Ministry of Strategy and Finance, Republic of Korea
Government Complex 2, Gwacheon, 427-725, Korea ● Tel. 82-2-2150-7712 www.mosf.go.kr

Korea Development Institute
130-740, P.O. Box 113 Hoegiro 49 Dongdaemun-gu Seoul, ● Tel. 82-2-958-4114 www.kdi.re.kr

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Knowledge Sharing Program
Center for International Development, KDI
● P.O. Box 113 Hoegiro 49 Dongdaemun-gu Seoul, 130-740
● Tel. 02-958-4224
● www.ksp.go.kr

Microfinance and Public-Private Partnership (PPP) Development in Cambodia

April 2010

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Program Director	Wonhyuk Lim, Director, Policy Research Division, Center for International Development(CID), KDI Taihee Lee, Director, Policy Consultation Division, CID, KDI
Project Coordinator	Seo-Young Kim, Research Associate, Policy Consultation Division, CID, KDI
Project Manager	Moon-Soo Kang, Emeritus Fellow, KDI
Authors	Chapter 1: Moon-Soo Kang, Emeritus Fellow, KDI Chapter 2: Chang-Gyun Park, Professor, Chung-Ang University Sophea Hoy, General Secretary, Cambodia Microfinance Association Chapter 3: Taehoon Youn, Research Fellow, KDI Keosothea Nou, Research fellow, Cambodia Development Resource Institute Chapter 4: Kang-Soo Kim, Research Fellow, KDI Touch Eng, Chief, Ministry of Economy and Finance, Cambodia Chapter 5: Seok-Kyun Hur, Research Fellow, KDI
English editor	Eunji Choi, Research Associate, Policy Training Division, CID, KDI

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Preface

In the 21st century, knowledge is one of the key factors in determining a country's level of socio-economic development. From this recognition, Knowledge Sharing Program (KSP) was launched in 2004 by the Ministry of Strategy and Finance of the Republic of Korea and the Korea Development Institute (KDI) in an effort to contribute to the socio-economic development in the development partner countries by sharing Korea's unique development experiences. The most distinguishing characteristic of KSP is that it is a demand-driven, participation-oriented consultation project aiming to tackle development issues from the partner country's perspective and provide policy implications that are not far-reaching but can be practically implemented in the environment of the partner country.

The first Knowledge Sharing Program with Cambodia was successfully implemented in 2006 on the topic of 'Strategic Framework for Fiscal Resource Mobilization and Life Insurance for Cambodia.' Upon its successful results, H.E. Deputy Prime Minister Keat Chhon submitted a request of the second KSP for the consultation on the infrastructure finance for public-private partnership (PPP) and market mechanism to ensure long-term sustainability and efficiency of the microfinance industry.

Cambodia has been selected again in 2009 as the partner country for KSP and this project includes four specific topics: 1) Securing Stable Funding Flow for Cambodian Microfinance sector; 2) The Role of Microfinance in Rural SME Development; 3) Improvement on Legal and Procedural PPP system in Cambodia; and 4) Financing PPP projects in Cambodia

I would like to take this opportunity to express my heartfelt gratitude to Project Manager Dr. Moon-Soo Kang and all the project consultants including Dr. Chang-Gyun Park, Taehoon Youn, Kang-Soo Kim, and Seok-Kyun Hur for their efforts in successfully completing the 2009~2010 KSP for Cambodia. I also thank Program Directors Dr. Wonhyuk Lim and Mr. Taihee Lee and Project Coordinator Ms. Seo-Young Kim, all of whom are members of the Center for International Development at KDI, for their dedication and contribution to the project. Lastly my special thanks go to the Ministry of Economy and Finance of the Royal Government of Cambodia for their active support and cooperation.

Upon this occasion of publishing the results of the 2009~2010 KSP for Cambodia, I sincerely hope our final research results including policy recommendations on the selected policy areas could be utilized to help Cambodia develop microfinance sector and PPP investment system. The policy recommendations in this report, however, are based on the Korea's development experiences and are solely the opinions and recommendations of the authors.

Oh-Seok Hyun
President
Korea Development Institute

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Executive Summary

The Second Knowledge Sharing Program with Cambodia in 2009

In the 21st century, knowledge is the key factor in determining a country's level of socio-economic development. From this recognition, the Knowledge Sharing Program (KSP) was launched in 2004 by the Ministry of Strategy and Finance (MOSF) and the Korea Development Institute (KDI). The KSP is designed to contribute to the socio-economic development of target partnership country by sharing Korea's development experiences and knowledge. The KSP analyzes the problems from the perspective of the partnership country and provides policy implications that can be practically applied in the environment of the partnership country.

Upon the successful implementation of the first 2007 KSP, the Cambodia Government requested to be a KSP Partner with Korea and submitted a demand survey with topics on "Infrastructure Finance for Public-Private-Partnership and market mechanism to ensure long-term sustainability and efficiency of the microfinance industry" in December 2008.

In April, 2009, experts from both Korea and Cambodia agreed upon four sub-topics and they are as follows:

Four Sub-topics:

Topic 1: Securing Stable Funding Flow into Microfinance Sector in Cambodia
Topic 2: The Role of Microfinance in Rural SME Development
Topic 3: Improvement on Legal and Procedura PPP System in Cambodia
Topic 4: Financing PPP Projects in Cambodia

During 16th to 21st of August 2009, the Korean KSP team visited Cambodia for the Local Reporting Workshop. In November 2009, in order to discuss and coordinate contents of research and consultation in progress, eight Cambodian experts visited Korea to hold an Interim Reporting and Policy practitioners' Workshop.

During 19th through 21st of January 2010, Senior Policy Dialogue and Final Reporting Workshop were held in Cambodia. Final consultation papers were presented to high-ranking government officials and research results were presented to government officials, opinion leaders, relevant international organizations and stakeholders at the Final Reporting Workshop in Cambodia.

Summary of Policy Recommendations

Securing Stable Funding Flow into Microfinance Sector in Cambodia

It is recommended that the Cambodian government establishes a facility to guarantee loans to microfinance institutions (MFIs) from commercial banks. The loan guarantee facility can facilitate loans to MFIs by reducing credit risk. Offering the loan guarantee facility may induce commercial banks to be more willing to provide loans to MFIs without worrying about credit risk and regulatory issues. European Commission uses a similar loan guarantee scheme to support loans from commercial banks to MFIs in EU region. The loan guarantee facility can be established in a joint effort between Cambodian government and foreign aid organizations. The National Bank of Cambodia (NBC) or Rural Development Bank, along with technical assistance from international experts on microfinance could operate the loan guarantee facility. Or a new independent entity could be established.

It is recommended that the Cambodian microfinance sector enhances international linkage and to pursue stronger relationship with the international microfinance network:

- Learn management practices at globally accepted level
- Acquire up-to-date microfinance-related information: especially, funding opportunities
- Help expanding on-and-off-the job training
- Help disseminate information on the Cambodian microfinance sector to world financial markets
- Take joint efforts to develop new microfinance institutions (MFIs) in rural area

The Cambodian microfinance sector should take advantage of innovation in microfinance. It is recommended that a Microfinance Investment Fund (MFIF) focusing on the Cambodian microfinance sector is established with efforts of the Korean government, Cambodian government and Asian Development Bank, etc.:

- Joint efforts with international initiatives
- Possible contributors: Cambodian government, international facility, Cambodian banking sector
- Mission: loans and guarantees to relatively small Cambodian MFIs

The Cambodian microfinance sector should explore possibilities of securitization of microfinance loan portfolios:

- Collateralized debt obligations (CDOs) initiated by large licensed MFIs could be designed to attract various types of domestic and international investors.
- Participation of ACLEDA's small loan operation would be helpful.

Microfinance-related infrastructure should be improved and strengthened:

- It is unavoidable pre-requisite to induce foreign investment.
- Re-examine foreign exchange regulation
- Strengthen corporate governance of MFIs
- Enhance transparencies: better reporting practices and accounting principles acceptable by international investors
- Assign credit rating to MFIs according to the international standard
- Maintain stable and reliable macroeconomic environment

The Role of Microfinance in Rural SME Development

The Royal Government of Cambodia (RGC) may introduce a comprehensive small and medium-sized enterprise (SME) policy initiatives and establish a headquarter in charge of followings: providing flexible funding to selected MFIs in the form of co-financing, developing and standardizing operational assistance procedures to MFIs as well as rural SMEs. The Rural Development Bank (RDB) is a candidate.

It is recommended that RGC introduces a credit guarantee system so that promising rural SMEs (including start-ups) without collaterals or established track records can be financed from MFIs and/or other financial institutions.

It is clear that agricultural cooperatives are the strongest candidates as the breeding ground of rural SMEs. However, many reforms and additional supports are needed for them to initiate voluntary entrepreneurial movement such as setting up a strong and centralized agricultural cooperative network (National Agricultural Cooperative Federation), integrated planning and action with village or township level voluntary reform movements.

RGC can newly establish an institution or utilize an existing institution to work as the arranger for facilitating syndicated loans to rural SMEs by MFIs.

Improvement on Legal and Procedural PPP System in Cambodia

Infrastructure investment is urgently required in Cambodia. Vast infrastructure networks are in serious disrepair and in need of modernization. Infrastructure reform and new investments are necessary in order to sustain stagnant productivity growth. However, the gap is growing between infrastructure requirement and public funding.

In order for the expansion of infrastructure investments to yield desired policy outcome, and resolve the challenges, a solid and operational PPP framework must be established to induce more private investments in infrastructure.

A single law cannot establish the necessary framework for projects as complex as that of privately financed public infrastructure. The legal, regulatory and governance framework must be solid and correspond to international standards with clear and consistent implementation procedures regulated by relevant act and practical implementation guidelines.

In light of the current Cambodian Law on Concessions, legal gap must be addressed and complemented through immediate adoption of sub decrees, specifying principles and schemes for tendering, contracting, risk sharing and conflict resolution. A clear governance structure should be established, and the relevant authority must play a central role in this governance structure.

Creating an enabling PPP unit with clear mandate in Cambodia is crucial not merely because it functions to coordinate PPP projects, but also through transparently conducting the necessary process. The rationale for the establishment of the PPP center, its functions and mandates as well as the organizational structure must be clearly stipulated in a sub decree. Many PPP units around the world are located within the respective financial ministry. A PPP center must be staffed with experts in relevant fields in order to accumulate the necessary competence and capacity over time.

