Review of

Opportunities for Public Private Partnerships in Cambodia

ISED Series
September 2005

2

"priority on development of the small-scale enterprise sector as an important means for creating new employment opportunities"

Ministry of Industry, Mines and Energy
Department of Small Industry & Handicrafts
Phnom Penh, Cambodia

International Labour Organization

First published 2005

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Review of Opportunities for Public Private Partnerships in Cambodia
Phnom Penh, International Labour Office, 2005

Printed version: ISBN 92-2-117931-1

ILO Cataloguing in Publication Data

ILO publications can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland or ILO Subregional Office for East Asia (SRO-Bangkok), 10th floor, United Nations Building, Raddamnoen Nok Avenue, P.O. Box. 2-349, Bangkok. Catalogues or lists of new publications are available free of charge from the above address. Or by email: pubvente@ilo.org

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Printed in Cambodia by Sunway Publishing Shop

INTERNATIONAL LABOUR ORGANIZATION

REVIEW OF OPPORTUNITIES FOR PUBLIC PRIVATE PARTNERSHIPS IN CAMBODIA

A Report on:

The Potential Public Private Partnerships for Improved Services and Job Creation in Cambodia

Purusottam Man Shrestha, ILO Consultant
September, 2005

Foreword

Improving the life of urban communities is a challenging goal. Creating decent work for all is an ambitious goal as well. The absence of basic services such as waste collection, water supply and energy provision, coupled with limited employment opportunities are driving individuals and communities to create their own solutions to overcome these challenges. Local governments and their partner organizations can turn these often desperate initiatives into real opportunities for wealth creation and better livelihoods. There is an expanding market of Public Private Partnerships (PPP) worldwide that deliver basic services to urban residents. The involvement of local entrepreneurs and community groups in these service delivery mechanisms can lead to more and better basic services for a reasonable, more affordable price.

The point of engaging small enterprises in local service provision is not about whether, but how this should be done. Informal service markets are developing rapidly in almost all urban centers in poor countries. Growing cities, persisting poverty and enterprising communities do not leave municipal authorities much of a choice. By recognizing and appreciating the viable and valuable contribution local service providers make to the sustainability of human settlements, municipal authorities can leverage and build off existing initiatives and expand the provision of services.

The Integrated Small Enterprise Development (ISED) Project of the International Labour Organization (ILO) promotes the use of Public Private Partnerships in four service sectors in Cambodia: urban waste collection, water supply, energy provision and infrastructure. By encouraging the involvement of small and micro enterprises in the delivery of these 'public' services, the project hopes to contribute to the improvement of services and increased employment opportunities. Given the unsatisfactory coverage and quality of basic services in Cambodia, and the pressing demand for job creation, PPP is a practical framework for engaging entrepreneurs and community groups in the improved delivery of selected services. These forms of public-private partnerships are a win-win situation for all: they reward the entrepreneurs for their risk taking and investment, they create good jobs in urban areas with high unemployment or underemployment, and they improve living & working standards in communities as basic needs are met.

This PPP study hence aims to identify the sub-sectors and geographical areas where major potential for PPP exists in present day Cambodia. The ILO hopes that the recommendations put forth in this study are useful to all stakeholders interested in promoting both business development and creative approaches to expanding basic service provision to underserved households and communities.

Christine Evans-Klock — September 2005
Director
Sub Regional Office – Bangkok
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Acknowledgement

In acknowledging the various people that have contributed to the completion of this study, I thank Mr. Bas Rozemuller, CTA, Integrated Support to Small Enterprises in the Mekong Delta Countries, ILO/Cambodia for making all necessary arrangements for my field visits in Cambodia; Mr. Sok Somith, National Program Coordinator, for assisting me with the interviews, interpretation and translation; and Ms. Yi Sothea, Admin/Secretary for her assistance.

I would like to extend my sincere gratitude to Mr. Kees Van der Ree, ILO – In Focus Programme, SEED, ILO/Geneva for his continuous support throughout the project.

Special thanks are due to all the officials of the various ministries, departments, municipalities, public utility authorities, development agencies, I/NGO, private organizations and associations, commune council members, community groups and all other people and organizations for their time, knowledge and inputs to the development of this study.

I also thank Mr. Roshan Khanal, Mr. Kayeswar Man Sulpya for providing me necessary information and Mr. Gaurav Man Sherchan for assisting me in the production of the report.

Purusottam Man Shrestha
PPP Consultant
September, 2005

Abbreviations and Acronyms

BB	:	Battambang Province
BOO	:	Build Own Operate
BOT	:	Built Own Transfer
DOE	:	Department of Environment
DPWT	:	Department of Public Work & Transportation
EDC	:	Electricité du Cambodge
GWh	:	Giga Watt - Hour
ILO	:	International Labour Organization
IMR		Infant Mortality Rate
INGO	:	International Non Governmental Organization
IPP	:	Independent Power Provider
ISSE		Integrated Support to Small Enterprises
KGC	:	Kampong Cham Province
kWh	:	Kilo Watt - Hour
LEIE	:	Local Employment in the Informal Economy
Mi	:	Million
MOE	:	Ministry of Education
MOEF	:	Ministry of Economy and Finance
MPP	:	Municipality of Phnom Penh
MPWT	:	Ministry of Works and Transport
MRD	:	Ministry of Rural Development
MW	:	Mega Watt
NGO	:	Non Governmental Organizations
NWRD	:	North Western Development Project
PP	:	Phnom Penh
PPP	:	Public-Private Partnerships
PPWM	:	Phnom Penh Waste Management
R	:	Riel
RGC	:	Royal Government of Cambodia
SHV	:	Sihanoukville
SRP	:	Siem Reap Province
SWM	:	Solid Waste Management
TKO	:	Takeo Province
UFW	:	Unaccountable for Water
WS	:	Water Supply
WSBB	:	Water Supply Battambang
SRWS	:	Siem Reap Water Supply

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EXECUTIVE SUMMARY

The ILO Integrated Small Enterprise Development Project aims to support Public-Private Partnerships (PPPs) understood as the involvement of small and micro enterprises in the delivery of municipal services in the urban waste, water, energy and infrastructure sectors, as a means to improve access to services, increase employment opportunities and alleviate urban poverty.

This study was conducted to make a situation analysis of the present service delivery systems, identify potential PPPs that will create greater access and generate employment opportunities for the urban poor, and review the existing public procurement system of Cambodia.

The limited resources of the government and supply-demand gap in urban basic service delivery have given rise to the involvement of the private sector, formally and informally. Their efforts have, however, not been able to achieve their true potential and indicate an urgent need to streamline individual efforts through facilitation and assistance at both policy and implementation levels.

In the energy sector, despite increase in the production capacity of government owned production units and Independent Power Providers (IPPs) and plans for increase in supply through internal electricity generation and imports, there is a big gap between supply and demand. As the reach of Electricité du Cambodge (EDC) grid is limited to city core areas, small and micro enterprises are involved in production and distribution through privately owned small generators while some enterprises simply buy electricity from EDC at bulk and redistribute it to the community with tariffs as high as 50 cents / kWh. The tariff rates are high not only due to transaction commissions but also due to production and distribution loss, lack of economies of scale, multiple layers of distribution, etc. There are some initiatives found taking place towards alternative energy sector such as bio-gas, bio-mass including improved stove and charcoal out of urban waste.

Regarding Solid Waste Management (SWM), the situation in Phnom Penh was found to be relatively better than in Battambang and Siem Reap although the responsibility of SWM has been contracted to private companies in all three cities. The private companies in the three cities have limited their service coverage to the city core areas. In Phnom Penh CINTRI (Cambodia) Ltd. was found to have a more extensive and better service coverage due to its human and financial strength and partnership with community groups in primary collection. The private contractors in Battambang and Siem Reap are weak in human, financial and technical resources and are also not working with the local community. Though a lot of waste is being collected, recycling and composting is negligible. There is a lot of scope for income generation and other benefits from the utilization of solid waste.

Similar to the case of electricity, water authorities in all three cities were found to have limited outreach due to which the peri-urban areas have to rely on private contractors who supply water at high prices. The water production capacity and distribution system is being rehabilitated and extended in all three cities.

The government has committed in its "Rectangular Strategy" to rehabilitate all national and primary roads (1,998 km) by the end of 2007 and reconstruct an additional 1,850 km of roads.

The urban roads and drainage infrastructure are however far from adequate in length and in quality. With only US$5-10 million allocated for road maintenance, it is felt that the traffic conditions in the cities will become unmanageable if maintenance of urban roads is not given priority. Bad road conditions along with poor drainage systems have resulted in traffic congestion, high transportation costs and increased traffic accidents.

While the government has a provision for community groups to participate in infrastructure projects, there is no provision of preferential treatment for local contractors and community groups.

It can thus be concluded that various forms of PPPs in Cambodia are already underway but they need policy support and implementation level interventions through facilitation, assistance and support to promote a sustainable and systematic form of PPP that is transparent, accountable and pro-poor focused.

On the basis of the first assessment, it is suggested that ILO proposes intervention strategies at two levels – 1) creating an enabling environment with policy level facilitation, and 2) implementation at the local level.

The ILO can develop support program such as orientation campaigns on pro-poor PPP, conduct training programs on pro-poor modality and process, and facilitate the introduction and training of Targeted Procurement System to the stakeholders. It is also recommended that ILO conduct a comprehensive feasibility study on potential PPPs as well as feasibility studies for identified projects.

The potential PPP projects identified are - partnerships in electricity distribution, networking of micro-electricity enterprises, recycling and composting of SW, community partnering in primary waste collection, community partnering in water distribution and contracting through targeted procurement system in water, road and drainage projects.

In the short term, it is advised that ILO coordinates with projects that are going to be implemented in the near future to explore immediate collaboration opportunities. ILO can also develop linkages and extend support to chambers of commerce, initiatives like Enterprise Development Initiatives (EDI) and to organizations supporting PPP and employment generation activities for small and micro enterprises. It is also suggested that ILO supports government departments, especially the Department of Transport and Public Works, and provincial municipalities to promote the concept of pro-poor PPP.

It is further suggested that ILO liaison with development agencies and local management and training institutes to support the ILO initiative to create a synergistic effect. The role of ILO is key in assisting and facilitating the government, development partners and other stakeholders in identification, facilitation, coordination and more importantly, facilitating partnerships and capacity building of the stakeholders for the successful implementation of PPP that is pro-poor focused and aimed at generating employment for the poor.

1. Introduction

1.1 Background

After experiencing economic and political turmoil for almost three decades, the economy of Cambodia is now growing rapidly. The long-term development of the economy after decades of civil war remains, however, a daunting challenge.

In the development process, much of the investment has largely been focused in the urban areas, which comprise 17% of the 12.5 million population of Cambodia. The population of Phnom Penh, the capital of Cambodia, has been growing at a rate of 15% per annum in the last three years. The population of Cambodia mainly lives in the rural areas and has a high underemployment rate, as 74.4% of the population relies on agriculture. The recent growth in the economy largely centered in urban towns, which has motivated the rural poor to migrate to the cities in search of better employment opportunities. The trend of urban migration has poised a two-fold problem to the local authorities: limited resources of municipalities due to which public utility agencies have not been able to keep up with the rapid growth in the demand for basic services, and demand for quality jobs. The problem is even graver for the urban poor as the municipalities are not able to provide them with even the basic public services - particularly to low-income households - due to legal, financial, political and institutional constraints.

In response to the constraints faced by the local authorities in most developing countries, the concept of Public Private Partnership (PPP) has been seen as a viable development model that can complement the development efforts of the government. PPP arrangements in the developed countries were largely centered on the government and large corporations, which increased efficiency in services but left out a large section of society – the urban poor. The trend in the developing countries has however been somewhat different as PPP arrangements have been by and large pro-poor focused which has not only given the poor greater accessibility to basic services but has also helped in generating much needed financial support through increased employment opportunities.

1.2 Project Background

The ILO Integrated Small Enterprise Development Project aims to support Public-Private Partnerships (PPPs) by involving small and micro enterprises in the urban waste, water, energy and infrastructure sectors. By promoting the involvement of small and micro enterprises in the delivery of services, traditionally being delivered by the public sector, the project hopes to contribute to improved services and increased employment opportunities. PPPs have to be sustainable in the sense that the business opportunity created will provide the enterprises with a sustainable source of income.

At the same time they have to alleviate poverty, meeting the needs of the poor urban population at an affordable price.

During the first phase of the project, a training programme "Local Employment in the Informal Economy" (LEIE) was designed and tested in Cambodia. This training programme aimed to capacitate both local governments and local private sector organizations to enter into partnerships for cost-effective and employment-intensive service delivery. During the second phase, the project aims to use the training materials to support the establishment of PPPs in Phnom Penh (PP), Battambang (BB) and Siem Reap (SR) Municipalities. The project will act as a catalyst for the creation of PPPs, offering training and advisory support to identified stakeholders, but not investing directly in the PPPs.

Given the unsatisfactory coverage and quality of basic services, and the demand for job creation, PPP is a practical framework for engaging small enterprises and community groups in the improved delivery of selected services. The public services covered in this study are drinking water, drainage, waste collection, energy and other basic infrastructure services. The study thus aims to identify the sub-sectors and geographical areas where major potential for PPPs exists.

1.3 Objectives of the Study

The present study has the following objectives:

- To conduct a situation analysis of the present service delivery system
- To identify the potential PPPs for micro enterprises, individual entrepreneurs and community-based organizations that will create greater access and generate employment opportunities for the urban poor
- To identify the benefits from potential PPP projects for the stakeholders, and more so, for the urban poor.

