Hyogo Trust Fund (HTF) VII
UNCRD - Moratuwa Municipal Council - JOCV
Joint Training and Participatory Workshop
July 28 - 29, 2006
Mount Lavinia, Moratuwa Municipality

"Managing Community Disaster Risk and Development through Effective Strategies"

United Nations Centre for Regional Development
Disaster Management Planning Hyogo Office

Moratuwa Municipal Council
Ministry of Housing and Construction Industry
Ministry of Urban Development and Water Supply

Japan Overseas Cooperation Volunteers (JOCV)
Japan International Cooperation Agency
UNCRD – Moratuwa Municipal Council – JOCV
Joint Participatory Workshop:
Managing Community Disaster Risk and Development through Effective Strategies

July 28th – 29th, 2006
Mount Lavinia, Moratuwa Municipality, Sri Lanka

Conveners:
Moratuwa Municipality Council
Japan Overseas Cooperation Volunteers (JOCV) Sri Lanka
United Nations Centre for Regional Development (UNCRD),
Disaster Management Planning Hyogo Office
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Special thanks and dedication
to the people of the Moratuwa,
Moratuwa Municipality Council

Editing Team:
Hyogo Trust Fund VII (2005-2006)
Sri Lanka

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Acknowledgements

This proceeding arose from dialogue, meetings, and workshops with people from diverse communities of Sri Lanka. Sincere thanks go to the colleagues in Sri Lanka, who supported the activities, in particular, the people of Samarkoon Watta and Delhiwala, Baduvita, Sanwassaraniwasa communities, who offered their precious experiences and knowledge to make this action research possible.

Special thanks go to the Moratuwa Municipal Council (Government of Sri Lanka) and Japan Overseas Cooperation Volunteers (JOCV) Sri Lanka for their support. Substantial contributions were made by Natsuko Sekiguchi (JOCV Sri Lanka), Satoko Tsutumi (JOCV Sri Lanka), Sujitha Suri Kumara (UNCRD Sri Lanka, Editor) and Edward Y Sumoto (UNCRD Disaster Management Planning Hyogo Office). Furthermore, CRMP (Coastal Resource Management Project), LEI&CDP (Lunawa Environment Improvement and Community Development Project), REAL Urban Settlements Improvement Programme, Real Estate Exchange Ltd, National Water Supply & Drainage Board, JICA Sri Lanka warmly supported to make a series of consultation meetings and participatory workshop possible.

It is noteworthy that the Great Hanshin-Awaji Memorial Research Institute sponsored the research and publication through Hyogo Trust Fund VII. Kind support was also made by UNDESA and UNCRD to publish the workshop proceedings.
### Abbreviation

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<td>AGA</td>
<td>Assistant Government Agency / Divisional Secretary</td>
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<td>CCD</td>
<td>Coast Conservation Department</td>
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<td>CGR</td>
<td>Ceylon Government Railways</td>
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<td>CRMP</td>
<td>Coastal Resource Management Project</td>
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<td>GBP</td>
<td>Green Belt Project</td>
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<td>JBIC</td>
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<td>RDA</td>
<td>Road Development Authority</td>
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<td>SCP</td>
<td>Sustainable City Project</td>
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<td>SLLRDC</td>
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<td>UN ISDR</td>
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Workshop Day 1

Opening Session:

Mr. W. W. Samanlal Fernando  
Mayor, Moratuwa Municipality  
Unofficial Magistrate & Justice of Peace

Morris Wijerathna  
Deputy Mayor, Moratuwa Municipality  
Unofficial Magistrate & All Island Justice of Peace
I would like to welcome all participants to community based regional development programme, including the Deputy Mayor, municipal councilors, official representatives of government and Non-Governmental Organisations, community societies, and volunteer organisations. We were able to organise this workshop with the Japanese volunteers, Ms. Natsuko Sekiguchi and Ms. Satoko Tsutsumi, and UNCRD Disaster Management Planning Hyogo Office.

Our municipality has faced a great number of financial and physical problems because of a lack of coordination between the relevant partners who are engaged in development activities in the area of Moratuwa Urban Council. A lack of coordination could seriously affect the effective path to sustainable development.

The main objective of this workshop is to provide an opportunity to raise the awareness among the officials of the various institutions who directly work for the development of Moratuwa Urban Council area, and to coordinate a group of stakeholders in the development process.

We will discuss the present activities and future development plans of the government and Non-Governmental Organizations that contribute to the overall development of the Moratuwa Urban Council area. It is expected that our discussion help us gain a clear understanding of the existing problems and contradictions in regional development and implement the necessary tasks in priority. A series of action plans will be prepared and the necessary annual tasks are identified through group discussions and agreements. The progress will be reviewed at the monthly meetings of the Housing and Community Development Committee, and the problems in implementation will be assessed for better activities in the future.

It is expected that this workshop will enhance the basic foundation for sustainable development to emerge. I would like to ask you actively contribute to the Moratuwa region in order to explore a new path of development and I wish to give the opportunity for the rest of the workshop to proceed.

Thank you.
I wish firstly to express my heartfelt gratitude to the Japanese Overseas Cooperative Volunteers (JOCV) for organising this community based regional development programme.

We hope to understand the real situation of the Moratuwa community through the lectures and discussions that were held over the last two days. Similarly, we are committed to lending the fullest support that is required in order to carry out the plans prepared through the discussions that were held face to face between politicians and government officials together with community participation. Our council possesses the ability to execute the suggested planning in the future with the fullest cooperation of the Chief Organizer of the Moratuwa seat for the United People’s Freedom Alliance, the Youth Affairs and Sports Minister Hon Jeevan Kumaratunge and the Mayor of Moratuwa Hon Samanlal Fernando. We will not fail to carry out decisions that may put a small minority of people in difficult circumstances if the large majority will benefit from them.

In ending my speech, I would especially like to thank the Japanese Overseas Cooperative Volunteers, Ms Natsuko Sekiguchi and Ms Satoko Tsutsumi, who have come from Japan to reside and work here. I also extend my gratitude to UNCRD Hyogo, Ms Mayumi Yamada and Mr Edward Sumato, who contributed to implementation the workshop programme, and all of you who participated in this workshop and helped organising it in various ways.

Thank you
Introduction
Introduction to the Hyogo Trust Fund Project
VII: Urbanisation and Community Based Disaster Management

Mayumi Yamada
Researcher, UNCRD Hyogo

Background of the JOCV & the objectives of the Workshop

Natsuko Sekiguchi
JOCV Sri Lanka
Urbanisation and Community Based Disaster Management: Introduction to the Hyogo Trust Fund Project VII

Mayumi Yamada
Researcher, UNCRD Disaster Management Planning Hyogo Office

Background

The UN World Conference on Disaster Reduction (UNWCDR) was held in Kobe, Japan, 18-22 January 2005. The event commemorated a remarkable recovery from the Great Hanshin-Awaji Earthquake of 17 January 1995, and was extended to paying sincere condolences and sympathy to the people and communities adversely affected by disasters, particularly those devastated by the unprecedented earthquake and tsunami disaster in the Indian Ocean on 26 December 2004.

UN World Conference on Disaster Reduction: Hyogo Trust Fund VII

Recognising intrinsic relationship between disaster reduction, sustainable development and poverty eradication, the WCDR resulted in three documents (the United Nations International Strategic Disaster Reduction (UNISDR, 2005) entitled: (1) Hyogo Declaration; (2) Hyogo Framework of Action 2005-2015: Building the resilience of nations and communities to disasters (hereafter referred to as the “Hyogo Framework for Action”); and (3) A Common statement on the Special Session on the Indian Ocean Disaster: Risk Reduction for a Safer Future. The Hyogo Declaration puts forward the framework of action to be taken globally, nationally and locally, calling organisations of the United Nations system, Governments, regional and international organizations and financial institutions, civil society, including non-governmental organisations and volunteers, the private sector and the scientific community (UNISDR, 1995).

As the follow up action of the WCDR, Hyogo Trust Fund project (VII) has been warmly funded by my hometown Hyogo prefecture based on the agreement between the Great Hanshin-Awaji Earthquake Memorial Research Institute and United Nations Department of Economic and Social Affairs (UNDESA), New York. A new theme, “Urbanisation and Community Based Disaster Management”, has been adopted in 2005 and UNCRD Disaster Management Planning Hyogo Office will be implementing the activities based on the agreement. The partner countries of Hyogo Trust Fund are Nepal, Bangladesh, Sri Lanka and Thailand.
Sri Lanka: Urbanisation and Community Based Disaster Management (CBDM)

In Sri Lanka, since January 2006¹, UNCRD Hyogo has been advocating the concept of living safely in the urban community and sustainable livelihoods, considering urban dynamics i.e. urban population growth and heterogeneous communities (e.g. new and old) and people’s vulnerability in urbanised and urbanising areas that might fall through the existing paradigm of Community Based Disaster Management (CBDM).

As a consequence of continuous dialogue and advocacy processes to consider rapid urbanisation and Tsunami recovery processes at community level, Japanese Overseas Cooperation Volunteers (JOCV) and UNCRD Hyogo Office have selected Moratuwa as the case study site, and thus, the three parties, including Moratuwa Municipality Council, agreed to organise the joint workshop to review existing knowledge on Urbanisation and Community Based Disaster Management.

As the issues of urbanisation in Moratuwa Municipality, increasing informal settlements and insufficient waste water management have overlapped with “Tsunami problems”. Moreover, it is believed that the Indian Ocean Tsunami did not severely affect the capital such as Colombo and its neighbouring districts, but the people of Moratuwa suffered losses and damages from the Tsunami in December 2004. As a matter of fact, recovery assistance for the victims and displaced have been taken place by a large number of the stakeholders such as the Government of Sri Lanka, politicians and both local and International Non Government Organisations (INGOs). Consequently, several urban infrastructure development and poverty alleviation projects are being implemented with the financial support of international development organisations. Besides, it should be noted that air pollution, traffic congestion and slums, which are urban-specific or associated with urbanisation, have existed before Tsunami devastated communities. It is wise to view these existing issues, which communities have been facing for long, were revealed by Tsunami rather than caused by Tsunami.

¹ The UNCRD stakeholder meeting was conducted in January 2005.
The Workshop Objectives

The Workshop Objectives and the HTF VII Inputs are as follows:

- Good Governance and Community Empowerment (HTF VII: 2005-2006)
- Mainstreaming gender perspectives into CBDM (HTF VIII: 2006-2007)

Furthermore,

- To explain and demonstrate in practice the concept of “living safely in the urban community and sustainable livelihoods” through comparative, regional studies.
- To enhance international and regional cooperation in the field of community based disaster management through exchange of research findings, ideas and information.
- To incorporate disaster management into development planning through community empowerment and good governance.

Downscaling these objectives further in the contexts of Moratuwa, UNCRD aims to assist community residents/members and the Moratuwa Municipal Council to make regional and community development activities effective after the Indian-Ocean Tsunami: (1) sharing and learning a common vision for regional and community development amongst community residents and stakeholders; (2) raising the awareness of integration of community development and disaster management planning; (3) promoting collective actions; and (4) empowering community residents/members through encouraging participation. An Action Plan will be drafted for its implementation, and participatory monitoring and evaluation will be discussed amongst the participants and further community residents. Consequently, it is anticipated that the people of Moratuwa be empowered to make their plans for development, and that urbanisation, which complicates and diversifies disasters, be considered. Various partners are here today to communicate and work together. Let us share our accumulated experiences and knowledge for good changes.
A Japan Overseas Cooperative Volunteers (hereafter JOCV) programme was launched after the initial agreement was signed between Japan and Sri Lanka in 1980: the first group of volunteers arrived in Sri Lanka in 1981. The volunteers had special skills in handicraft making, bamboo craft making and vegetable growing etc. In the same year, the JOCV office was established in Sri Lanka.

Now in its 25th year, hundreds of JOCV volunteers have come to this country and established valuable partnerships with the people and the government of Sri Lanka. Currently, 40 active volunteers in the country work actively in various fields: they are, for instance, sports instructors, food and cooking specialists, child development specialists and community development specialists. The JOCV unit is directly embedded in the Municipal Council bodies in order to assist in improving the living environment and livelihoods of the urban poor and the vulnerable.

The JOCV members are committed to work closely with communities as long as our time is permitted. This is because we know the importance of interacting directly with the people and hearing their voices for them to improve their living environment and livelihoods. We need to first establish trust between us and exchange ideas through our daily conversation.

If we aim to empower the most vulnerable or socially disadvantaged, it is important to understand their initiative. In this regard, one duty of JOCV and government is to facilitate the community member’s self-driven efforts and their ideas for development, so that they are empowered to find their own solutions based on their knowledge of life and conditions.

While the community members themselves are empowered, evidently, the local government capacity and services are crucial to support the community initiatives. Those who have the power and responsibility to mobilise resources may be the local government bodies. But, if they do not have the appropriate capacity to assist the community initiatives, the development process is neither transparent nor accountable, which may discourage communities to take actions. In addition, it is important to develop the capacity of government and enhance community-government dialogue.
Thus, we engage on three overall objectives to achieve the improvement of living environment and conditions: first, community empowerment through capacity building; second, the capacity building of government bodies, which includes the Housing and Community Development Committee (all stakeholders in regional development activities are invited) and better communication and partnerships with programme partners such as the LEI&CDP and JOCV members; third, networking all stakeholders, which enhance direct and regular dialogue between development stakeholders, government, and communities, so that joint project activities and information exchange are well coordinated.

The objectives of this joint-workshop are the following:

i Introducing and sharing visions of regional development with local communities;

ii Building the capacity of stakeholders to focus on people and communities and their issues including risks and assets;

iii Building partnership amongst stakeholders for better communication; and

iv Promoting the idea of participatory development in government and communities.

In particular, we would like to facilitate community members to work together for rehabilitation and reconstruction from the Tsunami disasters, and to raise their capacity to make them main actors/actress for development.

Moratuwa experienced wide-spread damage from the 2004 Tsunami. Consequently, there still
A total of 4019 housing units were damaged. Unstable support and weak partnerships and financing schemes have prevented some communities from the recovery processes. Each community condition varies depending on available supports or hampers reconstruction. For example, Sanwathsara Niwasa community consists of 70 to 80 households, which were formally under a NHDA housing scheme. Both homeowner and donor drive reconstruction with microfinance support from the Women’s bank. As the community was outside of the buffer zone, reconstruction has been taking place at a smoother pace, while the other reconstruction scheme has had difficulty in uniting the community and unifying vision for development.

*Modratuduwa* lies within the buffer zone and had 150 households before the Tsunami. But, *Modratuduwa* currently has 70 households because many residents had been displaced after the disasters. Their major problem is that reconstruction schemes based on microfinance activities have been implemented irregularly. The supporting organisation changing hands twice, and thereby there is no longer supportive microfinancing organisation while their status as Tsunami victims, and therefore their right to request Tsunami recovery assistance has expired. We need to address immediately such a lack of coordination and develop planning capacity for Tsunami victims to solve a number of issues.

We hope that during these two days we will be able to work together as a team and exchange ideas, so that all stakeholders are involved in reconstruction, such as development workers, community members, government, project teams and proponents, will be benefited from this opportunity, and we may establish a foundation for sustainable system to enhance our dialogue and partnership.
Community and Region Development

Reviewing the existing knowledge and status of regional and community development in the context of Moratuwa

Mainstreaming disaster management and gender in community based development

Further remarks on the issue of urbanization and vulnerability against disasters

Anura Dassanayake
Lunawa Environment Improvement and Community Development Project

Edward Y. Sumoto
Research Assistant, UNCRD

Hyogo

Mayumi Yamada

A. Dassanayake
W. S. Fernando

Remarks
When Sri Lanka became subject to foreign conquests and colonization, Lankan society underwent a tremendous transformation. As the foreign invaders introduced the local community to their values and ideals, cultural norms and social customs, the permanence of the rituals and traditional way of life which had remained for centuries began to be challenged by pervasive western influences. Consequently, the foundation of the communal way of life, namely self-sufficiency, self-help, mutual cooperation and community organisation began to erode.

In order to carry out their administrative duties, the colonial rulers created a state bureaucracy which spawned a new social class that served the government and developed a mentality to depend on the government. In this way, the hitherto well-established local values and ideals began to be eroded and a new social class came into being consisting of the new rich whose wealth was generated through the income they earned because of their connections to the government and big business. As a result of the emergence of this new social structure based on the ideals of wealth and power, the long-established social order based on the valuable principles of mutual cooperation, community participation and grassroots organization that had developed through the centuries began to break down rapidly. Instead of acting with initiative in undertaking traditional self-help ventures, the people developed the mentality which made them dependent on the government in thought and action with a strong belief in bureaucracy and the welfare state.

A social environment came into being based on the premise that because people worked for the government and paid taxes, the state thereby an income generating institution, the state was therefore responsible for the welfare of the public.

Another important point is that the unhealthy social transformations also adversely affected the country’s economic productivity. Since foreigners were ruling the country, the population immediately began adopting a positive and progressive stance by refraining from work altogether rather than serving a foreign administration. Even after Sri Lanka gained independence from foreign rule, decline in the country’s productivity continued because the
concept that they were working for the government had become ingrained in the collective consciousness of the public. Due to this low level of productivity, Sri Lanka’s per capita income even after Independence is seen to be extremely low compared with those of other Asian countries such as Japan and Singapore.

Another important and more positive phenomenon found in the post-independence era was the influence wielded within the country by a generation of Sri Lankans educated in the west who inculcated community activities and values common to both the east and the west.

Simultaneously, we also saw a renaissance of local traditions such as community participation at the grassroots level, people taking part in community activities and social projects and cooperating with each other for mutual benefit. Some examples are the establishment of massive pioneer settlements in Padaviya and Ampara, and the re-emergence of grassroots organizations like rural development societies, farmers’ organizations, death donation societies and water management societies.

Another important reemergence found in post-independence Sri Lanka is the inclusion of concepts and methodologies such as community participation, community leadership, self-sufficiency and self-aid as an integral part of the developmental framework used in discussion and dialogue in more recent times. The best example, without a doubt, is the Million Houses Programme. Similarly, development programmes designed to encompass methods based on community participation and community leadership and the active participation of the beneficiary in the development effort have turned out to be the most important characteristics of post-independence renaissance.

It is important to highlight two different approaches in relation to the question of participation, namely active participation and passive participation, which refers to whether one fulfils one’s duties and responsibilities actively by taking the initiative or whether one merely cooperates with the other party. Be in disaster management or some other development process, we should take the initiative in carrying it forward with maximum community input rather than we should participate in a project. The project should become our own rather than someone else’s. In the course of some development projects, I recall hearing people say “Ladies and Gentlemen, you do the work – we’ll give you whatever help you may need.” According to this approach, officers, including us, are seen to be those who implement the development programme while the public are viewed only as peripheral agents who merely cooperate with the officers. Instead, we ought to tell them “You people implement the programme. We will give you our
fullest cooperation.” In relation to development, instead of creating a dependent mentality in the community, we should encourage a mindset that views the programme as their own, takes responsibility for its functioning and becomes involved in every stage of the project including the decision-making process through active community participation.

In the course of some development projects, we have met groups of people in the community who are very sensitive and observant, quick to understand facts and capable to make wise choices, and possessing a wide range of talents and superior organizational skills.

The devolution of decision making structures to the lowest strata of society such as these grassroots community organizations is an extremely positive step. It is extremely important that they should not be viewed according to the old concept of the downtrodden, poor and suffering masses who need to be helped up the social ladder by giving them a few handouts in the form of certain social service programmes. They ought to be seen instead as forming the mainstream of the development effort as members of the community who are equal participants and shareholders in the development project and provided with the opportunity to actively participate in the programme.

We are able to see this kind of active community participation in the project in which we are currently involved. We are also able to observe the way the participants in the community-based organizations and the general public exchange views on the project with the project officers, urban council members and politicians, questioning us about the project, asking for clarification, visiting us frequently in office, taking part in discussions about it, and being a part of the decision making process. Our office doors are also always open to the members of the community. This is the way it should be. We are happy about this situation.

Instead of single individuals, it has become the norm now to have community based action plans with all the members of the community participating together in the decision making process. Accordingly, we are seeing the dependence on centralized development processes lessening and being replaced by development projects which are community based and marked by the active participation of people. Thus, in Sri Lanka today, we are witnessing the emergence of development programmes in which the general public participate actively, not only through physical labour unlike the case before, but also in decision making in many ways. It is very important that strategies are identified in order to successfully maintain and foster this trend, which enable us to establish a sustainable development process based on community participation and benefit the country. There are five important points relating to this:
1. Organizational stability
2. Institutional stability
3. Financial stability
4. Environmental stability
5. Attitudinal and behavioural stability

It is difficult to progress it if the community based organization is not organised with a firm foundation. In the same way, no matter how much work is carried out within the development process, without institutional acceptance and support, the organization cannot conduct its work effectively. In addition to financial stability that is an essential component to sustain a project. favourable environmental conditions including infrastructure, water supply and sanitation are important. However, with all the above satisfactory conditions, they would still not be adequate. The most vital factor for the community’s progress is attitudinal and behavioural stability.

I have an excellent example from first-hand experience to illustrate this point. This morning as I was driving to work, I saw the man who was driving the car in front of me throw an empty bottle onto the road while we were stopped at the traffic lights. As I just could not condone it, I stopped my car and got down and began collecting the shards of glass strewn around by the broken bottle. The driver of the car saw me in his rear view mirror and got out of his car and apologized for his wrong attitude and behaviour. This was a man who represented organized and institutionalized society and had financial security, but his careless attitude to his surroundings and his consequent behaviour patterns were an obstacle to his personal development and to the development of society.

When we stay in Japan or Singapore, we obey that country’s rules and regulations not to pollute the environment. We take great pains to put even a tiny piece of paper in the appropriate waste basket. However, once we return to Sri Lanka, we forget about all this in a flash. We once again begin to throw waste paper onto the road. This is why I stress the fact that we need a radical change in attitude and behaviour patterns. For example, in Singapore, such attitudes and the accompanying behaviour have become carved into the collective consciousness of the community. If we fulfill the conditions I have mentioned above, we will have everything in our efforts to further the development process. If we act together with responsibility and accountability, it is not a difficult task to foster community-centred development based on community participation as viable and sustainable development.
Today, I would like to begin with recounting a personal experience, which holds some important similarities with your experiences here in Moratuwa. Our office, UNCRD Disaster Management Planning Hyogo Office, is based in Kobe, Japan, where I live. It is a city teeming with people and big buildings and it is one of the major international ports, thus home to many trade and industrial installations. Kobe has diverse communities living in different sections of the city, including a large foreign population.