PPP procurement, bid, and evaluation methods suggest ways for optimal procurement for transparent selection process, which contributes to fostering a competitive PPP market. Ways to promote competition for proposals include addressing reimbursement issue of proposal preparation cost of unsuccessful proponents, announcing content of alternate proposals when pursing an unsolicited project, designating two or more potential concessionaires, and simplifying required documents for proposal. Transparency being a significant issue in tendering, clear access to information must be provided.

Financing PPP Projects in Cambodia

In principle, financing can be done by either equity or bond. In reality, however, there exist a variety of other ways between the two. Each financing method differs by magnitude and direction of risk-sharing between the parties involved. Depending on country specific factors, the Government may choose the best option(s) and implement it by adopting a certain credit guarantee program. Accordingly, overall evaluation on the Cambodian economy in consideration of various aspects, such as macro-performance, fiscal balance, capital budgeting system, and financial market development, would be critical for this project.

In addition to the country specific factors, the characteristics of a PPP project may require a different financing scheme. Each PPP project differs by uncertainty and duration of cash flow. Different cash flows may require different treatment especially in an incomplete financial market. Once priorities for infrastructure building are determined, different financing schemes should be matched accordingly.

Remind that not all infrastructure investment opportunities could attract private partners. However, that doesn't mean that those projects are less important for Cambodian economy. Thus, it is our first suggestion that bond financing should not be treated as an only option. Other financing methods besides PPP or Infra bonds should also be carefully designed for these occasions.

Second, a reasonable capital budgeting system including well-established feasibility evaluation methodologies should be introduced. By improving transparency, it will reduce investors' uncertainty and invite more funds to the PPP finance market. In the same context, enhanced market transparency through a reliable credit rating system will also alleviate risk aversion of private partners in PPP projects as well as infra bond holders.

Third, appropriate tax incentives and minimum revenue guarantee (MRG) should be given at the initial period. Not to be excessive, all these incentives should be evaluated thoroughly. The evaluation methods will be basically the same with the one used in running the feasibility test.

Fourth, Credit Guarantee for Infrastructure Investment should be introduced. Remind how crucial the Korea Credit Guarantee Fund (KCGF) was in expanding infra bond market. Fees and level of guarantee should be well balanced for the sustainability of the credit guarantee fund itself. Funding credit guarantee program may come from various sources. For example, regional or international organizations, such as ADB could form a partnership with Cambodia in establishing the credit guarantee fund.

Fifth, in addition, the following measures taken by the Indonesian government to induce more PPP are notable:

- Liberalizing and lowering the entry barrier to Infra market
- Eliminating legal and institutional uncertainties
- Establishing the principle of distributing fees and risks at a fair ground
- Efficient mechanism of conflict resolution

Chapter 01

Microfinance and Public-Private Partnership (PPP) in Cambodia

Chapter 01

Microfinance and Public-Private Partnership (PPP) in Cambodia

Moon-Soo Kang (KDI)

1. Economic Growth of Cambodia

1.1. Economic Growth

Cambodia has achieved a remarkable economic growth over the past decade. GDP growth averaged 9.8 percent annually, and reached above 10 percent in the four years from 2004 to 2007. Cambodia has more than doubled its income per capita over the past decade, from US$285 in 1997 to US$623 in 2007 (Figure 1-1). Such impressive economic growth created plenty of employment opportunities, helping to elevate millions of Cambodians out of poverty. The number of people living under the poverty line in Cambodia has decreased to 30% in 2007, compared with 45-50% during 1993/1994.

Cambodia has achieved 7 percent annual growth on average for 14 consecutive years. During the past decade, Cambodia's growth performance ranked 7th among all countries in the world[1]. However, the World Bank report(2009) points out that the odds of maintaining the rapid growth of the past decade are not so high. The base of economic growth has been narrow, institutions to sustain growth remain underdeveloped, and the global environment is less favorable[2].

The Royal government of Cambodia (RGC) has a development strategy, the NSDP, which describes the goals and policy priorities laid out in the Government' Rectangular Strategy. The

1) World Bank, Poverty Reduction and Economic Management Sector Unit, Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum, January 2009, p.1.
2) World Bank, ibid., p.1.

Rectangular Strategy covers many aspects of a growth strategy, with a focus on governance, private sector development, human development, and agriculture.

The recent World Bank report(2009) points out that economic growth has been driven primarily by four sectors: garments, tourism, construction and agriculture. The industry and services sectors accounted for 4.5 and 4.8 percent points of growth per annum respectively over the past decade, while the agriculture sector accounted for 2.0 percent points per annum. The Cambodian economy has experienced a profound transformation, with the agriculture sector ranking behind the industry and services sectors in terms of value-added in 2007 (Figure 1-3).

By its dependence on few sectors and inflows of foreign direct investment, Cambodia is vulnerable to the global economic recession. The report, however, suggests that Cambodia has a potential to continue high economic growth in the future despite challenges. The report suggests that to achieve the potential, firm policy action will be demanded. The report recommends that Cambodia should upgrade its endowment to move to the next stages of development. Cambodia should continue to develop its infrastructure and human capacity, and mobilize more savings to prepare for future economic growth, the report recommends[3)].

Cambodia has made efforts to diversify its economy through development of small and medium enterprises (SMEs). However, narrow base of economic growth remains as a concern.

Private sector and SME development is a priority for the government of Cambodia. The government has launched a SME development framework and has approved a Financial Sector Development Strategy (FSDS) 2006-2015.

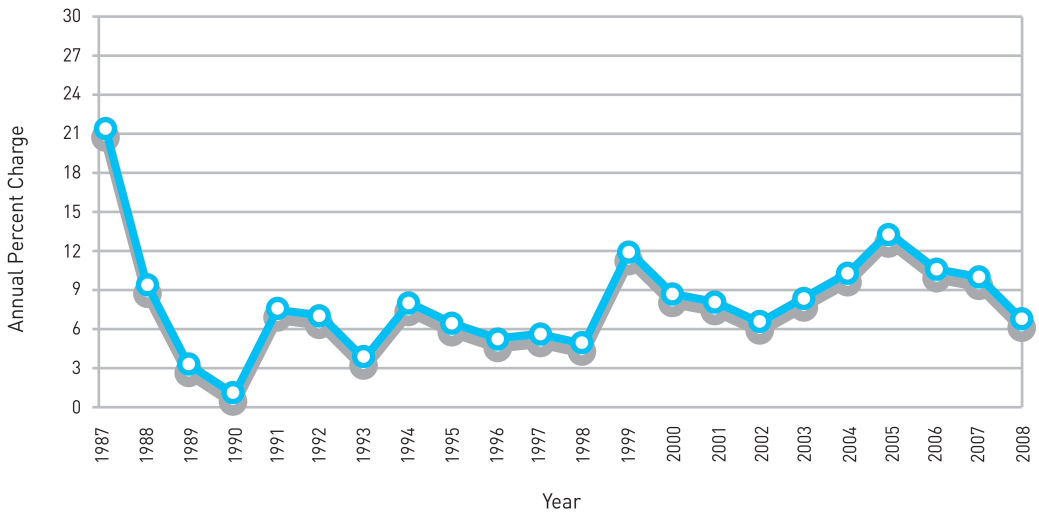
In Cambodia, private micro, small and medium enterprises (MSMEs) are dominant and many MSMEs are found in the rural area. As of 2006, the number of MSMEs was 41,775 and MSMEs employed about 31% of the labor force. The majority of the labor force is unregistered farmers[4)].

Cambodia's financial sector has a low penetration rate. Only 8% of total population of 14.5 million uses financial services from banks and microfinance institutions (MFIs). In 2007, the total number of borrowers was 821,500. MFI clients accounted for about 75% of the borrowers.

Access to finance in agriculture is insufficient and constrains farmers' ability to improve productivity in the agricultural sector.

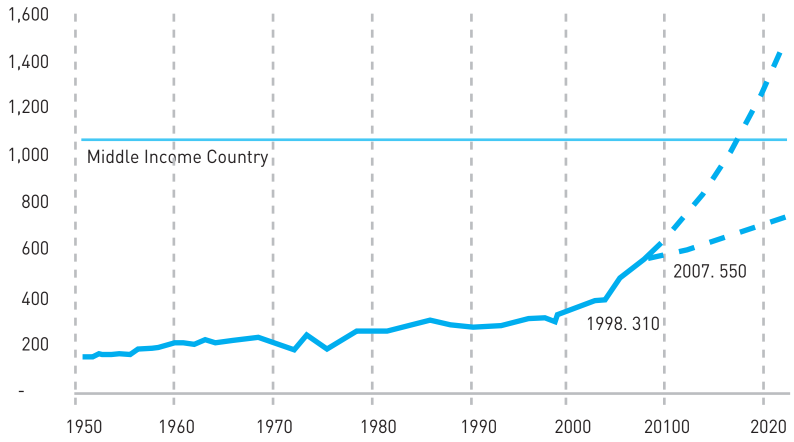
3) World Bank, Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum, Draft, January 2009.
4) IFC Cambodia , Cambodia: Financial Sector Diagnostic, 2008.

Figure 1-1 | **GDP Growth Rate of Cambodia**



Source : International Monetary Fund, 2008.

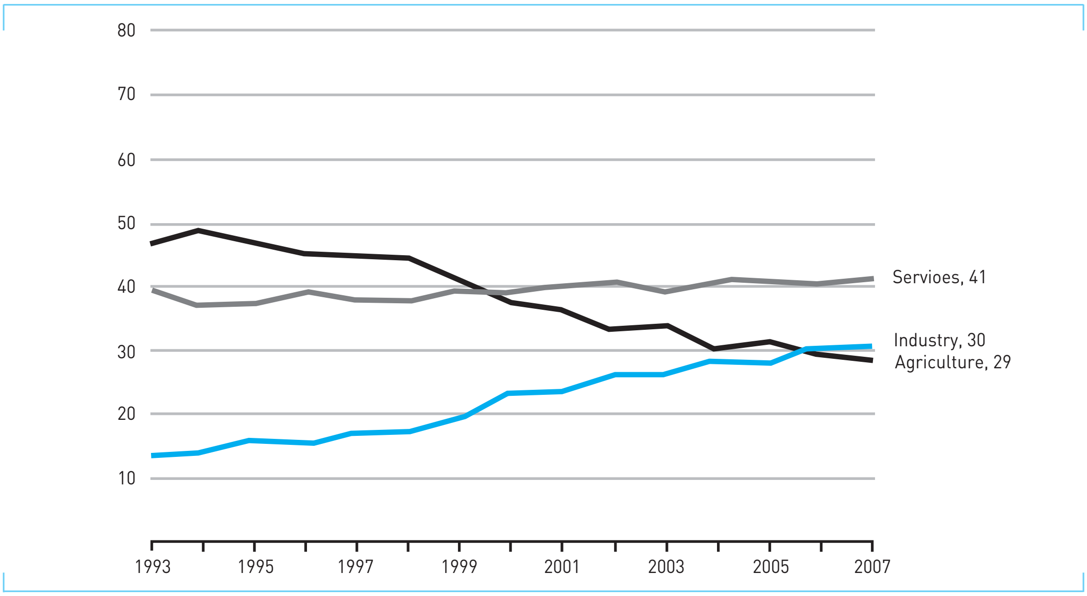
Figure 1-2 | **Cambodia's Income per Capita (2007 dollar)**



Note : Projections made based on reccent performance (7.5% p,a, per capita) and lower performance (2% p,a, per capita). Middle income country level is defined as US$1,075 per capita.