The study addresses the following issues for the waste, water, energy and infrastructure sector:

- Current service system in place
- Current PPP cases and technical assistance being provided, if any
- Problems and scope for improvements in basic urban services.

1.4 Scope of Work

The study makes an assessment on the potential for sustainable PPPs in the urban waste, water, energy and infrastructure sector in Cambodia. It also identifies business opportunities for small and micro entrepreneurs or their associations in public service delivery.

For each service area where an opportunity for a PPP exists, the study identifies opportunities as well as current and potential stakeholders. For each of the potential PPPs, it presents an overview of the potential benefits for the parties involved as well as the potential threats and impediments.

A broad assessment of the current procurement regulation in Cambodia, namely Implementation Rules and Regulations Governing Public Procurement (IRRPP) and Commune-Sangkat Fund Project Implementation Manual (PIM) is made and an analysis on the possibility for the involvement of small enterprises and community groups has been carried out as well.

1.5 Methodology

The study is based on both secondary and primary research. The secondary data was collected from public sector agencies responsible for service delivery in the waste, water, energy and infrastructure sectors in Phnom Penh, Battambang and Siem Reap. A checklist for the secondary information required was developed and the secondary data was collected on the basis of the checklist.

Further, qualitative in-depth interviews were conducted among the policy makers, organization heads of the municipalities, public sector agencies, private operators, NGOs, business associations, potential private operators, local entrepreneurs, community organizations, etc working in the four sectors. Focus group discussions were also held with present users of the various services and disadvantaged communities. Qualitative in-depth interviews and focus group discussion were conducted, using an interview guideline that outlined the list of information areas to be covered.

Based on the information collected, a situation analysis of the four individual sectors was made from a pro-poor PPP perspective. On the basis of the situation analysis and suggestions from the stakeholders, the PPP potentiality for each of the sector has been developed.

1.6 Area of Coverage

The study covered waste, water, energy and infrastructure sectors in Phnom Penh, Battambang and Siem Reap Municipalities of Cambodia. The study covered the following sub-sectors:

Table 1: Area of Coverage

Waste	Water
o Solid waste collection	o Piped Drinking water
o Recycling	o Non-piped Drinking water
o Composting	
Energy	***Infrastructure***
o Electricity	o Road
o Alternative energy	o Drainage and sewerage

1.7 Fieldwork, Analysis and Reporting

The fieldwork was conducted from 6 December 2004 to 16 December 2004. A total of 42 interviews/meetings were conducted. Minutes for each meeting were prepared, on the basis of which a detailed analysis was made. The findings of the report are thus based on the interviews, focus group discussions, personal observations and available secondary data.

1.8 Limitations of the Study

- This review is a first scan to identify existing PPPs and explore the potentialities for new PPPs in the three municipalities, with the understanding that a much more detailed analysis of costs, benefits, risks, legal and capacity constraints will be carried out at a later stage.
- This study has also not made the review of the work of the existing PPPs in terms of customer satisfaction which is very important and needs a separate exercise. This is to be carried out as a follow up of this study.
- The findings of the study have been based on available government and non-government publications, information provided by the key informants in meetings and interviews and personal observations only.

2. PPP in Cambodia

The modern Cambodia, in pursuit of socio-economic development is following a free market economy, decentralization and deconcentration. As in other developing and developed nations worldwide, the Royal Government of Cambodia (RGC) recognizes that decentralization at the grass root level is not only important for strengthening democracy but also instrumental to foster participatory development and improve quality of public services.

The government, with commitment in the National Poverty Reduction Strategy (NPRS) and the ‘Rectangular Strategy’ has shifted or is in the process of shifting responsibilities, power and resources from line ministries at the central level to local levels. In the process, the government has also given high priority to capacity building of the local authorities to ensure they are able to adequately manage the newly added responsibility of managing their own development needs.

Recognizing the private sector as the 'engine for growth' in both the NPRS and the Rectangular Strategy, the government has explicitly stated that NGOs, private sector and civil society will be encouraged to be involved by mobilizing local resources for infrastructure development and service delivery through partnerships and participation. To develop a conducive climate for involvement of the private sector in infrastructure development and public services, the government has expressed its commitment to continue to support private investments in development of transport and telecommunications infrastructure systems and development in energy and electricity sectors (Rectangular Strategy) in its third mandate.

With the commitment of the government, the private sector has already started working in infrastructure development and providing public services in energy, infrastructure and waste sectors, formally and informally on different scales. While the large-scale projects have been given legal recognition, a lot of local level private sector initiatives have yet to be recognized and brought into the formal channel and provided with a more focused direction.

On a large scale, four Independent Power Producers (IPP) are already supplying electricity to Electricite' du Cambodge (EDC) under the Power Purchase Agreement (PPA), which has greatly assisted EDC in meeting the power needs of Phnom Penh. The government has also been able to construct three toll highways with the investment of the private sector under the Build Operate and Transfer (BOT) arrangement. In the Solid Waste Management (SWM) sector, a Private company has undertaken the responsibility of managing the solid waste in Phnom Penh for a period of 50 years. The company has also successfully partnered with the community organizations to increase the coverage of their service and provide more employment opportunities. The municipalities in Battambang and Siem Reap have also already outsourced SWM services to the private sector for quite a while now.

In the unorganized sector, small and micro enterprises have been involved in production and/or distribution of energy in small pocket settlements, supply of drinking water to households using their own distribution network or simply transporting it through water tankers. These are some examples of PPP that are already taking place. The active participation and interest of the private sector in infrastructure development and public service delivery, both large and small, is an indication that PPP has great potential in Cambodia.

While the private contractors have been able to fill in the supply demand gap that has not been met by government owned public utility authorities, the poor people are having to pay unreasonably high tariffs in exchange for available services. The present situation has also largely occurred due to lack of appropriate government legislation with respect to PPP. The government as of yet has not formulated a policy on PPPs and amended other supporting policies though it has already recognized partnerships with private sector, NGOs and the civil society. While PPP is already underway in Cambodia, there is a need to systematize the process with participation, transparency and accountability and to ensure that it is pro-poor focused. The Governing Principles of PPP like Transparency, Accountability, Participation, Equity and Empowerment, Competition and Contestability and others should be followed in the process of implementing the PPP projects.

3. Energy Sector

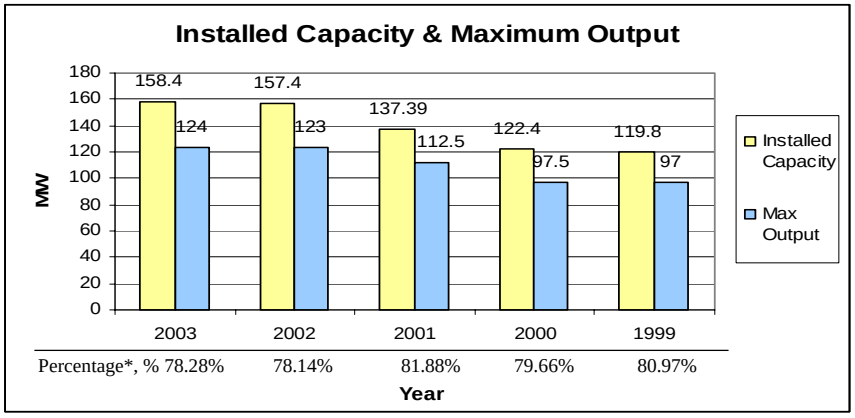
3.1 Situation Analysis

3.1.1 Overview

By the Royal Decree in March 1996, Electricité du Cambodge (EDC), a state-owned limited liability company is the sole authority to generate, transmit and distribute electric power throughout Cambodia. Electric utilities in 6 provincial towns have been integrated in EDC while the power utilities of other provinces still remain under the control of the Ministry of Industry, Mines and Energy under joint control with provincial authorities. EDC currently has 184,918 customers, up from 103,473 in 1999[1].

At present, less than 15% of the households in Cambodia have access to electricity (urban 53.6%, rural 8.6%) and the per capita electricity consumption is 45 kWh per annum, lowest among East Asian countries. The total installed capacity of EDC is 158.4 MW with peak power output of 124 MW (2003), fragmented into 24 isolated power systems centered in provincial towns and cities.

Figure 1: EDC Installed Capacity & Maximum Output, MW



Source : Electricité du Cambodge, Annual Report 2003
* The ratio of maximum output to installed capacity

The major consumption of electricity is centered in Phnom Penh, which accounts for four-fifths of the total electricity supplied by EDC while the provincial towns account for the remaining one-fifth of the total electricity consumption. The total installed capacity for other provincial towns is only 34 MW with a maximum demand of 23 MW.

[1] Draft Annual Report 2003, Electricité du Cambodge

Table 2: Power Demand Forecast

Year	2004	2006	2008	2010	2012	2014	2016
Power, MW	273	331	404	477	558	651	746
Energy, GWh	1036	1215	1454	1700	1968	2292	2634

Source: EDC/Corporate Planning and Projects Department

The supply requirements are projected to increase on an average by 18% per year over the next 12 years, and the peak load is expected to reach up to 746 MW in 2016 with majority of the growth coming from Phnom Penh.

As EDC is not being able to meet the growing demand of electricity, it developed a policy of off grid power supply and is also purchasing electricity from IPPs under the PPA at an agreed price of 8.7 cents per kWh. Under PPA, three private companies are already supplying electricity to EDC in Phnom Penh namely: Cambodia Utility Pte. Ltd., Jupiter Cambodia and Cambodia International Hydropower Development Co. Ltd.

By 2007, Cambodia will also be importing electricity from Vietnam. The costs of electricity at the border with Vietnam is estimated to be 6.02 cents per kWh and would be available at 8.5 cents per kWh, after addition of EDC costs. Present production cost of EDC is 12.5 cents per kWh and the official tariff is between 9 cents/kWh in Phnom Penh and 24 cents/kWh in Battambang, among the highest in the ASEAN region. As EDC does not provide access to squatters and other areas where the poor community live, the poor are forced to buy electricity from private contractors who buy electricity at 650 Riels / kWh (EDC tariff for residents using >100 kWh) and resell it to the people at a much higher price. There were private contractors found to be selling a minimum of 250 kWh and maximum of 5000 kWh per month.

Table 3: Official Electricity Tariffs of EDC (Residential)

Unit	Riels/kWh	US$/kWh
PHN		
* 0-50 kWh	350	9 Cents
* 51-100kWh	550	14 Cents
* >100 kWh	650	16 Cents
SHV	500	13 Cents
KGC (Flat Rate)	850	21 Cents
TKO (Flat Rate)	900	23 Cents
BBG (Flat Rate)	960	24 Cents
BVT/MMT/PKK/KGT (Flat Rate LV)	650	16 Cents
BVT/MMT/PKK/KGT (Flat Rate MV)	500	13 Cents

Source: Annual Report 2003, Electricité de Cambodge,

Besides the fact that the purchase price of electricity from EDC was high and the private contractors were charging a service fee on top of that, big losses in the distribution system on part of the private contractors were found to be further adding to the already high tariff. As a result, the poor who are supplied with electricity under such arrangements have to pay even higher tariffs than the wealthier customers. In an effort to provide electricity to the poor sections of the society, EDC has recently introduced a policy that allows Rural Electricity Enterprises (REE) to get power supply from the EDC grid and to distribute electricity to the areas in the outskirt of the city within 40 km from the main EDC grid.

EDC currently employs 1,755 staffs (2003) of which 23% are women. Of the total labor force, 27.8% are unskilled and high school graduates.

Rural Cambodians still rely on traditional sources of energy such as coal and wood energy; fuel wood meets 84% of the primary energy consumption and is likely to be an important source of energy for the coming years as well. The use of fuel wood for energy is not confined only to rural areas but is being used also in the urban areas and for commercial and industrial purposes also.

3.1.2 Municipality of Phnom Penh

The city of Phnom Penh is the major electricity consumer of Cambodia as it accounts for 81.5% of the country's electricity consumption. The city has an installed capacity of 124 MW and a maximum output of 101 MW. Of the total installed capacity of 124 MW in Phnom Penh, the three IPPs under the PPA supply 63 MW.

Table 4: Electricity Production in Phonm Penh

Sn.	Plant	Capacity in MW
1.	C2	18 MW
2.	C3	15.4 MW
3.	C5	2x5 MW
4.	C6	3x6 MW
5.	IPP - I: Cambodia Utility Pte. Ltd.	5x7 MW
6.	IPP- 2: Jupiter Cambodia	10x1.5 MW
7.	IPP - 3: Cambodia International Hydropower Development Co. Ltd.	2x6 MW

The progressive tariff rates that charges 9 cents/kWh for consumers using less than 50 kWh and 16 cents (650 Riels) per kWh for consumers using more than 100 kWh aims to benefit the poor. The poor people without access to the EDC grid, however, end up paying a higher price, as they have to purchase it through a private contractor in their locality. The private contractors purchase electricity from EDC at 650 Riels per kWh and resell it to the local community at rates ranging from 900 Riels to 2000 Riels per kWh. The purchase price of electricity to the private contractors itself is high as they have no formal contract with EDC and thus have to pay 650 Riels because they end up consuming more than 100 kWh from the EDC grid.

EDC in Phnom Penh has 140,918 customers (approximately 59% of the households) who consume 88.45% (478.1 GWh) of the total energy sales in Cambodia (540 GWh). Almost half (47.5%) of the total energy sales in Phnom Penh come from residential customers, 23.09% from commercial sources and 12.44% from Industrial purposes. The PP system has a loss of 12.7% (2003), down from a massive 40.8% in 1995[2]. Though PP consumes three fourths of the total electricity generated in the country, there is still a high usage of charcoal and fuel

[2] Draft Annual Report 2003, Electricité du Cambodge

wood brought from peri-urban and surrounding rural areas which causes serious environmental damage to the places from where it is brought from.