On the morning of January 17th, 1995, the city experienced an earthquake of magnitude 7.2 on the Richter scale that lasted about 20 seconds. Almost 90% of the buildings which collapsed or were highly damaged during the earthquake failed within the first 10 seconds of the disaster. In the end, 6430 people lost their lives from a variety of causes. Those who live in Kobe was severely affected by this great earthquake in one way or another.

One must keep in mind that not everybody died from the direct natural causes of the earthquake. The increased density of the urban setting contributed to damages. For instance, an individual’s house was structurally sound, but the house next door also collapsed onto their house. Fires erupted from gas stoves and trapped victims. Debris and collapsed building blocked the roads and prevented supplies from being delivered, or victims from being transferred to hospitals. A large number of people in one area were in trouble with obtaining enough supplies to those in need, especially when roads were blocked and empty land was scarce for helicopters to land.

Moratuwa is experiencing the third most rapid rate of urbanization in Sri Lanka. Many of you have experienced increased traffic problems, increasing number of residents, crowded settlements and greater pollution. When comparing on a district level, the District of Colombo, according to the 2001 national census, has a population of 2,234,289 with a density of 3,305 per square km. Kobe city has a population of 1,521,269 as of March 2005 with a density of 2,756 per sq. km. While census data has its anomalies, the numbers at least give us some preliminary ideas about the status of population and its implications.
In Kobe, when we experienced the earthquake, overcrowding and old or poorly constructed structures caused major damages and fatalities. In Moratuwa and other hard-hit areas of Sri Lanka such as Galle, highly populated coastal areas experienced a large number of fatalities, not to mention the abundance of weak, unguided and unregulated structures.

The population is already considerable and densely packed in a small area, and that both Kobe and Sri Lanka experienced wide-spread damage and losses from a natural disaster. It is also an important to note that damages and losses were magnified simply because there were lots of people and buildings in the area where and when the disaster struck. This is natural cause and effect as well as a non-natural, human induced cause and effect. Thus, what can we do now that we have been struck by a disaster? What we can do before disasters to protect ourselves? What can we do during disasters, and thus how can we develop and adapt to urbanization while reducing risk to disasters.

Kobe’s experience told us that when disaster strikes, it is our immediate neighbours, our community is most effective in helping each other. With all the rubble and obstruction in the roads, the immediate neighbors were the most helpful in rescuing trapped neighbors. But, this was not enough because the individuals lacked essential items such as adequate supplies of water or knowledge about first aid and possible evacuation routes. There is also a necessity for heavy machinery and large transport to effectively distribute daily necessities to the victims. But, how could we manage to do this fairly and account for everyone that lives in the area?

To fill in these gaps and more effectively respond to the crisis, we learnt the most important lesson from our disaster: we cannot respond without preparation. While the city might develop and buildings may be erected, they cannot survive in a high-risk area without appropriate construction methods. People cannot survive in a high risk area without basic knowledge of how to protect themselves, including where to escape, what items to keep at hand, how to deal with first aid, for example. And finally, to have the most effective aid distribution and account for all victims, both the community and government has the responsibility to talk to each other and see what issues need to be addressed.. Thereby, the members of the communities, government, development project managers, i.e. stakeholders, are not just a “targets” of a project but should be equal partners in eradicating risk.

In regards to disasters, it is also important for all development stakeholders to consider that what happens once may very well happen again. In Kobe, to both adapt to the post disaster recovery process and the eventual recovery of population, trade, and traffic, several disaster
management measures were incorporated into the recovery plans. For example, in the process of relocating some residents in high risk areas, planners made sure to widen the roads and install emergency water mains for fighting fires, for example in the Nagata Ward where the worst of the post-earthquake fires took place. The information are readily available on the official website of the City of Kobe, so as to communicate to its citizens and other city planners the importance of incorporating disaster management in city design and management, as well as to disseminate the lessons learnt from the disaster.²

Residents, on the other hand, began to take interest in learning of ways to protect themselves e.g. what emergency goods to keep on hand, learning from their disaster experiences. On a national level, people around the country took interest in volunteerism and came to Kobe to help out with the recovery process. This in turn led many to see in person the destruction that can be wrought on a large urban center in the instance of an earthquake. Japan being a very earthquake-prone country, the Great Hanshin Awaji Earthquake raised the awareness of Japanese citizens to the risks and vulnerabilities they faced in times of disasters. In Sri Lanka, there should be nationwide consideration for the risks that people face in their own communities and what they can do to minimize the risks, including vulnerability against floods that arises not only from natural causes but also due to lack of preparation or improper waterways management.

Even if one does not directly use the words “disaster management”, many of the issues in our daily life are related to disaster and risk management. For example, if people are concerned about a large number of new houses built in their area on filled up waterways, they are touching upon a great number of disaster issues that include floods, epidemics, fire, etc. Risk is often created in unwitting situations and therefore both community members and other parties such as government should come together to identify these issues.

Sri Lanka is a beautiful country blessed by wonderful fruits and food, rich land and beautiful sea and beaches. These are obvious natural or environmental assets to the country. This country is wonderful because of the ingenuity and hard work of the people. In other words, the knowledge and work of people is what makes a country great and furthermore, a safe and good place to live. Thus, it is the knowledge of the people and their preparation against disasters which minimize risk and allow for proper disaster management. Here lies the importance and strength of community based disaster management because we explore disaster risk in more

details, investigating the different sets of issues that pertain to the men, women and children of each community and their strengths, weaknesses and vulnerabilities.

For example, in regards to Sri Lanka, data and observers may point that Tsunami is the most destructive and largest risk. However, when we analyse disasters through different viewpoints/criteria, Tsunami may have been a highly destructive and costly disaster, but in terms of the total number of people affected and the frequency of occurrences, floods may be a far greater and more commonly shared disaster management priority among community members. In some places, it might be a priority to first develop some basic infrastructure or promote environmental conservation to prevent such disasters. Fishing communities will have different issues in comparison to those who live inland. Development planners may have different priorities from those who currently live by the coast. These areas need to be cooperatively investigated to prevent future disasters and/or confrontations.

Furthermore, there are both men and women here today who will be discussing issues and expressing their ideas and opinions at this workshop. When viewed equally through the eyes of each gender, how will they each view these issues? The way women look at a disaster may be different from the way men do it. Thus, we need to do our best to look at it from the perspectives of both the males and females. Among those most badly affected by a catastrophe can be women and especially children. How can we understand the issues through their eyes? This is therefore another issue that we need to discuss here.

With regard to what happened when the tsunami struck Galle, one of our former case-study areas, another tragic situation unfolded in a community of people housed in a place called “Sambodhi Nivasa”. Mostly consisting of people with physical and mental disabilities, this particular community had worked together to improve their living conditions in the past. However, disaster struck, nearly half fell victims to the waves. Thus, although they were united as a community of their own, but they were still vulnerable when the tsunami hit Galle.

We faced similar experiences during the earthquake in Kobe. In some instances, the needs of specific groups such as women, children, and those with disabilities and health problems were not adequately met. This was because when planning for such a situation, no one had tried to look at the issues, for example, through the eyes of women and considered what their needs might be and how they could be met. Thus, these vulnerable groups and individuals had to face much hardship during and after the time of the disaster. Therefore if we do not seek to understand the needs of each group of people before a disaster occurs, they are likely to face
more problems in the midst of the crisis. Having our discussion on disaster preparedness, we need to communicate and work with specific people groups if we do want to identify and understand their special needs, so that they, including ourselves, are ready to reduce disaster vulnerabilities during an emergency.

Today, we are fortunate to have many participants from very different community groups and backgrounds. Throughout the two days, Dr. Yamada and Mr. Dassanayake will be leading a series of interactive group sessions in which ideas will be exchanged, presented, and recorded for a productive session of participatory planning based on the identification of risks, vulnerabilities, assets, and priority issues. So, I hope that each one of you will express yourselves and actively participate in this workshop, through which enable us to make a united and valuable contribution towards disaster management and development planning in the city of Moratuwa. Thank you very much.
If urbanisation simply means the increase over time in urban population or the expansion of towns and cities, it is clear that Sri Lanka has been undergoing a certain degree of urbanisation. According to World Population Prospects (2003), the highest percentage of the urban population of Sri Lanka resides in the following urban agglomerations: (1) Colombo; (2) Mt. Lavinia; and; (3) Moratuwa. Mt. Lavinia and Moratuwa, where this workshop is now convened, are good places to explore the theme “Urbanisation and Community Based Disaster Management (CBDM)”.

The critique, however, does not only lie in “urbanisation”, but also “people’s vulnerabilities” as people often live in urban centres without disaster preparedness. Such “urban vulnerabilities” and “people’s vulnerabilities” are remarked here through my own experiences, memories and records from Kobe (my home town) where the Great Hanshin-Awaji Earthquake occurred in 1995. In the near future, the people of Sri Lanka may explore and develop a similar paradigm from their own experiences of the India Ocean Tsunamis in 2004.

It is believed that rural and urban living conditions are different, and therefore, comparing those two is not so simple because one’s indicators vary depending on her/his own experiences and interests. For instance, as urban populations have more opportunities for education and employment than rural inhabitants, governments and aid agencies may allocate more resources to rural communities than to urban centres. But, because of the higher population density, the number of those who are lost or hurt by natural disasters may be greater in urban than rural areas: from the viewpoint of disaster management, we may consider urban centres as the target area because living safely in the communities and sustainable livelihoods are difficult goals to be achieved without considering the ongoing urbanisation and diversified vulnerabilities to disasters.

“Urbanisation” reflects a series of processes which change people's surroundings from “we do not have” to “we do have”. For instance, infrastructure may be a simplistic indicator for assessing urbanisation. While urbanisation brings a number of positive transformations, it should be noted that people often make themselves vulnerable by constructing artificial objects without disaster preparation. In reality, the people of Sri Lanka have been exposed by urbanisation to a number of disasters (in addition to the recent tsunamis), which frequently strike the country (Table 1).
Disasters cause losses in human lives, but it should also be noted that they leave the injured and the homeless (Table 2). Not only disasters cause losses in human lives, but they also leave the injured and the homeless.

Table 1: Top 10 Natural Disasters (number killed), Sri Lanka

<table>
<thead>
<tr>
<th>Disaster type</th>
<th>Date</th>
<th>No Killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave / Surge</td>
<td>26-Dec-2004</td>
<td>35,399</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>24-Nov-1978</td>
<td>740</td>
</tr>
<tr>
<td>Flood</td>
<td>30-May-1989</td>
<td>325</td>
</tr>
<tr>
<td>Flood</td>
<td>17-May-2003</td>
<td>235</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>22-Dec-1964</td>
<td>206</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>25-Dec-1957</td>
<td>200</td>
</tr>
<tr>
<td>Slides</td>
<td>8-Oct-1993</td>
<td>65</td>
</tr>
<tr>
<td>Flood</td>
<td>25-Dec-1969</td>
<td>62</td>
</tr>
<tr>
<td>Epidemic</td>
<td>Nov-1987</td>
<td>53</td>
</tr>
<tr>
<td>Flood</td>
<td>24-May-1984</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: EM-DAT: The OFDA/CRED International Disaster Database

Table 2: Natural Disasters in Sri Lanka from 1957 to 2005 (Summary), Sri Lanka

<table>
<thead>
<tr>
<th>Disaster type</th>
<th># of Events</th>
<th>Killed</th>
<th>Injured</th>
<th>Homeless</th>
<th>Affected</th>
<th>Total Affected</th>
<th>Damage US$ (000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drought</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>88,613,000</td>
<td>8613,000</td>
<td>0</td>
</tr>
<tr>
<td>Avg per event</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8613,000</td>
<td>8613,000</td>
<td>0</td>
</tr>
<tr>
<td>Epidemic</td>
<td>5</td>
<td>58</td>
<td>0</td>
<td>0</td>
<td>206,777</td>
<td>206,777</td>
<td>0</td>
</tr>
<tr>
<td>Avg per event</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>41,355</td>
<td>41,355</td>
<td>0</td>
</tr>
<tr>
<td>Flood</td>
<td>37</td>
<td>948</td>
<td>1,000</td>
<td>2,746,6016,455,127</td>
<td>9,202,728</td>
<td>370,444</td>
<td></td>
</tr>
<tr>
<td>Avg per event</td>
<td>26</td>
<td>27</td>
<td>74,232</td>
<td>174,463</td>
<td>248,722</td>
<td>10,012</td>
<td></td>
</tr>
<tr>
<td>Slides</td>
<td>3</td>
<td>119</td>
<td>0</td>
<td>0</td>
<td>130</td>
<td>130</td>
<td>0</td>
</tr>
<tr>
<td>Avg per event</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>Wave / Surge</td>
<td>1</td>
<td>35,399</td>
<td>23,176</td>
<td>480,000</td>
<td>516,130</td>
<td>1,019,306</td>
<td>1,316,500</td>
</tr>
<tr>
<td>Avg per event</td>
<td>35,399</td>
<td>23,176</td>
<td>480,000</td>
<td>516,130</td>
<td>1,019,306</td>
<td>1,316,500</td>
<td></td>
</tr>
<tr>
<td>Wind Storm</td>
<td>5</td>
<td>1,151</td>
<td>5,000</td>
<td>100,0001,913,000</td>
<td>2,018,000</td>
<td>137,300</td>
<td></td>
</tr>
<tr>
<td>Avg per event</td>
<td>230</td>
<td>1,000</td>
<td>20,000</td>
<td>382,600</td>
<td>403,600</td>
<td>27,460</td>
<td></td>
</tr>
</tbody>
</table>

Source: EM-DAT: The OFDA/CRED International Disaster Database

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Although the above statistical data (Table 1 and 2) do not stratify the disaster impacts on urban and rural settlements or male and female populations (gender classification), it is clear that a natural disaster is diversified and complicated peculiarly in the urban settings, as evidenced by the Great Hanshi-Awaji Earthquake in 1995 and the Indian Ocean Tsunami in 2004. Natural disasters repeatedly demonstrate how artificial, fragile and risky our city/town attributes are (e.g. enormous quantities of debris and rubbles are produced after disasters), but, unfortunately, it seems that we are not learning or utilize such valuable lessons. Our ignorance of disasters remains and our negative behaviour and attitude towards the natural environment continue, contributing to the transformation of the natural disasters into human-made disasters. Urban vulnerabilities arise from what we artificially construct to meet our uncontrolled demands, and as a matter of fact, we then have to live with our own creation of such “urban vulnerabilities”.

In urban areas, man has constructed great infrastructures consisting of buildings and houses, supermarkets, cinemas, sports grounds and recreational facilities etc. People are attracted to live in or visit the urban centres. These places are often located near a beautiful seaside, such as Moratuwa and Kobe, and tourist industry may bloom and attract great numbers of people. This may require other amenities (e.g. hotels) and transportation systems. But, have we built these infrastructures with disaster management planning? Are we invited or inviting our guests to a safe space? Is our place to live safe or resilient to disasters? These are the critical questions in our dialogue on how to incorporate disaster management into community development planning, which may require “community empowerment and good governance”. Moreover, practical visions, not only for future’s Moratuwa but also for the rest of Sri Lanka, lie in more effective integration of disaster risk considerations into sustainable development policies, planning and programming. As we know, paying sincere condolences or commemorating the losses after a disaster is not enough, and actions leading to disaster preparedness and development are required.
Remarks
A. Dassanayake and W. S. Fernando

A. Dassanayake

This is a precious opportunity for the Mayor, the Deputy Mayor, Urban Council members, community representatives and government officials to meet face to face and discuss our issues. Having our dialogue on the present situation in the city of Moratuwa and our future visions, we learn how to formulate policies for positive changes in short-term, medium-term and long-term. It is also important to discuss how we employ the strategies to implement such policies that promotes participatory development. When we discuss a problem, we consider the time frames, such as its historical background, the present situation and our vision etc., for a prosperous future. For example, historically, the Lunawa lagoon is the place to enhanced the beauty and environmental value of Moratuwa city as a viable ecosystem helped the fishing community’ livelihood. However, currently, it turns to be a polluted water body due to the industrial and other waste discharged damped by nearby factories and communities. Considering such a limitation, we need to discuss our vision for the better future development of the lagoon.

W. S. Fernando

A few decades ago, the city of Moratuwa used to be rich in resources. However, today, the residents of city face several serious problems with urbanisation. A symbol of beauty, the Bolgoda river, has now degenerated into a polluted mass of water due to urbanisation. Another valuable resource, which was yet another place of tremendous aesthetic value, was the Lunawa lagoon. But today, it has been viewed as a dirty lake.

About 55 years ago, the city’s water supply system was used by about 7500 families. But, the population residing in Moratuwa has been increasing to date. When a large number of people need to use the same water system that was put down half a century ago, can you imagine how unpleasant the conditions must be? A administrative institution has his/her own limitations. Garbage disposal is another issue. I think that we need the community’s contribution to solve this problem. We know that our people usually throw away garbage or
everything, such as a scrap of paper lying around the house, a once-used item like a plastic water bottle, and other reusable things, which are sold for a small amount of money. This habit has created uncontrolled situations and problems to the residents of Moratuwa. In addition, the tsunami catastrophe has posed challenges to Moratuwa for the past two years. To date, people still live in refugee camps in our area.

I think that this workshop is creating an opportunity for us to find answers to our questions. You need to think about and understand what your problems are. You need to find the solutions through the processes of your discussions and interactions with the others. Otherwise, you may not find the answers to satisfy you. Therefore, representatives of all organisations including those of community, of government institutions and of provincial council institutions, may advise how you can contribute to the development process of Moratuwa. Thank you.
Presentations
The current status of development projects in Moratuwa Municipality

Experiences in participatory development in the community - Community Contracts

A Short Summary of the Role of the Moratuwa Urban Council in the Sustainable Development

Presentations by project developers

A Short Summary of the Role of the Moratuwa Urban Council in Sustainable Development

The Lunawa Environmental Improvement and Community Development Project

The Lunawa Coastal Resources Management Project

Group Poster Presentations
Round 1
Round 2

Group Presentation Summary and Closing Remarks

V.C.Warnakulasuriya
Commissioner, Moratuwa Municipal Council

Fisilin de Mel
Smarakoon Watta

M. Tushari Rodrigo
Moratuwa Municipal Council

M. T. Rodrigo
Moratuwa Municipal Council

Ranjith Samarashngha
LEI & CDP

M. G. W. M. Kapila Gunaratne
CRMP

Mixed Groups (Including Urban Council Members)

Mixed Groups

Group Representatives
M. Yamada
Moratuwa is a municipality that belongs to an electoral division. It is also a regional secretariat division. Moratuwa has a variety of geographical features.

Moratuwa is known as the “pioneering city”. Literally, it means that marches ahead of the others. A large number of famous individuals come from Moratuwa. The famous singer Visharadha Pandith Amaradeva who is a household name in this country was born to a carpenter’s family in Moratuwa. Several of our country’s most talented Test Cricket players also are from Moratuwa. Thus, we needs carefully plan the future of the place has spawned so many unique individuals with precious talent and ability in diverse spheres. Moratuwa is also well-renowned for its carpentry and furniture industry.

The urban council act has delegated the Moratuwa Urban Council to plan the own budget for the fiscal year of 2006 to meet the following objectives:

- To spend council resources, according to the amount of capital it possesses, to provide public utilities required for the well-being and convenience of the general public.
- To provide the residents of Moratuwa with public health and sanitation facilities and livelihoods for city development.

The Moratuwa Urban Council has these objectives.

The Moratuwa Urban Council consists of 29 members. The city occupies an area of 23.4 square km and consists of 12 urban electoral divisions and 42 Grama Sevaka divisions. Some 41,000 families reside in this city at present. The city’s population is, 186,033, but the voters are 116,448. There are 37 public bathing places and 34 state schools in Moratuwa. There are 1,122,486 km of tarred roads and 3,256 km of gravel roads within the city. There is a general hospital, 2 cinemas, 8 markets, 2 weekly fairs, 14 meat stalls, 7 public playgrounds, 8 libraries, 2 reading halls and a number of other public services.
We hope to draw up a development plan for the Moratuwa Urban Council. For the benefit of the general public, we primarily focus on the facts i.e. a clean and beautiful environment as human rights. In designing such an environment, we need to address the issues of garbage disposal, and road maintenance. In addition, we need to cleaning up public places.

The Lunawa Environment and Community Development Project was launched, which costs millions of rupees, and should be completed by the year 2010. It is because we, humans, polluted the environment to require the project. The Lunawa lagoon has no longer fish because we have polluted it, and now we have to clean it up. Because of our irresponsible actions, we have to spend millions of rupees. While spending millions to develop this lagoon, we must determine ourselves to maintain it properly. We should protect it to build a healthy and suitable environment for our life. We also need to clean up the Bolgoda river, which has been polluted by dumping sawdust from the furniture industry and other kinds of wastes. We ought to prioritise our planning to create a healthy environment and life quality of the people of Moratuwa.

Next issue is the public health, which is a primary responsibility of the planners, and we need our planning in both short-term and long-term. Water is the other essential issue for us. We obtain the information from the relevant officials and institutions to talk about the water supply issues. We should consider not only drinking water in our planning but also the water for human life.

When we plan for housing, we should pay our attention especially to the Internally Displaced Persons (IDPs) affected by the recent tsunami and should assist to build their houses promptly. Knowing that they have lived in unhealthy refugee camps, in the midst of very difficult circumstances, we need to provide them with houses to shut down the refugee camps. We should also make such plans not only for the IDPs affected by the tsunami, but also the homeless in general. We need to solve the housing problem holistically in Moratuwa.

We are happy to report something positive in the field of child education. Immediately after the present ruling party came to power, in fact within a period of about two weeks, permanent government appointments pre-school teachers and assistant teachers. These persons had worked for 10-12 years, but they were paid only a very small allowance for their services. Since they are appointed as permanent government servants, now we may ask them specific duties and responsibilities. With regard to primary education, we need to understand the importance of the pre-school education for a child. According to psychologists, 90% of the
development of a child’s brain occurs during his pre-school years i.e. under the age of five. We must give priority to pre-school education because children learn during these early years that form their foundation to grow into adults who comprise our society as good and upright citizens. Therefore, it is important to consider specific measures of pre-school education in our planning.