Source : NIS, national accounts, Madison for pre-1993 estimates.

Figure 1-3 | Share of GDP in Cambodia (%)



Source : Cambodia National Institute of Statistics

Figure 1-4 | Rectangular Strategy Diagram

Source : Council for Administrative Reform, 2004.

1.2. Cambodia's Macroeconomic Performance and Projection[5)]

Cambodia's economy has performed well in recent years due to a stable macroeconomic environment and double-digit economic growth. However, the global economic recession and financial crisis affected Cambodia's economy.

According to the IMF[6)](2009), real GDP growth is projected at 6.5 percent in 2008 and 4.75 percent in 2009, compared with 10.25 percent in 2007. In 2008, garment exports and tourism business declined as external demand weakened. The growth of the agricultural sector was likely below trend due to the adverse weather conditions. Construction activity also moderated as foreign direct investment decelerated and credit growth slowed down.

Headline inflation rate is projected to decline to 15.5 percent in December 2008 and 7.5 percent by the end of 2009 due to lower commodity prices and lessening demand pressures. The current account deficit increased sharply in 2008 due to high oil prices and strong growth of non-oil imports. The current account deficit is expected to decrease to around 7.1 percent of GDP in 2009. The gross official reserves would fall to around US$1.9 billion (3.1 months of imports) by the end of 2009[7)].

Garment industry is experiencing difficulties as garment exports are declining due to lower demand in the United States and European Union. The growth of tourism industry turned negative as the economic downturn in the world led to a decrease in discretionary spending. High inflation and the recent appreciation of the U.S. dollar and riel have reduced Cambodia's competitiveness.

Over the near term, the balance of risk is expected to be on the downside, because of uncertainty about the global financial crisis and its impact on external capital flows.

In March 2009, IMF projected that Cambodia's real GDP would fall by about 0.5 percent in 2009[8)]. The IMF mission and the government of Cambodia agreed that a larger fiscal stimulus appears warranted. The overall government budget deficit could be permitted to increase to around 4.75 percent of GDP without increasing external vulnerability. IMF recommended that the focus of additional stimulus should be on pro-poor social outlays and safety nets and high-quality infrastructure projects that would strengthen competitiveness.

5) IMF, 2008 Article IV Consultation with Cambodia, Public Information Notice No. 09/18, February 10, 2009; statement of an IMF Mission to Cambodia, March 6, 2009.
6) IMF, 2008 Article IV Consultation with Cambodia, Public Information Notice No. 09/18, February 10, 2009.
7) IMF, Cambodia: 2008 Article IV Consultation-Staff Report; Staff Supplement; and Public Information Notice on the Executive Discussion, 2009, p.9.

Table 1-1 | Cambodia: Selected Economic Indicators, 2005-09

	2005	2006	2007	2008	2009f
1. GDP					
GDP % change	13.3	10.8	10.2	6.7	6.0
Per capita GDP (in U.S. dollar)	468	534	623	739	
2.Inflation					
Inflation (y-o-y)	5.8	4.9	10.8	13.5	7.4
3.Government Budget (in percent of GDP)					
Revenue	10.3	11.5	11.9	12.5	12.1
Expenditure	13.7	14.2	14.7	14.2	15.4
4. Money and Credit					
(12 month percentage change)					
M2	16.1	38.2	62.9	17.0	6.1
Total Deposits in the Banking System	15.6	44.8	75.0	2.6	
Total Outstanding Loans in the Banking System	17.4	62.8	78.0		
Credit Private Sector	31.8	51.6	76.0	55.0	
5. Balance of Payment					
Exports	2910.3	3693.2	4088.5	4809.2	4197.0
Imports	-3903.5	-4727.4	-5419.0	-6661.3	-5798.0
Trade Balance	-993.2	-1034.1	-1330.5	-1852.1	-1601.0
Current Account (exclude official transfers)	-607.3	-527.0	-701.3	-1179.2	-1311.0
Current Account (include official transfers)	-266.0	-146.0	-170.0	-353.0	845.0
Exchange Rate (Riel per Dollar end period)	4112.0	4057.0	3999.0	4077.0	

Source : IMF, Ministry of Economy and Finance, National Bank of Cambodia, ACLEDA Bank

According to IMF(2009), medium-term prospects for Cambodia will depend on maintaining macroeconomic and financial stability, improving governance and infrastructure, among other things[9].

1.3. Cambodia's Global Competitiveness

The Global Competitiveness Report (GCR) 2008~2009 published by the World Economic Forum classifies 134 countries in the world into three stages of economic development: factor-driven, efficiency-driven and innovation-driven. Cambodia is classified as a country that belongs to the category of factor-driven economies.

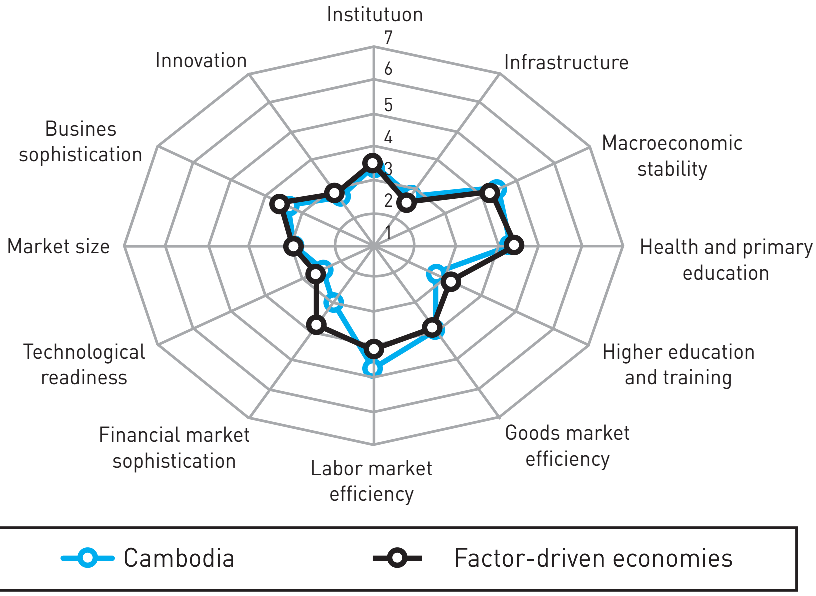
8) IMF, Statement of an IMF Mission the Conclusion of the Staff Visit to Cambodia, Press Release No. 09/67, March 6, 2009.
9) IMF, IMF Executive Board Concludes 2008 Article IV Consultation with Cambodia, Public Information Notice No.09/18, February 10, 2009.

The GCR states that the Global Competitiveness Index of infrastructure and financial market sophistication of Cambodia is 2.8 and 3.0, respectively, indicating the relative underdevelopment of infrastructure and financial markets in Cambodia. The lack of infrastructure and the inadequate access to finance are reported as primary bottlenecks to doing business in Cambodia (Global Competitiveness Report, 2008~2009).

The IMF Executive Board recommended that external competitiveness should be safeguarded by maintaining a stable macroeconomic environment and undertaking steps to improve public services and infrastructure[10].

Figure 1-5 | Stage of development of Cambodia

Figure 1-6 | Stage of development of Cambodia



Source : World Economic Forum, The Global Competitiveness Report 2008~2009, 2008.

10) IMF, IMF Executive Board Concludes 2008 Article IV Consultation with Cambodia, Public Information Notice No.09/18, February 10, 2009

Table 1-2 | Global Competitiveness Index, Cambodia

	Score (1-7)
GCI 2008-2009	3.5
GCI 2007-2008 (out of 131)	3.5
GCI 2006-2007 (out of 122)	3.4
Basic requirements	3.7
1st pillar: Institutions	3.4
*2nd Pillar: Infrastructure	2.8
3rd pillar: Macroeconomic stability	4.4
4th pillar: Health and primary education	4.3
Efficiency enhancers	3.3
5th pillar: Higher education and training	2.7
6th pillar: Goods market efficiency	4.0
7th pillar: Labor market efficiency	4.7
*8th pillar:Financialmarketsophistication	3.0
9th pillar: Technological readiness	2.4
10th pillar: Market size	3.0
Innovation and sophistication factors	3.0
11th pillar: Business sophistication	3.4
12th pillar: Innovation	2.7

Source : World Economic Forum, The Global Competitiveness Report 2008~2009, 2008.

1.4. Overcoming Constraints to Future Growth

Cambodia has a strong potential to continue high growth in the future if it increases competitiveness and maintains a stable macroeconomic environment (World Bank Report, 2009). To achieve the potential, policy intervention will be required, which includes (1) improving business environment and modernizing industrial policy and (2) larger public investment in agriculture, infrastructure, and education.

1.5. Financial Sector Overview

After economic growth accelerated in the early 2000s, the financial sector responded to growth since 2005, including financial intermediation by foreign banks. According to the World Bank report(2009), access to finance is likely to be a constraint for medium-size investments. Access to finance is a stronger constraint for agriculture.[11)]

Cambodia's financial sector has a low penetration rate. Only 8% of total population of 14.5

11) The World Bank, ibid., p. 58.

million uses financial services from banks and microfinance institutions (MFIs). Access to financial services outside the main urban sectors remains limited. Microfinance institutions have a significant role to play. In 2007, the total number of borrowers was 821,500. MFI clients accounted for about 75% of the borrowers.

In the last few years, the Cambodian banking system has grown remarkably with the number of banks increasing from 17 in 2004 to 24 in 2007. The strong growth of the banking sector was stimulated by the economic growth and the improvement of the regulatory and supervisory system, which helps to promote public confidence in the banking system. However, financial services are still limited and only available in urban areas.