The Cambodia Fuel Wood Saving Project (CFSP), a European Union (EU) project, has developed improved stoves (different stoves for urban and rural) that not only help replace the use of fuel wood, but also use less charcoal and are being used by households and small industries, such as the palm sugar industry.

At present, there are nine active urban stove producers and seven active rural stove producers (only in one province – Kompong Chnnang, where there is a good quality of clay required for rural stove). The project has focused on imparting the stove making skills to traditional stove makers only. The urban stoves cost US$3.5 and the rural stoves cost US$1; 3,000 urban stoves and 1,000 rural stoves are sold every month. According to CFSP, there is a high supply and demand gap, as they have been able to meet only 25% of the total demand. The program has also trained the traditional stove producers in management, marketing, bookkeeping, etc. CFSP has also initiated the production of charcoal out of urban waste (sugarcane and coconut cell waste) in collaboration with Community Forestry Program. They are also promoting brickets made out of urban waste, very suitable for quick cooking in urban areas.

3.1.3 Battambang Municipality

The total installed capacity of EDC in Battambang is 6.16 MW and has a maximum output of 5 MW. Of the total 30,372 households in the urban areas of Battambang, EDC covers only 14,116 customers (2003), up from 10,183 in 2002. As EDC supplies electricity to only the core city area, the remaining 54% of the households in and around the surroundings areas are either supplied by private power suppliers through independent generators or have no access to electricity.

While the highest electricity tariff rate applicable for residential purpose in Phnom Penh is 650 Riels per kWh, EDC charges a flat rate of 960 Riels per kWh in Battambang. As 54% of the households (mostly poor community) have to rely on private power suppliers, the cost of electricity is as high as 50 cents per kWh in poor settlements. Some of the private operators purchase electricity from EDC and resell it to the people at a higher price or generate diesel-generated energy, which comes at a very high price. There are a lot of micro enterprises, which generate electricity using small capacity generators (1 to 5 kWh) catering to a small group of 15 to 20 households. The cost of electricity is very high (up to 50 cents per kWh) as they have low capacity utilization, low economies of scale and high distribution loss due to use of normal electrical wires for distribution.

The majority of the poor population in Battambang relies on charcoal or fuel wood to meet their energy needs. Since they have no access to electricity or the price of electricity is too expensive, the poor resort to the use of charcoal and fuel wood. There is a pilot project called SME Renewable Energy, which is using bio-mass technology to generate energy to meet the local needs.

3.1.4 Siem Reap Municipality

EDC in Siem Reap has a total installed capacity of 9.2 MW and has a maximum output of only 4 MW. A new power plant is being built with a Japanese government grant. The province has a total line length of 122.5 cct-km and 38 medium voltage substations. The city is the second highest consumer of electricity in the country as it consumes a 19.2 GWh of electricity, which accounts for 3.55% of the total energy sales (2003) in Cambodia.

EDC only covers approximately 38% of the total Siem Reap urban area consisting of 26,053 households. The number of customers has increased from 8,660 in 2002 to 9,850 in 2003. Similar to other cities, households without access to electricity provided by EDC, either get electricity from private contractors reselling EDC electricity or through independent generators, while many are without electricity. They thus have to rely on other sources of energy such as charcoal, fuel wood, etc. EDC in Seam Reap is currently employing 117 staff, of which only 9 are women.

The electricity tariff in Seam Reap is 850 Riels per kWh for those using less than 20,000 kWh while it is 635 Riels per kWh for those using more that 110,000 kWh.

Table 5: Tarrif Schedule for Seam Reap

SRP	Riels/kWh
Overall Sectors	
<20,000 kWh	850
20,000 – 50,000 kWh	757
50,000 – 110,000 kWh	690
> 110,000 kWh	635

Source: Draft Annual Report 2003, Electricité du Cambodge

Similar to the case in Battambang, the peri-urban areas of Siem Reap is not covered by EDC and, micro enterprises generate electricity using small diesel generators with a capacity of 1 kWh to 5 kWh. Catering to a small groups of 15 to 20 households, their tariffs are as high as 50 cents per kWh due to low capacity utilization, low economies of scale and high distribution loss due to use of normal electrical wires.

3.2 PPP Potentiality

3.2.1 Partnership in Electricity Distribution: PP, BB & SR

Only about two-thirds of the total households in PP have been connected to the EDC grid, which is mainly concentrated in the city core areas. The poor hence have to purchase electricity through private contractors, which purchase electricity through the EDC grid. The majority of the 529 settlements in the peri-urban areas of Phnom Penh as of yet do not have access to the EDC grid and many do not even have private contractors. The condition in BB and SR is worse than in PP.

The private operators have no formal contracts with EDC. As they are connected to the EDC grid as residential users, they have to pay 650 Riels per kWh as they end up using more than 100 kWh. In some cases, the private operators were found to be supplying electricity to a community group, which again redistributed it to the community households, at a service charge. The multiple layers of distributors, in addition to the high price of EDC tariff (private operator being classified as a heavy residential user) and loss from the distribution system pushes the price up to 2500 Riels per kWh by the time it reaches the end consumer. The high tariff is simply not affordable to the poor customers who on an average earn US$1 per day. As a result, a lot of the households are deprived of electricity.

In this context, the ILO can facilitate the creation of two forms of partnership arrangements, i.e. the formation of Community User Groups (CUG) in partnership with EDC or partnerships between the community, private operator and EDC. In cases where CUGs directly enter into partnerships with EDC, there will still be a possibility for the private sector to operate under a management contract.

For areas where private operators already exist, the ILO could facilitate the creation of a partnership between the community, the private sector and EDC through revenue sharing.

Partnering with the CUGs can be beneficial to the existing private operators as the community will be in a position to negotiate on the bulk tariff rate with EDC. The lower tariff will provide scope for increase in customers base increasing the volume of business. The partnership could also result in a reduction in illegal connection and thus, reduce losses due to theft.

As part of partnership program, the private operator in both the cases will have to employ both technical and managerial staff from the local community. The ILO in this respect could provide training and facilitation to meet the needs of the operators. It could also further provide technical training for electricians who can provide technical services to households in the settlement areas and outside.

The role of the ILO can be, but may not be limited to, the following:

- Facilitate the formation of CUGs and partnerships between CUG, private operators and EDC
- Promote the concept of PPP by encouraging existing and new private entrepreneurs to become private operators under the new arrangement
- Facilitate PPP with pilot project implementation and orienting concerned stakeholders.
- Capacity building of private operators by providing management and technical training
- Technical training to community members as electricians that will enable them to work as employees or as independent electricians providing electrical services to households in and outside the community.

The logic for the private sector operators to agree to be partners, with a marginal or lesser amount of profit margins, is that they will become authorized distributors of EDC, that means a secured business in the long term. If the private operators were to operate as informal

entities, they would eventually have to close down once EDC starts direct distribution, which could become reality in the future.

The increased and improved involvement of the community and private sector through PPP arrangement in service delivery will firstly increase access of the poor people to electricity at a reasonable cost, increase coverage of electricity helping in reduction of poverty, increase tax collections, provide employment opportunities to the community members, improve air quality conditions and safeguard the ecology of surrounding areas, promote new private operators and lastly secure a long term business for existing private operators.

3.2.2 Networking of Micro Electricity Enterprises: BB and SR

As there are many micro enterprises involved in the production of electricity using small generators, there is scope for bringing together the small micro enterprises and encouraging them to buy a large generator with a higher capacity. The micro enterprises can afford to sell or dispose of their present generators and invest in the new large capacity generator as the present generator is of very low value. In addition to investing in a new generation capacity, the distribution line will also have to be replaced.

Though the investment in a new generator and distribution system may seem unviable to the micro enterprises, it may actually be more profitable for them if the loss of electricity in production and distribution and economies of scale is taken into account. A detailed feasibility study will however have to be conducted, to assess the actual financial viability.

EDC could also partner with the micro enterprises by either becoming a partner to the project (to reduce the initial investment cost), provide technical assistance, infrastructure support for distribution system, training for capacity building, etc. The ILO could also facilitate and assist EDC and the micro enterprises in capacity building of the groups.

In cases where the cost of acquiring a new generator is high, the ILO could coordinate with financial institutions or other INGOs providing micro credit finance to the group, using the newly purchased generator as collateral. The possibility of raising capital through the issue of shares to the community could also be explored.

Possible areas for ILO intervention include:

- Conducting a detailed feasibility study
- Facilitation to bring together the micro enterprises into one group
- Coordination with EDC to partner with the micro enterprises and users or would be users groups
- Capacity building of micro enterprises in association with EDC
- Coordination with financial institutions and development agencies providing micro credit such as SIELA Program, Urban Poverty Fund (UPF), Partnership for Urban Poverty Reduction (PUPR) to arrange for micro credit.

4. Solid Waste Management

4.1 Situation Analysis

4.1.1 Overview

With the rapid growth of population and migration of people from rural to urban areas, management of solid waste has become a challenge for all cities in Cambodia. The problem of managing solid waste for the local bodies is even more challenging due to the concentration of people in a few selected cities. The management of solid waste in urban towns has thus been recognized as a serious environmental challenge by RGC.

As the local bodies are finding it ever more difficult to effectively and efficiently handle the growing amount of solid waste, there are serious environmental and health hazards to the urban inhabitants. Weak policies, confusion amongst various government agencies and lack of adequate resources (financial and human) have become additional obstacles to maintaining a clean healthy urban atmosphere.

Keeping in view the limited municipal resources, the municipality has outsourced the job of collecting and disposal of waste to the private sector in a few cities i.e. Phnom Penh, Battambang, etc and some NGOs are also actively involved in SWM. The reach of the private sector till date has been limited to the richer sections of the society while the poorer sections have no access to its services. Though quite a few NGOs have been working to service the poor, their reach is often limited to small areas.

In some sangkats where developmental agencies are active, there are partnerships with the local communities to work hand in hand with the private sector SWM companies. However, large sections of poor communities still have no access to waste collection and disposal facilities, which makes them vulnerable to environment and health hazards.

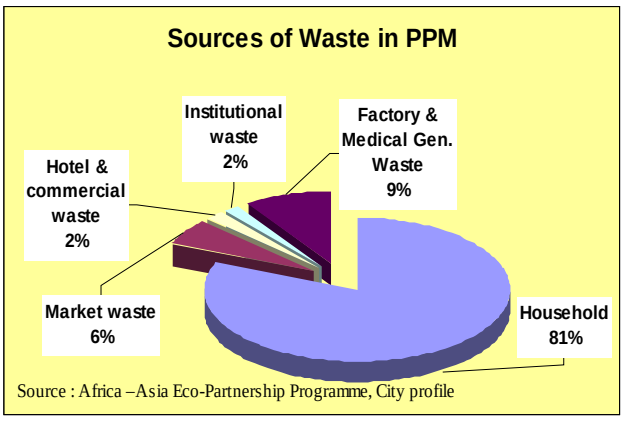
On the collection front, a lot of people from the poor community are working as waste pickers; half (51%) of the active waste pickers are children under the age of 18 while one-third (35%) are under 15 years of age in Phnom Penh City. With no other means of income, the waste pickers sort through the garbage to collect recyclable materials, which they sell to depots throughout the city. In PP alone, there are 3,000 waste pickers. Their resource recovery activities interfere with landfill operations and put their lives at risk.

4.1.2 Municipality of Phnom Penh

The phenomenal increase in the population of PP has resulted in a growing volume of solid waste, which is often thrown at roadsides, vacant lands and drainage canals. Managing huge volumes of waste is becoming a more serious problem as the existing landfill site at Stung Mean Chey reaches its operable life.

SWM is a multidimensional problem because it causes environmental problems and more importantly causes adverse health hazards to the residents. The issue of SWM is ever more important as the majority of the people in Phnom Penh are poor and have little or no access to SWM services.

Figure 2: Sources of Waste in PP



This city with a population of approximately 1.2 million generates approximately 900 tons of waste a day. Only about half of the waste generated is collected (426.4 tons)[3]. Of the total waste generated, four-fifth (81%) comes from the households. Although almost one-tenth (9.2%) of the total waste in Phnom Penh is factory and medical general waste, which is very hazardous to public health, the sub decree on SWM does not have clear standards or guidelines for hazardous waste management, including infectious waste. As a result a lot of medical institutions do not report hazardous waste.

Figure 3: CINTRI Communication Material

Waste is collected by two waste collecting organizations, CINTRI (Cambodia) Ltd. and Phnom Penh Waste Management (PPWM), a unit of Municipality of PP, on a daily basis, in addition to the waste collected by NGOs. Of the total generated waste, two-thirds (63.9%) is collected to be recycled or disposed, 22% is self disposed, 9.5% is illegally dumped and 4.6% is recycled at source. CINTRI has been awarded the contract for waste collection and cleansing work from 1997 (took over from PSBK in 2002) for a period of 50

[3] City Profile, Phnom Penh, Asia-Africa Eco Partnership Project, UNDP

years. CINTRI is thus allowed to do business as a monopoly and to collect fees from the households.

CINTRI has divided Phnom Penh into two areas: Service Area (4 districts) and Non-service Area (3 districts) on the basis of the accessibility of its service vehicles. It should however be noted that some of the poor communities within the SA are not covered by CINTRI.

In the service areas, CINTRI directly collects waste from the households and business organizations and charges a fee of US$1 to households and US$2 to US$25 for business establishments, depending on the type of the client. The company to date has been able to garner 130,000 clients into its service net of which only 65% pay for the service.