Finally, I would like to focus on leisure and entertainment as planning needs. When we are mentally and physically tired, we need to release our stress. We need some resting places, but few public places are currently available. When I referred Moratuwa to the ‘pioneering city’, I also mentioned the famous cricketers of Moratuwa. But, the Soysa Grounds of Moratuwa are no longer popular venue for cricket matches. Therefore, considering the advice of the Mayor and the Deputy Mayor with the Sports Minister, we are now taking measures to elevate these grounds to meet the standards of an international sports arena. Besides, we hope to develop a place for rowing on the Bolgoda River and a children’s park near the beach among other facilities. We hope that you consider all these in your planning.
I have lived on the property adjoining the Bolgoda River known as Samarakoonwatta since 1984. After two months when we moved there, we experienced a big flood. 66 families lived there at the time. We went to the Urban Council office and the District Secretary's office. We explained to the officials about the floods, so that we received their unstinting support. These officers provided us with dry rations. On every occasion, during flood period of time, we received dry rations in this manner. Mr Ranasinghe of the Urban Council gave us his fullest cooperation. With the Mayor's help, we established a Community Development Society, and we learnt how to go to the relevant places to make known our sad plight. We had no access to our property by road. We lived in the houses built on a muddy marsh. We neither did have water supply nor electricity. We had no toilet facilities. We had no health facilities. We faced many obstacles to access the necessary facilities because we had settled on this property without prior permission from the authorities. As a narrow two-foot bund was the only access to our property, the Urban Council and the District secretary's office constructed four-foot wide roads for us. They also supplied the main road with 8 streetlights. We had to meet respective officer repeatedly with our grievances to fulfill our needs.

During the period, Japan International Cooperation Agency (JICA) came to help us in many different ways. Mr Yoshida, who was in charge of our city for JICA, assisted us in many ways. At that time, I used to work as the Chairperson of our society. He started to accompany us everywhere for us to obtain assistance for the development of Samarakoonwatta. Ending his assignment, he had to return to Japan. Thereafter, a new person, Mr Takai came and continued to render a great service to us in Samarakoonwatta, where the side drains were waterlogged. Mr Takai worked with the Urban Council to construct side drains to have a distance of about 500 feet, which cost roughly 4 lakhs of rupees (Rs 400,000). However, during the drain construction, neither a government officer nor anyone else did come to monitor the work in progress. The cement began to crack because the building contractor had used cheap materials and produced low-quality drains. I just could not keep watching the drains destroyed. They had been made without iron rods to strengthen the cement and without enough sand and stones for the concrete mix. I went once again to the Urban Council and reported this regrettable
situation. I told Mr Ranasinghe that as the drains had not been built correctly, the water did not flow properly. I even asked him to investigate directly the situations. He came and understood what we had been telling him. However, it was too late for us to do anything about it. Today, those remaining drains have meshed with the road and already broken down. We cannot use them at all.

Next, we informed them of the drain in front of the property. There used to be a bridge made of coconut tree logs to cross the drain, but they broke it down. Instead, a concrete slab was placed. However, it has sunk lower. When flooding takes place, water flow it over. We cannot use the concrete slab, and now we need to reconstruct the bridge.

After that Mr Takai helped to form a women’s society (about 85 of us women), he also introduced us to a credit scheme that continued until the time he left Sri Lanka. However, after his departure, this loan scheme was discontinued.

Mr Lasantha Gunaratne from a non-governmental organization (NGO), the Human Rights Foundation in Piliyandala, came to our settlement and spoke to me. We introduced him to the Urban Council and the Provincial Council officials for consultation. He took the initiative and helped us organise ourselves into another women’s society, which is still active to date. It facilitates credit schemes and conducts health and hygiene programmes. We had no place for garbage disposal. He discussed this issue with the Urban Council and got 135 barrels of compost fertilizer for us. We had no community hall. In order to build one, a piece of property was bought for Rs 4 lakhs and the construction of a two-storey building construction has been planned.

During this time, Mrs Tsutumi (JICA) organisation came to our organization. She enquired about our needs and requirements. We asked her help to reconstruct our drainage system. She spoke to the Urban Council about this. Later, in response to her request, Mr Ranasinghe and Mrs Sewwandi launched the “Promotion of Urban Settlements” programme. They also rejuvenated our Community Development Society to construct our main drainage system.
These are our houses. This is the drainage system under construction. The half has been completed. Ms Tsusumi signed an agreement to build the other half. Each household had to pay Rs 500 as a part of community contributions to the Community Development Society for the task. In this way, we deposited money in the bank on behalf of the society. After depositing that amount, at the end of the first quarter, with the full knowledge of the Urban Council, the Community Development Society received Rs 185,449. This money had half of the main drain constructed. We signed the second agreement according to what we have received (Rs 407,384).

We have already taken that money and completed another drainage system. Finally, we recently signed the third agreement. We have not yet received the budget, but expect to get Rs 507,517. When we signed the first agreement, we deposited Rs 5,000 in the bank as the community contribution of our development society. We deposited Rs 3,000 when we signed the second agreement. When we deposited that money for construction, Rs 30,000 was left over, and it is deposited in the bank as the community cooperation were successful to construct this drain. Without seeking their help and delegating this task to building contractors, we would not have been able to complete this assignment effectively. Therefore, we intend to work through the Society, cooperating with the community members, so that we can undertake whatever task in the future.

I would like to use this opportunity to kindly request to give us this property ownership. I have resided this property for the past 22 years. No matter what we work hard for the property, we do not have any legal rights. We merely reside here. Initially, there were only 66 families live here, but now, here are 265 families. The number of the residents has increased because of
a lack of control to build new houses on the property. There are approximately 125 houses on the river bank, where should be designated a protected area. But, they just dump garbage and fill up the river to build their houses. I understand that we lack space, but I want to ask to stop dumping garbage and filling up the river. Approximately 80 households have property transfer while the others do not have anything to transfer. I request that you grant land ownership to those who live on the property.

A. Dassanyake

I think we should consider the reason why we are presenting these project facts. We need to understand the projects ongoing in Moratuwa. The Urban Development Authority of Moratuwa has the city development plans. The Urban Council also has these urban development plans. There are the Housing Development Authority, the Water Supply and Drainage Board, the Electricity Board, the Electricity Company and other government institutions serving this region, Non-Governmental Organizations (NGOs), and a number host institutions of other development projects such as the Business Management Project and the Industrial Waste Project. Since there are so many different development programmes ongoing in the place where we live, we have right to know what they are doing. What are these programmes? How do they operate? Which organisations carry out these programmes? How do these projects relate to each other? Which of these programmes have no such links? If they are not connected, how can such links be forged? How can these projects to benefit the different communities? Without possessing such information and knowledge, it is difficult to mobilise resources to benefit the people of Moratuwa.
Within the Moratuwa Urban Council area, one programme has been jointly operated by the United Nations Human Settlement Commission and the United Nations Development Programme (UNDP). The main objective is to establish good governance while assisting the regional administration. This programme helps the different departments work together. Accordingly, the independent decisions made by the different departments were brought to a common platform for discussion in order to carry out these proposals in an appropriate manner. Another goal, yet, is to enhance community participation for urban development and the efficient management.

Importantly, sustainable urban development programme aims to strengthen the Housing and Community Development Committee through their regular monthly meetings. This programme helps identify and prioritise the problems municipality faces, and find their solutions. It also assists in identifying the regional requirements of Urban Council members by eliciting the ideas and opinions of the community and disseminating information among government officials. In addition, the project is more effectively operated through the monthly committee meetings.

We identified two small projects to be implemented under this programme. One project was for the use of 500 compost fertilizer barrels. The other one was for the creation of a bio-gas unit. These two projects were supported under this programme as priorities were identified through group discussion.

The main problem in our Urban Council is solid waste management. The compost fertilizer project would encourage people to participate in solid waste management. We were able to carry out this project very effectively in our Idama electorate. We attempted to create a bio-gas unit as the second project. We tried to launch a power generation project by collecting leftover vegetables and other waste materials from the market. The wastes were transported to another place to be broken into pieces by machine whereby methane gas was produced for electricity generation. This was an unsuccessful project. Without understanding the community, every time we attempted to establish something within the Urban Council area, the general public
opposed it. Finally, we tried to operate it in the Urban Council office grounds, but in terms of environmental concerns, we were not able to establish it here either. As a result of the group discussions, we decided to establish a model rainwater management project in the Urban Council grounds. We hope to collect the rainwater on the roofs of the Urban Council buildings and re-direct it through pipes to meet our water requirements. This model project was designed to show the residents how we could obtain water for the daily requirements of the Urban Council, such as the water for flushing toilets, for watering plants and for washing vehicles rather than for drinking purposes. However, we still have not carried it out although we are trying our best to launch it in the near future.
The Moratuwa Urban Council is a local government council that is part of the Western Province. The Moratuwa Municipality area is located near the sea as its western boundary, the Bolgoda Lake and Panadura River at its southern and south eastern boundaries and the Dehiwela-Mt.Lavinia municipal city limits as its northern boundary.

Table 1: Population by G. N. division, sex and age

<table>
<thead>
<tr>
<th>GN. Division number and name</th>
<th>Total</th>
<th>Sex</th>
<th>Age (in Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Colombo District</td>
<td>2,251,274</td>
<td>1,151,413</td>
<td>1,099,861</td>
</tr>
<tr>
<td>Moratuwa D.S. Division</td>
<td>177,563</td>
<td>87,313</td>
<td>90,250</td>
</tr>
<tr>
<td>547: Angulana North</td>
<td>3,832</td>
<td>1,958</td>
<td>1,874</td>
</tr>
<tr>
<td>548: Kaldemulla</td>
<td>4,927</td>
<td>2,335</td>
<td>2,592</td>
</tr>
<tr>
<td>548A: Soysapura North</td>
<td>4,483</td>
<td>2,070</td>
<td>2,413</td>
</tr>
<tr>
<td>548B: Soysapura South</td>
<td>3,286</td>
<td>1,552</td>
<td>1,734</td>
</tr>
<tr>
<td>548C: Dahampura</td>
<td>3,284</td>
<td>1,436</td>
<td>1,848</td>
</tr>
<tr>
<td>549B: Thelawala North</td>
<td>5,560</td>
<td>2,670</td>
<td>2,890</td>
</tr>
<tr>
<td>549A: Borupana</td>
<td>6,952</td>
<td>3,433</td>
<td>3,519</td>
</tr>
<tr>
<td>549: Thelawala South</td>
<td>3,634</td>
<td>1,769</td>
<td>1,865</td>
</tr>
<tr>
<td>550A: Lakshapathiya North</td>
<td>5,436</td>
<td>2,432</td>
<td>3,004</td>
</tr>
<tr>
<td>550B: Lakshapathiya Central</td>
<td>2,951</td>
<td>1,446</td>
<td>1,505</td>
</tr>
<tr>
<td>547A: Angulana South</td>
<td>3,441</td>
<td>1,742</td>
<td>1,699</td>
</tr>
<tr>
<td>552A: Uyana South</td>
<td>4,306</td>
<td>2,129</td>
<td>2,177</td>
</tr>
<tr>
<td>552B: Uyana North</td>
<td>3,789</td>
<td>1,875</td>
<td>1,914</td>
</tr>
<tr>
<td>557B: Rawathawatta South</td>
<td>2,212</td>
<td>1,009</td>
<td>1,203</td>
</tr>
<tr>
<td>557: Rawathawatta East</td>
<td>4,469</td>
<td>2,108</td>
<td>2,361</td>
</tr>
<tr>
<td>550: Lakshapathiya South</td>
<td>5,728</td>
<td>2,693</td>
<td>3,035</td>
</tr>
<tr>
<td>551B: Kuduwamulla</td>
<td>3,080</td>
<td>1,517</td>
<td>1,563</td>
</tr>
<tr>
<td>551: Katubedda</td>
<td>10,186</td>
<td>5,328</td>
<td>4,858</td>
</tr>
<tr>
<td>Grama Seva Officer Unit</td>
<td>Population 2001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>551A: Molpe</td>
<td>6,215 3,135 3,080 1,646 4,569</td>
<td></td>
<td></td>
</tr>
<tr>
<td>551C: Moratumulla North</td>
<td>3,409 1,731 1,678 983 2,426</td>
<td></td>
<td></td>
</tr>
<tr>
<td>558A: Kadalana</td>
<td>3,591 1,752 1,839 955 2,636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>557A: Rawathawatta West</td>
<td>3,764 1,815 1,949 887 2,877</td>
<td></td>
<td></td>
</tr>
<tr>
<td>552: Idama</td>
<td>3,285 1,617 1,668 707 2,578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>553C: Uswatta</td>
<td>2,580 1,174 1,406 825 1,755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>553: Moratuwella South</td>
<td>4,770 2,344 2,426 1,247 3,523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>559: Indibedda West</td>
<td>4,099 2,052 2,047 1,258 2,841</td>
<td></td>
<td></td>
</tr>
<tr>
<td>558: Moratumulla East</td>
<td>4,158 2,113 2,045 1,267 2,891</td>
<td></td>
<td></td>
</tr>
<tr>
<td>558B: Moratumulla West</td>
<td>3,498 1,770 1,728 1,022 2,476</td>
<td></td>
<td></td>
</tr>
<tr>
<td>560/6: Villorawatta West</td>
<td>3,651 1,889 1,762 1,088 2,563</td>
<td></td>
<td></td>
</tr>
<tr>
<td>560/6: Villorawatta East</td>
<td>4,286 2,178 2,108 1,285 3,001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>559A: Indibedda East</td>
<td>3,554 1,768 1,786 1,134 2,420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>553A: Moratumulla North</td>
<td>2,937 1,569 1,368 681 2,256</td>
<td></td>
<td></td>
</tr>
<tr>
<td>553B: Moratumulla West</td>
<td>2,703 1,358 1,345 900 1,803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>554: Koralawella North</td>
<td>5,831 2,835 2,996 1,827 4,004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>554B: Koralawella East</td>
<td>2,214 1,092 1,122 606 1,608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>554C: Koralawella West</td>
<td>3,938 1,972 1,966 1,298 2,640</td>
<td></td>
<td></td>
</tr>
<tr>
<td>554A: Koralawella South</td>
<td>4,064 2,022 2,042 1,278 2,786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>555: Katukurunda North</td>
<td>4,040 1,970 2,070 1,276 2,764</td>
<td></td>
<td></td>
</tr>
<tr>
<td>555A: Katukurunda South</td>
<td>4,906 2,401 2,505 1,545 3,361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>556: Egoda Uyana North</td>
<td>5,114 2,541 2,573 1,617 3,497</td>
<td></td>
<td></td>
</tr>
<tr>
<td>556A: Egoda Uyana Central</td>
<td>3,294 1,702 1,592 991 2,303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>556B: Egoda Uyana South</td>
<td>6,106 3,011 3,095 2,173 3,933</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

**Population According to Grama Seva Units**

While there are 42 Grama Seva officer units in Moratuwa, a total of the population is reported to be about 177,190 according to the 2001 population census.
**Table 2: Population Growth Rate**

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Total Population</th>
<th>Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>50,698</td>
<td>2.18</td>
</tr>
<tr>
<td>1953</td>
<td>60,215</td>
<td>2.84</td>
</tr>
<tr>
<td>1963</td>
<td>77,333</td>
<td>3.06</td>
</tr>
<tr>
<td>1971</td>
<td>96,668</td>
<td>4.08</td>
</tr>
<tr>
<td>1981</td>
<td>13,5610</td>
<td>3.03</td>
</tr>
<tr>
<td>1990</td>
<td>172,606</td>
<td>3.12</td>
</tr>
<tr>
<td>2001</td>
<td>177,190</td>
<td>2.59</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

**Table 3: Population Density**

<table>
<thead>
<tr>
<th>Amount of Land</th>
<th>Population Density per Hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land with water area</td>
<td>1972</td>
</tr>
<tr>
<td>Land without water area</td>
<td>1682</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

**Table 4: Total Population, Density per Hectare, and Net Density**

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Total Population</th>
<th>Gross resident population density per hectare</th>
<th>Net resident population density</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>30604</td>
<td>13.8</td>
<td>37.3</td>
</tr>
<tr>
<td>1981</td>
<td>37554</td>
<td>16.9</td>
<td>45.7</td>
</tr>
<tr>
<td>2001</td>
<td>46309</td>
<td>20.9</td>
<td>56.4</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)
Millennium Development Goals

With the aid of the sustainable urban development programme, we have prepared 8 Millennium Development Goals designed in the context of Moratuwa.

1. Eradicating extreme poverty and starvation

Table 5: Percentage of population living below the poverty line

<table>
<thead>
<tr>
<th>Percentage for Sri Lanka</th>
<th>22.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Province</td>
<td>11.5%</td>
</tr>
<tr>
<td>Colombo District</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

Although there are no available statistics for the poverty rate that is specific to Moratuwa, one may deduce the figure from that of Colombo District.

Although the District has a lower level of poverty in comparison to the national average, it is observed that extreme poverty exists within 10 of the city’s divisions. The main divisions are:

- Moratuwella West
- Angulana South
- Katukurunda South

2. Obtaining a well-rounded primary education

The percentage of those who enter and complete primary education in Moratuwa exceeds 95%. The aim here is to provide education for children in the 5-14 year age group. The percentage of the student population within the Moratuwa Urban Council area is about 92.63%. These statistics are validated by the schools. However, some children also attend schools outside the Urban Council area. When such children are also included, the student population percentage increases to 95.97% approximately. If the well-rounded education system reaches a success, 100% should receive the right to education. However, only 95.97% have entered a school to obtain an education. According to this, the percentage of children not attending school becomes very high: a considerable number of children do not go to school. Our challenge is to bring these children into the educational system.
The Grama Niladhari division where this percentage takes on added significance is Angulana, Egoda Uyana, Thelawela and Koralawella. Therefore, education will be an important issue to those Urban Council members representing these areas.

**Table 6: Schools in the Moratuwa Urban Area**

<table>
<thead>
<tr>
<th>Government Schools</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Population</td>
<td>21842</td>
</tr>
<tr>
<td>Percentage completing education up to degree level</td>
<td>1.79</td>
</tr>
<tr>
<td>Percentage with no schooling at all</td>
<td>3.27</td>
</tr>
<tr>
<td>Percentage receiving education up to O/L and A/L before dropping out</td>
<td>38.79</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

A very disappointing phenomenon to be seen in Moratuwa when considering education is that while about 95% of children are admitted to Grade 1 in schools, 60% of these children drop out of school before sitting for the Ordinary Level examination. We consider this to be an issue that needs to be taken into account when we prepare development plans for Moratuwa.

3. Improving gender equality and empowering women

**Primary Education**

Compared with other areas, women in the Moratuwa council area are seen to have achieved a high standard of education. At primary level, in the 6 – 10 year age group, the education of girls in the Moratuwa area exceeds that of girls in every other area of the country.

It should be mentioned that in organizing this workshop, Miss Natsuko took great pains to organize it so that there was equal gender participation in it. We should bear in mind that the achievement of equality for women has been identified as a new millennium goal.

**Secondary Level Education**

At secondary school level, 13.5% of women, on a national average, are enrolled. However, there is a tendency for women in the 20–24 year age group to drop out of further education.
Women’s participation in the political activities at the Moratuwa Urban Council is very low. The Urban Council has been a patriarchal institution over a long period of time and women’s participation rate in it is only 3.5%.

4. Minimizing the infant mortality rate

Infant deaths are identified here as the percentage of children who died before the age of 5. It is possible to state that Moratuwa enjoys an excellent standing in regards to this issue.
5. Developing maternal health

When maternal health is considered, only 1 maternal death has been reported for 2640 live births in 2002. The maternal death ratio is 3.8 which is a very low percentage. While we say that our Urban Council area has a high standard of health, it is the mothers’ knowledge of the subject that has resulted in the decrease in maternal deaths. Similarly, the skill of attendants and health care officers has also helped maintain the high standard of health seen within the Urban Council area.

6. Controlling HIV AIDS, Malaria and other diseases

It is difficult to obtain data in this field. Thus, we present here only a percentage about the use of family planning methods within the Moratuwa municipal area.
Table 8: Use of Family Planning Methods in the Moratuwa Municipal Area

<table>
<thead>
<tr>
<th>No</th>
<th>Method</th>
<th>Number of Users</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Condoms</td>
<td>1239</td>
<td>7.12</td>
</tr>
<tr>
<td>2</td>
<td>Vaccinations</td>
<td>2057</td>
<td>11.82</td>
</tr>
<tr>
<td>3</td>
<td>Rings</td>
<td>1408</td>
<td>8.09</td>
</tr>
<tr>
<td>4</td>
<td>Nikshepana</td>
<td>4460</td>
<td>25.63</td>
</tr>
<tr>
<td>5</td>
<td>No plant</td>
<td>321</td>
<td>1.84</td>
</tr>
<tr>
<td>6</td>
<td>L.R.T.</td>
<td>3780</td>
<td>21.77</td>
</tr>
<tr>
<td>7</td>
<td>Vasectomy</td>
<td>150</td>
<td>0.85</td>
</tr>
<tr>
<td>8</td>
<td>Natural family planning methods</td>
<td>2154</td>
<td>12.40</td>
</tr>
<tr>
<td>9</td>
<td>Although planning is needed, no method is used.</td>
<td>1823</td>
<td>10.48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17392</td>
<td>100</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

Reports of tuberculosis within the Moratuwa municipal area show a high prevalence of the disease.

Table 9: Number of reported T.B. patients

<table>
<thead>
<tr>
<th>Public Health Inspector Unit</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Soysapura</td>
<td>03</td>
</tr>
<tr>
<td>Katubedde</td>
<td>05</td>
</tr>
<tr>
<td>Moratumulla</td>
<td>09</td>
</tr>
<tr>
<td>City of Moratuwa</td>
<td>08</td>
</tr>
<tr>
<td>Koralawella</td>
<td>12</td>
</tr>
<tr>
<td>Total:</td>
<td>37</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)
7. Establishing environmental value

The urban environment has faced many different challenges and problems. The forest cover within the Moratuwa Municipal boundaries has been cleared, and now only marsh land remains. It is very difficult to find a vacant property in our area today. The percentage of land area allotted for leisure and sports facilities is only about 10.65 which is far from adequate.