Table 1-3 | Financial Depth and Outreach of Cambodia

(Unit: millions US$)

	2005	2006	2007
Total Loans	594	893.6	1,695.5
Loan Growth (%)	26	50.4	89.7
Loans as % of GDP	10.8	12.4	19.7
Total Deposits	906.9	1312	2,469.8
Deposit Growth (%)	14	45	88
Deposits as %of GDP	16.5	18.2	28.7
Loans as % of Deposit	65.5	68	69
% Cash of Total Deposit	38	35	31
No. of Loans per 1000 people	36	44	57
No. of Deposits per 1000 people	24	28	42
No. of FIs per 1000 people	0.2	0.3	0.28
No. of Branches per 1000 people	2.2	6.7	8.35

Source : National Bank of Cambodia

Table 1-4 | Number of Financial Institutions

	2004	2005	2006	2007
Number of Banks	17	19	20	24
Private Local Banks	12	15	16	20
Foreign Banks	3	3	3	3
State-Owned Banks	2	1	1	1
Licensed MFIs	13	16	16	17
Leasing Companies	0	1	1	1
Insurance Companies	4	4	4	7

Source : National Bank of Cambodia and Ministry of Economy and Finance

Only 5 percent of the loan portfolio of banks is for agriculture(NBC, 2008). Because of the lack of access to formal credits, many farmers depend on informal sources of financing with very high interest rates. Lack of credit is regarded as a major reason for rice millers' lack of working capital and outdated technology. Access to finance in agricultural sector remains insufficient and is one of constraints on farmers' ability to enhance productivity. In addition, banks only do collateral-based lending with steep coverage requirements.

1.5.1. Financial Sector Development Strategy 2006~2015

In 2001, the Royal Government of Cambodia (RGC) adopted the Vision and the Financial Sector Development Plan for 2001~2010 (FSDP 2001~2010), which is a long-term strategy for financial sector development in Cambodia.

Financial Sector Development Plan for 2001-2010 adopted phased approach in four steps:
(1) Implementing a rural credit policy
(2) Strengthening regulation and supervision
(3) Building financial infrastructure for microfinance
(4) Ensuring a pro-poor orientation in the development of microfinance sector

The FSDP 2001~2010 was revised and updated to address priorities and sequencing for the period of 2006~2015. In 2006, Financial Sector Development Strategy 2006-2015 (FSDS 2006~2015) has been developed.

2. Microfinance in Cambodia

2.1. Growth of Microfinance in Cambodia

Microfinance is the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and their micro-enterprises(ACLEDA Bank, 2001)

Microfinance is a powerful tool to fight poverty and transform lives. Microfinance can also serve as a means to empowerment.

Cambodia has developed an extraordinary policy, regulatory and supervisory regime for microfinance: (1) assigns a formal status and role to MFIs and (2) created an institutional framework for their operation(Foundation for Development Cooperation, 2003).

Cambodian authorities adopted restrained approach in support of microfinance:
(1) Allowed initiative and market force

(2) Preserve stability of financial system
(3) Protect the poor from exploitation

Since 2001, the microfinance sector has developed significantly. This impressive development is the result of an overall market-based approach to the development and soft government intervention.

Responsibilities have been divided between Ministry of Economy and Finance (MEF), National Bank of Cambodia (NBC), and the Cambodia Microfinance Association (CMA). MEF support policy development and funding coordination. NBC is responsible for regulation and supervision. CMA and the industry are responsible for operational aspects.

Table 1-5 | Main Microfinance Providers

	Loan Portfolio outstanding (in US$ million)	Number of borrowers (rounded)	Amount of deposits (in US$ million)	Number of depositors
ACLEDA Bank	57	115,000	29.2	51,437
PRASAC MFI	7.5	65,000	0	0
AMRET(ex. EMT)	7.3	101,000	0.2	110
Cambodian Entrepreneur Building(CEB)	3.4	8,000	0.16	8,147
Thaneakea Phum(Cambodia) Ltd(TPC)	3.1	36,000	0.37	59,931
Hattha Kaksekar Ltd(HKL)	2	6,000	0.08	7,723
Seilanithih	1.6	13,000	0.2	13,012
CREDIT	1.4	10,000	0.16	10,054
AMK	1.3	23,000	0.002	393
Vision Fund	1.2	19,000	0.02	1,745
CCSF	0.4	14,700	0.15	14,673
Maxima	0.2	1,000	0.02	10
Credo	0.1	3,000	0.02	2,033

Source : Asia Resource Centre for Microfinance, 2004.

Microfinance institutions (MFIs) have grown very fast despite constraints on the availability of local currency funds for their businesses. MFIs' loans reached 600,000 borrowers with the total loan outstanding of US$155 million in 2007.

Current trends in Cambodia's Microfinance sector are as follows:
(1) emergence of market leaders
(2) emphasis on financial sustainability

(3) growing-up market
(4) focus on microenterprise lending
(5) underdeveloped savings services
(6) NGO microfinance programs

Key issues for developing the Microfinance Sector are as follows[12]:
(1) Funding strategy for MFIs.
(2) Deposit taking by MFIs.
(3) Regulatory parity.

Table 1-6 | Repid Expansion of Microfinance Institutions in Cambodia(2000-2008)

(Unit: Million pesos)

	2000	2002	2007	2008
No. Registered	-	-	26	27
No. Licensed	0	4	17	18
No. Borrowers	370,651	328,295	600,486	825,652
Loans outstanding ($million)	29	49	155	277
No. Savers	147,441	107,150	104,712	108,788
Deposit balance ($million)	1.5	6.8	5.3	5.4

Source : National Bank of Cambodia, 2009.

2.2. Rural Development Bank

The Rural Development Bank (RDB) was established by the Government in 1998 to support and strengthen microfinance services in rural areas. The RDB is under the financial control of the Ministry of Economy and Finance and is supervised by the NBC. Licensed as a commercial bank, RDB deals with rural finance, solely at the wholesale level. RDB provides loans to licensed financial institutions. Its responsibilities are as follows:
(1) To finance and refinance MFIs and commercial banks in support of the rural economy.
(2) To negotiate with donors for funding
(3) To encourage the mobilization of deposits by the public
(4) To cooperate with financial institutions in providing agricultural credit
(5) To conduct wholesale banking activities, and
(6) To train the staff of MFIs funded by donors or government.

The RDB has provided loans for onlending to a number of leading Cambodian MFIs willing to contribute to rural development in Cambodia at concessional rates

12) Royal Government of Cambodia, Financial Sector Development Strategy 2006~2015, 2006.

2.3. Regulation and Supervision

The National Bank of Cambodia (NBC) is the supervisory body that grants and terminates licenses of banks and MFIs. The NBC also oversees operations of all banks and MFIs.. The NBC has recently issued a Prakas to permit qualified MFIs to take deposits from public. Major MFIs are expected to apply for the deposit taking institution status[13)].

2.4. Gap Analysis of MFIs[14)]

According to the gap analysis of the IFC Cambodia(2008), MFIs in Cambodia are faced with following problems:

(1) MFIs lack funds particularly for local currency and their savings products are not well developed.
(2) The market is crowded and MFIs offer similar financial products.
(3) MFIs offer limited products because they are not permitted to provide other services than credit, such as remittances.
(4) The MF sector suffers from a lack of service providers such as rating agencies, training providers and consultancy services.
(5) Remote areas can not get access to financial services. Branches and offices are located in district towns.
(6) Most MFIs are owned by NGOs. There is a threat to MFIs owned by local NGOs and the MF sector as a whole.

3. Public-Private Partnership (PPP)

A public-private partnership is an agreement between the government and private partners according to which the private partners provide the service in such a manner that the service provision objectives of the government are allied with the profit objectives of the private partners, and where the effectiveness of the alignment relies on an adequate transfer of risk to the private partners[15)]. When the government operates under expenditure limits or other budgetary constraints, the PPP mechanism may enable it to launch projects that would not be possible under traditional procurement.

There has been a huge increase in use of public-private partnerships(PPPs) as a mode of public service delivery in the countries that implement them during the past two decades. The trend has been to begin with PPPs in the transportation sector and then to move gradually

13) IFC Cambodia, Cambodia: Financial Sector Diagnostic. August 2008.
14) IFC Cambodia, ibid.
15) OECD, Public-Private Partnerships: In pursuit of risk sharing and value for money, 2008.

towards other sectors. Several developed countries and some emerging market economies increasingly use PPPs to provide services that previously delivered through traditional procurement[16]. Top ten countries engaged in PPP project finance deals in 2003 and 2004 include U.K., Korea, Australia and Spain(OECD, 2006).

PPP projects have been aggressively pursued in Korea for over 15 years since the enactment of the Promotion of Private Capital into Social Overhead Capital Investment Act in 1994, whose name was changed to the Act on Private participation in Infrastructure in 2005. Korea has followed a similar path to other OECD countries, starting off with transportation infrastructure projects, after which there is a gradual expansion into schools, hospitals, and public housing projects.

Emerging market economies using PPPs are Brazil, Chile, China and South Africa. Chile and South Africa have a more positive experience with PPPs primarily because legal frameworks in both countries have been geared to deal effectively with PPPs(IMF, 2006)[17]. Public-private partnerships operate best in a legal and regulatory environment where transparency is present, where there is clarity about the legal framework and where the terms of contract are properly enforced.

3.1. Public-Private Partnership (PPP) in Cambodia

Infrastructure plays a key role in enhancing economic growth. Numerous studies have found that infrastructure has a positive impact on output, especially in developing countries. Caledron and Serven(2004) found that Latin America's slow infrastructure accumulation in the 1980s and 1990s relative to East Asia explains much of why it has lagged behind economically. Calderon(2007) points out that infrastructure has long been considered a key determinant of productivity growth. He argues that an adequate and efficient supply of infrastructure may accelerate the growth rate and, if it grants access to poorer households, may reduce inequality.

Infrastructure has an important role to play in supporting Cambodia's growth and development. Efficient infrastructure is essential to sustain economic growth and industrial competitiveness. The poor coverage, quality and efficiency of Cambodia's infrastructure are primarily due to low income, low population density and history of conflicts in Cambodia[18].

Private sector participation offers two main advantages: (1) augmenting budget resources and (2) improving efficiency.

16) OECD, Public-Private Partnerships: In pursuit of risk sharing and value for money, 2008.
17) IMF, Public-Private Partnerships, Government Guarantees, and Fiscal Risk, Fiscal Affairs Department, 2006.
18) The Public-Private Infrastructure Advisory Facility and the World Bank Group, Private Solutions for Infrastructure in Cambodia: A Country Framework Report, 2002.