CINTRI has made huge investments in developing infrastructure, which might not have been possible through PPWM. It is currently using 72 tractors (5-12 tons capacity), 12 cubic meter compactors, 6 containers, 2 sweeping machines and 2 separators. Besides the use of modern equipment, it has been able to provide employment to 1,000 workers and an additional 100 workers who are involved in sorting, separating and recycling of plastic and glass waste with the help of 2 separators. While it has been successful in providing employment to a large number of people, there has been a concern that the waste pickers are loosing their jobs, who have little or no skills as required to work in CINTRI, are loosing their jobs.

Concerned with the inaccessibility of the poor communities to SWM, Solid Waste Management Project for Phnom Penh City, financed by *UNDP* Africa - Asia Eco-Partnership was started in two SA, namely: Sangkat Beoung Tompun, and Sangkat Phsar Deum Tkov. The project works in capacity building of stakeholders, public awareness promotion and information dissemination, conducting a pilot project in SWM and further strengthening it by extending it to two new sangkats and policy workshops.

Rather than creating a parallel project, the SWM Project developed a "bridging system" between unserved communities and CINTRI, which enabled the poor community to have equal opportunity for proper SW collection services.

As per the agreement between Municipality of PP, CINTRI and Sangkat Council, a committee has been established in each Sangkat, which manages the working teams and selected community-based waste collectors. The Sangkat Council received 35% of the total fees collected for management of primary collection, which it distributed among its waste collectors while 65% is transferred to CINTRI for the operation cost of secondary collection. The tripartite partnership has thus been fruitful to all the stakeholders. Although the partnership has met with success, CINTRI is concerned about the capability of the local community to meet its quality and service standards.

PPWM started its operations in 2003, and was finally under the Municipality of PP in 2004. PPWM, with participation of the community is providing SWM services to four Sangkats where CINTRI is absent. The community members are responsible for primary household collection and PPWM is responsible for secondary collection. PPWM has only 70 staff, including office staff, waste collectors and staffs in the dumping site. PPWM has been

receiving technical assistance from a JICA project. The JICA project has been assisting PPWM with technical support for SWM and Dumping site management.

The Japanese Fund for Poverty Reduction (JFPR) has provided garbage vans, push carts and other accessories such as waste collector's uniforms and waste bins. JFPR has allocated US$1 million for a period of 3 years, which started in 2003 and will end in 2005.

Besides CINTRI and PPWM, there are many NGOs working in the area of SWM in Phnom Penh. Some of the more active are CSARO and COMPED. CSARO has been implementing its Neighborhood Improvement Program (NIP) in Chamcarmon District since 1998. CSARO commenced its activities in July 1997 when Municipality of PP was seeking the assistance of NGOs in initiating hygiene education programs and methods for improving drainage systems. It had then conducted a study that showed the need for proper waste collection, support for socio-economic well being of waste pickers, and upgrading the living and health situation of urban poor communities. The study also showed that 51% of the waste pickers, active in Phnom Penh, are children under the age of 18 years and 35 % are under the age of 15 years[4].

CSARO Projects:

- **The Community Organizing and Community Infrastructure (CO/CI)**
- **The Environment Hygiene Awareness Campaign (EHAC)**
- **The Waste Picker Development Center (WPDC)**
- **The Waste Recycling Development Center (WRDC)**
- **The Mobile Outreach Team (MOT)**

CSARO has been providing SWM services to 8,000 households and have mobilized more than 500 waste pickers to collect and recycle waste.

Though 426.4 tons of waste is collected every day in Phnom Penh, only a negligible amount of it is being recycled or composted. It has been estimated that private recyclers recycle approximately 30 tons per day while NGOs such as CSARO recycles 2 tons of waste and COMPED composts 6 tons of waste respectively[5].

CINTRI, at present, is disposing all collected waste in Stung Mean Chey landfill site, which has an operable life until 2006. All the waste is simply being disposed off which harms the ozone layer due to methane gas emitted. It is, however, conducting a study to assess the commercial viability of the whole operation of sorting, separating and recycling. The company has also showed interest in carrying out composting work and has thus requested the government to allow it to operate the new dumping site.

COMPED, an NGO registered in the year 2000, operates a composting unit employing 13 people (2 women) which composts organic waste provided by PPWM and CINTRI. Its unit is operating at a 60% capacity and is selling manure at 200 R/Kg. It is also working with Africa-Asia Eco Partnership / UNDP. A large landfill site is under construction under the JICA

[4] A Socio Economic Study of Waste Pickers in Phnom Penh, 1997, CSARO
[5] City Profile, Phnom Penh, Africa-Asia Eco Partnership Project, UNDP

project in Dang Kor. COMPED feels that there is a good scope for composting of organic waste in Phnom Penh but their operations had to be constrained due to the small size of land and volume of waste received. It hopes that it can extend the size of its operation in the new landfill site.

4.1.3 Battambang Municipality

Out of the total population of Battambang municipality, 30,372 live in the urban areas. Battambang Municipal area produces an estimated 545 tons of solid waste per day[6]. The SWM for the city has been entrusted to City Sanitation Office (CSO) since 1993, much earlier than CINTRI in Phnom Penh but its responsibility till date has been limited to secondary collection and sweeping of the roads using manual labor. In comparison to Phnom Penh and Siem Reap, the city of Battambang is in a much dirtier condition. While the municipal authorities also mentioned that the quality of work provided by the private sector is not satisfactory, an attempt should also be made to understand the private operator's capacity and limitations.

With no household collection, the households are responsible for disposing the waste in the CSO assigned roadside waste collection points and then CSO collects and transfers the waste to the open dumping site at Cham Car Chek village area.

The municipality has till date not provided any official dumping site and hence, the company itself purchased a dumping site at Cham Car Chek village area which is about two to three hectares. The transportation of waste from the primary collection point to the dumping site is also not regular, which is obvious as CSO has only two tractors operating in the whole of Battambang. The present private dumping site being used by CSO is almost full and it is not clear on who will provide the new dumping site.

In sharp contrast to CINTRI, CSO is operating with minimum infrastructure due to which it has not been able to effectively fulfill its responsibility of maintaining a clean environment in the city area and peri-urban areas of Battambang. It only has two tractors; one used in the city area and the other is used in the peri-urban area.

It also has a small workforce of 30 employees to provide service to a city spread over 343 sq. km. The 12 women workers sweep the roads manually and the 18 male workers are responsible for collecting waste from the collection points where each household disposes their waste.

The company charges a fee ranging from 2000 Riels to 5000 Riels per month depending on the volume of waste generated and classification of the client. The revenue is collected by two staffs assigned with the job of collecting SWM fees from the clients. Till date, CSO claims that they have not had any problems in bill collection. The minimum service charge itself is half of what is being charged in Phnom Penh.

[6] Estimated: 897,353 x 0.8 kg per person

The company is not engaged in sorting, separating and recycling of waste. The company however has allowed its workers to sort and separate the waste in its dumping site and then sell it to private depots. This practice is taken as an incentive for the workers to earn an extra income to add on to their meager salary that they receive from the company. The workers are, however, limited to the collection of recyclable materials such as plastic and bottles. The biodegradable waste is not composted.

Despite the fact that the capacity of the private operator and the municipality in Battambang is very weak while there is much to be done to make the city clean and hygienic, there is very little support from non-governmental organizations. The JICA project is providing training support to the municipality staff but there has been no such improvement in service. A committee has been formed in the Battambang municipality which is responsible for the management of SWM, public parks, etc. The municipality has been thinking in the line of waste separation, recycling and composting but no concrete actions have been taken as of yet.

The community remains indifferent to waste collection efforts. With minimal or no educational campaigns, community mobilization efforts or capacity building of the local authorities and private sector, effectively managing solid waste in Battambang is still a major challenge.

4.1.4 Siem Reap Municipality

Siem Reap province, spread over 10,229 km^2 with 12 districts, 100 communes and 907 villages has a total population of 733,822, with an average household size of 5.4. The province is a place of tourist attraction due to Angkor Wat. The province generates an estimated solid waste of 446 tons per day (collection facts not available).

The SWM contract has been awarded to MICC, a private operator in Siem Reap City. The work scope of MICC is however limited only to the city area where it is responsible for daily garbage collection from households and commercial establishments and daily roadside sweeping. The overall development and management of the Angkor area is under the jurisdiction of Apsara Authority. Apsara Authority levies an entry fee to all tourists and uses it for its upkeep and maintenance, including management of solid waste.

For SWM services in the city area, MICC charges a service charge to each household in the service area. It collects waste from the households and transfers the waste to the MICC owned dumping site: Svay Thom in Prasat Bankong district. It has planted plants and greenery around the dumping site. Similar to Battambang, MICC has had to purchase its own dumping site as the municipality has not provided any dumping site.

The company charges a monthly fee of US$ 5 per month per household, US$20 per month for small offices and NGOs and US$50 per month for hotels, restaurants and other big organizations. The service charge in Siem Reap is much higher than that of Phnom Penh and Battambang. Aside from the fees levied on its customers, the company does not receive any fees for the upkeep of public places i.e. roadsides and river sides.

With the high rise of fuel and limited area of coverage, MICC is experiencing financial problems carrying out its job effectively. The company is, however, keen to expand its area of operation.

4.2 PPP Potentiality in Solid Waste Management

4.2.1 Recycling and Composting of SW: PP, BB & SR

With an average waste production of 0.8 kg per person, Phnom Penh alone generates 900 tons of solid waste every day and Battambang and Siem Reap further produces an estimated 545 tons and 446 tons respectively. Of the total waste generated in Phnom Penh, only about half (47.4%) of it is being collected, by two waste collector organizations CINTRI and PPWM. Waste collection in Battambang and Siem Reap is much more unsystematic.

Though 446 tons of waste is being collected in Phnom Penh every day, only about 902 tons of waste is being recycled per month and 6 tons is being composted per month. Recycling is being done on a very informal level in Battambang and Siem Reap.

As CINTRI is the official private collection contractor and PPWM the authority for waste collection in Phnom Penh, the solid waste generated in the area belongs to these two organizations. The waste at present is being disposed with very little recycling and composting being done on a small scale. It thus presents a great opportunity for the poor to engage themselves in income generating activities through recycling and composting.

Recycling and composting can be done by the community in partnership with CINTRI and PPWM where the poor community can generate income by sorting recyclable waste, adding value and selling it or composting of degradable waste. ILO can develop intervention programs by educating households to separate waste at the household level which the community can collect and develop products from recyclable waste, or undertake composting of biodegradable waste in a *sangkat* level, or even provide separating platform or table to facilitate in sorting and separation in the dumping site to bring back recyclable waste and then make products. A detailed study will need to be conducted to ascertain the modality of operations.

It should however be noted that CINTRI is also planning to start recycling and composting in the near future and is already conducting an analysis to asses its commercial viability. In cases where CINTRI does start recycling and composting, ILO can provide support to the community to ensure that the local people have the skills required and further coordinate with CINTRI for their employment. ILO can also coordinate with PPWM, which is working in three *sangkats* and undertake recycling and composting in PPWM working areas.

Besides being engaged in production of recyclable products and composting, ILO can also impart capacity building training programs on entrepreneurship, management, marketing and sales, accounting, modes and benefits of PPP, etc to form producers cooperative. The

cooperative can then better negotiate and market the product by themselves, which will provide them with a better income. The poor community members can thus be engaged in sorting and separation, production as well as marketing of the product, providing ample opportunities for the poor depending on their interest and capability. In addition to these activities, ILO can also develop a linkage with CFSP, the EU Project and such projects to arrange for the transfer of technology in areas like production of brickets from urban waste.

In Battambang and Siem Reap, the municipality has until now not provided any dumping site, which has forced the private contractors to make arrangement for their own small dumping site. The landfill site of Phnom Penh will also be inoperable by 2006. As waste is only being disposed, introducing recycling and composting projects could also help in making better use of the existing landfill sites.

Possible avenues for ILO intervention:

- Community mobilization for engaging communities in recycling and composting
- Education and training for technology transfer on recycling and composting technology to communities
- Creating partnerships of community groups with PPWM and CINTRI for providing access to solid waste
- Facilitation the formation of cooperatives of community producers of recyclable products and composting
- Training on entrepreneurship, management, marketing and sales to cooperative members
- Orientation on benefits and modalities of PPP to community cooperatives, private sector and municipalities.

The project would thus be beneficial in generating income opportunities to the poor, improving the environment and increasing the life of landfill sites.

4.2.2 Primary Waste Collection: BB, SR

The SWM Project funded by Africa-Asia Eco-Partnership Programme/UNDP has mobilized the community in a few selected SAs of CINTRI and works in *sangkats* of PPWM in primary waste collection. The mobilization of the community in primary waste collection has been crucial in increasing service coverage as CINTRI was not covering areas where its heavy vehicles had no access and has also been providing employment to poor community members.

Though the responsibility of SWM has been outsourced to the private sector in Battambang and Siem Reap, their responsibility till date has been limited to secondary collection and only in core city areas. Households are thus responsible for delivery of waste to the collection points from where the private contractors transfer the waste to the final dumping sites.

As the coverage in both cities is very limited, the local community can be mobilized for primary waste collection while the private contractor will still be responsible for secondary collection and transfer to final dumping site. Involvement of the community members in

primary collection will increase the coverage of the SWM services, improve the environment of the city and provide income opportunities to the poor community members.

It should be noted that the present service charge for SWM to households in Battambang is only 2000 Riels, which can be increased, after improvement in service. Similar to practices in Phnom Penh, both the cities can work with the community on a revenue sharing basis. The private operators in both the cities will also require capacity building in terms of infrastructure, technical skills, management skills, etc., where ILO can prove useful.

