Marqueza Reyes, EMI</p> <p>Unfreezing exercise Mr. Marino Deocariza, EMI</p> <p>Overall Workshop Objectives and Expectations Check Dr. Marqueza L. Reyes, EMI</p> <p>SESSION 1a: Leveling-off: Review of KMC Land Use Map/ Plan Mr. Bimal Rijal, KMC Mr. Tribhuvan Pradhan, KMC</p> <p>SESSION 1b: Overview of the planning project Dr. Marqueza L. Reyes, EMI</p>	<p>Recap of Day 1</p> <p>SESSION 4: Working arrangement of the KMC Project Implementation Team (PIT) Mr. Marino Deocariza, EMI</p> <p>SESSION 5: Developing the project work and financial plan Determining roles, responsibilities and resources Dr. Marqueza L. Reyes, EMI</p> <p>Synthesis and Next Steps</p> <p>Closing Remarks</p>
	Lunch	Lunch
PM	<p>SESSION 2: Developing a framework for partnership Dr. Marqueza L. Reyes, EMI</p> <p>SESSION 3: Elaborating the planning system, process and approach of KMC and agreeing on a consensus planning methodology Dr. Marqueza L. Reyes, EMI</p> <p>Synthesis and Next Steps</p>	