In trying to attract private participation in infrastructure, Cambodia faces several challenges such as: (1) balancing cost-covering tariffs and affordability concerns, (2) facilitating competition, transparency, and incentives for efficiency, (3) allocating and mitigating risks, (4) mobilizing local finance and (5) managing the private participation in infrastructure process[19].

Leautier(2007) of the World Bank points out that there are four critical capacities that countries need to have in place to successfully manage public-private partnerships in infrastructure (PPPI):

(1) Infrastructure is much dependent on public sources of finance. The public sector needs to play a key role in providing an enabling environment for PPPI. Policy makers need to pay more attention to the capacity of the public sector to do so.

(2) Capacity to manage fiscal risks is the ability to establish the level of acceptable risk, issue guidelines on risk profiles for sector agencies and local governments and monitor and manage risks.

(3) The complexity of financing mechanisms and regulatory environments challenges countries to search for ways to adjust local institutions to manage the environment.

(4) Learning from reforms is essential because it offers a risk-free option to countries launching policy reforms for PPPI[20].

4. Summary of Research Findings

4.1. Securing Stable Funding Flow into Microfinance Sector in Cambodia

The Cambodian microfinance (MF) sector experienced fast expansion in 2000's, which is one of the success stories in the microfinance history. It became an indispensable component in the Cambodian financial sector. It explores a new stage of commercialization and self-sustainability.

Major funding sources for the Cambodian microfinance institutions (MFIs) are deposits, loans from domestic sources (commercial banks and domestic institutional investors), and international capital markets (debt instruments, equity, structured products). Only 1.5% of outstanding loans can be covered by deposits for 17 MFIs in Cambodia.

Major players in the international funding for MFIs are development aid organizations, international financial institutions (multilateral and bilateral IFIs), and microfinance investment

19) The Public-Private Infrastructure Advisory Facility and the World Bank Group, ibid.

20) Leautier, Frannie, "Public Private Partnership in Infrastructure: A Step Forward," Jay-Hyung Kim(ed.) Performance Evaluation and Best Practice of Public-Private Partnerships, KDI 2007.

funds (MFIFs).

Recent global financial crisis cast doubts on traditional beliefs on the microfinance sector. The financial crisis has transformed perceptions of risk. Reputation of the microfinance sector came under the possibility of serious attack. Tighter risk management has brought accusation that MFIs are abandoning social missions. Over-indebtedness emerged as the biggest issue in the microfinance sector.

The financial crisis may cause funding to MFIs to dry up. Funding to the microfinance sector was seriously hit by the crisis. Funding from developed countries has shrunk significantly. Deteriorated financial market environments would raise the overall cost of capital for MFIs, resulting in worsening competitive edge in the microfinance sector. It should be the top priority of MFIs to secure stable and cheap funding sources.

It is recommended that the Cambodian government establishes a facility to guarantee loans to microfinance institutions (MFIs) from commercial banks. The loan guarantee facility can facilitate loans to MFIs by reducing credit risk. Offering the loan guarantee facility may induce commercial banks to be more willing to provide loans to MFIs without worrying about credit risk and regulatory issues. European Commission uses a similar loan guarantee scheme to support loans from commercial banks to MFIs in EU region.

The loan guarantee facility can be established as a joint effort between Cambodian government and foreign aid organizations. The National Bank of Cambodia (NBC) or Rural Development Bank, along with technical assistance from international experts on microfinance could operate the loan guarantee facility. Or a new independent entity could be established.

It is recommended that the Cambodian microfinance sector enhances international linkage and pursue stronger relation with the international microfinance network:

- Learn management practices at globally accepted level
- Acquire up-to-date microfinance-related information: especially, funding opportunities
- Help expanding on-and-off-the job training
- Help disseminate information on the Cambodian microfinance sector to world financial markets
- Take joint efforts to develop new microfinance institutions (MFIs) in rural area

The Cambodian microfinance sector should take advantage of innovation in microfinance. It is recommended that the public sector and private investors establish a microfinance investment funds (MFIF) focusing on the Cambodian microfinance sector:

- Joint efforts with international initiatives
- Possible contributors: Cambodian government, international facility, Cambodian banking sector

- Mission: loans and guarantees to relatively small Cambodian MFIs

The Cambodian microfinance sector should explore possibilities of securitization of microfinance loan portfolios:

- Collateralized debt obligations (CDOs) initiated by large licensed MFIs could be designed to attract various investors domestic and international.
- Participation of ACLEDA's small loan operation could help.

Microfinance-related infrastructure should be improved and strengthened:

- It is unavoidable pre-requisite to induce foreign investment.
- Re-examine foreign exchange regulation
- Strengthen corporate governance of MFIs
- Enhance transparencies: better reporting practices and accounting principles acceptable by international investors
- Assign credit rating to MFIs according to the international standard
- Maintain stable and reliable macroeconomic environment

4.2. The Role of Microfinance in Rural SME Development

Cambodia's main growth engines were garment, construction, tourism, etc. However, due to the global crisis, those existing growth sectors in Cambodia are extremely stagnated and the crisis has revealed their vulnerability to the shocks from outside. The Royal Government of Cambodia is, therefore, actively searching for ways to promote agricultural sector which is traditionally considered as the dominant sector in the national economy, contributing 34.4% to GDP and employs about 60 percent of the labor force in 2008.

Cambodian government also focuses on the SMEs in rural areas, and sees that rice processing facilities are one of the key areas that can boost up the productivity as well as profitability of the agricultural sector. However, there are still many obstacles in the promotion of SMEs in rural areas, and financing issue is considered to be one of the key obstacles. Therefore, this study focuses on identifying the existing and expected obstacles as well as exploring possible policy alternatives to overcome those identified obstacles.

Examining the current status of rural SME financing in Cambodia, most commercial banks are reluctant to provide loans to SMEs, especially the rural ones. Those banks possess insufficient business networks in rural areas and are concerned with SMEs' lack of accounting transparency. On the other hand, MFIs are not able to provide active lending service to those rural SMEs due to insufficient funds and information despite their comparative advantage in SME financing. In addition, a MFI cannot provide enough funding needed by SMEs since a MFI's aggregate loan commitment to any one client cannot exceed 10% of its net worth. While the MFIs have better networks in the rural areas than the commercial banks, those networks or resources may not be enough for them to provide sufficient amount of monitoring and education to the rural SMEs.

Therefore, the top priorities for rural SME promotion in Cambodia can be defined as follows. First, it is required to correct market failures in rural SME financing such as informational asymmetry. Considering that those SMEs have positive externalities to the whole society, it might also be necessary for the government to support SME's credit worthiness thereby providing easier access to the credit market. Second, it is required to promote the overall entrepreneurship because it is hard to expect active promotion of rural SMEs without the supply of proper entrepreneurs. This might involve a voluntary reform movement of rural areas. Third, in the pursuit of fore-mentioned, it might be necessary to introduce additional government measures to smooth the transition. Therefore, it is required to identify additional areas that need further government involvement.

Recognizing these priorities, this study reviews following international representative experiences and search for relevant implications that will constitute the building blocks for policy suggestions. We first examine EU's microfinance policies along with recommendations from other international organizations. We review Korean policies for SME promotion, the well known Saemaul-undong, and the development of agricultural cooperatives. We also cover the technique of syndicated loan to overcome the regulatory barriers.

After identifying Cambodia's vision and current situation in agricultural sector and policy priorities of Cambodian government in the promotion of rural SMEs, we reviewed EC's and Korean experiences in MF and SME policies as well as Saemaul-undong and agricultural cooperatives as the relevant best practices. We also examined syndicated loan techniques to bypass the given regulation and facilitate the risk diversification.

After all, the issue of financing rural SMEs through MFIs is about to whom and how to provide fund along with business supports. Therefore, this study focuses on the mid level microfinance that is closely related to SME financing. Once the effort to promote rural SME succeeds, it can expand and extend into broader SME in general.

Provision of various support for MFIs and thereby promoting SMEs have been one of the top priorities in EU's agenda. From the EC's ongoing efforts to promote SMEs through MFIs, it can be learned that the main issue for SMEs remains access to finance, and that self-sustainability of the MF activity should be the major aim. It can also be found that the intensity of public support to MF should be digressive, based on achieved performance and adapted to the targeted businesses. It is also shown that non-financial services, in particular mentoring, are essential to increase the chance of survival of SMEs. Even in EU, MFIs need performance evaluation/disclosure, and effective synergies with business support services. Through various efforts to achieve these goals, they also have found that comprehensive and systematic management are considered efficient and effective.

International organizations, for example, such as CGAP recommends character-based lending techniques and technical criteria in loan management, loan terms and conditions adjusted to cyclical cash flows and bulky investments, and utilization of membership-based organizations. ADB is also offering recommendations such as knowledge on the market, lending outlets located near the client, simple application procedure, quick disbursement of loans, as well as market based interest rates. These are not too different from the lessons derived from European experiences.

From these, following policy recommendations could be drawn. First of all, close cooperation and clear allocation of roles and responsibilities among the government, MFIs, and the business proprietors are the Key success factors. The government is required to scout the core players who will act as the business proprietor to found and operate the rural SMEs. In doing so, utilizing membership-based organizations is a very realistic option since individuals are hard to rise as the candidate entrepreneurs due to lack of funding and experiences. Besides, rural SMEs including the rice processing facilities have the characteristics of club good.

The experiences of agricultural cooperatives in Korea and their experiences with rice processing facilities can shed lots of implications in this respect. These cooperatives were very much integrated with the Saemaeul-undong and the Farm Machinery Joint Utilization Projects in the 1970s. Many efforts were made to promote joint marketing groups and to expand product distribution facilities (collection points, warehouses) and processing facilities. The same can be applied to the case of Cambodia.

The government also has to educate and motivate such potential players with mental and technical stimuli. The government may announce a plan to support SMEs with inaugural and operational knowledge and skills once the MFIs invest in them. The government must plan ahead with operational details, and may set up a separate government entity, or work with existing institution for this task. The government may also want to announce a plan to support SMEs with inaugural and operational knowledge and skills once the MFIs invest in them.

Best to encourage MFIs to eventually expand their branch network in rural areas, fortified with monitoring and educational functions. Until MFIs become equipped with fully operational networks in such areas, the government may want to provide temporary substitution scheme, such as systematic support of the government entity, for now.

It is also important for the government to work closely with MFI Association (and may involve Rural Development Bank) to introduce syndicated loan scheme to diversify the risks and to increase the size of the loan provided by the MFIs. The size of the required funding to build and operate a SME may be too large and the accompanied risk may be too high for an

MFI to execute given its capital size and imposed regulations. Syndicated Loan may provide a solution to the problems associated with MFIs' rural SME investments. It might be a good idea to designate an institution as the intermediate to provide organized support service for loan syndications.