Table 10: Pattern of Land Use within the Moratuwa Municipal Area in 2003

<table>
<thead>
<tr>
<th>Use</th>
<th>Land area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1126.0</td>
<td>57.1</td>
</tr>
<tr>
<td>Commercial</td>
<td>52.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Industrial</td>
<td>85.2</td>
<td>4.3</td>
</tr>
<tr>
<td>Timber-based industries</td>
<td>32.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Institutional</td>
<td>136.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Sports &amp; Entertainment</td>
<td>12.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Religious</td>
<td>27.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>3.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Agricultural land</td>
<td>292</td>
<td>1.5</td>
</tr>
<tr>
<td>Roads &amp; reservations</td>
<td>103.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Marshes</td>
<td>33.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Open space</td>
<td>16.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Beach</td>
<td>21.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Watercourses</td>
<td>290.5</td>
<td>14.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1972.0</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

Table 11: Additional Open Areas Suggested by the Urban Development Authority

<table>
<thead>
<tr>
<th>Unit</th>
<th>Number</th>
<th>Land expansion by hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playground open areas</td>
<td>23</td>
<td>9.65</td>
</tr>
<tr>
<td>Medium parks – low level</td>
<td>04</td>
<td>5.70</td>
</tr>
<tr>
<td>Town parks</td>
<td>01</td>
<td>7.00</td>
</tr>
<tr>
<td>Leaner parks</td>
<td></td>
<td>119.0</td>
</tr>
<tr>
<td>Coastal belt</td>
<td></td>
<td>60.0</td>
</tr>
<tr>
<td>Natural parks</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td>206.35</td>
<td></td>
</tr>
<tr>
<td>Open areas &amp; existing common parks</td>
<td>38.2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>244.55</strong></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)
Table 12: Use of Drinking Water

<table>
<thead>
<tr>
<th>Sources</th>
<th>Number of Houses</th>
<th>Reported Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Top Mainline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Within premises</td>
<td>2801</td>
<td></td>
</tr>
<tr>
<td>1.2 Outside premises</td>
<td>9861</td>
<td></td>
</tr>
<tr>
<td>Total Mainline</td>
<td>37862</td>
<td>93.29</td>
</tr>
<tr>
<td>2. Protected wells</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Within premises</td>
<td>1403</td>
<td></td>
</tr>
<tr>
<td>2.2 Outside premises</td>
<td>353</td>
<td></td>
</tr>
<tr>
<td>Total number of protected wells</td>
<td>1758</td>
<td>4.33</td>
</tr>
<tr>
<td>3. Unprotected wells</td>
<td>102</td>
<td>4.33</td>
</tr>
<tr>
<td>4. Tube wells</td>
<td>775</td>
<td>1.91</td>
</tr>
<tr>
<td>5. Other ( e.g. tanks, rivers )</td>
<td>88</td>
<td>0.22</td>
</tr>
<tr>
<td>Not reported</td>
<td>699</td>
<td></td>
</tr>
<tr>
<td>Total number of households</td>
<td>41282</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

Table 13: Present Toilet Facilities within Municipal Limits

<table>
<thead>
<tr>
<th></th>
<th>Housing Units</th>
<th>Reported Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total exclusively for household use</td>
<td>29896</td>
<td>73.47</td>
</tr>
<tr>
<td>2. Sharing one's own with other houses</td>
<td>5511</td>
<td>13.55</td>
</tr>
<tr>
<td>3. Common use of toilet with another house due to lack of one's own</td>
<td>3401</td>
<td>8.36</td>
</tr>
<tr>
<td>4. Common public toilets</td>
<td>1377</td>
<td>3.38</td>
</tr>
<tr>
<td>5. Those who do not use toilets</td>
<td>504</td>
<td>1.24</td>
</tr>
<tr>
<td>Total number reported</td>
<td>40689</td>
<td>100.00</td>
</tr>
<tr>
<td>Number not reported</td>
<td>593</td>
<td></td>
</tr>
<tr>
<td>Total number of houses</td>
<td>41282</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)
Table 14: Types of Toilets Used within Municipal Limits

<table>
<thead>
<tr>
<th>Types</th>
<th>Number of Houses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-sealed</td>
<td>32991</td>
<td>81.45</td>
</tr>
<tr>
<td>Pour flush</td>
<td>6092</td>
<td>15.04</td>
</tr>
<tr>
<td>Pit latrine</td>
<td>583</td>
<td>1.43</td>
</tr>
<tr>
<td>Other</td>
<td>336</td>
<td>0.83</td>
</tr>
<tr>
<td>Non-use of toilets ( use of open land )</td>
<td>504</td>
<td>1.25</td>
</tr>
<tr>
<td>Total</td>
<td>40506</td>
<td>100.00</td>
</tr>
<tr>
<td>Number not reported</td>
<td>776</td>
<td></td>
</tr>
<tr>
<td>Total number of houses</td>
<td>41282</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

8. *Further improving global partnership for development*

**Percentage of youth aged 15 – 24 years employed**

1996: 31.6
2000: 27.9

Table 15: Percentage of youth aged 15 – 24 years employed

<table>
<thead>
<tr>
<th>Entrepreneurial/ Administrative district</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lankan entrepreneurial</td>
<td>26.2</td>
<td>23.8</td>
</tr>
<tr>
<td>Urban</td>
<td>29.1</td>
<td>24.0</td>
</tr>
<tr>
<td>Rural</td>
<td>25.3</td>
<td>23.8</td>
</tr>
<tr>
<td>Western Province</td>
<td>31.8</td>
<td>27.7</td>
</tr>
<tr>
<td>Colombo District</td>
<td>27.6</td>
<td>26.5</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)
Table 16: Percentage of Total Unemployment in the Moratuwa Municipal Area

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Population</th>
<th>Economically Inactive Population</th>
<th>Economically Active Population</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>– 10 years &amp; above</td>
<td>150725</td>
<td>78614</td>
<td>21014</td>
<td>67312</td>
<td>3702</td>
<td>5.21</td>
</tr>
</tbody>
</table>

(Source: Census of Population and Housing, 2001)

This data has been presented to reflect issues concerned with our millennium development goals. We believe that these data will be useful in the preparation of plans.
• Developing the estuary
• Constructing a road around the lagoon

Human development features

• Improving settlements with less facilities
• Resettling those who live in the vicinity of the canals and the lagoon

The nature of rainwater flooding

Rainwater flooding is caused by the rising water level of the Lunawa lagoon, the inadequate capacity, inefficiency and a lack of maintenance of the existing drainage system. Some drains are not systematically connected to the main canals.

Concepts of the basic plan

• Improving drainage capacity.
• Making full use of the prevailing drainage system.
• Creating new drainage systems to link confluences of water to the canal.
• Constructing drains on respective side of the road.
• Implementing methods to keep the lagoon water at a low level.
• Preparing road access for maintaining drainage systems.

Stages of the project

1. Development of canals

There will be three kinds of canal renovation known as main canals, secondary canals and tertiary canals. The sum total of the lengths of all the repaired canals will be 73.93 km. Taken separately, they will be as follows:

• Main canals: 6.41 km
• Secondary canals: 8.12 km
• Tertiary canals: 59.4 km

2. Main constructions proposed

• Main and secondary canals: 2.9 km
• Main and secondary open concrete drains: 11.6 km
• Main and secondary square culverts: 64
• Tertiary covered concrete drains: 21.9 km
• Tertiary side drains: 37.5 km
• 8 bridges will be re-constructed.

Approximately 70,000 cubic meters of digging will be done. A 4.4 km road will be built around the lagoon. The 6 meter road around the lagoon will be turned into a scenic route, which will enable the general public to enjoy the landscape beauty.

3. Steps to keep the estuary open at all times by reducing the sand that gets collected
The sand barrier at the mouth of the river will be broken. By maintaining the height not to exceed 1 meter above sea level at any time, it will be possible to break it down and cut a channel through it to the sea whenever there are signs of a flood. A sand digging machine for this task has already been supplied to the Moratuwa Urban Council.

4. Preparing the land to re-settle those displaced by the project
While preparations to establish 4 settlements suitable for those who live in: 3 in Moratuwa and 1 in Ratmalana are underway, some families already reside in these settlements.

5. Obtaining tools for maintenance.
• Maintenance tools
• Measuring instruments
• Vehicles for construction and maintenance activities.
The Lunawa Coastal Resources Management Project
M. G. W. M. Kapila Gunaratne
CRMP

Project Vision

In association with Vision 2010 of the Sri Lanka, “Lunawa Lagoon 2010” was prepared by various partners and the Moratuwa Urban Council\(^3\). Our project objectives and the work plans are implemented according to the Lunawa Lagoon 2010.

To transform the Lunawa Lagoon area (6.2 square km) and the adjoining coastal belt into a region, which is free of flooding and environmental pollution, containing an industrial, commercial and residential mixed pattern of land use with a population, more sensitive to the environment and a healthy management of solid waste and industrial waste disposal.

To rehabilitate the 40 hectare Lunawa Lagoon region, a mosquito-free zone amenable to healthy living and a leisure environment where families relax and enjoy the surroundings.

The project areas of both the Lunawa Environmental Promotion and Community Development Project and the Lunawa Coastal Resources Management Project are geographically similar.

The Lunawa Special Lagoon Management Area

- The Lunawa specialized management area
- Extent of area: 40 hectares
- Total population: 85,000
- Migrant population: 64,000

This region belongs to the following Urban Council areas: (i) Moratuwa and (ii) Mt. Lavinia. It also belongs to two Regional Secretariat Divisions: Moratuwa and Ratmalana. Currently,

\(^3\) In association with Vision 2010 of the Sri Lanka
there are 19 Grama Seva units within this lagoon development area: 15 in Moratuwa and 4 in Ratmalana. The length of the lagoon is 2,000m and the width ranges between 150 and 200m. When the water level is at 0.5 meters, the extent of the lagoon is 20 hectares. When there are differences in the water level, there are certain differences in the extent of the lagoon. After excavating the lagoon in the near future, with support from the Survey Department, we may state exactly how big it is. It is not impossible to restore dead lagoon and its natural beauty. We needed to coordinate and implement a programme.

Problems Identified Within the Region

1. The lagoon and surrounding coastal belt is subject to extreme environmental pollution:

- Garbage disposal and industrial wastes from factories into the lagoon
- The dumping of waste through the canals cause the filling up of the lagoon
- Garbage overflows on both sides of the road
- Thus, the dumping of waste in the lagoon is a serious threat to the canals and the lagoon

2. A weak water flow caused by the sand barrier built up at the lagoon estuary. The water is collected in the lagoon, and it does not flow to the sea. The estuary should be connected to the sea at the expected level. But, current situation is that even when the water level is at 0.7 meters, the estuary remains blocked.

3. The natural lagoon filling up due to the water flowing forwards.

4. The area is vulnerable to constant flooding. People have filled up the lagoon and engaged in unauthorized construction. As a result, the canals have become blocked. The percentage of nitrogen has greatly increased in the lagoon because toilet wastes flow into it. This makes the lagoon covered by water weeds, which contributes to causes constant flooding.

5. The region is vulnerable to sea erosion.
In the coastal belt around Lunawa, it is common to dredge unauthorised sand and remove rock from the beach and the breakwater. Moreover, all sectors have failed to adopt appropriate courses of action to stop to illegally remove sand regardless of the fact that the surrounding area is exposed to sea erosion.

6. Water weeds cover the lagoon.
There is a growth of huge water weeds around the lagoon. The Lunawa canal as well as the lagoon is being overrun from all sides by these water weeds.

7. The lagoon lacks a natural fresh water source.
There is a lack of a natural fresh water system to supply the lagoon with water. One main reason for this is that this lagoon remains separated from the Bolgoda river. Since the Colombo – Galle road was constructed a long time ago, there has been no connection between the Bolgoda river and the lagoon. It is said that in the past, the water in the lagoon had therapeutic value. The reason for this must have been because of the water from the springs in the Bolgoda river area flowing into the lagoon. However, the water has now become increasingly unclean due to the population growth.

8. There is widespread land reclamation and occupation of the lagoon.
The field study conducted in the year 2002 identified 119 unauthorized reclaims and constructions in the area. According to the estimate of the Survey Department (2002/2003), 18% of the lagoon had been occupied by people. Every property deed owned by the people who lived around the lagoon mentioned the lagoon as the boundary of their land either on the south or the east.

9. The lagoon lacks a legal boundary.
We only realized this fact after we began this project. Legal boundaries have not been identified between the lagoon and the private properties around it. 90% of all the properties around the lagoon consist of private land. Because systematic surveying had not ascertained the legal boundary until the beginning of this project, the lagoon boundary could not be identified. However, the surveying is now being carried out.

We have divided the main problems identified with regard to the Lunawa lagoon into three
categories: environmental, socio-economic and institutional/political.

The table below shows the environmental problems of the Lunawa Lagoon and the surrounding coastal belt.
The table below shows the socio-economic problems of the Lunawa Lagoon and its surrounding coastal belt.

<table>
<thead>
<tr>
<th>Problems</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unauthorized. lagoon area land and canals reclamation and occupation</td>
<td>Decrease in the size of the of the lagoon</td>
</tr>
<tr>
<td>Inadequate healthcare services for low-income families</td>
<td>Environmental pollution</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Poverty and low socio-economic background</td>
</tr>
<tr>
<td>Overcrowding of houses and the spread slums along the coastal belt</td>
<td>Increase in slum dwellers and unauthorized construction</td>
</tr>
<tr>
<td>Lack of awareness and understanding among settlers around the lagoon</td>
<td>Non-organization of environmental conservation programmes</td>
</tr>
</tbody>
</table>
The table below shows the institutional and political problems of the Lunawa Lagoon and the surrounding coastal belt.

<table>
<thead>
<tr>
<th>Problems</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of a specialized institutional framework for lagoon management</td>
<td>Non-implementation of rules and regulations</td>
</tr>
<tr>
<td>Lack of good coordination between institutions</td>
<td>Wastage of resources and the lack of sustainability of programmes</td>
</tr>
</tbody>
</table>

The solution to the problems categorized above is to identify and implement a specialized regional management preparation process for Lunawa. What is this specialized regional management project?

When compared with other projects being implemented in the Moratuwa area, one difference in this project is that it is one with long-term planning.

The Specialized Regional Management Planning Approach

A Specialized Zonal Management Plan seeks to identify coastal resource management problems within an identified environmental system and obtain the full cooperation of the parties identified in that area for the preparation of a management plan. This planning is also suitable for the preparation of national as well as regional level programmes. Relating to the community and finding out what their ideas are is a primary aim when implementing management programmes.

In order to prepare these management plans, it is essential to improve the mutual connection between the national and regional levels and at inter-organizational level and to relate the private sector to it.

A special zonal management plan is important because this lagoon belongs to diverse administrative areas and to different institutions. Because the boundaries of these various institutions are different, there is no one institution to take responsibility for the lagoon. We need one institution to bear responsibility for the lagoon. It is necessary to treat this whole lagoon as one environmental system.
Project Time Period: 2001 – 2005
(April – December 2001)

- Commencement of the Lunawa Field Action Unit (April 2001)
- Collection of environmental, social and economic data about the lagoon and its surroundings
- Identification of community leadership and the relationship between institutions in and around the Lunawa Lagoon area
- Identification of projects which were, and are due to be, implemented in the Lunawa area
- Identification of different parties in the Lunawa Lagoon area (January – December 2002)
- Establishment of the Lunawa Special Regional Management Coordination Committee
- Identification of the Lunawa Specialized Zonal Management Area
- Coordinating the other projects working in the Lunawa Lagoon area
- Preparation of plans based on the common vision for Lunawa Lagoon
- Identification of the environmental, social and economic problems of the Lunawa Lagoon
- Commencement of the waste management model project
- Identification of the Lunawa Specialized Regional Management area (January – December 2003)

Preparation of the Lunawa Lagoon and related coastal environmental

- Environmental, social and economic facts
- Population facts
- Scientific research facts

Preparation of the Lunawa Coastal Resources Management Plan
- Preparing the legal background necessary for sustainable development
- Preparing a legal framework for the Lunawa Lagoon area
- Identifying the institutional mechanism necessary for long-term conservation of the Lunawa Lagoon
Preparation of the Lunawa Coastal Zone Management Action Plan

- Prioritization of decisive factors in identifying activities of the Lunawa Coastal Resources Management Project (January – December 2004)
- Identifying the legal boundary of the lagoon
- Preparing and implementing a solid waste management plan
- Preparing an industrial waste management plan
- Excavating the lagoon and building a road around it
- Pilot studies and research on digging the lagoon and widening the estuary
- Analysis of reports
- Preparing and implementing a project to improve the healthcare services in the coastal belt
- Preparing and implementing a proposal for industrial waste management projects in the Lunawa Lagoon area
- Commencing the excavation of the lagoon
- Opening the estuary (January – December 2005)

- Stabilizing the water flow in the estuary
- Digging the lagoon and removing the mud
- Improving healthcare services around the lagoon
- Implementing the community centre
- Creating places for leisure and entertainment around the lagoon and the coastal belt
- Implementing a programme to help low-income families in the lagoon area to identify alternative ways of income generation
- Introducing an environmental pollution feedback process to the lagoon area
- Preparing and implementing an institutional solid waste management process
The total cost of the Lunawa Coastal Resources Management Action Plan is Rs 1569 lakhs. This programme is implemented under 6 main sections.

1. Establishment and maintenance of a Community Coordination Committee including the community and all other parties.
2. Maintenance of an awareness raising and educational programme with the aim of changing the attitudes and practices of the community, the relevant institutions and all other parties. Rs 59 lakhs will be spent for this.
3. Subjecting the Lunawa Specialized Regional Management Planning process to policy decisions that tally with the Coastal Conservation Department and other government institutions regarding policies and management methodologies.
4. Rs 40 lakhs will be spent on environmental conservation of land settlement and resource management.
5. Establishing excavation of the lagoon and the estuary water flow. Rs 1100 lakhs will be spent on this.
6. Implementing social development programmes – Rs 370 lakhs will be spent on this.
The big project, the Lunawa Environmental Promotion & Community Development Project, is launched in Moratuwa and implemented by the Ministry of Urban Development and Water Supply. This project covers the Moratuwa and Ratmalana divisional secretariats with 18,000 families approximately. The project area covers 6.94 square km of watersheds, which consists of 3.53 square km of Lunawa’s northern area and 3.41 square km of its southern area. The altitude in the valley ranges approximately from 1 to 6 meters above the sea level. The annual rainfall is 2400mm, which make the residents vulnerable to flood risk. Flood regularly occurs from 4 to 6 times per year, which affects 18,000 families.

The lagoon area constitutes 40 hectares, but it has been shrunk to 20 hectares because of unauthorised filling up. The water level is now only about 0.5 meters above the sea level. The present Lunawa lagoon is lifeless. Not only has it has died, but also become a place of environmental decay for both the lagoon and the people who live in its vicinity. Unclean, stagnated water creates unhealthy environment with the wastes discarded from factories, toilets, piggeries and other places. People have continuously been dumping garbage into the canals and the lagoon over the past 30 years.

Project objectives

- Minimizing flood risks
- Health improvement
- Raising living standard among the vulnerable low income earning population to flood risks

Technological and human developments are the two main features of the project.

Technological features

- Improving the drainage system for the percolation of rainwater
Day 2
Review of Day 1

Presentation s
Incorporating activities at the macro, mezo, and micro level

Community Presentations and Q&A
- Success Story of Participatory Approach for Improvements of Living and Environmental Conditions
- Experiences of Working in Cooperation with Local Authorities, Government Agencies and JOCV, Success Story with Community Managed Solid Waste Collection and Recycling Programmes

Group Poster Presentations
Round 3

Presentations
Planning and Implementation Methodology Review

Wastewater Disposal Systems for the Ratmalana – Moratuwa Area

Closing Remarks
Known as the ‘Pioneering City’ in the past, the famous city of Moratuwa was situated by a lovely lagoon and had the beautiful Bolgoda river running through it. It had a socio-economic environment that made it eminently suitable for a community to live in.

Today Moratuwa shows both the positive and negative impact of development and the urbanization that occurred with the passage of time. By the latter part of the 20th century what Moratuwa was left with was a filthy stretch of seashore and a highly polluted lagoon and river.

Fifty years ago, there was a population of 50,689 living in Moratuwa but due to the process of urbanization, by the year of 2002, the people of Moratuwa had increased to 177,190. Moratuwa had become a densely populated city of migrants and permanent residents. Similarly in the past it had been a quiet area with few factories but after urbanization, Moratuwa turned into a highly industrial city. Factories, particularly in relation to the furniture industry, have increased greatly compared with the past. While Moratuwa has been famous for its furniture industry for over 50 years, the increasing concerns about sawdust disposal has now made the industry a real problem to the environment. Both the processes of population growth and urbanization have probably exacerbated this problem.

Another very serious problem is the lack of both a systematic programme as well as a designated area for the disposal of garbage and waste matter. However, is it just the Moratuwa Municipal Council that is responsible for solving these problems? Aren’t other institutions responsible for them as well? For instance, it is a common sight to see businessmen who launch their industries with the consent of the Environmental Ministry but proceed to flout rules and regulations and act with no regard for the environment once their factories are up and running. Due to political intervention in such situations, rules and regulations safeguarding the environment are not upheld in a systematic way. As a result, even life-threatening chemicals form a part of the industrial waste matter that flows along the canals and pollutes the lagoon.

Yet another serious problem is the building construction that goes on without planning or permission which is so detrimental to the aesthetic and administrative aspects of the city. It can
be seen that even some factories that have been built belong to this category of unauthorised and 
unsystematic construction. It is a real problem to us that the Urban Development Authority is 
unaware of all this unauthorised and unsystematic building that is taking place. Similarly, a host 
of environmental problems including that of flooding has accompanied the filling up of the 
lagoon by the general public for purposes of unauthorised house construction. Such 
unauthorised construction can be seen on both protected property as well as other government 
land, and sometimes even next to government institutions, within the Moratuwa city limits and 
also adjoining railway lines, the lagoon and the canals. This unauthorised construction can be 
considered one of the city’s major problems because a multitude of other general problems 
arises out of it. A host of problems such as the impact on the city’s general health situation on 
transport facilities, on the water and electricity supply and on garbage disposal arises out of the 
unauthorised construction that is going on.

At this point we also need to mention the problems arising from the non-development of the 
Lunawa lagoon. Because of this reason, even a small shower of rain causes the flooding of 
about 10 Grama Niladhari electorates in the area. Every time it floods, the government spends a 
large sum of money to provide the affected population with welfare measures through disaster 
management institutions. Similarly the problems faced by the people who are affected by such 
floods are a constant harrassment to the Urban Council. The spread of disease due to the 
flooding of these areas also poses a major threat to the health of the general public.

Another serious problem is the lack of an efficient drainage system to cope with both rainwater 
and wastewater within the city and the mismanagement of the existing drainage system.

Although there is a hospital to serve the people of Moratuwa, the shortage of medicines and 
machines to supply the needs of the hospital has relegated it to an untimely state of neglect. 
This problem too should be addressed through a development programme.

In the same way our attention should also be focused on the educational needs of Moratuwa. 
Today only 2 national schools exist in Moratuwa. Every parent tries their best to admit their 
child to one of these national schools. Therefore in order to prevent the competition and 
injustices created by school entrance procedures, other schools in the area ought to be developed 
to reach the standard of the national schools.

One reason for the increase in environmental pollution has been the increase in vehicle use in 
the area. The combination of very dusty roads and the poisonous fumes emitted from vehicles
poses a serious threat to public health.