Possible avenues for ILO intervention:

- Preparation of SWM plans for Battambang and Siem Reap in cooperation with JICA
- Mobilization of community members to form community groups for primary collection of solid waste
- Partnership of communities with private operators
- Education and training to community members engaged in primary waste collection
- Capacity building of private contractors on planning, management, technical skills and infrastructure development
- Providing PPP orientation to Municipalities, interested Private Sector and Community Organizations.

5. Drinking Water

5.1 Situation Analysis

5.1.1 Overview

Drinking water provision is a big challenge for the government as it not only is a public utility service required by the people, but also has direct health implications. With only 23.7% (1998 census) of the rural population and 60% (1998 census) of urban population having access to safe drinking water, the Infant Mortality Rate (IMR) surveys indicated an increase in Mortality Rate from 88/1000 to 95/1000 over the 1990 to 1997 period, a situation partly due to low level of access to safe rural water supply. Similarly, 30% of the hospitalized patients in Phnom Penh were admitted in the hospital due to waterborne diseases, a result of unsafe drinking water in urban centers.

Table 6: Access to Safe Drinking Water

Area	1998 (Baseline)
Rural	23.7%
Urban	60%

Source: 1998 Census

Leaving aside the differences in urban and rural accessibility, DHS 2000 data shows a high disparity between the rural poor and the rural rich: over half of the rural people rely on pump or well as a source of water supply while only 15% of the rural rich rely on pump or wells. The reliance on pump or well was found to be similar between rural rich and urban households at 15% and 15% respectively. Only 4% of people in the poorest area have access to piped water compared to 17% in the richest areas[7].

Recognizing the need to provide safe drinking water to the people, not only to provide public utility services but also to combat deteriorating public health conditions, the RGC has established a water supply and sanitation policy framework that focuses on financial autonomy, tariff adjustment to initiate cost recovery, private sector participation, donor coordination, water resource allocation, and regulatory responsibilities. The policy seeks to make better use of the existing water resources, strengthening institutional capacity, upgrading the production level of existing clean water processing plants to design capacity, and improving their performance and expanding connections to end-users.

RGC has also specifically mentioned in the NPRS that it will provide access to drinking water in situ and on relocation sites to provide adequate housing and living conditions for the urban poor. Wherever possible, it mentions that it will link health strategies to safe drinking water for both urban and rural livelihood.

[7] National Poverty Reduction Strategy 2003-2005, Kingdom of Cambodia

In line with its NPRS strategy, the RGC in collaboration with bilateral and donor agencies have already started the implementation of drinking water programmes in various provinces, particularly in Phnom Penh. Due to the serious efforts of the government and implementing bodies, a larger proportion of the population today have access to safe drinking water in Phnom Penh.

5.1.2 Municipality Phnom Penh

The water supply system of Phnom Penh Water Supply Authority (PPWSA) had severely deteriorated in the past two decades. Till 1993, approximately three-forth (73%) of the water capacity was Unaccounted for Water (UFW), due to weak infrastructure and mismanagement. At the time, PPWSA had only 227 km pipe length of cast iron, which was in a very poor condition. Given its weak infrastructure, it had coverage of only 50% (26,881 connections) in the inner city area, of which only 12% were metered and 28% were being fixed price billed. PPWSA had only 15,000 registered connections with water meters installed[8].

PPWSA made serious reforms in its management and organization culture since the change in leadership after the Paris Peace Agreement in 1993, initiated by the RGC and supported by various donor agencies. PPWSA became an autonomous, commercial and self-reliant entity in 1997.

Figure 3: Phum Prek WTP, PP (150,000 m^3 / day)

The water treatment plants of PPWSA have been rehabilitated with the assistance of World Bank, Government of France and Government of Japan. In addition to the water treatment plants, three water towers with a unit storage capacity of 1500m^3 were being added in 2004 to the existing water tower capacity of 2000 m^3. The supply of water is managed in accordance with the demand responsive policy, which is being supplied 24 hours a day wherein the PPWSA production team regulates water pressure according to the change in demand. Thus, Unaccounted for Water (UFW), which was 73% in 1993, has been reduced to a respectable 17% by the end of 2003.

It now provides complete coverage of clean and piped water supply to all four central districts of PP and has also extended its coverage to the peri-urban areas. The authority now only uses Ductile Cast Iron (DCI) Pipes and High Density Polyethylene (HDPE) Pipes and has a total distribution network length of around 990 km, three times the total length in 1996. From a mere 27,741 connections in 1993, PPWSA has increased the number of connections by 285% to 105,777 connections (2003) through three water treatment plants having a total capacity of 235,000 m^3 / day. This covers almost 85% of the total service coverage in Phnom Penh.

[8] Business Plan of PPPWSA

Table 7: Existing Water Facility in Phnom Penh

Year	1993	1995	1997	1999	2001	2003
No. of Customers	27,741	27,019	41,681	58,335	74,945	105,777
Increase in %		-3%	54%	40%	28%	41%

The number of customers has been increasing rapidly. The figure is projected to increase to 155,200 by the year 2009.

In some of the peri-urban areas of Phnom Penh, private operators are selling ground or river water to the community. Over half of the population in the poor settlements in the various districts of PP reported to be facing a lot of problems with water supply. Almost three-forth (74%) of the population in Charmkar Mon reported that they have problems with water supply and two-third (63%) of the population in Russei Keo reported to also having problems with water supply.

Table 8: Water Supply Problem in Poor Settlements of PP by District

Khan (District)	Water Supply Problem
Charmkar Mon	74%
Daun Penh	43%
Prampi Makara	60%
Toul Kork	50%
Mean Cheay	N/A
Russei Keo	63%
Dangkao	N/A

Source: Information Booklet on the City's Development and Settlements of the Urban Poor, Phnom Penh, SUPF

PPWSA charges US$100 as connection fee, which is unaffordable to low income communities. Project Management Office (PMO) in PPWSA subsidizes the low-income residents. It has selected NGOs to provide a report identifying low-income families in peri-urban areas of Phnom Penh eligible for receiving the subsidy scheme based on the set of criteria developed. As they cannot afford upfront payment, a payment by installment has been introduced under which they get a discount of up to 30 to 50% on water supply connection fee and can pay over a period of 10, 15 or 20 months, with interest. It has thus been able to make 7,968 connections (July 2004) among 81 poor communities located within the coverage areas of Phnom Penh city. The program has however been able to connect only half of the low-income residents as the other half stated that they would not be able to repay the loan. The authority is also facing problems with fee collection, as some of the poor families have not been able to pay consistently every month. To take care of this, PPWSA has introduced community partnering in the collection of water bill revenue by allowing community representatives to collect revenue of the particular area and provide certain percentage of the revenue for that service. This has been found effective, which is also a kind of PPP arrangement.

Though PPWSA was able to improve its services, it also had to increase water tariffs to cover its costs. It thus implemented a three-step increase in water tariffs, first in 1997 and then in 2001. As its revenues showed that they would be able to fully recover their costs due to higher collection ratio and significant drop in UFW, it did not push for the third increase. As of

2001, the new tariffs was minimum of 550 Riels per m3 for those households using less than 7 m^3 per month and maximum of 1,270 Riels per m3 for those using more than 100 m^3 per month.

Table 9: New Domestic Tariff Increase & Structure (2001) in PP

Range	1997	2001
	Riel/m3	Riel/m3
0 to 7 m3/month	300	550
8 to 15	300	770
16 to 30	620	1,010
31 to 50	940	1,010
51 to 100	940	1,270
> 100	1,260	1,270

As PPWSA has not yet been able to provide its service to 100% of the areas, water vending by private contractors is very much in place. Private contractors are found to be buying water from the city water officials at 350 Riels per cubic meter and reselling it to people at 1000 Riels, 1500 Riels and can go up to 3000 Riels depending on the size of the jar[9]. The expansion of services by PPWSA to peri-urban areas will be very beneficial as the cost of getting water directly from PPWSA network will be less expensive.

PPWSA currently has 423 permanent employees and about 117 contract workers. The efficiency has also improved over the years as the number of staff per thousand connections has dropped from 15 in 1995 to about 3.7 in July 2004 as opposed to the requirement of 6 employees per 1000 customers, laid out by World Bank and Asian Development Bank in the loan agreement.

5.1.3 Battambang Municipality

Water Supply Battambang (WSBB) is an autonomous authority responsible for the production and distribution of water in Battambang city. WSBB has a very old water production unit which gets water from Sang Ker River due to which processing is very difficult in the rainy season and there is difficulty in pumping water in dry season. The distribution pipeline is also small and old, due to which it has been able to cover only 14% of the total households. The city will require approximately 7,000 to 10,000 m3 of water per day to meet the demand of 10 communes.

The old production unit is being replaced by a new unit with a production capacity of 3,500 m^3 of portable water per day and the existing distribution system is being replaced by a new pipeline with a 3.4 million US$ ADB loan. The project was to start from February 2000 and completed in March 2005, but was delayed and is now underway.

[9] Report on an Analysis of Informal Economy in Phnom Penh, Urban Sector Group, 2003

The situation of water supply in Battambang is extremely miserable, as the existing distribution system is very limited and prices are very high due to which only the rich community have access to piped drinking water. Of the 25,111 households in the ten communes, it has been able to serve only 4,534 households in seven communes, meeting only 30% of the total demand in those seven communes where it is present, and the private sector is supplying to another 11% of the households. A large portion of the population in Battambang has thus been deprived of access to safe drinking water.

WSBB faces a commercial loss of 5% and technical loss of 45%. The technical loss is primarily due to the condition of the old pipes, which were installed in 1960. It also incurs a loss in supply of water due to increase in fuel cost from 600 Riels to 1300 Riels.

WSBB contracts out distribution to four small contractors who buy water in bulk at 1,375 Riels per $m^{3,}$ who then sell it to the end consumers at 1800 to 1900 Riels per m^3 through PVC pipelines to the surrounding areas of Battambang city, namely Phsa Deum Doung, Phsa Boeng Chouk, Phsa Leu, Phsa Thmey. The four small contractors have extended the pipelines in their area with their own investment. The private water suppliers are supplying water to 2,684 households. WSBB also charges its customers for drainage as it gives DPWT 100 Riels as drainage cost.

WSBB has total staff strength of 58 people, of which 9 are females.

5.1.4 Siem Reap Municipality

Siem Reap Water Supply (SRWS) is responsible for the production and distribution of drinking water in Siem Reap city. SRWS has a total production capacity of 2880 m^3 per day, which is supplied from three wells.

SRWS currently has a network system of 12 km only with a capacity of 1800 m^3 of portable water per day. The distribution system in Siem Reap still uses the old Asparo Cement Pipe (ACP) in its pipeline, that was constructed in 1960. During the year 1999, UFW was 65%, which has now come down to 40% (2004). The ground water in Siem Reap is high in iron content and thus requires three to four hours for oxidation due to which the treatment costs are high.

A 13 million US$ Clean Water Project (a JICA project) has started in Siem Reap from October 2004 and is scheduled to complete in May 2006. The project will seek to increase water production and replace and extend the existing distribution network. On the production front, a deep underground boring will be made and a new filtration oxidation facility will be acquired that will increase the production capacity. The physical location of intake and treatment plant will be moved to a new location near Phonpi Barahi.

The present 12 km pipeline is to be replaced by new pipelines using duck pipe (DIP steel pipe) and PVC pipes which is to be partly funded by the government (6km) and JICA (6km). The present distribution pipeline will also be extended by another 24 km with the funding of

JICA. On the completion of the project, Siem Reap will have a total distribution pipeline of 36 km.

As of November 2004, SRWS has 858 consumers, including both domestic and commercial (hotels, restaurants, other businesses and government offices) consumers. The present water tariff for domestic consumption is 1,200 Riels per m^3 and 1,400 Riels per m^3 for commercial use. The authority makes an average profit of 10% and does not provide subsidy to any of the consumers.

SPWS has a very weak human resource as it has only 7 staff of which 2 are females and further employs 2 to 4 contractual labors. Only three of its staffs are graduates and the remaining have studied only up to secondary level. Two of the staffs look after water bill collection.

5.2 PPP Potentiality

5.2.1 Water Distribution through Micro Enterprises: BB, SR

WSBB has been able to supply water to seven of the ten communes and has further been able to meet only 30% of the demand in these seven communes. While WSBB covers only 4,534 households, four private sector small contractors have been catering to another 2,684 households using their own pipelines. Siem Reap at present is also equally weak in water supply as it also caters to only 858 consumers.

Though both the cities have a very small production capacity at the present state, Battambang is being supported through an ADB loan to increase its production capacity by 3500 m^3 of portable water per day while Siem Reap is being supported by JICA project to increase its production capacity. Though the distribution network is also being extended, it still will not be able to adequately meet the demand of the city dwellers.

The water supply authority can thus partner with private contractors for the distribution of water to different settlements where it does not have its own distribution system. The authority can engage the private contractors to develop their own distribution system by connecting it to the main pipeline and supply water to the people in pocket areas. The role of ILO will be pivotal in facilitating the whole partnership process, promoting the concept of PPP among WS authorities and micro enterprises, capacity building of micro enterprises and community members.

The authority will benefit, as they will have an extended water connection, local micro enterprises will be promoted, poor community members can get employment during and after construction, while the community will have access to drinking water. The community will greatly benefit, as the incidence of water borne diseases will decrease.