In longer term, as the fiscal consolidation enhances, it might be a good idea to introduce government provision of credit guarantee system, either in partial or full. The central bank can also play an important role in the introduction of such system. In doing so, Korean experiences and facilities of credit guarantee systems can be imported to the Cambodian system.

While the micro finance is an area where the private sector takes a leading role, it is still true that potential synergies can be realized if the government takes initiatives in clearing the existing bottlenecks. Therefore, it is further required for the Cambodian government to search for the potential bottlenecks with the progress of rural SME promotion.

4.3. Improvement on Legal and Procedural PPP System in Cambodia

Infrastructure plays a decisive role in determining the overall productivity and development of a country's economy, as well as improving the quality of life of its citizens. Well developed infrastructure can raise industrial competitiveness by enhancing productivity and capacity to innovate. It also helps to reduce poverty and thus improve welfare and income distribution. However, a growing evidence of gap between the needed infrastructure and the ability to provide public funding, further aggravated by the recent global financial crisis, is expected to put a deep strain on the fiscal soundness of the country.

We first analyze the current state of infrastructure development in Cambodia, focusing mainly on challenges and investment needs. Given that vast infrastructure networks are in serious disrepair and in need of modernization, infrastructure investment is an urgent requirement in Cambodia. Infrastructure reform and new investments are necessary in order to sustain productivity and growth of the country. Infrastructure development, in this regard, is among the high priority and core targets in Cambodia. In the National Strategic Development Plan (NSDP) the Royal Government of Cambodia manifests its willingness to expand and develop infrastructure and provides targets and measures in various sectors for development. Challenges rest on how to ensure the upkeep and consistent maintenance of infrastructure and how to invest efficiently. In resolving these challenges, private sector involvement in infrastructure provision can be emerged as a preferred method. In order for the expansion of infrastructure investment to yield desired policy outcome, a solid and operational public-private partnership(PPP) framework must be established to induce more private investments.

PPP in infrastructure development in Cambodia started in the late 1990s, for which the process complies with the Law on Concessions, enacted with the aim to promote and facilitate the implementation of privately financed. Nevertheless, Cambodian PPP legal framework is still in the course of development where many areas in terms of legal regulations and processes are yet to be covered. Hence much backlog in implementing PPP exits. Institutionally, unstructured and informal nature of PPP process that often does not follow a clearly documented prescribed path to approval hinders coherent execution of a PPP project. Also, several institutions have key roles in the PPP process but usually lack capacity and clear institutional roles and responsibilities. Fundamental and critical reform to the current regulatory and institutional environment is required to mitigate political and regulatory risk. To ensure transparent and accountable implementation as well as strengthened governance for increased public-private partnerships in infrastructure, an entity solely responsible for PPP with improved legal framework seems necessary.

As Korea has experienced challenges regarding PPP in infrastructure at its development stage and has also overcome the obstacles through trial and error, we draw policy lessons for the Royal Government of Cambodia based upon Korea's experiences on infrastructure development. The focus, in particular, will be on legal framework, procurement and evaluation, and organizations (unit) for public-private partnership. Key policy recommendations are organized around three main points: the introduction to solid legal and regulatory framework; the creation of an independent PPP unit; and the establishment of transparent procurement process.

It is generally agreed that a single law cannot establish the necessary framework for projects as complex as that of privately financed public infrastructure. The existing legal framework with loopholes that allows circumvention or avoidance of some of the most critical regulatory stages must be addressed. The legal, regulatory and governance framework must be solid and correspond to international standards with clear and consistent implementation procedures regulated by relevant act and practical implementation guidelines. In light of the current Cambodian Law on Concessions, legal gap must be addressed and complemented through immediate adoption of sub decrees, specifying principles and schemes for tendering, contracting, risk sharing and conflict resolution. A clear governance structure should be established, and the relevant authority must play a central role in this governance structure.

A specialized unit for assisting PPP program must be established as an advisory and project facilitating entity. Creating an enabling PPP unit with clear mandate in Cambodia is crucial not merely because it functions to coordinate PPP projects, but also through transparently conducting the necessary process, it can induce international investor participation, which is essential for project implementation in Cambodia. In Korea an independent PPP entity is in work, while many PPP units around the world are located within the respective financial ministry. A PPP center must be staffed with experts in relevant fields in order to accumulate the necessary competence and capacity over time. The rationale for the establishment of the PPP center, its functions and mandates as well as the organizational structure must be clearly stipulated in a sub decree.

PPP procurement, bid, and evaluation methods suggest ways for optimal procurement for transparent selection process, which contributes to fostering a competitive PPP market. Cost and time resources are certainly required in a transparent tender process. However, it is also true that a generally competitive tender process for PPP procurement ensures enhanced public service. Advocating competitive bidding process is required for Cambodia, with standardized sets of process and guidelines. Ways to promote competition for proposals include addressing reimbursement issue of proposal preparation cost of unsuccessful proponents, announcing content of alternate proposals when pursuing an unsolicited project, designating two or more potential concessionaires, and simplifying required documents for proposal. Transparency being a significant issue in tendering, clear access to information must be provided.

4.4. Financing PPP Projects in Cambodia

The level of physical capital in Cambodia is very low. Beyond private physical capital, and despite recent progress, infrastructure is particularly poor. Electricity is expensive and in short supply.

To address electricity as a major constraint, Cambodia needs to invest in large scale generation, build its national grid, and improve the operational and financial efficiency of this sector. In the area of rural infrastructure, the role of labor-intensive public work projects could be explored.

All put into consideration, it seems appropriate to assign different types of financing methods to different infrastructure investment opportunities. Foreign borrowings are crucial sources of Infra Financing. Private lenders are sensitive to profitability and accompanying risk. While, international organizations are sensitive to their own policy goals. Plausible performance measurement and monitoring schemes should be prepared.

Korea has been the Asian pioneer in establishing infrastructure funds. For example, Macquarie Korea Infrastructure Fund was established in 2002 and is engaged in the investment of infrastructure assets in Korea.

In principle, financing can be done by either equity or bond. In reality, however, there exist a variety of other ways between the two. Each financing method differs by magnitude and direction of risk-sharing between the parties involved. Depending on country specific factors, the government may choose the best option(s) and implement it by adopting a certain credit guarantee program. Accordingly, overall evaluation on the Cambodian economy in consideration of various aspects, such as macro-performance, fiscal balance, capital budgeting system, and financial market development, would be critical for this project.

In addition to the country specific factors, the characteristics of a PPP project may require a different financing scheme. Each PPP project differs by uncertainty and duration of cash flow. Different cash flows may require different treatment especially in an incomplete financial market. Once priorities for infrastructure building are determined, different financing schemes should be matched accordingly.

Above all, a reasonable capital budgeting system including well-established feasibility evaluation methodologies should be introduced. By improving transparency, it will reduce investors' uncertainty and invite more funds to the PPP finance market.

Appropriate tax incentives and MRG should be given at the initial period. Not to be excessive, all these incentives should be evaluated thoroughly. The evaluation methods will be basically the same with the one used in running the feasibility test.

Credit Guarantee for Infrastructure Investment should be introduced. Fees and level of guarantee should be well balanced.

In addition, the following measures taken by Indonesian government to induce more PPP are notable:

- Liberalizing and lowering the entry barrier to Infra market
- Eliminating legal and institutional uncertainties
- Establishing the principle of distributing fees and risks at a fair ground
- Efficient mechanism of conflict resolution

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Chapter 02

Securing Stable Capital Flow into Microfinance Sector in Cambodia

Chapter 02

Securing Stable Capital Flow into Microfinance Sector in Cambodia

Chang-Gyun Park (Chung-Ang University)
Sophea Hoy (Cambodia Microfinance Association)

1. Introduction

Originally a small-scale, local initiative to provide credit to the poor mainly led by non-governmental organizations, microfinance (hereinafter MF) has recently accomplished a great success and is now firmly established as an indispensable part of financial system providing a wide range of financial services such as credit, saving vehicle, money transfer and insurance to millions of people around the world.

It is now a broadly appreciated proposition that MF can play an important role in economic development as well as poverty reduction in developing countries. According to the Microfinance Information eXchange (MIX) that compiles a wide range of data on MF in developing countries around the world, 1,200 microfinance institutions (MFIs) reporting their performance to MIX were serving approximately 64 million borrowers and 33.5 million savers in 2007. Total asset of these MFIs amounts to $32 billion and attracts investors, socially and commercially motivated, from all over the world. Furthermore, the core concept of MF is now being successfully introduced into developed countries with an intricate network of financial institutions. Though still in a nascent stage, MF in developed countries is taken very seriously by policy makers as a powerful tool to cope with deteriorating income distribution and support to construct a labor market with a more robust employment basis.

However, MF sector has been undergoing a fundamental structural change. Several stellar success stories stimulated interest on the sector and attracted billions of dollars of outside investment, resulting in explosive expansion of MF. Moreover, commercialization of MFIs pursuing cost reduction and competitive edge has made it blur the distinction between the traditional banking and MF. It is no more surprising to observe that many MFIs transformed into a commercial bank or several traditional commercial banks launched large scale MF division. Globalization of MF operation is another significant trend in MF sector over the last decade. Large MFI networks such as Grameen Network and ACCION Inc. extended the realm of business beyond territorial limit and acquired investment interests in multiple countries. While one cannot deny that these trends have pushed MF sector into a new dimension in terms of the diversity and quality of services by MF sector, it is also true that the competitive pressure and higher expectation compel MFIs to engage in an incessant quest for new financial innovations.

Like in many other developing countries, MF is an essential ingredient of financial system in Cambodia. MF sector is the most important credit provider to micro, small and medium enterprises largely located in poor rural areas. Those enterprises are beyond the reach of the banking sector that focuses on serving relatively large scale creditors in urban areas. Thus, MFIs play an important role in providing credit services to majority of population residing in rural areas. Access to financial services helps the rural population, especially the poor, to secure foundation for income growth and build up asset holdings for longer term financial security. It also helps the poor better cope with external shocks such as sickness and natural disasters in a country like Cambodia that lacks social safety net. Cambodian MF sector is one of the most rapidly developing ones and is internationally recognized as a great success story. The sector reaches over a million borrowers and more than 520,000 savers in 24 provinces. By the end of 2008, the total loan portfolio was almost US$440 million while deposits were more than US $490 million, which boasted a remarkable growth performance in recent years with an annual growth rate around 30%.