There is a large number of low-income earners in the Moratuwa area. Conversely, with the expanding population, there is a corresponding growth in the numbers of the unemployed. The latter are prone to anti-social behaviour such as substance abuse and related activities which have had a negative impact on society.

We should focus on the provision of necessary infrastructure to the fishing industry, especially in relation to the conditions arising from the tsunami disaster and the impact they have had on the fishing community. Our future vision should be sustainable development through good urban planning. In mobilizing the Moratuwa Urban Council towards formulating such a future vision, some ideas and proposals we considered important are mentioned below.

We should do our best to keep all service providing institutions connected to each other through community participation. There ought to be an overall programme that coordinates all aspects including the economic, environmental, health and education spheres. A mechanism should be developed that would be able to activate such a joint development process. A methodology needs to be formulated for policy planning in the different fields and also for carrying out these policies effectively. Special attention should be paid to the overall development goals formulated by the Urban Council which relates to 8 main areas including poverty reduction, education, policy planning, and health facilities.

In order for sustainable development to be achieved through this future vision, we need to plan carefully to build strong, systematic community organizations within the municipal council area. It is important to create a change in the attitude of the public regarding the role they should play and the duties they need to carry out in sustainable development.

A systematic housing scheme should be for those who do not have a permanent settlement, or alternatives should be explored such as flats or other suitable housing schemes. We consider the Coastal Management Project as a great resource to benefit the entire Moratuwa area. Thus, if we are able to activate such diverse projects jointly, it would be a major factor in developing the Moratuwa city. Systematic environmental management, the establishment of factories by harnessing the abundant resources of the region as well as formulating a special programme for the upliftment of the fishing industry, and searching for ways to generate income from waste matter such as sawdust are also important areas that need to be considered. The need to identify development programmes that can be carried out according to the amount of resources
we own as well as looking for new income generation schemes for the Urban Council are important factors in urban development.

Main roads need to be cleaned up and low-income housing developed. Since garbage disposal has become a big problem due to population growth, garbage management awareness and training programmes should be organised. Similarly the increase in population has resulted in an increase in the amount of waste water expelled from houses so there is a need for drainage systems to cope with this extra flow as well as the construction of common toilets for houses which are too small and too closely built to have one of their own. Public places need to be developed and health facilities provided. There is a need for more joint programmes such as this in order to develop links among those institutions pioneering community and development activities. It is also important to carry out a programme contributing to child development by organizing children's clubs.

If the Lunawa Lagoon Development Project is carried out successfully, it will be possible for people to earn an income through the fishing industry which is a major livelihood of the community. It will also help a great deal towards fulfilling water supply needs. People will be able to obtain clean water through the development of the lagoon. The present water supply schemes provide us with only a limited amount of pipe water and thus the right urban dwellers to possess adequate drinking water facilities has been denied. However, through cleaning up the lagoon, the people living in its vicinity will be able to use the clean water for bathing, washing clothes and other purposes. Moratuwa is well-renowned for its furniture industry and a large number of people are engaged in it and in related businesses. We can thus consider the furniture industry as an inherent resource of Moratuwa and work towards developing it with long-term planning. To do this we therefore need to formulate a methodology and create an appropriate plan that will assure the development of this industry. Through this we will be able to reduce the present degree of unemployment and increase the means of income generation for urban dwellers. We need to act to change the nature of political intervention in order to correct the situation that prevails through the increasing unauthorized construction of houses. We also need to better investigate the plight of those who lost their houses during the tsunami disaster and also that of children who lost their parents in order to take the necessary steps to redress the situation.

Before bringing today’s programme to a close, I would like to invite Ms Mayumi to present her ideas.
I need to make you move a little bit as I would like to promote participatory approaches. So, let me say something from the back of this workshop room now although we always speak something from our front seat.

Exercise 1:
When you cross your hands, which your thumb comes below? Is it your right thumb or your left thumb? OK. Then, let us do it oppositely. If your left thumb usually comes below, make your right thumb below. Uncomfortable? Unique feeling? How do you feel about your new way of doing?

Exercise 2:
When you want to touch your ear, there is more than one way of doing it. You can touch your ear by circling your hand right around the back of your head like this, or you could just stretch out your hand directly and touch your ear. Ok, let us do it whichever you like. Which way is more comfortable for you?

I assume that you feel uncomfortable when you do the things that you are not get used to although these two ways reach what we want to do at the end. The feeling probably lies in somewhere between the paradigms of participatory planning (i.e. bottom-up approach) and traditional planning (i.e. top-down approach). But, probably, the differences do not make any sense if equal partnership and friendship emerge from changes in our behaviour and attitudes.

Moreover, from our dialogue, the following three points came in my mind: (1) Environmental concerns and issues in Moratuwa; and (2) the existing concept of community participation; and (3) community empowerment and good governance.

First, creation of mechanisms for garbage disposal is important. However, a sustainable solution should be “reducing” the amount of garbage first, which requires “changes in our behavior and attitudes”. I do understand that garbage is useful, alternative energy sources or even income generation sources, but it does not mean that we need to produce more garbage.
Reducing the amount garbage from our every day life is the first solution for garbage disposal.

Second, the concept of community participation should move to “people’s empowerment”. For instance, we have participated in this workshop, but we need to be empowered: “Empowerment” is more than participation.

Third, dialogue on government and community responsibility was critique. In sustainable development, do you think disaster management is your responsibility or your government one? Here lies community empowerment and good governance. It is not so difficult to ask anybody to participate in various events. Therefore, instead of promoting merely participation, we need to empower ourselves to explore realistic, suitable activities. For example, we may make an action plan for ourselves, for instance, with the urban council members who are in this workshop. Nobody ask us remain as mere participants or target audiences.

Thus, let us move from community participation today to community empowerment tomorrow. These are two very different concepts. In ending today’s workshop programme, I thank you for your active participation today and I wish to see you empowered tomorrow.
Presentation(s)
Incorporating activities at the macro, mezo, and micro level

Community Presentations and Q&A

- Success Story of Participatory Approach for Improvements of Living and Environmental Conditions
- Experiences of Working in Cooperation with Local Authorities, Government Agencies and JOCV, Success Story with Community Managed Solid Waste Collection and Recycling Programmes

Satoko Tsutsumi
JOCV Senior Field Staff

Malanie Jayalath
F. U. Karunasiri
(Both from Badovita, Community Development Society)
My name is Satoko Tsutsumi. I work as a volunteer in the Japanese Overseas Cooperation Volunteers (JOCV) service. I work in conjunction with the Ministry of Housing and Construction in Sri Lanka. Today I would like to talk to you about the incorporation of activities at the macro or main, mezzo or interim, and micro or grassroots levels.

I wish to clarify nine points that are raised here:

1. The roles that the three levels play: (1) the Macro (or main) level; (2) the Mezzo (or interim) level; and (3) the Micro (or grassroots) level;
2. The importance of the Mezzo level;
3. Samarakoon Watta as an example of the above;
4. The Japanese Overseas Cooperation Volunteers (JOCV) service;
5. The JOCV Unit under the Ministry of Housing and Construction;
6. The objective of the JOCV Unit;
7. The role of the JOCV Unit;
8. Programmes or activities; and

The Role of the Macro, Mezzo and Micro Levels

**Macro Level**

We identify as the Macro level is the level at which policies are formulated and institutions such as ministries, the government and the United Nations Organization operate.

**Mezzo (or interim) Level**

Various institutions such as the Urban Council, the District Secretariat, the Divisional Secretariat, government offices and NGOs belong to this Mezzo level.
Micro (or grassroots) Level

Micro level is considered as the general public, community based organizations and settlements. If development is to take place, all three of these levels should work together.

The Importance of the Mezzo (or interim) Level

Macro level facts and activities are conveyed to the Micro level via the Mezzo level. The Mezzo level is a level at which many activities take place. However good a policy is formulated by the government, if the institutions at the Mezzo level are not activated appropriately, those ideas will not flow from the Macro level down to the Micro level i.e. to the settlements and the community. In the same way, since it is difficult for the settlements to take their community ideas up to the higher levels, it is the institutions belonging to the interim level which are close to the Micro level, the community and the settlements, which should convey their ideas to the higher levels.

Samarakoon Watta

When one considers the development of Samarakoon Watta, institutions belonging to what we called the Macro level such as the Ministry of Housing and Construction, the Ministry of Urban Development and Water Supply as well as the institutions belonging to the Mezzo (or interim) level such as the Moratuwa Urban Council, the JOCV Unit and the Urban Settlement Improvement Programme all participate in the development of Samarakoon Watta. We can see that other institutions belonging to the interim level like Janarukula, NGOs, the Grama Seavak Niladhari, the Samurdhi Niladhari and other government institutions are also working together with Samarakoon Watta. In fact, there may be still more institutions related to the development of Samarakoon Watta.

The Japanese Overseas Cooperation Volunteers service

The JOCV service was begun in 1965. This organization is now 41 years old. Today Japanese men and women volunteers serve in 83 countries around the world. They number 28,384 and work in 140 fields of service. The JOCV in Sri Lanka was started in 1981. A total of 676 Japanese men and women volunteers have served in Sri Lanka to date. Our volunteer service is limited to two years. The Japanese government provides volunteers only to countries that request overseas cooperation volunteers based on the request from the country.
The Japanese Overseas Cooperation Volunteers (JOCV) unit under the Ministry of Housing and Construction

We commenced serving as a unit under the Housing and Construction Ministry in 1986. While it has been 20 years now since we began the JOCV unit, we now serve in conjunction with 8 Municipal Councils and 2 offices of the National Housing Development Authority. The Municipal Councils are those of Moratuwa, Dehiwela-Mt Lavinia, Negombo, Sri Jayawardenapura-Kotte, Ratnapura, Badulla, Matale and Nuwara Eliya. The 2 offices of the National Housing Development Authority are those of Colombo and Galle. There are 10 men and women volunteers in service with me at the JOCV Unit under the Ministry of Housing and Construction.

The Housing and Construction Ministry sends these volunteers from the JOCV Unit to various Urban Councils. Settlements are the closest to Urban Councils. If the Urban Councils are not strong, community development work may not be carried out. Thus, it is extremely important that these community organizations should be empowered.

The Objective of the JOCV Unit

- Our objective is to raise the living standard of settlement dwellers through community development of the urban poor.
- Poverty is not the lack of money. Those we have chosen as a target group are the settlements which are poor in facilities, have poor access to their rights, and have poor opportunities.

The Role of the Volunteers of the JOCV Unit

Our role is to work as facilitators. There are two features to this. One is making linkages. The other is providing opportunities. Making linkages is the linking of fields to other fields, institutions to other institutions and ministries to other ministries. It is also the linking of fields with resources in Sri Lanka. In order to do this we work by relating to the ministry, the field and various institutions.

Providing opportunities means to share an opportunity for the exchange of experiences and
ideas for problem solving and for participation. This is done between settlements and also between institutions. Opportunities are also provided for the ideas of the settlement community to participate in decision making processes for problem solving.

Programmes and Activities

The volunteers of the JOCV Unit under the Ministry of Housing and Construction conduct programmes in settlements in conjunction with various Urban Councils according to the 5 categories mentioned below.

1. Community development programmes
2. Environmental programmes
3. Health programmes
4. Educational programmes
5. Women’s development programmes

Under community development programmes, we conduct Community Action Planning (CAP) workshops and carry out programmes for strengthening community based organizations, for raising awareness and for exchanging ideas.

Under educational programmes, there is the opening of preschools and the establishment of children’s societies. Programmes to strengthen children’s societies, to raise awareness, to exchange ideas and to do “shramadhana” are held.

Under health programmes, there are health and nutrition programmes conducted with the Urban Council. There are also awareness raising and exchange programmes as well as dental care and mental health programmes and “shramadhana” that are conducted.

Under environmental programmes, there are seminars held for raising awareness, for observing of programmes in other settlements, for shramadhana, for compost fertilizer and for garbage sorting.

Under women’s development programmes, there are workshops conducted to strengthen women’s societies, for raising awareness, for exchanging ideas, for food processing, for small-scale financial schemes, for income generation and for shramadhana.
Badulla Municipal Council: our volunteers engage in development activities with the Urban Council in the settlements where the workers of Badulupitiya and Kailagoda live. Dehiwela-Mt Lavinia Urban Council – in Badowita, in Applewatta and in areas that were subject to the tsunami.

- Matale Urban Council in Sudugangawatta and Higgolla labour Lane.
- Negombo Urban Council in Thalduwa, Kadolkele, Fathimawatta and Hamilton Canal.
- Nuwara Eliya Urban Council in Galways Lane, Shanthipura and Mahagastota.

We are linked to the development activities of the Pompakele workers in Ratnapura.

In order to serve in areas destroyed by the tsunami, we are engaged in development activities with the Moratuwa Municipal Council and the National Housing Development Authority in Colombo and Galle respectively.

We serve as facilitators in the above fields. Not only JOCV, but also members of any other organization can also do this facilitator’s work. However, this task can be done successfully only if the facilitator provides the opportunity for the free flow of ideas and opinions between all the different levels, i.e. the Macro or main level, the Mezzo or interim level and the Micro or grassroots level. The facilitator should especially assist in taking ideas from the Micro or grassroots level to the Mezzo or interim level. Otherwise, decisions made at the Macro level piled up at the lower levels. This is an obstacle to development.

Tsunami Activities

The JOCV Unit under the Housing and Construction Ministry received a request from the Moratuwa Urban Council for us to come to the Egoda Uyana region which was damaged by the tsunami and help clean up the area. By then, many community groups had come to volunteer their help and had cleaned up both sides of the Galle Road which was a main road and always in the public eye. However, Egoda Uyana, was the place left with full of debris, where was invisible to the public eyes. We were informed that even a single volunteer had not come to the area. From 28th December 2004 to January 2005, 40 Japanese volunteer service staff,
including myself, with Japanese nationals who were engaged in various activities in Sri Lanka under the Japanese-Sri Lankan Friendship Programmes at that time, worked daily to clean up the Egoda Uyana area. Initially, the people of Egoda Uyana, who were still suffering from pain and trauma due to the tsunami disasters, did not participate in a single activity, but merely observed our work. After watching us for a long time, they gradually began to join us and work alongside us.

While we were conducting children’s programmes in Moratuwa city and had established Children’s Societies under the Lunawa Project, we cooperated with them to implement programmes for the children affected by the tsunami.

In April 2005, we gathered the children from some settlements in Moratuwa and organised a New Year celebration. On World Children’s Day last year, we gathered children from the Children’s Societies under the Lunawa Project, which were formed by the children’s families affected by the tsunami disaster in the Egoda Uyana area, conducted large-scale children’s programmes. The children made beautiful presentations there. We have also conducted various community development and research programmes.

Suggestions

Now, I would like to present my suggestions. Let us all get together and work together. The way I see it, this workshop is a special programme. This is because we all gathered together in one place to present our ideas and to talk about common objective. In the same way, we should maintain the Housing and Community Development Committee (H.C.D.C.) with the Moratuwa Urban Council, in an active way and take it in the right direction.
Community Presentation and Dialogue
The invitation to Mrs Malani and Mr Anura of the Badowita Community Development Society to Present the Success Story of their Solid Waste Management Project.

Next we have the important task of engaging in a discussion about the experiences of our communities. We would like to invite two members of the Badowita community development society, Mrs. Malanie and Mr. Anura, to tell us about their experiences. Badowita is a large settlement situated within the Dehiwala–Mount Lavinia city limits. It is a place where people who used to reside within Colombo and its suburbs were resettled. These people lived in very difficult circumstances when they were first taken to Badowita, but through their strong sense of commitment they were able to bring about significant development of their village. I think it is very important for us to understand how they brought about this development. Now I would like to invite Mrs. Malanie and Mr. Anura to come forward and share their experiences with us.

Mrs. Malanie's presentation on Badowita Solid Waste Management Project

First, I would like to say that the reason why people (like us) got an opportunity to attend an important programme such as this and express our ideas is because we as community leaders worked together with all the institutions in our area that help the community, including both government and non-governmental organizations. It was they who taught us what we needed to know and for this I am truly grateful.

I think it is best that I relate our story starting from the very beginning i.e. from the day we came to Badowita village. At the end of my talk, I would like you to ask me whatever questions come to mind regarding the development that has taken place and the victory we have achieved.

When this story begins, we were living by the canals in the Wellawatte and Narahenpita areas. During the time of the big flood, we had to leave the canal banks and come to our residential place in the village of Badowita. The Housing Development Authority and the Lowlands Development Board/Land Reclamation Board acted together to bring us to Badowita. They gave
us each 2 perches of property and asked us to reside there. When we first settled there, we had no water supply or toilet facilities. In fact, we were just loaded onto a tractor and brought to Badowita. We had to build houses with wooden planks on the 2 perches we received. However, most of us had jobs outside this area in places e.g. Wellawatte and Narahenpita and our children also went to school in those areas. Thus, coming to Badowita, we lost a great many facilities that we had enjoyed before. After having brought us to this area, neither the Urban Council nor the Housing Development Authority nor a single other individual showed the slightest concern for us. The government did transport us here, but no one seems to show any concern for our plight, and we felt as if we had been imprisoned in that place.

During this time, i.e. by the latter half of 1992, our settlements were about 30-35 acres in the project area. Approximately, 800 families were brought here to be settled with each family being given 2 perches of property to build on. All the families had common toilet facilities. According to the number of toilets there, 40-45 people had to share a single toilet. We had no water supply. Water was brought by a bowser up to the main bridge beside Badowita and we were compelled to queue up for it from dawn. However, all of us who lived here were low-income earners and did not possess containers big enough to fill up with the water supplied by the bowser. Thereby, we had small barrels, plastic containers and clay pots. The great volume of water released from the tap of the bowser meant that when we filled up one container with water, a bigger amount spilled on the ground. That is the way we received water. By this time, the Housing Development Authority had intervened and begun to raise awareness among our community. We were living in the midst of very difficult circumstances by then, and our community had been united to inform the Urban Council of the inconveniences we faced, and had begun to discuss these issues with them. Two other organizations, the Urban Settlement Programme and JICA, also began to correspond with us in order to help us out. They began to make us aware of a lot of facts. They intervened to construct a water tank for us which the bowser filled up. From then on, we were able to stand in line to obtain water from the tank instead. In this way we obtained a solution to our water supply problem. During this period of time we kept in touch with all the government and NGO institutions (connected to us) in order to share and discuss our problems, and to gain an awareness of what we needed to do to find solutions for them.

By this time, we had formed a Community Development Society through which we planned development programmes. Our biggest issue was the toilet problem. The Lowlands Development Board constructed a huge gully and a tank for our toilets and expanded the toilet system. But, many residents did not have the wherewithal to build a toilet for their own house.
Therefore, the institutions and organisations that supported us give some residents aid in the form of toilets, pipes and building materials. While some residents used their own money and had ability to build toilets by themselves, others had to obtain aid to construct them. This is how we solved our problem.

The Housing Development Authority gave us Rs 20,000 as a loan for us to build our houses. By using this money, we built our houses in the best way we could. However, our water problem kept constantly harassing us. While common taps had been fixed, approximately 40 people had to use one such tap. Everyone had to use one tap for everything including washing clothes, bathing, washing children, collecting water for household needs. There was always a long queue in front of each tap, and residents would be forever arguing and fighting over the water. Japanese men and women volunteers from the JICA (JOCV) fully supported us to find a solution to our water problem. They facilitated discussions with us. They also coordinated the Urban Development Authority, the Housing Development Authority, NGOs and other institutions, and gave us sensible advice on how to fulfill our need. It was necessary to build a huge pipeline in order to ensure a steady water supply to the community. We were able to obtain aid from Japan to construct this. Thereafter, we needed to obtain pipe water for the houses. We had continuous discussion on the issue and spent a lot of our time and energy, thinking about how we could create a suitable way for us. Later we worked to obtain water according to the cluster system where the Water Supply and Drainage Board agreed to provide a common water supply to all the families living in a row of houses, i.e. for about 8–10 families. The Water Supply Board assured us that in a short while we would be able to get a pipe water supply to each of our houses separately. Until such time, we agreed to pay a common water bill under the cluster system. Soon after obtaining water in this manner, however, we began increasingly to feel that we need a separate pipe water supply to each of our houses. People who had the money went ahead and did this, but those who did not were faced with a problem. At this juncture, the Dehiwela, Mt. Lavinia Urban Council members, held discussions with the Water Supply Board and worked out a way for low-income earners to obtain a pipe water supply for about Rs. 4000. In order to do this, they gave us a bank loan of Rs. 2000, and asked us to come up with the remaining Rs 2000. In this way our water problem was also solved. Each family was able to obtain a separate pipe water supply.

Our next problem was how to drain waste water. Waste water from all the houses flowed through a drain between two rows of houses. The Urban Settlement Programme enable us to rebuild the channel the waste water flowed through and to design a suitable drainage system.
They discussed this at length with us and gave us an idea about how we could do this. It was the Japanese volunteer organisation that supplied the financial provision to construct the drains. The community had to work together and make a community contribution to the action.

Some people in our community did not agree to do this. In order to have their support, we tried hard to explain the situation to them. We told them that if there was a community contribution, the community would gain ownership of the task, which in turn would result in that the community would then protect it and care for it as something that truly belonged to them. In this way, we managed to obtain the community support although some people had to be won over almost by force. Later, we were able to obtain capital from the Japanese volunteer organization and construct the drain with community support (contribution).

In this instance, the construction of drains turned out to be a competition between the community members. This happened because there was ample community interest in and enthusiasm for the task at hand. As they were well informed the drain construction that was an acute need, they worked tirelessly day and night to complete the construction work. Our Community Development Society obtained the building contract and we, the community, gave our free labour to fulfill the task.

We also need to mention another important point. As we had no understanding of how to maintain water supply and toilet systems, we had to employ outside contractors when we were doing some of this maintenance work for the first time. However, once we observed how they carried out their work, we learnt to how to do it ourselves. We were certainly able to do these things because our community had interest and participation. Thus, facing every obstacle, we were able to link ourselves with many organizations including government institutions, NGOs and the Dehiwela-Mt.Lavinia Urban Council, and hold discussions with them to analyze each problem and find the solution.

Our next problem was garbage disposal. Our people were used to putting their garbage into the garbage dumpsters on the road. Consequently, the garbage overflowed onto the road and spread over the neighbourhood. Stray dogs and cows would often stand eating rubbish from these dumpsters, and further scattering it around. We invariably went to the Urban Council and plied them with repeated requests to dispose of the garbage in the dumpsters. However, the Urban Council only responded and got rid of the garbage after several months of complaints from us. Meanwhile the Urban Settlement Programme and the Japanese men and women volunteers told us about the different organizations working on solid waste management. At this time, a
representative from our society obtained the opportunity to go on a study tour to Bangkok in order to gain knowledge of solid waste management and it was decided that I should be the one to go. By that time, I was working as the secretary of the combined Community Development Society. Representatives from the Dehiwela-Mt.Lavinia and Kotte Urban Councils, and other community leaders also participated in this educational trip. However, we were not able to see anything in the city of Bangkok that brought us pleasure. They took us every place where where we had to do with solid waste management. Although it was garbage dumps that we saw everywhere, and they were shown to us as if they were a resource of the country. After seeing all this, I determined myself to begin such a project in our own village. I began to act on this desire on my return.