Possible intervention areas for ILO:

- Promotion of the concept of PPP among WS authorities and micro enterprises and Municipal authorities
- Encouraging existing and potential entrepreneurs to enter into partnerships
- Facilitate the partnership process between WS authorities and micro enterprises
- Capacity building of micro enterprises on managerial and technical skills
- Plumbing skill trainings for poor community members

5.2.2 Contracting through Targeted Procurement System

The cities are increasing their production capacity with the assistance of various development agencies such as JICA and ADB. Even with the added capacity and improved distribution system, both the cities will still require more funding to meet the high demand for water. Hence, it can be expected that there will be more projects coming to these two cities in the near future. Communities could do some of the works more efficiently; allocation of such works to the community will help achieve better systems quickly.

This represents a lot of opportunity for local contractors and poor community members who can work as skilled and unskilled labors. The present procurement system only recognizes community groups; it does not provide any preferential treatment to local contractors and community groups. Community contracting as a PPP arrangement can help generate income-generating opportunities amongst the poor communities.

As part of the partnership arrangement, the water authority can support private operators with technical assistance and assistance in the extension of pipelines. This will also help the authority in increasing revenues.

ILO can thus play an important role by initiating discussion with development agencies funding the projects to award contracts or subcontracts to local contractors or community contracting in the short term and lobbying with the government to recognize targeted procurement and provide special preferential treatment to local contractors and community groups.

It was also learnt that the local communities in Battambang and Siem Reap do not have the necessary plumbing skills. ILO can thus provide vocational training on plumbing to members of the poor community who can obtain employment in the construction of production units and distribution system as well as provide plumbing services to the community. ILO can also facilitate the employment of trained plumbers by coordinating with the various development agencies involved in the projects.

Partnering with private contractors will help mobilize local resources in infrastructure development and at the same time will strengthen the distribution system. It will promote the development of micro enterprise and generate income generation opportunities. In the long run, local people will replace skilled plumbers, who are now coming from other countries.

Possible ILO intervention areas:

- Initiating discussions with development agencies supporting drinking water projects to award contracts or subcontracts to local contractors or community groups
- Lobbying with the RGC to introduce targeted procurement system with special preferential treatment to community contracting
- Capacity building of local contractors through managerial and technical training
- Vocational training on plumbing to members of the poor communities and facilitate their employment.

6. Infrastructure (Roads & Drainage)

6.1 Situation Analysis

6.1.1 Overview

Road transportation in Cambodia, like in any other country, plays an important role in passenger movement and freight transportation: road transportation carries 65% of the passengers and about 70% of the freight in Cambodia. The transportation sector is mainly under the responsibility of Ministry of Public Works and Transportation (MPWT). The roads in Cambodia mainly consist of primary, secondary, tertiary, and sub-tertiary and urban roads. Of the total 12,323 kilometer roads, only 1996 kilometer is paved and the remaining 10,327 kilometer is unpaved. The existing road infrastructure has undergone significant improvements with the rehabilitation programs during the second mandate of RGC between 1998 and 2003, but a lot yet remains to be done to meet the demands of the growing economy.

With the assistance of local and international development partners, 2,350 kilometer of roads were rehabilitated during the second mandate, besides which RGC has also repaired and rehabilitated about 2,096 km of roads with it own limited budget resources[10]. The government has mentioned in 'The Rectangular Strategy' that it will rehabilitate all main national or primary roads (1,998 km) by the end of 2007 and rehabilitate and reconstruct an additional 1,850 km of roads, using short-life techniques. Aside from rehabilitation and reconstruction, the government has also accorded a high priority for road maintenance in the second mandate and has allocated around US$ 5-10 million annually from the domestic budget[11].

Though there have been major improvements in the primary road network, some of the main urban roads are in very poor conditions with many sections impassable to traffic. In Phnom Penh alone, 59% of the streets are in a poor condition, which has resulted in congestion, high traffic accidents, inconvenience, air pollution, shorter vehicle life, etc. The poor conditions of the roads in urban areas have a greater impact on the poorer sections of the society. The cities of Cambodia can expect major traffic problems if the rate of road development and maintenance does not meet the growth in population.

Though a large proportion of the national budget and development partner's assistance is being allocated to this sector, the government as yet has not formally adopted a road and transportation policy. MPWT has a strategy for road investments but gives inadequate

[10] National Poverty Reduction Strategy 2003-2005, Kingdom of Cambodia
[11] Implementing the Rectangular Strategy and Development Assistance Needs, Royal Government of Cambodia

attention to road maintenance and inefficient allocation of transportation budget due to lack of clear policy directions.

The development and maintenance of roads were found to not only provide more accessibility but also have significant impacts in improving the quality of life and reduce poverty. A socio-economic study conducted by Ministry of Rural Development (MRD) with the assistance of ILO in Siem Reap showed that there was a 103% increase in transportation of goods along rural roads and increased trade activities by 600%, which highlights the need for developing a good road infrastructure.

The role of road and transportation projects, however, is not only limited to increasing accessibility but can also help in generating employment for local contractors and laborers from the poor communities. Therefore the NPRS has proposed to spend US$216 million especially in road and transportation projects. The MRD's rural transport strategy has specified that it will promote the use of labor-based appropriate technology (LBAT), with the involvement of small and medium sized contractors.

The condition of drainage of Cambodian cities is also equally bad. With very limited coverage of drainage system in most cities, the government needs to rehabilitate and extend the existing drainage systems. The lack of proper drainage system surfaces even more during rain floods, which makes movement of traffic inside the city even more chaotic.

The construction and maintenance of drainage system within the city area is under the DPWT. An autonomous authority for drainage systems has been suggested and a committee has been set up in the ministry at central level though no such moves have been made at the provincial level.

6.1.2 Municipality of Phnom Penh

Phnom Penh has a total road length of 863 kilometers of which 459 kilometers is in the four central districts and the remaining 404 kilometers is in the three peripheral districts of Phnom Penh. Two toll roads have been built with private sector participation under the Build Operate Transfer (BOT) arrangement in Phnom Penh and one on highway number 4.

Table 10: Roads in PP

Road Types	Length of Road in KM	
	4 Central District	3 Peripheral District
Cement Concrete	3	-
Aphalt Concrete	176	-
Macadam	57	-
DBST	38	-
Laterite	106	-
Earth	80	-
Total length	459	404

In the rehabilitation and reconstruction of the additional 1850 km of roads planned in the Rectangular Strategy using short-life rehabilitation techniques, priority has been given to linking Phnom Penh through secondary national roads to provincial capitals. While primary and secondary road networks are being developed, more than half (59%) of the streets in Phnom Penh are in poor condition.

As Phnom Penh is the economic, cultural and political center of Cambodia, there has been a rapid increase in traffic in the last few years. The population growth and thus increase in traffic has resulted in traffic congestion, high transportation costs and an increased number of traffic accidents. If the present roads are not rehabilitated or reconstructed, the city could face major traffic problems in the coming years.

Phnom Penh has 179 kilometers of sewer pipes of all sizes and has 4 kilometers of main drainage concrete canals and 7 kilometers of main drainage earth canals. The city has 9,586 units of manholes of all types and sizes. Poor traffic conditions combined with poor drainage system have also resulted in flooding during rainstorms.

Table 11: Sewer Pipes in PP

Sewer Pipe	Length/Number		
Sewer pipes with all sizes	179,083	179	Km
Main Drainage concrete canals	3,533	4	Km
Main Drainage earth canals	6,790	7	Km
Manholes with all types and sizes	9,586		Unit

With very limited coverage of drainage canals, most of the poor settlements in various districts face severe flooding and drainage problems. 96% of the population in Dangkao district reported major flooding and drainage problems while 68% and 80% of the population in Daun Penh and Toul Kork districts respectively reported flooding drainage problems.

Table 12: Flooding & Drainage Problem in PP Poor Settlements by District

Khan (District)	Flooding &Drainage Problem
Daun Penh	68%
Toul Kork	80%
Dangkao	96%

Source: Information booklet on the city's development and the settlements of the urban poor, Phnom Penh, SUPF

DPTW in Phnom Penh has 414 permanent employees of which 26% are female. Of the total workers, 86 of them are in the road and bridge division and another 144 staffs are in the drainage and sewerage division. The road and bridge division has four engineers and the drainage and sewerage division has eight engineers.

6.1.3 Battambang Municipality

The construction and maintenance of road and bridge works are under the responsibility of DPWT and the Provincial Department of Rural Development (PDRD). Maintenance of

National Roads and provincial roads and bridges is carried out by DPWT, while PDRD constructs and maintains the lower level road network.

Road number 5 in Battambang was constructed with the assistance of the World Bank. As minimal maintenance to the roads are being undertaken, some municipal authorities believe that the condition of roads will be unfit for use in the next five years. Some believe taxing road users and extra charges to heavy vehicle users should be introduced to create a Road Fund that will be used for regular road maintenance.

The present drainage system provides coverage to 5,000 houses (some houses have more than one family). Talks are presently underway to repair and extend the drainage network in BB and authorities stated that they expected it to start in 2005.

The North Western Rural Development Project (NWRDP) has made three interventions by providing training to Small Scale Contractors, conducting socio-economic studies and developing a Rural Road Policy. The small scale contractors trained by NWRDP can be used in road and drainage maintenance.

Of the 1,500 Riels that WSBB charges to its customers for water supply, 100 Riels is directly reimbursed by WSBB to DPWT as drainage charge. The government is planning to raise 5 million Riel by increasing tariffs to 1,000 Riel per household for drainage facilities. It has, however, been able to raise approximately 1.5 million Riel as only 1,200 households are paying their bills. The authority has assigned three staff members to collect fees.

The DPWT is of the opinion that drainage systems and provincial road construction should be contracted out to the private sector and communities as it would help in securing the commitment of the community members and thus get contributions for its construction.

6.1.4 Siem Reap Municipality

The provincial area of Siem Reap has 423 kilometers of road of which 282 kilometers is in Siem Reap City and the remaining 141 kilometers is in the other districts. The main and interior roads, drainage, municipal markets, provincial roads and repair and maintenance functions are being handled by DPWT. The Apsara Authority is managing the public light system and public gardens. DPWT however provides technical support to Apsara Authority and Apsara Authority is meeting the costs of maintenance.

In the drainage system, the entire trunk line is being made by DPWT and the community is making the household connections. DPWT is handling all big constructions and the municipality is managing the small ones.

The roads in Siem Reap require immediate maintenance and a drainage system needs to be built in the poor areas, especially for the rainy season. Construction and maintenance of drainage in the city area and roads in peri-urban areas could provide employment opportunities to local contractors and poor community people in Siem Reap.

6.2 PPP Potentiality

6.2.1 Contracting through Targeted Procurement System

The country requires huge investments to develop its infrastructure. The RGC has specifically stated in NPRS that it will spend US$216 million on promoting income opportunities, especially on roads and transportation projects[12]. Investment in road and transportation projects will not only strengthen the country's infrastructure but also generate employment for the poor. It should however be noted that the government needs to develop policies that will ensure employment opportunities for local contractors and community members in general, and the poor in particular.

Though the government has recognized local community groups, there is no such provision of giving preferential treatment to community groups. The government has a provision for community partnership in the projects under the Commune Sangkat Fund Project where the community has to share the cost of construction. Even in such cases, there is no provision for targeted community contracting in the procurement process. As targeted procurement system will be instrumental in generating employment at the local level, the ILO can lobby with the government to introduce targeted procurement systems in its policy and procurement system.

As the local contractors or communities may not have the adequate skills, ILO can provide capacity building training programs that will enhance their contracting skills and other technical skills required for undertaking infrastructure projects at the local level. The small scale contractors trained by NWRDP could be linked to the concerned works through ILO intervention.

"Targeted procurement systems" will provide employment to the local community members, which will provide them with income-generating opportunities and create ownership amongst users. The system will make it easier for the community groups to get contracts as opposed to competing with other private contractors. Though they may not have all the required skills, intervention to upgrade their skills will help reduce this gap.

The authorities are also very much in favor of community contracting as they feel that it would provide scope for local skill development, use of local raw materials, employment generation, a trickle down effect in the community itself and the development of local enterprises.

The possible areas for community contracting and involvement of local contractors as identified by the local authorities are road rehabilitation and maintenance, construction of

[12] National Poverty Reduction Strategy 2003-2005, Kingdom of Cambodia

culverts, supply of tools for construction works, supply of food and other materials during the period of construction.

Possible ILO intervention areas include:

- Outsourcing road maintenance work under the PPP concept
- Lobbying with the government to introduce "targeted procurement system"
- Capacity building of local contractors and community groups to enable them to undertake local level contracts
- Vocational training for poor community members that will impart construction skills.

7. Review of Current Procurement Regulation

7.1 Introduction

There are two important documents published by the Ministry of Economy and Finance, which govern the Public Procurement on the Central and Local level in Cambodia. The documents are:

a. Implementation Rules and Regulations Governing Public Procurement (IRRPP)
b. The Commune-Sangkat Fund Project Implementation Manual (PIM)

IRRPP is a central level and PIM is a local level (Commune-Sangkat Fund Projects) procurement manual. A broad review of both the documents has been carried out from the perspective of its suitability for the involvement of small enterprises and user groups.