All seemed to agree that there exists a promising prospect for MF sector but the recent turmoil in financial market and following recession, however, cast serious doubts on the optimism. Many questions were raised. How would the dramatic events in financial market affect MF sector? Would it be able to survive the crisis unscathed? What are the risk factors that can jeopardize the future development of the industry? Researchers and practitioners in the industry embarked on collective efforts to find and secure the future of the industry. It is agreed that the economic crisis has completely changed the landscape of MF sector in various aspects. Perception on risks, especially credit risk, has been completely changed and the issue of over-indebtedness and consumer protection was identified as one of the key areas that should be addressed. One serious question brought up after the crisis is the question of securing stable funding source. Many MFIs confronted with different market environment in which once friendly fund providers, in most cases international investors, have suddenly changed their positions denying extension of existing loan contracts or unilaterally cancelling signing of new contracts. All of a sudden, liquidity became a scarce commodity and operational realm of an MFI was limited within the level of liquidity the institution had stockpiled. Under the new market condition, it is vital for MFIs to secure not only inexpensive but also stable funding sources for long term growth.

This chapter discusses how Cambodian microfinance sector can build up a stable and reasonably-priced funding framework. In searching for the solution, we focus on domestic sources, namely deposits and securitization of microfinance loan portfolios. Particularly, we suggest that Cambodian government consider establishing a loan guarantee fund to induce deposits taken by commercial banks to MFIs. We also propose that larger Cambodian MFIs establish close relationship with commercial banks and public agencies in microfinance and experiment with a securitization scheme such as issuance of collateralized debt obligation with loan portfolio of several MFIs as underlying collaterals.

The next section sketches impacts of the recent global financial crisis on microfinance sector. A brief discussion on history and current state of microfinance industry in Cambodia follows in Section 3. In Section 4, we examine possible funding methods for MFIs and discuss pros and cons for each method with special reference to Cambodian microfinance sector. The final section presents policy measures that are necessary to establish a secure funding source for Cambodian MFIs. The focal point of our suggestion would be on loan guarantee fund and securitization scheme for microfinance loan portfolio.

2. Global Financial Crisis and Microfinance

Many poor people, especially small farmers and micro-entrepreneurs have benefited from access to financial services provided by MFIs. Access to financial services offers the poor opportunities to increase income and improve quality of life. Some are even trying to explore the possibility of utilizing microfinance in order to stimulate economic development particularly in low income countries. Moreover, compared with other financial institutions, MFIs have shown a remarkable resiliency to emerge relatively unscathed from the financial crisis of the past few decades. During the turbulent periods of currency crisis in East Asia and banking crisis in Latin America in the 1990s, institutions serving the poor performed relatively better financially and operationally than the mainstream banks in the region. Those experiences have been utilized to argue that microfinance sector is very robust to external shocks.

Considering the fact that neither clients nor MFIs were fully integrated into the complex network of banking system, one can argue that the main factor behind MFIs' remarkable shock resistance capacity may not be the inherent resiliency of MFIs but the isolation from the shock propagation mechanism of the mainstream financial institutions. However, microfinance now has more complex links with both domestic and international financial markets. The aftermath of the recent turmoil in global financial market sparked by subprime mortgage crisis in the United States is more likely to inflict various damages on MFIs as well as on the mainstream institutions. Still, there are many optimists who express positive prospects that many strong institutions and vast amount of untapped reserves in the hands of creditworthy borrowers will ensure the survival of the microfinance sector in spite of the setbacks due to the recent global financial crisis.

The effects of the recent financial crisis are likely to be more complex, deeper, and more difficult to predict than in the past. What is clear at least for now is that the length and severity of worldwide recession following the havoc in financial market will throw a punishing blow to many poor people and the institutions that serve them. Evidences, though sketchy, from different segments of the markets suggest that MFIs around the world have already started to feel pressure in various ways due to consequences of the crisis such as credit crunch, sudden liquidity reduction, currency dislocation, job losses, and bankruptcy. How an individual institution is affected depends also on various factors; capital structure of an institution, financial state, and the economic environment surrounding an institution.

Although we cannot offer a clear answer except for anecdotal evidences, several reports from the field suggest that the economic downturn initiated by the recent financial crisis is inducing negative impacts on household income. Low income families, in particular, are struggling to adjust to a new but harsher economic environment. With less opportunity to work and lower income, low income households as the main clients of microfinance sector witnessed considerable deterioration in their ability to repay the debts. Poor people in developing countries also suffer from economic downturn in developed countries since the remittance income from relatives abroad, in most cases the United States and European countries, was badly hit. Considering the fact that remittance income occupies a significant part of hard currency inflow for many developing countries, decreased remittance means fewer resources flowing into those economies, and especially to poor families in those countries.

Deterioration of clients' purchasing power and increasing demand for cash in developing countries caused savings to be withdrawn and sometimes straining repayments. This subsequently caused both liquidity and credit risks to emerge as the major concerns for MFIs. Fortunately, demand for goods necessary for subsistence level of consumption tends to remain stable and does not show any signs of considerable damage during worldwide economic contractions, and this is the business of many microenterprises. Some even argue that a lot of clients of MFIs might find opportunities to benefit from the crisis if, for example, they can adapt their inventory to sell cheaper goods to meet newly frugal customer demands. However, consensus among the market observers is that we should expect pressure on microfinance clients to ultimately translate into higher arrears over time.

The funding source is expected to have different impacts on MFIs. MFIs with a broad base of deposits are less exposed to refinancing risks than those heavily relying on external funding sources such as loans from foreign investors. CSFI(2009) reports that most deposit-taking MFIs, including many savings-led institutions in Asia and Africa, have fared relatively well compared to MFIs that rely on international funders who have been hit hard by the credit crunch in global financial market. A respondent from Uganda in CSFI survey stressed the importance of deposit-taking; "Take deposits or die! MFIs will have to come up with alternative ways of running the business if they are to stay afloat. Deposits will be one of the cheapest ways to raise money."

However, deposit-taking is not easy for MFIs. First of all, MFIs should overcome the suspicion of the public and regulatory authorities on the credibility issues. Especially, regulatory authority will put more stringent restrictions on the operation of MFIs and that can be easily translated into higher compliance cost and ultimately higher cost of capital. Moreover, efforts to take more deposit will pitch MFIs more directly into competition with commercial banks. It is not clear that the microfinance industry is readily prepared for the next step of confronting with their bigger and stronger competitors.

The most immediate concern raised by the glut in the global financial market in most countries is how the global liquidity contraction will affect the availability of funding to non-deposit-taking MFIs. Essentially, liquidity comes from two sources, deposits and credit lines with other financial institutions, namely commercial banks. MFIs that do not take deposits or rely heavily on borrowings from external sources are required to manage their dependence on these sources. Confronting a series of turbulent market conditions, banks promptly turn their position around to cut back loans and credit lines extended to MFIs. Even MFIs primarily relying on deposits as the funding source for lending could become vulnerable once public confidence on MFIs gets weaker. The lack of proper framework to cope with sudden liquidity crunch may damage the prospects for MFIs' survival as well as business potential. At the start of the recent financial crisis, many otherwise strong MFIs actually had to watch the lines of credit had suddenly disappeared and even in some cases large commercial banks were chasing the same client group as MFIs in soliciting deposits. The dry-up in liquidity affected MFIs particularly those traditionally depended heavily on microfinance investment vehicles or international credit lines since damages caused by the recent crisis were much more serious in international financial market than in domestic market.

Liquidity crunch in international financial market was directly linked to the emergence of refinancing risk as an important risk factor MFIs should pay a close attention to. Refinancing risk addresses the danger that MFIs may not be able to renew their base funding from investors and lenders because of changes in funding environment. It is a very important risk factor especially when MFIs generally borrow with short maturities, say less than three years. According to a survey conducted by CGAP, an international organization promotes microfinance through provision of information and technical assistance to MFIs, while most banks and investors offer funding to MFIs with one or two-year tenor so that refinancing risks are likely to become more imminent and dangerous unless the stringent atmosphere in global financial market changes its course of action to offer more favorable circumstances to borrowers. Concerns on refinancing problems will leave a lingering effect on MFIs since as MFIs anticipate shortage in funding, they are likely to slow down the pace of credit and take a more cautious approach in making new loans. They will stick to current clients and some may extend only smaller amounts or not renew loans at all. This attitude makes sense in the context of asset and liability management but will hurt the quality of assets in the longer run as it undermines repayment incentives. When borrowers expect that their current loan contract have little possibility of getting renewed or receiving a new loan, they have little incentive to make effort to repay the current loan.

Much effort has been taken to ease the stringent conditions in global financial market. The most noticeable measure was to establish liquidity facilities. For example, the Inter-American Development Bank launched in 2008 a $20 million financing facility to help Latin American MFIs that have difficulty in securing liquidity. In November 2008, the reserve Bank of India extended a $1.5 billion credit line to SJDBI, the country's development bank for small enterprises. The move was intended primarily for emergency liquidity provision to small and medium-size enterprises through MFIs. In February 2009, KfW, a German development financing agency, and International Finance Corporation launched a $500 million cross-border refinancing facility for MFIs.

There are many skeptics offering critical assessments even though they generally agree on the necessity for an emergency liquidity facility. They argue that such emergency funding is needed but should be short term and priced as a last resort so as not to crowd out local resources or create disincentives to mobilize deposit .They also stress that over the long run, funders should encourage the progression of institutions to become licensed to take deposit from the public to acquire a safe and ample liquidity source.

Currency mismatch is another area of concern in microfinance transpired conspicuously in microfinance industry after the recent global financial crisis. As most MFIs are operating in developing countries where domestic financial market is still in a nascent stage, they have no choice but to resort to foreign funding sources from both commercial and non-commercial sectors. In addition, there are few international investors that are willing to buy debt instruments denominated in local currency due to the fear for foreign exchange rate risk and in some cases, capital control. Therefore, MFIs borrowing in foreign currency are facing a double-edged difficulty after the global financial crisis. They suffer from both interest rate hikes and depreciation of domestic currency against the hard currencies in which debt instruments they issued are denominated. In the past few years, it is reported that foreign exchange loss by MFIs amounted up to 7~43% of their operating profits. Even in top-tier MFIs that had relatively less stringent funding opportunities, loans denominated in foreign currencies equal a significant part of their equity capital. This is especially true in Latin America or Eastern Europe, where most MFIs heavily depend on external source of funding rather than deposits and therefore their foreign exchange exposure sometimes exceeds equity base. An exception to the fear of currency mismatch could be found in countries whose economies are dollarized due to lack of confidence in domestic currency. Cambodia is an example that is relatively free from concerns on foreign exchange exposure due to de facto dollarization but international investors are not totally free from worries on the possibilities of extreme events such as change in foreign exchange regime.