By now, there were 6 Community Development Societies among us. The village had 6 phases, thereby, there were 6 societies for the 6 phases. Each leader used to act independently rather than to work together. Therefore, I decided to approach to Mr. Anura, the secretary of the first society, and proposed that we work together to launch a solid waste management project. He thought that it was a suitable project for all our societies to start and I agreed with him. We proceeded to unite the 6 societies and amalgamated them into one combined society. In this way, we established a joint Community Development Society of which the treasurer was Mr. Anura while I was appointed its secretary. The community was united with the Urban Development Programme, the JICA Sri Lanka, the Dehiwela-Mt.Lavinia Urban Council and other volunteer institutions, and we went from house to house in groups explaining the situation, and we asked the people not to put their household garbage into the dumpsters or to give it to the Urban Council garbage tractors. But, we requested to save the paper, cardboard, polythene, coconut shells, tins, metal sheets etc to give to us.

We did not have a place to deposit our garbage. Mr. Anura promised to let us use the community hall of that society for this task. Two women also helped us. After that, we continued with the garbage management programme. Mr. Anura worked hard to sustain this programme throughout the year without receiving any remuneration or reward for doing so. In the meantime, another gentleman was recruited to assist this programme, and a small allowance was paid to him for this community service. It should be mentioned that we were scolded and criticized by many people in the course of carrying out this programme.

Later, the Lowlands Development Board gave a place for us to continue with this programme. The Urban Development Authority, the JICA Sri Lanka and other NGO institutions, the Dehiwela - Mt.Lavinia, Urban Council, and the Urban Settlement Programme also helped us to
continue with our programme.

The unity of the community enabled us to reach this level in our development programmes. We could achieve this through community awareness raisi, and the officials from different institutions assisted us. It becomes very easy to carry out development programmes when such officials and the community unite and each party listens to and communicates with the other. It is a difficult task to raise community awareness. It is no secret that there is often friction between some members of the community. However, community awareness and unity must be created by whatever possible means. Otherwise, it will be difficult to carry out a programme. We should also prepare to face a variety of complaints and criticisms when we engage in community service activities.

Our manager, Mr. Anura, will now give us more details regarding this.
Mr. Anura (Fernandu Upananda Karunasiri)

I also would like to present you brief our garbage centre in Badowita.

We made efforts to build this centre, where we have been able to solve 90% of Badowita’s garbage problem. Waste disposal issue is the greatest unsolved problem in any provincial institution in Sri Lanka today. However, for us, those who live in Badowita, garbage has become an asset rather than a problem. According to our statistics, we have sold some Rs 120,800/= worth of waste material (goods) from the Badowita centre during the past year. A part of the income is given back to the community. We collected this waste from the community by paying money for it and by going from house to house. We have two of our own and three service workers from the Urban Council to do the job. They keep records of the amount of waste materials obtained from each house. Then, those goods are brought to the garbage centre, and after a month or two, the service workers are paid money according to the value of the goods received. During the past year, we have paid the community about Rs 94,000, and the remainder were spent for the needs of our community centre. Now, our community is accustom to this programme, and I can say from experience that this is a very successful solution to the current garbage problem in Sri Lanka. However, it is a pity that so many people do not think in the same way. Another important point is that Badowita village is the first among all Sri Lanka’s local government institutions to establish a garbage centre. However, it is indeed sad that until now there has been no attempt to evaluate this programmes. It is true that many institutions have come to observe this programme, but there has been no coordination between them to continue programmes in the future. It would be a great service if every Urban Council and local government institution started this solid waster management programmes.

Through our programme we prevented 30 tons of garbage produced in this city over a two-year period. We have been able to reduce garbage by 90% and achieve excellent results, the minimisation of garbage, through this programme. What would have happened if we had not reduced and recycled our wastes and the garbage instead? Now we have turned all that garbage into money. We began this programme with a sum of Rs 5,000. Now we have about Rs 60,000 in a fixed deposit as well. Thus our deposited money in the bank is the value of garbage.

These programmes are also an answer to unemployment. Another factor which was important to us in making a success of this programme were the links we forged with other government and
NGO institutions. We had constant discussions with a member of Parliament at that time. We succeeded in accomplishing a great deal through the meeting in which all the representatives of the government and non-governmental institutions of the area participated. We reviewed our needs and requirements at every meeting we attended and made decisions on the unaccomplished work. We worked hard to meet deadlines before the next month’s meeting. It is because we worked with such commitment that we were able to successfully continue this programme.

Thank you.
Facilitator

We would like to thank Mrs Malani and Mr Anura for presenting their programme. Each one of us should examine carefully and make an evaluation of the programme. Therefore, I think that we need a little more time to ask questions on this programme in detail.

First question (by female participants)

I live in Samarakoonwatta. There are about 265 families in our settlement. There is no place for them to dump their garbage. That is why we throw our rubbish, especially polythene bags, into the waste water drain. That became a serious problem to us. The Urban Council does not come daily to collect the garbage. They only come about once every two weeks. So, I think it would be good if Mrs Malani here further explains us the method of garbage collection in detail.

Malanie (Speaker)

We know that it is very wrong to throw polythene and other wastes into a drain where water flows. Dirty water grows bacteria and adversely affects our health. The environment is also polluted. The people in your community should be united, meet the officials of the Urban Council and discuss the issue. An important point is that you should neither be discouraged, feel fear nor give up your effort halfway through. Instead, you should talk to them persuasively. Talk about the issue to the member who was elected through your vote. Request him/her to intervene and help you solve your garbage problem.

You need some space in order to separate the collection of organic wastes from non-organic waste. You can make a container such as a barrel for organic materials or even a place built with stones will be fine. By collecting them separately, it will be possible to make use of these two different kinds of wastes in various ways. It is great if you turn organic garbage into fertilizer. You should collect everything including coconut shells, polythene, cardboard, plastic and tins. Money can be earned from both large and small pieces of cardboard as well as from both big and small pieces of paper. They need to be collected in separate lots. There are institutions that buy all these kinds of things. You can find out more about these institutions from us. Even we can sell pieces of glass once they are categorized according to colour. We can also sell Polythene at a higher price if you know how to process polythene bags and shopping bags. Such knowledge too through the institutions that work in these fields. You do not need
transport these materials. Some institutions come to your doorstep and pay you money for the waste materials, and they will collect them from your place. If some business people do not offer you an adequate amount of money, you may find other entrepreneurs to sell your stuff. The initiative also seems to be a successful business venture. You can solve both the garbage problem of the village and have livelihood means. You need to prepare places for waste collection.

We also need to develop certain skills in decision making on how much we will sell our materials for and how we can reach at prices that will benefit us. If you do not have the capital to begin such a project, you will be able to obtain a loan by consulting with government and NGO officials.

It is your commitment that enable you to make a success. We need to commit ourselves to this because it is a programme that will invariably reach success.

The population of Badowita is now more than 6,000. However, we have carried out the garbage reduction and recycling as well as along with other relevant development programmes, our village has greatly developed both the community and employment.

If you have any questions, please feel free to ask me now.
Mr. Ranjith

It is my opinion that the participation of all the institutions in the area is extremely important when undertaking this programme. We should be able to come to a position where the officials of the Urban Council and the Regional Secretariat, the Grama Niladharis, government institutions and non-governmental organizations all work together in group. Moreover, we should take the productive experiences we have had such as this to other places as well. According to the ideas expressed by a gentleman who addressed us here, if programmes such as these are to succeed, people should be made aware at community level. This has taken place very effectively in Badowita. Community awareness was raised, community support was obtained, the community carried out the necessary activity and community itself generated profits and received them. This solid waste management programme has contributed, to certain extent, to the solution of the country’s (national) problems. It was important that the situation of each of the individuals who were involved in this programme, the their commitment and responsibilities.

A Japanese Woman

I am a Japanese volunteer, who works for the Lunawa project. Garbage disposal is a very serious problem in the villages linked to the project where I work. Although we worked hard to raise community awareness, it was all in vain. Even when barrels are given to them, they do not put their garbage in them. They show no concern about it. I would like to know if you have any ideas about what to do.

Mr. Anura

I would like to answer this question. We also gave out bags and barrels to houses for garbage collection. Sevanatha institution donated a barrel to each house for this purpose. The Urban Council also paid for this. In fact, the barrel method is good. Other methods were also introduced, but the community did not show much interest and we tried to find out the reason. It was found out that each family had only 2 perches to build a house on and their houses were so small, so that they cannot find room to keep a barrel or even a dustbin for their garbage. Because of lack of space, we had to find a way to collect the garbage that would not be a burden for the people. If we distribute bags for garbage collection, we should timely collect them when
they get filled. It is also very important that we show people the monetary value of garbage. Even we should throw away the toothbrush after use. We should help people understand that neither the toothpaste tube, the cap nor the cardboard box may come in needs to be thrown away because these items can be sold. We will be unable to carry out a programme such as this successfully unless we educate them about the financial benefits from it. People need to recognize the fact that wastes has monetary value. We should raise awareness among them and pay them without delay for waste management.

Another Woman

We should provide the community appropriate knowledge. The Badowita group is one that has gained a multidimensional experience such as how to collect the garbage in sacks, how to sort the rubbish, what institutions buy which materials, what prices they fetch, and the kind of problems that have to be faced while engaging in this activity. I think this group should visit to educate other communities.

I think that if they share their experiences with other communities, we will be able to successfully make impacts on them and good publicity for the Recycling Programme. Therefore, I think we should prepare a specific method on which group raise the awareness among other communities.

Malanie

That is something we can do. We would like to go anywhere at anytime to raise awareness among people about the garbage problem and to show them that garbage is, in fact, an asset rather than a problem. We would also like to share the opportunity to anyone who wants to visit our village and understand how our programme works.

Facilitator

When this programme was launched at the beginning, how did government institutions and the Urban Council respond to the people? Their attitude towards people and the way the latter went about changing these attitudes when they needed to be changed are also experiences we can
learn from.

Malanie

In the past, people used to throw garbage into the canal. We went to the Urban Council in order to save the canal. They came and had a look. Garbage rotted for months in the stagnant water of the canal. It had even been infested with maggots. Then the Urban Council constructed a tank for us to put our garbage into but the rubbish that was collected there was never taken away. When we complained about this to the Urban Council member, they said they would find a solution but they did not. Finally, the Urban Settlement Programme and other organizations e.g. the Sevanatha institution were united and held discussions. They took a few of us to see how recycling centres worked. By gaining knowledge from here and abroad, we were able to carry out this programme.

Mr. Anura (Fernandu Upananda Karunasiri)

Selling garbage, we are not doing a business. We are getting together with the community in order to develop it. When we arrived in Badowita, we came to a muddy marsh. We succeeded in establishing a community development project there. We received assistance from the Japanese volunteer organization. We also obtained support from some of the programmes conducted by the Urban Council. We did suffer from hardship and had to continue to achieve our present success with a strong commitment.

We often had to spend the whole day waiting to meet officials in order to do something. Some days we had to go without any food in order to complete something. But, our strong commitment enable us to bring this programme up to this level in Badowita. We ourselves often had to carry out the tasks which the officials should have done. At other times, we had to strive hard in order to have the officials fulfill the tasks they needed to do.
Group Dialogue
Group Poster Presentations: Round 3
Mixed Groups (Six Groups)

The following sections indicate group poster presentation (Round 3) from 6 groups.

**GROUP 1**
H.M. Susima (H.D.F)
Sisilin De Mel: Community leader (Samarakoonwatta)
Lasika Srimathi (H.D.F.)
W.S. Wickramasinghe (U.S.I.P.)
Sewwandi Gamage (U.S.I.P.)
Mr Nandasena (N.F.P.O.)

**GROUP NO 1**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
<th>Method of Implementation</th>
<th>Partners</th>
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</thead>
<tbody>
<tr>
<td>Lack of property ownership</td>
<td>Untangling properties according to a plan and granting legal land ownership to deserving families</td>
<td>• Identifying lands that need to be cleared within the Moratuwa Urban Council area</td>
<td>• Divisional Secretariat</td>
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<td></td>
<td></td>
<td>• Registering</td>
<td>1. Divisional office</td>
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<td>• Identifying deserving families in settlements to be given land ownership</td>
<td>2. Grama Niladhari</td>
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<td>• Prioritization</td>
<td>3. Lands Officer</td>
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<td>• Preparing a plan</td>
<td>4. Samurdhi Niladhari</td>
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<td></td>
<td>• Preparing a mechanism (committee) for implementation of this</td>
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<td>• Identifying relevant partners and implementing through their coordination</td>
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<td></td>
<td></td>
<td>• Building methodologies for evaluation and feedback</td>
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<td>• Urban Council</td>
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<td>5. Mayor</td>
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<td>6. Community Development officer</td>
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<td>7. Planning officer</td>
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<td>8. Municipal engineers</td>
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<td>9. Survey Dept</td>
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<td>10. Land Registry office</td>
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<td>11. Community based organizations</td>
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<td></td>
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<td>12. Various NGOs</td>
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</tbody>
</table>
GROUP NO 1

How to obtain the assistance of partners

1. Coordination
2. Helping to collect information
3. Assistance regarding the size and ownership of property
4. Helping to collect information
5. Taking leadership in activities
6. Coordinating with and helping the community in this
7. Validating property allotment plans
8. Helping to provide services
9. Doing the surveying of property
10. Registration of property
11. Active participation and contribution from the very beginning of this process
12. Raising awareness about and organizing this programme
GROUP NO 2
(Third round of Presentation was not done by this group.)

GROUP NO 2 (This Group was asked not to do their third round of presentation as theirs was similar to the Group 1.)

Problem – Property ownership

<table>
<thead>
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<th>Problem</th>
<th>Solution</th>
<th>Method of Implementation</th>
<th>Assistance of Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of property rights</td>
<td>Granting land ownership</td>
<td>• Present status of ownership</td>
<td>• Divisional Secretariat</td>
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<tr>
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<td>• Discussing with relevant</td>
<td>• Urban Council</td>
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<td>institutions</td>
<td>• Housing Development Authority</td>
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<td>• Urban Development Authority</td>
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<td>• Survey Dept.</td>
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<td>• NGOs</td>
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</tbody>
</table>
**GROUP 3**

Hon Municipal Councillor Chandra Gamini Peiris  
S.M. Sujith – Project Manager – Sevanatha  
Samanthi Kumari, Community Development Officer (Kotte Municipal Council)  
Gamini Harischandra, Assistant Manager (Sri Lanka Telecom, Ratmalana)  
Ranil Gunawardene, Secretary (Youth Society, Moratuwa)  
Nobuto Ito (JOCV)  
Mai Sekine (JOCV)  
Anura Marasinghe, Community Health Officer (Badulla Municipal Council)  
Ananda Warnasuriya

<table>
<thead>
<tr>
<th>Problems</th>
<th>Solutions</th>
<th>Method of Implementation</th>
<th>Partners</th>
<th>Assistance of Partners</th>
</tr>
</thead>
</table>
| Distance between the community and institutions and between institutions| 1. Creating a change in attitude of officers from the least to the greatest | • Launching training programmes  
• Including officers in field programmes  
• Including community development work in the duty lists of all officers  
• Finding solutions to problems irrespective of party affiliations in community activities  
• Implementing the law  
• Empowering the community  
• Obtaining a handbook of facts for raising community awareness | Institutions and consultants relevant to community development  
Government and opposition politicians  
Dept of Bribery and Corruption  
Auditing division  
Assisting organizations  
Officers qualified in the community development field  
Urban Council | Obtaining advice and supervision e.g. – JOCV  
All Moratuwa political authority  
sudden checks inspection inquiries |
<table>
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<tr>
<th>GROUP NO 3</th>
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<tbody>
<tr>
<td>Obtaining community contribution for preparation of annual budget</td>
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<tr>
<td>• Obtaining advice and proposals annually through Community Development Societies</td>
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<tr>
<td>• Obtaining development proposals by relating to Hon Municipal Councillors of divisions</td>
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<tr>
<td>• Educating Community Development Societies at the start of the year about the money, programmes and resource persons set aside for each division by the budget</td>
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<tr>
<td>• Exhibiting the work plan relevant to each division on the field display board</td>
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<td>• Carrying out construction according to the community contract system</td>
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<tr>
<td>• Follow up process and evaluation of progress</td>
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<tr>
<td>The community</td>
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<tr>
<td>Community Societies</td>
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<td>Rural Development Societies</td>
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<td>Youth Societies</td>
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<td>School Development Societies</td>
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<td>Volunteer organizations</td>
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<td>Physical Technical planning financial community</td>
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<td>GROUP NO 3</td>
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<td>----------------------------------</td>
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<tr>
<td>Creating cooperation between departments and government institutions</td>
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<tr>
<td>• Obtaining assistance for Community Development Society meetings</td>
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<td>• Housing</td>
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<td>• Obtaining a contribution towards Community Development Societies</td>
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<td>• Obtaining the participation of private institutions and government organizations in development programmes</td>
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<td>• Conducting a follow up process and evaluation of progress</td>
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<td>• Engaging in common tasks through coordination on national days</td>
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<td>Hon Ministers</td>
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<tr>
<td>Government institutions</td>
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<td>NGOs</td>
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<tr>
<td>Coordination on National days</td>
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<td>common tasks</td>
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<td>Shramadana.</td>
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**GROUP NO 4**

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<tr>
<th>Problem</th>
<th>Solution</th>
<th>Method of Implementation</th>
<th>Partners</th>
<th>Assistance of Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unauthorized construction</td>
<td>• Preventing new unauthorized construction</td>
<td>• Taking steps to remove unauthorized construction while it is taking place through raising awareness</td>
<td>• The community, Grama Niladhari, the Urban Council, Divisional Secretariat, Urban Development Authority, the police, community organizations</td>
<td>• To obtain accurate facts and to prevent such construction</td>
</tr>
<tr>
<td></td>
<td>• Removing existing unauthorized construction and providing houses in a methodical manner</td>
<td>• Starting new housing schemes and making people to settle in those after paying a certain value. Removing people by paying compensation.</td>
<td>• Urban Council, Urban Development Authority, NGOs, Divisional Secretariat, Housing Development Authority, the community.</td>
<td>• Technical as well as financial support</td>
</tr>
<tr>
<td></td>
<td>• Planning and implementing houses / settlements as required by the increasing population</td>
<td>• Educating landowning institutions and individuals</td>
<td>• Landowners, Urban Council, Divisional Secretariat, Grama Seva Niladharis.</td>
<td>• Coordinated activities</td>
</tr>
<tr>
<td></td>
<td>• Establishing security of property ownership for landowning individuals and institutions</td>
<td>• Identifying laws and decrees and implementing them by raising awareness of them</td>
<td>• Local government institutions, property owner/ institution</td>
<td>• Legal advice</td>
</tr>
</tbody>
</table>
|                                     | • Implementing rules and regulations regarding unauthorized construction without any hesitation | • Fixing notice boards in public places                                                 | • Urban Council, Divisional Secretariat, the police, the judiciary, media institutions, community organizations | • Implementati**

The community, Grama Niladhari, the Urban Council, Divisional Secretariat, Urban Development Authority, the police, community organizations | • To obtain accurate facts and to prevent such construction |
| • Technical as well as financial support | • Creating consciousness in the community about national property |
**GROUP 5**
Mr Ajith Kumara, UDA  
Miss Malkanthi Jayawardene  
Miss Pradeepa Dilhani, Arthacharya Foundation  
Miss Arisa Kato  
Mr K.A.T.S. Kumara  
Mr H.K. Sisira Kumara  
Miss Sudarshani

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solutions</th>
<th>Method of Implementation</th>
<th>Partners</th>
<th>Assistance of Partners</th>
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</thead>
<tbody>
<tr>
<td>Material Problems</td>
<td>Working according to a methodical plan</td>
<td>Planning to provide relevant facilities corresponding to existing regulations.</td>
<td>1. Urban Development Authority</td>
<td>1. Preparing project plans</td>
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<tr>
<td></td>
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<td>Preparing housing plans.</td>
<td>3. Moratuwa divisional Secretariat</td>
<td>3. Supplying facilities for drainage systems, toilets and water supply, and waste disposal</td>
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<td>Developing a low-income residential zone.</td>
<td>4. Housing Development Authority</td>
<td>4. Preparing a coastal conservation programme</td>
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<td>2. Implementing informal education programmes.</td>
<td>5. Water Supply Board</td>
<td>5. Organizing social service activities</td>
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<td></td>
<td>6. Coastal Conservation Dept</td>
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<td>7. NGOs</td>
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### GROUP NO 5

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<tr>
<th>Problem</th>
<th>Solution</th>
<th>Method of Implementation</th>
<th>Partners</th>
<th>Assistance of Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Being subject to sudden disasters</td>
<td>Preparing a disaster management plan</td>
<td>1. Identifying disasters inherent to the area&lt;br&gt;2. Identifying areas most subject to disasters&lt;br&gt;3. Identifying times and seasons when disasters occur&lt;br&gt;4. Identifying the resources and weaknesses people possess when they face such disasters&lt;br&gt;5. Investigating opportunities to minimize, control and prevent disasters&lt;br&gt;6. Identifying individuals who need to intervene in order to find solutions&lt;br&gt;7. Exchanging experiences with other institutions and individuals&lt;br&gt;8. Identifying resource personnel&lt;br&gt;9. Presenting necessary solutions&lt;br&gt;10. Preparing a plan that can be understood by just about anybody in the event of a sudden disaster</td>
<td>The community&lt;br&gt;Government officers&lt;br&gt;Volunteer organizations&lt;br&gt;Religious leaders&lt;br&gt;Resource persons</td>
<td>• Obtaining comparative data from history and past experience&lt;br&gt;• Institutional intervention. Provision of facilities. Supply of resources.&lt;br&gt;• Provision of material / financial resources</td>
</tr>
</tbody>
</table>
GROUP 6
Divisional Secretariat - Moratuwa
Miss Sanalu Takahashi
Mrs S. Kodagoda
Mrs Mallika Karunaratne
Mrs Ramya Hemaseeli
Mrs Geetha Peramunage
Miss H. Sumali Pushpika Soysa
Mr D.S.N.Wijeweera
Mr Shantha Karunaratne

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<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
<th>Method of Implementation</th>
<th>Partners</th>
<th>Assistance of Partners</th>
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</thead>
</table>
| For the original settlers without land ownership  | Granting legal deeds (finding out the wishes of the community) | - Identifying the original owners of a property  
- Presenting the problem to the Ministry of Lands  
- Approaching the Survey Dept for measuring purposes after taking possession of the property  
- Going to the Housing Development Authority (with the Divisional Secretariat) for property allotment  
- Implementing the programme for granting deeds (via the Divisional Secretariat) | Divisional Secretariat  
Municipal Council  
Survey Dept.  
Ministry of Lands  
Housing Development Authority  
Volunteer organizations | Preparing basic data  
Carrying out tasks in the relevant lands  
Measuring activities  
Getting properties signed up  
Granting deeds after assigning properties  
Obtaining necessary service facilities |
Presentations
Our activity is very timely. After discussing community problems, it is very important that we consider how we should present our discussion points in the form of a project proposal to government institutions, particularly a funding institution, or a volunteer organization active in this field. I am here to show you the way. I also learnt that there were problems and even serious drawbacks in progress monitoring for project implementation. Progress monitoring is a very decisive factor that affects the success of a project.