7.2 Implementation Rules & Regulations Governing Public Procurement (IRRPP)

IRRPP, section 6, pages 5,6,7 outlines various procurement methods to be followed. They are basically open competitive bidding and non-open competitive bidding. Their sub-classifications and the situations in which they are to be followed are mentioned below:

Contract Cost	Situations for contracting	**Types of Procurement**
>200 Mi. R. for construction works. >100 Mi. R. for goods or service. Any contract, if conditioned by foreign financing.		International Competitive Bidding (ICB)
50-200 Mi. R. for constructions works. 20-100 Mi. R. for goods or service.		Domestic Competitive Bidding (DCB)
< or = 200 Mi. R. for construction works. < or = 200 Mi. R. for goods or service.	1. If contract is too small to attract international competition. 2. If there are few bidders. 3. If there is not enough time for ICB.	International Shopping (IS)
< 20 Mi. R.		Domestic Canvassing (DC)
	1. If the Cost is less than 50 Mi. R. for construction works or less or more than 20 Mi. R. for goods or service 2. Expansion or repair works of existing equipment 3. Proprietary goods. 4. Urgent need in emergency. 5. Delayed work. 6. Purchase at the previous competitive bidding price and no reason why it may be cheaper. 7. If competitive bidding failed twice 8. Contracting with Government agencies	Direct Purchase or Direct Contracting (DP or DCO)

Comments and Suggestions:

To promote and strengthen the local contractors and "User Groups", it would be better to introduce a targeted procurement system with the provisions of preferential treatment. Some of the models of preferential treatments, for example, could be:

1. For local contractors in DCB
   a) 10% of bidding price advantage in all DCB biddings
   b) 20% of bidding price advantage for construction works costing less than 100 Mi. R. and for goods or service costing less than 50 Mi. R.
2. For User groups willing to bid in DCB
   a) 20% of bidding price advantage for construction works costing less than 50 Mi.R and for goods or service costing less than 25 Mi. R
   b) 30% of bidding price advantage for construction works costing less than 20Mi.R and for goods or service costing less than 10 Mi.R.

7.3 Commune–Sangkat Fund Project Implementation Manual (PIM)

PIM has set out the guidelines for implementation of Commune Development Projects and covers project studies, project approval, project procurement and project management. The section on procurement explains about the procurement committee, its composition and working procedures, technical support official (TSO), types and process of procurements, project implementation, modes of payment and types of contractors.

Followings are the steps of procurement as explained in the procurement section of PIM:

1. Advertise Bidding Meeting for two weeks in Commune Council and *Sala Khet*.
2. Bidding Meeting with following activities:
   a. Bid Orientation meeting.
   b. Bid Submission at least 30 minutes after the bid orientation is completed.
   c. Bid Opening.
   d. Bid Evaluation (by Procurement Committee in absence of bidders)

   There are two stages of evaluations:

   i. Check if each bid is valid and reject the invalid bids. Here procurement Committee checks the followings:
      - In case of Service Contract: Bidders are eligible to bid or not?
      - In case of Purchase Order: Type of goods the supplier proposed are approvable or not?
      - In case of Construction Work: The contractors are included in the contractor list or not?

   ii. Choose the best priced bid
3. Announce the result in presence of bidders
4. TSO reports to the Provincial Governor that the bidding process has followed the guideline. If it did not, Governor can cancel the result.
5. Agree work plan.
6. Sign Contract seven days after the bid evaluation result is announced.

Comments and Suggestion:

PIM section 3.1.2 (2) on page 94

(1) gives the provision of Procurement and the composition of Procurement Committee. It would be better to include one member representing the beneficiary for each particular project.

(2) As the Procurement Committee is said to be a public meeting, it would be better to make presence of certain numbers of beneficiary's representation mandatory.

PIM section 3.2 on page 100:

says, "There are four kinds of Contractors" and has an opening for users groups to be listed as a local contractor and make bidding. But it would be better to introduce targeted procurement system. In that system, the user groups will be given preferential treatment. The preferences may be:

- **Reservation:** Public Infrastructure or goods (that all the people of one or more village benefit) costing less than a certain amount and all semi-private infrastructure or goods (that only some households benefit) be **open only for user groups**.
- **Price advantage:** The user's group wins the bidding even if their price is higher than others by a certain percentage.

Such preferential treatments have many benefits like orientation and capacity building of local communities; increase the sense of ownership which increases the operation and maintenance sustainability; employment generation and asset retention in the community level which directly addresses the poverty alleviation, though it may compromise efficiency only in the short-term.

The provision also mentions that the contract will be awarded to the best price bidder from amongst the list of contractors. It would be better if we can treat the local contractor preferentially. The preference may be:

(a) Public infrastructure or goods (all the people of one of more village benefit) costing less than a certain amount and all semi-private infrastructures or goods (only some households benefit)

(b) 10% of bid price advantage

The provision also says "For service contracts the Procurement Committee will evaluate the capacity of the bidder during the bidding meeting". It would be better to invite simple pre-qualification application, at least one week before, requesting pertinent information which is vital to ascertain their ability. This will be accessed by TSU and later briefed and passed in bidding meeting. Narrative evaluation criteria may be pre-decided if necessary.

PIM Section 3.3.2 (d,e) on page 110:

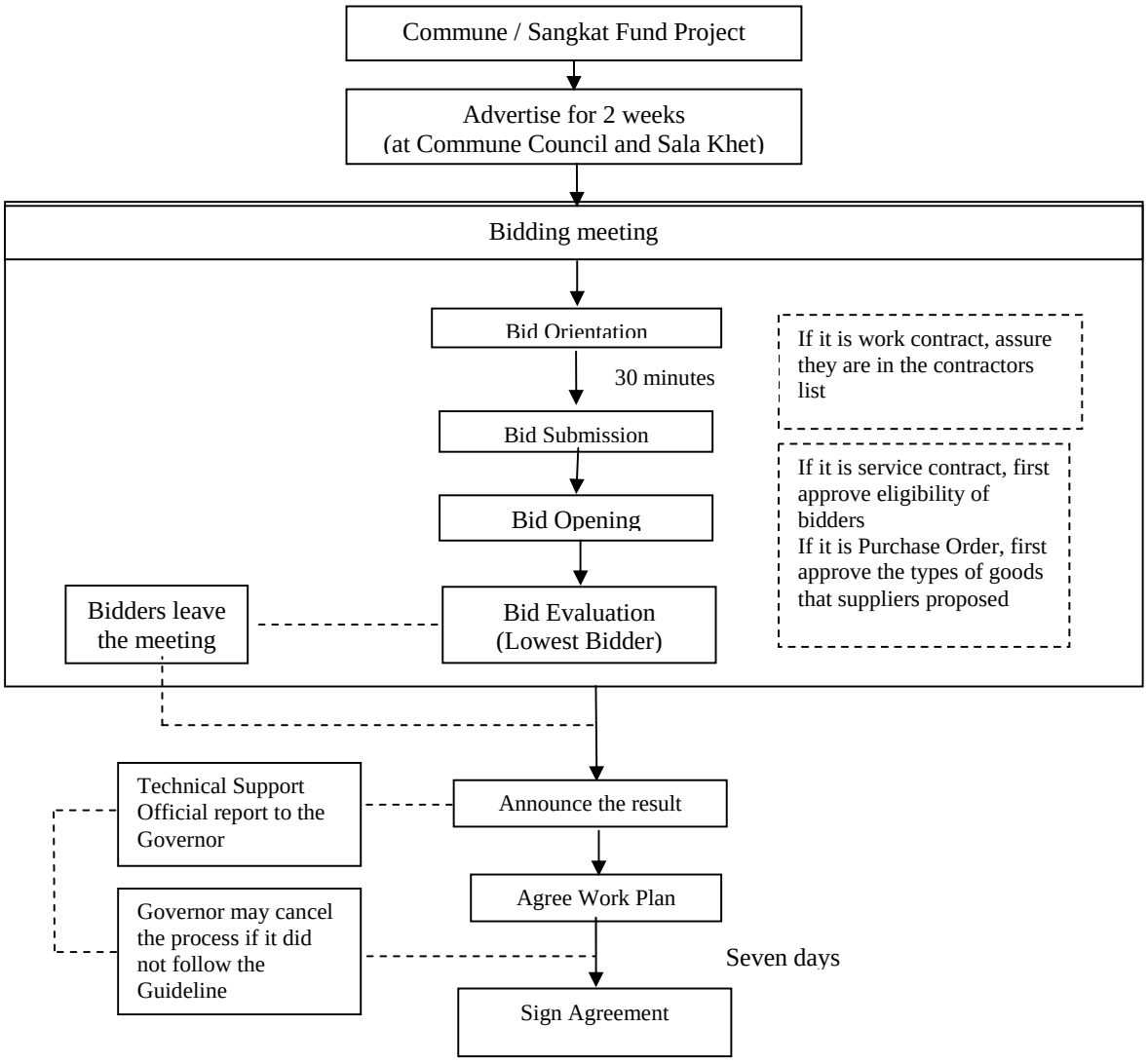
The provision says, "The Commune Chief must not make any advance payments to a contractor". It would be better to provide some advance, say 20% of the project cost or

an amount enough to purchase 50% goods like cement, brick and pipes etc., to local contractors or user groups.

PIM Section 3.4 page 115;
Provision says, "For most Commune Development Projects, there will be a bidding meeting that will include four events, namely 1. Bid Orientation, 2. Bid Submission, 3. Bid Opening, 4. Bid evaluation." It would be better to do these evaluations not within a meeting, but in different meetings. Instead of one bidding meeting, it will be good to give additional time for bid preparation and bid evaluation. Then the next meeting will hear the bid evaluation report and endorse it in a public meeting.

PIM Section 3.4.3 page 116:
Provision says, "After the orientation, the bidders will be allowed 30 minutes to complete the bid forms". It would be better to give 36 hours for that purpose, so that the user groups get enough time to consult amongst themselves and study the market.

Figure 4: Flow Diagram of Procurement Process



8. Conclusion & Recommendations

8.1 Conclusion

The Royal Government of Cambodia has recognized the private sector as an 'engine of growth' and has been actively promoting the private sector and civil society as partners to development. The government has reaffirmed its commitment by initiating the process of decentralization by shifting its responsibilities and resources to the local bodies and recognizing the role of private sector in the development of infrastructure and delivery of public services in national strategic documents.

The concept of PPP has already been initiated in Cambodia as the private sector, formally and informally, has already become partner to infrastructure projects and delivery of public services. Large-scale infrastructure projects such as highway toll roads, electricity production, water and solid waste management are underway. Small-scale infrastructure projects in energy and water distribution have been undertaken by small enterprises at an informal level. Although the process of PPP has been initiated, it still lacks clear vision, knowledge and an appropriate enabling legal environment that promotes the concept of pro poor focused PPP.

A lot has still has still to be done to achieve the real benefits of partnerships between the government, private sector and civil society, but the country nevertheless presents ample opportunities for PPPs, even in the present context. In the process of creating a transparent and accountable PPP that is pro-poor focused, the assistance of development agencies will remain vital.

The scanning of the four sectors i.e. energy, solid waste management, water and infrastructure (road and drainage) in Phnom Penh, Battambang and Siem Reap reveals many opportunities to promote PPP projects that will help the government meet its development plans, improve access and quality of public utility services while generating employment opportunities for the urban poor and business opportunities for micro and small enterprises; this will all be crucial for improving the lives of the urban poor.

The interventions for promoting PPP range from initiating dialogue with the RGC and development agencies, capacity building of present service providers, incorporating them in the formal network, capacity building of poor communities to take advantage of employment opportunities arising from PPPs, facilitation and coordination between various stakeholders and awareness campaigns on pro-poor PPPs and its systematic process of implementation.

In the first scan, the study has identified that the following interventions are required in the four sectors:

- **Energy sector:** incorporating the private contractors involved in the distribution of electricity and small and micro enterprises generating electricity into the formal networks. Also giving non-progressive tariffs to the user cooperatives or small distributors.

- **SWM:** primary and secondary collection of SWM is already being supported by a lot of development agencies where the community has been mobilized for primary collection in Phnom Penh. There is however a scope for involving the local community in primary collection of SW in Battambang and Siem Reap. The sector presents even greater opportunity in recycling and composting of SW in all three cities, as there has been very little effort to utilize the waste that is being generated.

- **Water:** as the accessibility of drinking water for the poor is very low, there is an opportunity to encourage the present water vendors and private water distributors to come into the formal network and encourage new entrepreneurs. With a lot of assistance from development agencies in this sector, training of community people and local contractors to take advantage of plumbing jobs and local contracting is also an avenue. As many foreigners are engaged in plumbing, training the community members in plumbing skills will help generate income to locals replacing foreigners. Facilitation with the development agencies introducing the rehabilitation projects and lobbying for targeted procurement system will be crucial in securing employment for the trained workers and local contractors. Adjusting tariffs will facilitate local and user group cooperatives in water distribution works.

- **Infrastructure:** with the government making huge investments in the development of road and transportation infrastructure in the country, this sector requires a lot of skilled and unskilled labor and local contractors. While employing the local community is a possibility, it has been identified that both local communities and local contractors require capacity building in construction skills and techniques. Local level road constructions and most of the maintenance works could be entrusted to local user groups.

In the present procurement system, the community groups have been recognized and can bid for the tender, but have to compete with other contractors. As community contracting and contracting to local contractors promote local skills development and generates local employment, it is essential that the community groups and local contractors be given special treatment in the public procurement through Targeted Procurement System.

PPPs in Cambodia thus presents ample opportunities for ILO to introduce intervention programs, which will not only promote the concept of PPP but also generate employment opportunities for the urban poor and micro and small enterprises in all three cities. As various development agencies have already initiated the process of PPP to some extent, complementing their efforts would bring about better synergy rather than initiating an entirely new process.

8.2 Recommendations

The first scan for potential PPP projects reveals that interventions are required at various stages: lobbying with government and development agencies, direct intervention to facilitate, encourage and promote the local community and local contractors towards PPP and capacity

building of local communities and local contractors to introduce a more systematic and pro-poor focused PPP.

On the basis of the first scan, it is recommended that ILO makes interventions on two levels:
1. Creating an enabling environment and policy level facilitation, and
2. Implementation at local level

It is also recommended that ILO formulates short term and long term strategies that will enable the communities to take advantage of the immediate opportunities and develop a sustainable, accountable and transparent form of PPP.

Working towards creating an enabling environment, ILO can develop intervention programs targeted at central and local level government agencies, development agencies, private sector through associations and civil society. Some of the recommended activities are:
1. Orientation program on the concept of pro-poor PPPs to relevant line ministries, departments and local bodies, business associations and labor associations and civil society.
2. Conduct training programs on Pro-Poor PPP modality and process to municipal bodies including commune council representatives and other public utility authorities such as EDC, PPWM, DPWT, etc.
3. Facilitate the introduction of Targeted Procurement System in Public Procurement on both central and local level.
4. Conduct training programs on Targeted Procurement System concept, modality and process.

On the implementation level, it is recommended that ILO complements the activities of the government, development agencies and private sector initiatives by providing technical and technological assistance, entrepreneurship development training and facilitation of the PPP process.

In the short term, ILO can coordinate with the government, development agencies and implementing agencies engaged in infrastructure projects in water and road sector to provide room for providing special consideration to involve the local community and local contactors in their projects in PPP modalities. In cases where the local community still requires further upgrading of skills, ILO can introduce short-term training programs. Some of the recommended short-term measures are:
1. Facilitate with drinking water projects in Battambang and Siem Reap for job opportunities to small local contractors and community groups. As the projects have either just started or is going to start in the near future, immediate action is required.
2. Develop linkage and support chambers of commerce such as the newly formed Battambang Chamber of Commerce and other initiatives like Enterprise Development Initiatives (EDI) to promote the concept of pro-poor PPP amongst the business community, including SMEs.
3. Support government departments especially Department of Transport and Public Works, and provincial municipalities to promote the concept of pro-poor PPP.

4. To aid long-term activities, it is recommended that ILO conducts a detailed feasibility study that will make the programs more effective. The areas of study are as follows:
   - A follow up detailed feasibility study on potential PPPs in Cambodia.
   - Feasibility study and impact assessment of recycling and composting in the community.
   - Study on the operation and commercial viability of Micro Electricity Enterprises and Micro Water Enterprises.

   The studies will address the following:
   - Investment requirement
   - Sources of finance
   - Coverage area
   - Willingness of the stakeholders to enter into a PPP arrangement
   - Assessment of the potential financial and socio-economic benefits arising from the partnership with special attention to pro-poor PPP
   - Potential PPP arrangement modality
   - Potential employment generation
   - Capacity building requirements for the stakeholders.

In the long term, the recommended activities for ILO are:
1. Facilitating the partnerships between public sector, individual and micro enterprises and the civil society in Pro Poor PPP modalities
2. Encouraging informal groups to enter into formal partnerships with public utility service authorities and civil society
3. Capacity-building programs aimed at upgrading the managerial and technical skills of existing and potential private contractors, micro enterprises, local contractors and community groups
4. Capacity building programs aimed at imparting vocational skills to community members to enhance their skills.

On the basis of the first scan, potential PPP projects in the four sectors of Phnom Penh, Battambang and Siem Reap have been identified. The identified projects seek to build on the existing efforts already underway and should be need-based, targeting the urban poor. The potential PPP projects are as follows:

Table 13: Potential PPP Projects

Sector	*Phnom Penh*	*Battambang*	*Siem Reap*
Energy			
• Partnership in Electricity Distribution	✓	✓	✓
• Networking and or forming cooperatives of Micro Electricity Enterprises		✓	✓
SWM			
• Recycling and Composting of SW	✓	✓	✓
• Primary Waste Collection		✓	✓
Water			
• Water Distribution through Micro Enterprises	✓	✓	✓

• Contracting Through Targeted Procurement System	✓	✓	✓
Infrastructure			
• Contracting Through Targeted Procurement System	✓	✓	✓

ILO can liaison with various development agencies active in the three cities and also further develop linkages with projects such as SEILA, NWRDP, CFSP, AAEP etc. to create synergetic effects. It is further recommended that ILO also makes use of local management and training institutes to provide training on entrepreneurship development (IYB, EYB, LEIE etc.), management, PPP, etc. Particularly the training programme "Local Employment in the Informal Economy" adapted in the local language should be widely implemented. Similarly, local NGOs could be utilized for community mobilization, local entrepreneurs' mobilization and other related training courses.

The role of ILO will be crucial, not in developing new projects but assisting and facilitating the government, development partners and other stakeholders in identification, facilitation, coordination and more importantly, facilitating partnerships and capacity building of the stakeholders for the successful implementation of PPP that is pro poor focused and aimed at generating employment for the poor. It is recommended that ILO also includes suburbs of the cities as important project activity areas.

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- Meeting with the community members of Roteh Pleung B, Phnom Penh. (Mrs. May Thonak, community leader)
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Discussion Guidelines

Public Sector Segment

Warm Up

1. For how long have you been working in the organization?
2. What is the present status of water/waste/energy/infrastructure in the municipality?
3. Are there any other service providers (government or private) in water/waste/energy/infrastructure in your municipality? Could you please tell me their names?

Main

4. Range of services provided by your organization? And could you also please tell me the coverage?
5. Please tell me the process in detail on how you provide the services? *(Service process)*
6. On what basis do you provide the services?
    - Are the customers subsidized by the government? To what extent?
    - Which services are charged for and which services are for free?
    - What is the basis of pricing (tariffs)? Cost plus, subsidized, etc.
7. In your opinion, how would you evaluate the performance of this unit in the municipality?
    - Effective delivery of services / meeting customer demands
    - Efficiency: cost of service
    - Meeting total demand
    - Coverage of households of various economic strata's
8. What would you say are the main strengths of this public unit? And what are the main weaknesses of this public unit? **Probe: Anything else?**
9. What are the problems / impediments that this public unit is facing, in operation and in service delivery? **Probe: Anything else?**
    - In your opinion, what are the reasons for such problems / impediments? **Ask reasons for each individual problem.**
    - In your opinion, how do you think the problems / impediments in operation and or service delivery can be solved? **Probe: Why do you say so?**
10. What is your perception on the involvement of the private sector (micro enterprises, individual entrepreneurs and or community based organizations) in the service delivery of various public utilities? **Probe: Why do you say so?**
11. And what is your perception on the involvement of the private sector (micro enterprises, individual entrepreneurs and or community based organizations) in the service delivery in your service area? **Probe: Why do you say so?**
12. In what ways (i.e. by service type or geographical coverage) do you think the private sector can be involved in the service delivery in partnership with your organization? **Probe: Anything else?**

13. If you were to agree to go in partnership with the private sector in the areas that you have mentioned, what would be the modalities of operations that you think would be suitable or should be adopted? **Probe: Anything else? Why do you say so?**
14. In your opinion, do you think PPP in your area would be beneficial or not beneficial? **Probe: Anything else? Why do you say so?**
    - Benefits could be: financial, efficiency leading to more reasonable rates, better access, better quality of service, etc.

Key Informants

Warm Up

1. Could you please give me a background of your organization?
2. From your organizations experience, could you please give us an idea of the present conditions here in this municipality? **Ask sector specific.**

Main

3. What would you say are some of the major pertinent issues that the municipality is currently facing in light of the growing population vis-à-vis public services and growing urban unemployment? **Probe: Anything else? Why do you say so?** And what are the other issues of concern? **Probe: Anything else? Why do you say so?**
4. The urban population is rapidly growing. What are the things being done to ensure better accessibility of public services to the poor? **Probe: Anything else?** And what are the activities that are being done to provide working opportunities? **Probe: Anything else?**
    a. In terms of planning, policy formation and implementation
5. What is your (governments) perception on the involvement of the private sector (micro enterprises, individual entrepreneurs and or community based organizations) in the service delivery of various public utilities? **Probe: Why do you say so?**
6. And what is your perception (government) on the involvement of the private sector (micro enterprises, individual entrepreneurs and or community based organizations) in the service delivery in your service area? **Probe: Why do you say so?**
7. In what ways (i.e. by service type or geographical coverage) do you think the private sector can be involved in the service delivery in partnership with your organization? **Probe: Anything else?**
8. If you were to agree to go in partnership with the private sector in the areas that you have mentioned, what would be the modalities of operations that you think would be suitable or should be adopted? **Probe: Anything else? Why do you say so?**
9. In your opinion, do you think PPP in your area would be beneficial or not beneficial? **Probe: Anything else? Why do you say so?**
10. Benefits could be: financial, efficiency leading to more reasonable rates, better access, better quality of service, etc.

Support Organizations

Warm Up

1. Could you please give me a background of your organization?
2. Which are the areas that you are at present supporting? and which organizations?
3. Since you have been working in this locality, could you please tell us the level of participation of people in your programs? and programs of other organizations?

Main

4. In what way are you presently involved in this sector?
    a. Technical support,
    b. Funding,
    c. Facilitator, etc
5. What is the reason behind supporting this sector? And in this area (municipality)? **Probe: Anything else?**
6. Please give us detailed description of your project? **Collect information brochures or other reading materials on the project if available.**
    a. Sector
    b. Project objectives
    c. Type of support
    d. Activities under the project
    e. Target groups / coverage area
    f. Budget, etc
7. Since you have been working in this sector, could you please give us a general background on the present situation?
8. In your opinion, how would you evaluate the performance of this unit in the municipality?
    a. Effective delivery of services / meeting customer demands
    b. Efficiency: cost of service
    c. Meeting total demand
    d. Coverage of households of various economic strata's
9. In your organizations experience, what do you think are the major constraints to deliver better services in the present context? **Probe: anything else?**
10. In your organizations experience, could you please give us a brief on the accessibility of the services provided by the present service providers to the various strata of population?
    a. If certain segments of the population don't have access to such services, please give me a profile of the people who don't have access? (Profile by geography, ethnicity, etc)
    b. What has been the impact of them not being able to access those services? i.e. economic, health, standard of living, etc.
    c. Has your organization or any other organization made an effort to provide them with the services? and what have been the results? If your organization has been involved, could you please share with us your experience in this matter?
11. In the local context, how do you think such services can be reached to them in the best possible manner?

12. What is your perception on the involvement of the private sector (micro enterprises, individual entrepreneurs and or community based organizations) in the service delivery in this sector? **Probe: Why do you say so?**
13. In what ways (i.e. by service type or geographical coverage) do you think the private sector can be involved in the service delivery in partnership with your organization? **Probe: Anything else?**
    a. Considering the local situation, which partners do you think would best suit the various projects that you have mentioned?
14. If the private sector were to go into partnership, what would be the modalities of operations that you think would be suitable or should be adopted? **Probe: Anything else? Why do you say so?**
15. In your opinion, do you think PPP in this sector would be beneficial or not beneficial? **Probe: Anything else? Why do you say so?**
16. Benefits could be: financial, efficiency leading to more reasonable rates, better access, better quality of service, etc.
17. As an organization that has been working in this sector, are there any suggestions that you would like to make that would possibly help in the planning and implementation of PPP.

Consumer Segment

Warm Up

1. Could you all please kindly introduce yourselves? your name, occupation, etc.

Main
Repeat for each sector

2. What are all the types of services that you are availing at present from …. ? **Probe: Anything else?**
   a. What are the services that you use more frequently?
   b. What are the services that you use occasionally?
3. If you are not availing services, please tell me why you are not availing services?
   a. If not availing services, as the service provider is not providing services, then probe why they think the service provider is not providing them the services?
   b. If not availing services because they don't want to avail services then probe why they don't want to avail the services?
4. Are you satisfied or dissatisfied with the services being provided by …? **Probe: why do you say so? Anything else?**
5. In terms of:
   a. Quality of customer service
   b. Range of services
   c. Coverage area / accessibility
   d. Frequency of service
   e. Value for money **(service received vis-à-vis money paid)**
6. Please tell me the problems that you are currently facing while accessing the services being provided by the service providers? **Probe: Anything else?**
   a. If consumers don't have access to the service, ask them the problems they face due to unavailability of services?
7. What are some of the service areas *(service, coverage, etc)* in which you feel that the quality of services should be enhanced? **Probe: Anything else?**
8. In your opinion, in what ways do you think the quality of services can be enhanced? **Probe: Anything else?**

Repeat for each sector one by one

9. What is your perception on the involvement of the private sector in the delivery of such services? Please note that by private sector, we mean micro enterprises, individual entrepreneurs and also the civil society? **(Please explain to them the concept of PPP)**.
10. In which sector and types of service do you think PPP would be effective? **Probe: why do you say so? Anything else?** In your opinion, which partners do you think should work in partnership in those sector and types of services? **Probe: why do you say so?**

11. Do you think that involving the private sector in public utility service delivery would be beneficial? **(Please remind the participants of the various modalities in which a PPP project can operate)**.
    - **a.** In what ways do you think it would be beneficial? **Probe: why do you say so? Anything else?**
    - **b.** And in what ways do you think it would not be beneficial? **Probe: why do you say so? Anything else?**
12. In your opinion, what issues do you think should be taken care of while entering into a partnership? **Probe: why do you say so? Anything else?**

The ILO ISED project offers integrated support to small enterprises in Cambodia and Lao PDR with a view to create employment opportunities and reduce poverty. It offers a comprehensive package of interventions primarily targeting support structures for small enterprises, including business associations and business development service providers. The ISED Series is an initiative of the ILO to share its ISED project experiences with a larger audience.

ISED Series No. 1 : Micro and Small Enterprise Development in Lao PDR
ISED Series No. 2 : Opportunities for Public Private Partnerships in Cambodia

Upcoming Issues:
- Gender Issues in MSEs in Lao PDR
- Vendors' Purses: a study on women micro vendors in Phnom Penh
- Supporting Rural Entrepreneurs through Multi-Media in Lao PDR

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