Stage 1: Preparation of Project Outline

1. Project Identification

Now those gentlemen, who represent the community in the political sphere, have brought up the point that there is an important problem in the city of Moratuwa for which they need to implement a project. That is one approach whereby a project can be identified i.e. on the request of a local government or political authority. The Urban Development Authority, a specific planning authority, There is another approach that a project is identified according to the request or need of a community or a Community Development Committee. These approaches are common for project identification.

2. Project Conceptualization

In preparing a project proposal, we need to identify the framework of the project proposal. We call this project conceptualization. This is divided into 4 main features.

   a.) Objective: What is expected from the project? What are our aims?
   b.) Methodology: the decision making process works during the 3 stages of the project; (1) the planning, (2) implementation and (3) management stages.
c.) Institutional Framework: Knowledge should be gained to make an institutional structure for the project, including local government institutions, planning authorities, the community, community societies and working committees.

d.) Method of Funding: We should have an understanding of the manner in which we mobilize resources for the project.

We need to have a clear and accurate understanding of these 4 steps to prepare a project proposal.

3. Project Preparation

The next stage is to prepare the project and we can call this a process of making rational decision. We can follow two approaches to prepare for a project proposal: (1) the participatory approach; and (2) the typical planning approach. In preparing project proposals at the village level, we can approach the project in either of these two ways, i.e., by using a participatory development approach or the more traditional approach through the intervention of professional planning experts. These two approaches generate a project plan. However, whichever approach is adopted, both aim to reach the same goal.

In Sri Lanka, for instance, housing projects are implemented in a participatory manner. Your group discussions at this workshop were also one of the participatory community exercises: this workshop is, let us say, promoting participatory approach.

The participatory approach in this workshop may cover 4 main steps.

The Participatory Approach

1. Identifying needs and problems:
If you intend to explore a specific geographical area, during the workshop, you could divide into groups and walk through to make a list of the problems. This will be a process of instant identification of problems.

2. Formulating Strategies:
The identified needs and issues are subjected to group exercises and analyses, and appropriate strategies may be formulated to solve these problems. Strategies means seeking solutions to these problems. For instance, if you have the issues of slum housing, constructing apartment
housing may be some suggestion or strategy. The solution may be to transform unauthorized settlements to authorized ones or to further improve their present housing condition. In this manner, we are able to identify either one or several strategies to solve particular problem.

3. Adopting Approaches:
After identifying strategies and choosing the most suitable one from all the available alternatives, we need to identify an approach to implement the selected strategies. “Approach” here means the way we are going to do it. For instance, if we supply the necessary building materials and try to accomplish certain tasks in cooperation, how will we implement this? If, on the other hand, if our decision is to authorize settlements, how will this process of property authorization take place? Will we hold the measuring tape and divide the properties? Will we get the licensed surveyors in our institutions to divide the properties? Or, will we divide them according to the way they are divided currently? Approaches identified for strategic implementation are carried out through the discussions and questions taking place at this workshop.

After completing the three steps above i.e. need identification, strategy formulation, and approach adaptation. Through the processes, we can begin to make an action plan.

Making an Action Plan: Look carefully at the words “action plan”. The word “action” is placed in front, and the word “plan” comes after it. Thus, it signifies a plan that can be done and should be done. If it is a plan that can and should be done, we need to clarify the points that are included in this plan.

- What? (What are we doing?)
- How? (How do we implement and what needs to be done?)
- When? (What time period will we use to carry out activities?)
- By whom? (Who will be responsible to do what?)

4. Preparing Action Plan:
We will answer these questions accordingly. These processes clarify how we are implementing development activities in the selected area. The Action Plan may be submitted to relevant local government offices, volunteer organizations etc. to obtain assistance.

5. Creating a monitoring mechanism:
the final preparation of a project proposal is how to analyze the project i.e. how to evaluate the
project progress by creating a monitoring mechanism.

In conclusion, i.e. at the end of the workshop, we may have the micro plan which shows the clear and accurate responsibilities of the community and the partner institutions. This is one participatory approach to make an Action Plan. We have described this process in great detail in a booklet. You may be able to find this book in your local government institutions.

Now, let us consider the other approach to prepare for project proposal, so-called the typical or traditional planning approach that professional planners use. Let us then consider how these professional planning experts prepare a project proposal. Such an approach has 5 main sections: (1) a feasibility study; (2) a sensitivity analysis; (3) detailed planning with implementation methodology; (4) a cash flow survey; and (5) a cost benefit analysis.

The Traditional Planning Approach

1. Feasibility study:

Feasibility study is done to find out whether this project should be implemented and yield good results. If it is a financial project, a financial appraisal may be employed. If it is a housing loan project, a socio-economic appraisal may be applied. In case of a financial project, the feasibility study is conducted to find out approximately what profit we gain from the investment. A socio-economic feasibility study may seek to find out the social, economic and environmental benefits from the money and time we invest in the project. The benefits may be improved people’s living standards, a solution to the problem of unemployment, or the total number of houses increased in the country. In case of a housing project, a socio-economic appraisal may be carried out on a large-scale. Thus, the choice of methodology changes according to the nature of the project.

2. Sensitivity analysis:

If a project is a feasible, sensitive features are identified and analyzed. This project may incur unforeseen expenditure, for instance. If we have planned a project for two years but it takes up three years due to circumstances beyond our control, we will have to face the losses and the extra expenses that accompany it. What happens if we do not obtain the income that we
expected? Thus, we need to identify areas of extreme sensitivity and compare with the financial appraisals in order to consider whether the project should be continued.

3. Detailed planning with implementation methodology:

After completing the first two stages, we start preparing the plan i.e. if the project is feasible financially and socio-economically, we may prepare a detailed plan. This stage includes analysis, formulation of strategies and the preparation of an implementation methodology. During this stage, we practically focus on the identified problems and analyse them in order to identify appropriate strategies and to prepare implementation methodologies. Now, you know how to prepare a plan and the rationale. In your opinion, what is a plan based on? It is based on the problem. We make a plan in order to solve a problem. We also need resources to prepare a plan. However, we may ignore resources and consider only the problems and make any plan we want. One method is to prepare a plan based on the fact that we need to do something specific regardless of our financial conditions. We also prepare a plan based on our available resources. In the latter case, we are not focused much on the problems. Rather, we will prepare a plan based on how to spend the amount of money. For instance, the preparation of the annual Urban Council budget is a resource-based plan. These two approaches are known as problem-based planning and resource-based planning. You can enter planning through either of these two approaches i.e. by finding solutions to the stated problems or by making full use of available resources.

4. Cash flow survey

After the detailed planning stage, we consider the money that comes into and goes out of the project. If we think of a housing project, the cash inflow will consist of obtaining bank loans, equity capital and income while the cash outflow will constitute the cost of construction, operational and maintenance costs and loan repayment.

5. Cost benefit analysis:

The final stage is a cost benefit analysis which is divided into a list of our costs on one side and a list of our advantages on the other. These costs are also known as capital expenditure and recurrent expenditure. For instance, when we use a property for a project, we may suffer from losing land productivity and having environmental pollution. Building construction sometimes decreases the absorption of water by the soil and thereby increases the risk of flooding. As a
result of implementing this project, the people who used to work in the place may lose their jobs. Project costs include all these factors.

Next we need to consider project benefits. This project may create new assets and generate wealth. Land prices may skyrocket because of the project. The social status of residents may be greatly enhanced. New jobs may be generated. All these are counted as the project benefits. In this manner, we can make costs–benefits analysis of the project.

After these 5 stages are completed, traditional planning experts prepare a project proposal. Comparing the expert approach with participatory approach, we notice that they are very different from each other. Traditional approach is the exercise that carried out by professionals cloistered in planning rooms. In contrast, one participatory approach is that community representatives are given the opportunity to exercise planning for their own communities. Without communities, planning is unsuccessful,

The participatory approach is more useful and effective which impact the general public. The advantage is the increase in community participation in the project. The community is given the opportunity to express their ideas and opinions regarding the project. Thus, there is the increased possibility of relating the community to both the positive and negative aspects of the project. Therefore, after preparing the basic plan, we adopt the participatory approach as the more suitable one for settlement improvement plans because it is far more effective for the community themselves to identify their problems. As the project is initiated with them from the beginning, they show a desire and commitment to work for the project implementation. It is our experience that participatory approach works better.

**Step 2: Project Monitoring and Feedback**

Many projects fail because there is no methodology to monitoring their progress. There is a joke on progress monitoring. Progress monitoring punishes those who work and promotes those who do not. The meaning behind this is that progress monitoring shed lights on the weaknesses of the individuals who did the work and get them punished. But, the people who did neither work nor get into any such trouble, because they have made no mistakes that can be discovered. In fact, they may even receive a promotion!
Joking aside, let us find out the objective of the monitoring of progress.

*The Objective*

Progress monitoring aims to ensure that the project is advancing towards its goal in a satisfactory manner. The overall objective of progress monitoring is divide into several parts as follows.

- To track and review the main project variables which constitute the cost of the project, its time limit, its broad scope (vision or framework) and the quality of deliverables as planned.
- To update the list of activities, problems and issues.
- To update the project plan and schedule.
- To make comparisons between actual costs and budgeted costs.
- To revise the project plan when and where necessary.
- To take appropriate action timely when project performance varies from original plans.

*The Scope of Monitoring*

The monitoring process is usually based on the project work plan. However, for large-scale, medium and small-scale projects, the work plan is likely to change because of the nature of the community, various new issues and changes in people’s preference arose with rapid urbanization. It seems that change is an inherent feature of project planning.

The project monitoring takes two ways, namely “process” monitoring and “progress” monitoring. For instance, if it takes two years to complete a project and we subject the process of project implementation to evaluation by means of constant monitoring throughout those two years (process monitoring). Conversely, progress monitoring takes place to keep specific time periods during our evaluation, for example, if we plan to build 20 houses during the first year and we evaluate whether the construction is completed as planned.

Process monitoring can be further divided into two sections: (1) activity monitoring and; (2) deliverable monitoring. Process monitoring is crucial to make a project successful.
Activity Monitoring

Activity monitoring is divided into 4 main parts.

A project usually has the manager, team, senior administrative staff and sometimes a steering committee above them. To maintain a sound monitoring system, “who does what” may need to be very clear. Project often fails when roles in the process are in confusion.

Roles in the Process:

1. The Project Manager is the chief officer responsible for plan implementation at the field level and is in charge of planning and tracking the project including making approved revisions to project plans, estimates, schedules and budgets.
2. The Project Team is participates in preparing, reviewing, developing and implementing the project plan.
3. Senior Management authorizes the project and makes policy decisions and provides personal and financial resources for the project activities.
4. The Steering Committee, which may consist of people involving the Minister and the Mayor, reviews the project progress and approves any changes in the plan in order to ensure that the project meets its goals.

Activity monitoring needs to be regularly conducted throughout the project. The project manager monitors the project in a simple, direct way at field level, by using the project plan as the basis and requiring each team member to provide a weekly progress report. These reports help her/him find out the problems and weaknesses in project activities and constantly monitor the project progress.

S/he is able to conduct activity monitoring, organizing weekly meetings to coordinate all parties related to project activities and review the work, the nature of risks, the amount of progress made and the problems and obstacles that have arisen. These discussions can be called a group monitoring of the project.

The senior project management team will include high level officials of donor agencies, volunteer organizations and local government institutions can also conduct activity monitoring
on a monthly basis.

In addition, a progress monitoring session may be conducted through discussions with project representatives such as the project manager and the team members, management (people on the senior management board and the steering committee), of clients (such as the community) and of political authority (such as ministers) every 3 months.

There is also monitoring tool such as visual aid. Visual aid presentations are a convenient way of giving people an idea of the prevailing situation in a project and an understanding of what stage it is at, whether it has faltered at some point, if time limits have expired etc. through the use of photographs and diagrams. Today, many institutions use visual aids for monitoring and even employ special photographers for this purpose. Many private sector institutions have photographic presentations of project progress monthly during their progress monitoring. Sometimes, we can see the photography exhibition which shows the monthly progress of relevant projects on the walls of a Board room. These visual aids are very effective in giving us an idea of the progress made in a quick, simple way.

Problems and obstacles arise through project implementation. Progress monitoring play a role in steering the future path of the project and avoiding the harmful effects. However good the project planning, if the progress monitoring is weak, the project does not yield successful results. We have plenty of experience of this. There are many projects that have been started and abandoned. The main cause of the failure was the lack of a good progress monitoring methodology. The project was aborted and people were able to defraud it.

There are reports on participatory planning and progress monitoring for settlement development, which were written 10 years ago. There was also a book, titled “Community based Monitoring and Evaluation of Settlement Development“, which describes how to conduct participatory progress monitoring. Sri Lanka has extensive experiences in planning and progress monitoring in both traditional and participatory ways. Both methodologies aim to make project activities sustainable.

There is a group of highly experienced officers who have worked with us over the past 10 years. Sri Lanka has strong and large-scale institutions that have been built up since the One Million Houses Project was conducted. As you receive the assistance from the officers who have experienced community based planning methodologies, I am convinced that you are going to carry out an excellent project in the future.
Mayumi Y. (To the members of the Audience)
Who should conduct project monitoring?

Audience
The community, officials, the government and those who grant aid.

Mayumi Y.
What should be monitored?

Audience
Material and financial aspects

Mayumi Y.
Adopting a participatory approach, we need to notice that things cannot be always measured by financial statements or documents (e.g. work plans). Moreover, timely implementation of project activities does not always mean that people’s lives have improved in reality. My concern is not how much money is spent, but how money was spent. My question is whether people’s living conditions are positively changed or not, and I want to hear that from people themselves, not project staff or administrator who are comfortably sitting at desk.

Comment from the Audience
I think it is should be the community to monitor and evaluate how successful a project is. (For example,) If the community states that they have obtained a service through the project and value that contribution, then we can be satisfied that the project has indeed been successful.
Lalitha

Commencing a project in Moratuwa under the Urban Based Services Project, we collected data on people’s living conditions and health situation. We also conducted an annual data collection, for example, on infant mortality rates. Collecting such data at initial stage, we observed that the social conditions had prevailed, and that the initial project plan was completely changed. This also became a very valuable exercise for evaluating the project impact. But, in order to do this, you need to keep records from the very inception of the project. I think the Moratuwa Urban Council must still have an account of this experience.
I would like to present you the project of Wastewater Disposal Systems for the Ratmalana/Moratuwa area, which was launched by the Water Supply Board. I will talk about the Ratmalana and Moratuwa areas, but the Wastewater Project belongs to the Ratmalana/Moratuwa and the Ja Ela/Ekala regions both industrial zones in Sri Lanka.

**Project Justification**

Firstly I would like to explain the reasons why we chose such a project. As you are aware, the discharge of domestic and industrial wastewater from houses and factories in this region has filled and overflowed drains and travelled as far as the Lunawa Lagoon, polluting all these surface bodies of water. Because the groundwater table is high, on rainy days the septic tanks overflow and cause many threats to public health. Stagnant water puddles and ponds become breeding grounds for mosquitoes and results in mosquito-borne diseases becoming widespread. Due to wastewater flowing into the Lunawa Lagoon, the latter has undergone severe environmental degradation.

Industries do not have individual treatment facilities to clean the wastewater before discharging it due to the expense they would incur. Enforcing the closure of industries may not be a serious problem to factory owners who are wealthy, but would severely affect poor people losing their employment. Considering all these, we decided to embark this project.

**Project Background**

This project began with the feasibility studies in 1994/95 funded by World Bank. The contracts were awarded in 1998. During that time period, this project was divided into two sections: (1) the collection of wastewater which was funded by the World Bank; and (2) the fixing of machinery for new solutions to the wastewater problem. However, we were not able to
do the latter because the contract was awarded to a Chinese company, they were unable to do it: we had to abandon it.

Meanwhile the time limit for World Bank funding expired, and we had to terminate the project in 2000. In 2001, the University of Moratuwa updated the project feasibility study and the Government of Sri Lanka approached the Government of Sweden for funding. In 2002 the SIDA institute reviewed the project. From 2003 to 2005, the tender document was reviewed with budgeting. During this time, the Urban Development Authority and the Central Environmental Authority studied the environmental impact of the project and gave its approval. In 2005, Sweden agreed to fund the project. In March 2006, the necessary contracts were signed and tenders are being invited from interested parties in the European Union countries.

**Project Objectives**

The project objectives are to develop the living standard and general environment of the people in the area, to improve the health condition of the residents, to keep the surface drains and waterways in the surroundings clean, to advance the long-term economic viability of the area, and ultimately the economic status of the men and women living there.

**A Project Summary**

The project area is divided into catchment areas. The wastewater in each catchment will be collected into a pumping station by laying a network of collection pipes. The wastewater collected in the pumping station will be taken to the treatment plant. Wastewater will be treated to the required standard authorized by the Central Environmental Authority. Finally, the treated water will be discharged into the sea at Ratmalana and the remaining dry sludge will be disposed of through the composting plant or the incinerator. This is in brief the process that the project will carry out.

Within the project area, manholes are made every 60 meters along pipes with a small diameter and every 100 meters along pipes with a bigger diameter. The reason for this is that wastewater does not flow freely along pipes in the same way that normal water does. The manholes are made for workers to climb down into the pipelines and clean them when they get blocked. The first wastewater collection pumping station will be located at Badowita. Wastewater from a
specified area around Badowita will be collected in this pumping station. The second pumping station will be by Jayasumanarama Road. The third pumping station will be on Kandawela estate. The fourth pumping station will be on Maha Vihara Road. The fifth will be on the Thelawala Water Supply Board property. The sixth pumping station will be situated in Idalwatta, Moratuwa. The seventh pumping station will be in Punchi Park on the road to the Katubedde University. The small pumping stations fixed in these places will be built below ground level. The pumps will be fixed underground and shut off. Only the office will be above ground. When the wastewater collects up to specified level, these pumps are automatically activated. There will be no bad odour or noise during this process. We have designed these pumps in this way.

This project has several stages, and we now consider the first stage. During the first stage, there are 238 factories, 157 government and commercial institutions such as offices, 6597 houses and 3 housing schemes which constitute the Lunawa new settlement scheme, the Soysapura housing scheme and the housing scheme still under construction.

**Funding of the Project**

The project cost for the first quarter in the two project areas of Ratmalana/Moratuwa and Ja Ela/Ekala are as mentioned below.

<table>
<thead>
<tr>
<th></th>
<th>Ratmalana / Moratuwa SL Rs M</th>
<th>Ja Ela / Ekala SL Rs. M</th>
<th>Total SL Rs M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign aid</td>
<td>5580</td>
<td>1960</td>
<td>7540</td>
</tr>
<tr>
<td>National funding</td>
<td>1330</td>
<td>450</td>
<td>1780</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6910</strong></td>
<td><strong>2410</strong></td>
<td><strong>9320</strong></td>
</tr>
</tbody>
</table>

While the whole project in the first quarter costs Rs 9320 millions, Rs 6910 millions of it will be spent on the Ratmalana/Moratuwa project area.

The Swedish government and the Sri Lankan government signed the pact in March 2006. According to this agreement, we will receive an interest-free loan of 72.6 million US dollars or 7,500 million Sri Lankan rupees (hereafter SL rupees) from Swedish International Development Agency (SIDA) to cover the project cost. SIDA will provide us an outright grant, 3.6 million US dollars (equivalent to 370 million SL rupees) to cover costs of contract supervision and environmental sanitation. Rs 10 million SL rupees have been allocated for toilet construction for
the poor in the project area as the component of environmental sanitation activity. The Sri Lankan government has to spend Rs 1,780 million for the 4 year-project to cover custom duty, land and other local costs.

**Project Details**

Within the project area, there will be a 46 kilometers long collection system of pipelines ranging in diameter from 160mm to 1,400mm. Some pipelines are very fine, but others are very large. There are 7 pumping stations. There will be 10.5 km long force mains pipes. A wastewater treatment plant will be established at Soysapura. Treated water will be pumped into the sea through a 2 meter long pipeline with a diameter of 1,100mm.

**Current project status**

Because funding has been approved, tenders have been called from 25 European Union countries during the period from 8th June to 1st November 2006. Preparations have been made to evaluate and approve tenders from October 2006 to April 2007 and to award the contract by the third week of April 2007.

The project implementation period will be (1) from May 2007 to December 2010 and (2) from January to May 2011 under our coordination.

Moreover, we need a piece of property of about 4 acres in the Ratmalana/Moratuwa area to establish the treatment plant. The existing sewage treatment plant in the Soysapura apartment housing scheme is situated on a 2-acre property, the 2 acres adjoining it has 121 families whom we have planned to compensate and re-settle elsewhere. While these families will be paid adequate compensation, the 4 acres will be used to establish the treatment centre. In addition, before commencing wastewater system operation, we need to establish a sanitary landfill, a suitable place to deposit the mud leftover after straining the treated wastewater. A place needs to be prepared before the conclusion of the project.
Questions, Comments, and Answers

A Municipal Councilor

Those who are going to be evicted from the 4 acre property, where the Soysapura Wastewater Treatment Centre will be constructed, are keen to find out how much compensation will be paid. They are anxious whether adequate compensation will be made for them.

The Project Director

We are hoping to pay them enough compensation. Currently, the Board of Directors is trying to obtain the approve, and once it is approved, we shall announce how much the amount of money is. The residents of Lakshapathiya area opposed to the first pahse of the project, therefore, we had to remove some areas from the proposed project sites. The losers are themselves. The opposition parties will not benefit from the advantages that could arise from the second and third phases. Actually, if the general public had to pay for these wastewater discharging linkages, they would have to spend an exorbitant amount of money by themsleves. However, the Swedish will pay for it under this project.

Although we spent a long time to raise public awareness, the people still opposed to it. Some even threatened us.

Another Councilor

There is another opinion that has arisen against this project in the Katubedde area. Some communities declare that if this project is implemented, they will oppose it to the best of their ability.

Others state that their area should reap the full benefits from this project. The people in the village are polarized by those for and against this project, and two opinions hold sway in the village. As a village representative, I was caught in difficult position between these two opinions. My view is, however, excellent decisions making at higher levels, if they are not made known to the general public, opposition such as this is bound to arise. Therefore, I would like to suggest to
hold an open meeting in order to educate all the residents about the project. The Project Director should come and discuss these issues with people. Thereby, the project benefits will be made evident even to those who are negative about the project. We promise to provide the facilities and cooperation required to conduct such an awareness raising programme in the Katubedde.

_A female member of the audience_

The people of Idalwatta in the Lunawa area under this project live in fear and doubt because there is rumour that the project widen roads, but it may break down their homes and people lose their house ownership. It would be good if you could clarify the situation for them.

_Project Director_

Since the pumping station that will be established in this area is a small one that will occupy only 7 perches of land, it will not be necessary to widen the road.
Closing Remarks
M. Wijerathna

I would like to thank all of you and all the institutions you represent for devoting your time to coming here over the past two days to focus your special attention on the problems besetting the Moratuwa area and to discuss these issues at length. We greatly value the commitment you have shown.

The theme of this workshop was the use of effective strategies to transform natural disasters and situations where people are at risk so that development can take place.

About 11/2 years ago, we faced something that we had never experienced before - that is, the tsunami disaster. It was the first time in known history that we had to face such a situation. None of us had past experience of it. This was a great catastrophe that the people of our country had to undergo. A large number of people who had no idea what a tsunami was died when the tidal wave hit the country.

We learnt important lessons through this tragedy. At that time we had no plan whatsoever about how to face such an event. Today we are talking about just such a plan. Those who were particularly affected by this tragedy were the unauthorized dwellers along the coastal belt living on land that belonged to the Coastal Conservation Department. It is they who in the main had to face this situation. Now this problem has been understood in all its seriousness and the government has worked to protect land up to 45 meters inland from the seashore as a coastal reserve on which no building construction can take place.

Similarly, during the tsunami disaster, we saw how the mangroves, natural vegetation and sand dunes along the Bundala wildlife sanctuary and the surrounding coastal belt provided protective cover to the area. Now, after realizing its importance, the Coastal Conservation Department and the Urban Development Authority have jointly implemented a programme to make such a barrier of greenery along the boundary of this coastal reserve. The Bundala wildlife sanctuary area suffered minimal damage during the tsunami disaster. By producing such surroundings and such scenic beauty in other areas as well, we can create an environment that will be able to
withstand disasters. I wish to respectfully thank all those men and women serving in institutions in Japan who came here especially in order to raise our awareness about these facts.

In my opinion the second most important point is the issue of unauthorized construction. The Hon Mayor, our Municipal Commissioner and I intend to take stern action against unauthorized construction.

In talking about natural disasters, we have no problems with earthquakes and volcanoes. The most important problem we have is that of flooding. The problem of floods greatly impacts 10 of our Grama Seva divisions. I think that in the future we will be able to minimize this situation through the development of the Lunawa Lagoon and its community based programmes.

The Moratuwa Municipal Council area is a little more than 23 square km in extent. Therefore property is a very valuable resource to us. Land is very precious to our people. That is why a large proportion of our community live in houses built on paddy fields, marshes and government land. Another issue that arose during this workshop was the lack of property deeds. Perhaps these lands belong to the Public Trustee Department, the government and private businessmen and other such powerful people. People live on these lands as unauthorized dwellers. Most people who live as unauthorized dwellers construct their houses in areas where flooding occurs. It was also put forward here that Moratuwa is an area where there is a high degree of urbanization. In my view this is absolutely correct. This urbanization can be evidenced by the housing construction that takes place on marshy land, in rice fields and along river banks.

However, it is not difficult to solve these problems if each institution correctly understands and fulfills the responsibilities it has. We should all safeguard for the future the excellent situation that has prevailed in the field of development since the tsunami disaster. We should also unite and work together with a clear understanding of our objectives. We hope to work in the future through these institutions represented here regarding the issues that were discussed at this workshop.

On behalf of the Urban Council and the Mayor, I wish to thank all the institutions, government departments and NGOs who attended this workshop over the last two days to work together in this manner regarding the Moratuwa area.
V. C. Warnakulasuriya

I gave my full attention to this programme conducted over the past two days and personally read through all the points noted in the posters presented by each of the groups during the course of the workshop. I also requested Ms Natsuko, who organized this workshop, to make all the points and ideas brought up in this workshop available to our Municipal Council. I would like to state on behalf of the Moratuwa Municipal Council that the Hon Mayor, Deputy Mayor and municipal councillors, and our working committee are committed to working together to focus our attention on the points that have been raised and to find solutions to these problems and to implement them to the best of our ability.

I offer my heartfelt thanks to all those who organized this two-day workshop. We also express our deep gratitude to Ms. Mayumi Yamada and Mr. Edward Sumoto of the United Nations Centre for Regional Development in Hyogo, Japan to give their contribution in order to make this workshop a success.
N. Sekiguchi

I am very thankful to everyone who participated in this workshop. Although this two-day workshop ends today, I would like to remind all of you that in reality this is not the end. We can state that this workshop was successful only if we implement in the future what we have discussed here. I believe that you all learnt a lot through this workshop and that you all have many abilities that you can use.

My assignment in Sri Lanka ends on the 19th of August 2006, and I am leaving this country. I am very sad to leave Sri Lanka when I think of the work I was engaged in the development of Moratuwa city. While I wish to meet all of you again, it would be immensely pleased to find your successful engagement in development activities on my next return to Sri Lanka. I, therefore, request you not to forget what we discussed here, but to begin to implement the activities you are able to in relation to it.

I am very grateful to the Hon Mayor, the Deputy Mayor, the Commissioner, Mr Anura Dassanayake, Mr Ranjith, the volunteers of the Japanese Overseas Cooperation Volunteers service and the United Nations Regional Development Centre Disaster Management Planning Hyogo Office, who gave me their fullest cooperation.
Mayumi Y.

Let me first thank you for taking out your time to participate in this workshop programme. I would like to thank Mr Samanial, the Mayor of Moratuwa city, and Mr. Mauris Wijeratne, the Deputy Mayor for their presence this workshop. I believe that your strong commitment and advice made this workshop successful. I am also grateful to the participants and JOCV colleagues. Special thanks go to Natsuko Sekiguchi (JOCV Moratuwa). She is completing her JOCV assignment successfully and coming back to our country Japan. I also would like to request her efforts and achievements to be continued by the people of Moratuwa. (May I ask you now to kindly raise your hand and promise to continue with her work she has started with you? From the Audience: We promise to give our fullest cooperation!)

We could organise this workshop with the cooperation of Japanese Overseas Cooperation Volunteers (JOCV) who have been with us. I would like to convey such volunteer spirit, contribution, enthusiasm and dedication, so-called “Volunteerism”, to the people of Hyogo in Japan when I return to Kobe (my birthplace and home town). As you may know, volunteerism re-emerged in Japan after the 1995 Kobe Earthquake, and I also know that Sri lankan people did volunteer to assist their own people in the aftermath of Tsunamis.

I am confident that our communication and network are enhanced through a series of workshop sessions. Action plans are comprehensively drafted with various inputs and dialogue among us: Community Disaster Risk and Development should be jointly in the development planning process. All the information will be published as our joint publication, (Moratuwa municipality council, JOCV/JICA and UNCRD Hyogo) and disseminated worldwide (Sri Lanka, Japan, NY, Geneva etc.). Moreover, it is my understanding that programme participants are requested to attend the future monthly HCDC meetings at the MMC as the follow-up.

We will publish what we have discussed at this workshop in your language. Then the others in Sri Lanka too will be able to learn many things from the contribution you made to this workshop. We will also translate this report on the workshop into English. It will be sent to New York, Geneva, Japan and other countries of the world. I wish to see how you implement your action plan. Let us continue to work in friendship in the near future. Then, it will be a blessing not only to Moratuwa but also to Sri Lanka. Let us show the whole world what a precious and beautiful country Sri Lanka is in any difficult time.

Thank you.
Annexes

Annex A: Disaster Survival Information Pack

Part 1 – Lifesaving Items Check List for Disasters
Part 2 – Check-List for Flood and Disaster Prevention
The following is a list of items that will be useful in times of disasters and should ideally be prepared before emergencies so that one can run with these essential items and protect themselves. The list includes items that are considered sufficient for two adults to go through one day without major problems. Please use this as a starting point to prepare yourself against the unexpected and protect you and your family.
# Part I: Lifesaving Items Check List for Disasters

A quick guide to keep you prepared in case of emergency
Protect yourself and family from rain and storm induced disasters!
By the Disaster Reduction Institute (DRI) and UNCRD DMP Hyogo Office

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty.</th>
<th>For 2 Adults</th>
<th>Check</th>
<th>Recommendation, notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Bag</td>
<td>1</td>
<td></td>
<td>Find a sturdy, waterproof bag with straps to put the items in. Bag should be small enough to carry and run with!</td>
<td></td>
</tr>
<tr>
<td>Drinking Water</td>
<td>At least 6 litres</td>
<td></td>
<td>It is said that each adult needs 3L of water a day, but because of its weight, it is marked here to be half the daily necessity, making it slightly easier to carry.</td>
<td></td>
</tr>
<tr>
<td>Preserved/Dry Foods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flashlight</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candle</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighter/Matches</td>
<td>2</td>
<td></td>
<td>Lighters are more water resistant than matches</td>
<td></td>
</tr>
<tr>
<td>Battery operated radio</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work gloves</td>
<td>2 pairs</td>
<td></td>
<td>Cotton is more resistant to handling heat and leather is good for handling sharp objects</td>
<td></td>
</tr>
<tr>
<td>Towels</td>
<td>4</td>
<td></td>
<td>Towels are also useful for binding wounds and broken bones, cleaning, temporary underwear and a host of applications</td>
<td></td>
</tr>
<tr>
<td>Plastic bags</td>
<td>10</td>
<td></td>
<td>Useful for waste disposal, waterproof protection of valuables, documents, medicine, food and clothes</td>
<td></td>
</tr>
<tr>
<td>Medical Kit</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile gauze sheet</td>
<td>2</td>
<td></td>
<td>Placing over (cleaned first with disinfectant or clean water if possible – dirty water will cause infection) open wounds will prevent infection</td>
<td></td>
</tr>
<tr>
<td>Clean cloth/towel/sari</td>
<td>2</td>
<td></td>
<td>To bind wounds and support broken bones</td>
<td></td>
</tr>
<tr>
<td>Cotton swabs</td>
<td>2 rolls</td>
<td></td>
<td>To clean wounds</td>
<td></td>
</tr>
<tr>
<td>Bandages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterilizing alcohol</td>
<td>1 bottle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tweezers</td>
<td>1</td>
<td>Useful in pulling out glass shards, shrapnel, splinters, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mask/towel</td>
<td>2</td>
<td>To prevent inhalation of fumes, dust, or possible airborne diseases in case of abundance of decomposition or spillage of raw waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescription drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rope</td>
<td>1</td>
<td>At least 5m long is more practical for rescue or various pulling applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors and utility knife</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic sheet/tarp</td>
<td>For 2 perches</td>
<td>Temporary roofing or flooring solution – even if rain dissipates, if there are sick or injured individuals, lying on a cold, wet floor will worsen their condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra Blankets</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric/Duct Tape</td>
<td>1 roll</td>
<td>Strong tape useful for binding luggage, temporary housing, and even broken bones. Messages can also be written on the surface and left at appropriate areas to notify your whereabouts to family members.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marker</td>
<td>1</td>
<td>To leave messages to family members and other people you need to contact in case of relocation or evacuation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note book and pen</td>
<td>1 set</td>
<td>Note down important information such as contact numbers, evacuation points, and also information during disasters such as the current condition of injured family members, when and how they got injured, and what medicine was administered if any. Such information will greatly help doctors make appropriate decisions and save lives.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While not necessary the best solution, especially during normal times, plastic bags are essential in going to the toilet and disposing the waste in a safe place. Directly defecating or urinating in flood waters raises the chances of spreading air and waterborne diseases and will cause great problems after the water recedes.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whistle/Noise Makers</td>
<td>Helps direct rescuers</td>
</tr>
<tr>
<td>Crowbar, car jack</td>
<td>Helps free survivors</td>
</tr>
<tr>
<td>Footwear</td>
<td>Having at least a pair of slippers by the bedside can make escape safer and easier</td>
</tr>
<tr>
<td>Mobile phone, charger</td>
<td>Even if the other end is unavailable, messages can be left sometimes</td>
</tr>
<tr>
<td>Sanitary goods (including toiletpaper, female products, sanitizer)</td>
<td></td>
</tr>
<tr>
<td>Protective gear (helmet, gloves)</td>
<td></td>
</tr>
<tr>
<td>Infant and baby necessities</td>
<td>- Powdered milk food</td>
</tr>
<tr>
<td></td>
<td>- Diapers and change of clothes</td>
</tr>
<tr>
<td>Clothing, etc.</td>
<td>- Underwear</td>
</tr>
<tr>
<td></td>
<td>- Rain gear</td>
</tr>
<tr>
<td>Necessary Documents</td>
<td>- IDs (Drivers license, alien registration, student, etc.)</td>
</tr>
<tr>
<td></td>
<td>- Insurance card</td>
</tr>
<tr>
<td></td>
<td>- Bank statement</td>
</tr>
<tr>
<td></td>
<td>- Proof of residence, land certificate</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
</tr>
<tr>
<td>Elderly should keep close at hand:</td>
<td>- Prescription drugs</td>
</tr>
<tr>
<td></td>
<td>- Walking/moving aid</td>
</tr>
<tr>
<td></td>
<td>- Extra supplies of health care products including oxygen</td>
</tr>
<tr>
<td></td>
<td>- Numbers and address of suppliers</td>
</tr>
<tr>
<td></td>
<td>- Own address and next of kin contact</td>
</tr>
<tr>
<td></td>
<td>- Noise making implements such as whistles to call help</td>
</tr>
<tr>
<td>Plastic and aluminum wraps</td>
<td>Insulation, dishware substitute, waterproofing, radio antenna, etc.</td>
</tr>
<tr>
<td>Other useful goods</td>
<td></td>
</tr>
<tr>
<td>Some clean old clothes, newspapers</td>
<td>Emergency substitutes for a variety of applications including bandages, insulation, fuel, warmth</td>
</tr>
<tr>
<td>Portable grills and fuel</td>
<td></td>
</tr>
<tr>
<td>Car batteries</td>
<td></td>
</tr>
</tbody>
</table>

This additional list has been compiled and modified from an original version produced by the Japan "Bousaishi" Association
Part II: Check-List to protecting yourself from

Flood Related Disasters

A quick guide to keep you prepared in case of emergency
Protect yourself and family from rain and storm induced disasters!
By the Disaster Reduction Institute (DRI) and UNCRD DMP Hyogo Office

1. A cyclone is approaching/monsoon is here! It’s been raining heavily for days!
The river is rising every day! What to do?

□ Outside your home:
  1. Watch out for objects that are not tied down and might fly away or
     swept in your direction. Tie them down if you can!
  2. If possible, shutter or board up your windows and place sand filled
     bags (having them prepared before the flood is better) in front of the
     doorway.

□ Inside your home:
  1. Move your valuables and food and water supply away from/higher
     than areas vulnerable to rising waters, wind and rain.
  2. Keep in a handy, dry place (preferably in a sealed plastic bag) some
     emergency items such as flashlights, matches, extra lamp, first aid
     goods (bandages and prescription medicine), radio, documents and
     valuables.
  3. See the “Disaster Survival Information Pack, Part 1, ‘Life Saving Items’
     for tips on what kind of items might be useful to have in times of
     disaster.

2. Evacuation has become necessary! Some precautions.

□ Basic disaster prevention
  1. Evacuate as soon as possible to higher solid ground (e.g. away from
     the bottom of the hill or waterfront). On foot is preferable as cars can
     be swept away and sink, trapping all passengers.
  2. See if the radio or local authorities can provide information.
Precautions when the winds or water is too high

1. The “critical water level” when walking becomes potentially fatal or when one cannot see enough to prevent accidents is considered to be 70cm for men and 50cm for women, but any level of flooding may be dangerous for children.

2. When possible, use ropes for evacuation if it can be tied down to a solid base.

3. Watch out for gutters and open manholes!

DO NOT ATTEMPT TO:

4. Move by car or three wheeler

5. Use elevators

6. Go into underground passages

Flooding and/or blackouts may occur and trap victims

3. After the storm/flood/winds...

   Don’t let down your guard:

1. Water may not have receded, slopes may have become weak, dams may burst and sewage covers may have been swept away.

2. Lifeline infrastructure may be down: electricity, water, telephone.

3. Your house might be damaged. Evacuation to a shelter might be necessary.

Help each other after disasters:

1. Watch out for fallen power lines on the ground and in water!

2. Wear protective gear when handling debris such as long sleeve pants and shirts and gloves. You may catch contagious diseases and suffer fatal infection from cuts while handling debris or by coming in contact with bodies and other deteriorating organic matter such as food and garbage.
4. Prepare against disasters from before it occurs.

- Having a sturdy water proof emergency bag ready:
  1. In the emergency bag first aid items, prescription drugs, drinking water, preserved foods, change of clothes, flashlight/lamp, matches, radio, and gloves and ropes. Don’t overload – you have to be able to run with it!

- And what is an essential item for you? (e.g. cane, diapers, milk, etc.)

5. Find out information before the disaster!

Different types of information:
- TV, radio, and web-based weather reports
- Your regional/district government’s warning system, evacuation plans and directives
- Your local hazard map including layout of your neighborhood
- Know what risks you face and what precaution to take!
Types of weather warnings (In Japan)*:

**Alarm (Critical/imminent large scale disaster)**
- Severe winds, snow, rain, blizzard, high tide, flood, very high waves, tsunami

**Warning (High possibility of disaster prone conditions)**
- Heavy rainfall, snow, high winds, extreme dryness (fire warning), fog, lightning, avalanche, high tide, flood, high waves

**Information (Upcoming possibilities of disasters)**
- Approaching typhoon/cyclone, low pressure (storm gathering), heavy or light rain and snow, long-term rain/snow, low humidity, low sunlight, etc.

*The standards for issuing warnings differ depending on the region, type of geography, and typical weather conditions. In Hyogo Prefecture, for example, a severe rain/flood alarm is issued when: In one hour rains exceed 50mm or in 3 hours more than 100mm.

**What is your local standard for heavy rain and flood alarm?**
(Local government should be equipped to warn its citizens about severe weather and disaster risks.)
**My disaster management memo:** (Talk it over with your family!)

- The nearest safe place to run with higher and solid ground:

- In case of separation, we will meet up at:

- In times of disaster, my responsibility is to:

- Emergency contact number (self, relative, rescue, etc.):

- In case of separation, I will leave a message at:
Annex B: Volunteer supporters (JOCV) of the Workshop

Nobuto Ito
Field: Community Development, Badulla
Assignment:
- Living environment improvement of the slums;
- Solid Waste Management in Badulla;
- Income improvement for low income inhabitants.

“I am used to Sri Lankan culture and spend my time here happily every day!”

Arisa Kato
Field: Community Development, Ratmalana
"After finishing M.A. in Graduate School of International Development, Nagoya University, I have been working as a community development officer for the Lunawa Environment Improvement & Community Development Project in Ratmalana since August 2006."

Maiko Kobayashi
Field: Community Development
“I work with the Lunawa CEI & CDP and work to empower community groups, promote improvement of living environments, and connecting community members with public service and offices through grassroots initiatives. Everyday I am getting power from the energetic and active ladies of my communities.”

Matsumoto Ryohei
Field: Community Development, Nurwara Elya
Assignment:
- Mobilization of communities
  1) Formation of community based organizations
  2) Formation of Children’s society
  3) Provide administrative mobile service to communities
  4) Making arrangement of connections between communities and governmental service/ other organizations
- Empowerment of women saving groups introducing micro financial NGOs
- Conducting awareness programs on environment (Solid Waste Management)
- Bilateral cultural exchange (ex; Japanese language classes)
- Making arrangements of community contracts (ex; construction of toilet facilities/drainage)
Natsuko Sekiguchi
Field: Community Development, Moratuwa
During her total of three years in Sri Lanka, her work has included the “Punch Saviya” Children’s Day programme, support for Tsunami affected communities and promoting dialogue with various government and non-government stakeholders, capped by the conceptualization and convening of this workshop. She was based at the Moratuwa Municipal Office.

Mai Sekine
Field: Community Development, Sri Jayawardenapura
Working on village development projects at the Kotte Municipal Office in the capital city.

Sanae Takahashi
Field: Community Development
The objective of my activities is to promote social participation opportunities of persons with disabilities through Sri Lanka National CBR (Community based rehabilitation) program. Especially, I try to do it by decreasing poverty. I'm attached to decreasing poverty section of District Secretariat Anuradhapura. Past experience with working as a consulting staff at a franchise photo shop is contributing to my work.”

Satoko Tsutsumi
JOCV Senior Staff
Attached to Ministry of Housing and Construction
Programme officer of JOCV Programme on Community Development for Urban Poor
About the UNCRD Disaster Management Planning Hyogo Office

The United Nations Centre for Regional Development (UNCRD) was founded in 1971 in Nagoya, under an agreement between the United Nations and the Government of Japan. UNCRD has been striving to achieve the following objectives:

- Serve as a training and research centre
- Provide advisory services
- Promote global knowledge-sharing
- Encourage international cooperation among nations, regions, and organizations

In 1999, the UNCRD Disaster Management Planning Hyogo Office was established in Kobe, where the Great Hanshin-Awaji Earthquake had claimed the lives of more than 8,000 people in 1995. The Hyogo Office focuses on various disaster management initiatives through multi-lateral collaboration at an international level while utilizing the momentum created during the UNIDNDR 1990-99 (United Nations International Decade for Natural Disaster Reduction). It promotes effective disaster mitigation, focusing on key elements of self-help, cooperation, and education through activities such as:

- (a) research projects;
- (b) training and capacity-building;
- (c) a series of international workshops; and
- (d) advisory services.

United Nations Centre for Regional Development
Disaster Management Planning Hyogo Office

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