In response to the changes in market environment, various market participants will adjust their both long term perspectives and short term strategies. MFIs are thought to consider increasing reserves and adjust growth plan to be more conservative in the light of tighter credit conditions. However, cutback on existing loans should be executed with great caution only after a careful examination on the effects on repayment decision of the borrowers. When MFIs decide to repudiate the implicit contract to grant follow-on loans for those who faithfully honored the existing loan contracts, repayment incentive of current borrowers suffers significantly, and consequently delinquency rate increases very fast. In addition, MFIs should pay closer attention to the issue of over-indebtedness to protect themselves as well as borrowers. Better communication channel between MFIs and borrowers is needed and information sharing system among MFIs with common business area should be established. In order to cope with future possibility of liquidity problem, greater attention to asset-liability management is warranted in terms of maturity mismatch and currency mismatch. Most of all, MFIs currently without sound depositor base should consider taking steps toward transforming themselves into institutions relying more on deposits and limiting dependence on cross border financing.

The recent global financial crisis made the role of public sector in microfinance re-examined. Non-interventionalist approach has been the mainstream view. It emphasizes that it is very important to limit the role of the public sector as a supportive one. The danger of crowding out private players has been the chief reason cited in objecting to active participation of the public sector. Deep-seated objection against activist approach is still intact. However, we detect a subtle shift in atmosphere surrounding the discussion on the proper role of the public sector. In calling for help from the public sector in overcoming the hardships, people seem to acknowledge that the public sector should play more active roles such as emergency liquidity provision, institutional capacity building for deposit taking, and injection of equity capital for MFIs in lower echelon of long term sustainability. On the other hand, some commentators warn that generous regulatory treatment of MFIs to alleviate adverse effects of the financial crisis such as loan forgiveness, subsidized lending, or interest rate caps may result in undesirable by-products of hurting financial access of the poor in the long run.

The recent global financial crisis left its mark on Cambodian microfinance sector especially in the form of tightened funding constraints. Cambodian microfinance sector that depends heavily on borrowings from foreign sources is thought to be potentially vulnerable to instability in international financial market. Facing with liquidity crunch, some foreign lenders have actually cancelled planned loan contracts or asked to revise existing contracts to charge higher interest rates. The Cambodian Microfinance Association reports that cost of capital has increased by, on average, 1.5 percent points per annum and consequently MFIs have started to reduce loan disbursements to clients. The reduction in loan disbursements left undesirable impacts on the incentive to repay an outstanding loan and delinquency ratio increased in a considerable magnitude to 0.42 percent in 2008, which was only 0.19 percent in 2007.

Cambodia is one of the few cases that showed a strong performance even in the midst of turmoil in international financial market. Growth in loan portfolio was not interrupted and profitability improved in a remarkable scale. The impact of the global financial crisis may be detected in the deterioration of the quality of loan portfolio. In the first quarter of 2009, the portfolio at risk defined as the ratio of total loan balance to overdue loans for more than 30days increased to 4 percent from less than 2 percent in 2008. Cambodian MFIs also watched a significant level of drop in deposit balance after the fourth quarter of 2008, which recovered its previous trend in 2009.

The microfinance industry, at its core, showed remarkable resiliency even against extreme events in international financial market. It is not likely that the sector in general will suffer from fatal damage jeopardizing survival of the industry. However, there will be serious problems in certain group of institutions with fragile customer basis or weak funding structure. But on the whole, the recent financial crisis also brought opportunities to MFIs. Some microfinance markets had become overheated in recent years, with unusual growth rates along with deteriorating underwriting standards. Recent events in financial market could offer a chance for MFIs to re-examine their operational practices and strategic goals. Slower growth, more conservative lending policy, and even consolidation of weaker institutions may be beneficial to MFIs in the long run.

The recent crisis clearly illustrated the value of creating a strong depositor base for MFIs as the main funding source. Those institutions relying mostly on deposits for funding showed remarkable resiliency in the midst of chaotic changes in international financial market. Many people came to believe that it is very beneficial to adopt a deposit-centered approach to building microfinance sector that are financially sound and properly serving the poor with both credit and saving instruments.

3. Cambodian Microfinance Sector

3.1. A Brief History

It was not until early 1990s when Cambodia had just started to emerge from a long period of severe civil conflicts that microfinance was formally introduced to Cambodia. The roots of microfinance in Cambodia can be traced back to a project called Rural Finance, an effort to provide credit resources to help rehabilitate the rural area seriously inflicted by the civil conflicts. Targeting the rural poor, the project directed most resources toward humanitarian support such as social works, health, and education. Without a functional financial system, non-governmental organizations (NGOs), domestic and international, played a crucial role in delivering the credit resources even to remote areas. UNICEF, EMT/GERT, and WVIC (World Vision International in Cambodia) were the names that should be mentioned as important contributors. Recognizing the Rural Finance as a useful mechanism for poverty reduction by promoting business activities and agricultural productivities, the Cambodian government, in a close cooperation with the NGOs, took various measures to support the Rural Finance Initiative.

The new Cambodian government acquired the official recognition in international community in 1993 and aids started to flow into the country. Under the new political and economic environment, a new generation of microfinance operators such as ACLEADA, SEILANITHI, HATHA KAKSEKAR, PRASAC, and Catholic Relief Services (CRS) emerged. They are more focused on delivering credit services to new small business activities by the poor than rehabilitation and humanitarian works strongly advocated by previous efforts. Still, the ultimate goal of most microfinance operators was to assist the poor in strengthening the ability to generate sufficient income to support themselves by offering access to credit services.

Microfinance initiatives started to extend the scope and depth of services in a significant scale and established themselves as an important credit provider along with banking sector. By 1998, the new industry was serving more than 200,000 people and sending representatives to almost all parts of 24 provinces in Cambodia. The Cambodian government was very active in promoting the industry. With funding support from international development organizations such as UNDP and AFD, Cambodian government established the Credit Committee for Rural Development (CCFD) in 1995 to formulate a strategic plan for more effective credit provision to rural area.

In addition, the National Bank of Cambodia (NBC) began recognizing microfinance sector as a major factor in financial system by setting up the Supervision Office in 1997. The Office was responsible for supervising and supporting microfinance institutions and in 2000, it was divided into two divisions, “the Office of Specialized Banks and MFI Supervision” in charge of regulation and supervision and “the Project of Supporting Microfinance Sector” in charge of capacity building of MFIs. In 1998, the Rural Development Bank (RDB) was established by the Cambodian government as the main promoter of rural finance and the apex institution for microfinance institutions.

While growing MFIs attained a significant position in the echelon of financial institutions in terms of size and outreach, they had posed new challenges to financial regulators in that larger microfinance sector meant increased risk factors for clients as well as financial system. Policy makers decided that it was time to create a regulatory framework for microfinance sector.“Law on Banking and Financial Institutions” was enacted in 1999 and the law stipulated three different categories of banking-related financial institution subjected to the regulation and supervision by the NBC; that is, commercial banks, specialized banks, and microfinance institutions. The distinction is based on the coverage of business operation that financial institutions in each category can undertake. The sub-degree issued by the NBC requires larger MFIs defined in terms of loan outstanding and the number of clients to get license or to register with the NBC. Microfinance has grown to encompass more than 80 MFIs by the end of 2009. Among them, 20 were licensed and 26 were registered. ACLEDA was the first NGO-initiated MFI registered in 1992, and subsequently became a specialized microfinance bank in 2000. The bank acquired the status of a commercial bank in 2003.

Since the mid-2000's, microfinance sector in Cambodia has been transformed into an industry with a commercial purpose. A variety of players including commercial banks, credit unions as well as traditional NGO-led MFIs entered the market. Outreach and diversity of services provided by microfinance increased in a considerable scale. Moreover, a new generation of commercially motivated MFIs with no NGO affiliation was introduced, and they extended domain of their business operation.

At the same time, the credit technique seems to have shifted from village banking or group lending to individual lending. This reflects the efforts of Cambodian MFIs trying to adapt themselves to a changing social and economic environment. Aside from a few exceptions such as AMERT or ACLEDA offering various financial products, microfinance in Cambodia is still in very much credit-oriented stage mainly led by NGO-initiated organizations. Even though more MFIs have started to express interest in offering additional products such as savings account, remittance service, and micro-insurance, it would be accurate to describe the current situation of Cambodian microfinance sector as having just passed the stage of micro-credit and started to explore the economic feasibility of offering more diverse products based on more commercial consideration.

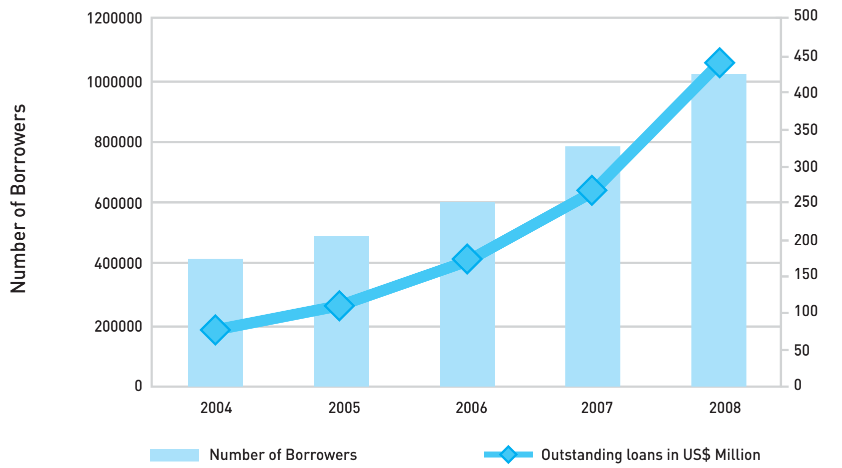
In spite of stellar success stories of Cambodian microfinance sector, many structural problems still remain unsolved. Credit portfolios are still financed by external sources such as foreign donors and investors. Most MFIs have not yet completely succeeded in achieving enough credibility to take own deposits or acquire loans from domestic commercial banks holding large stock of deposits. Interest rates are thought to be too high for the poor in Cambodia to manage without endangering their ability to repay. That is partly due to strong emphasis on long-term sustainability of MFIs but mostly due to high cost of operation and high cost of funds stemming from inability to mobilize domestic savings in a large scale.

3.2. The Performance

Cambodia has one of the most rapidly developing microfinance sectors in the world and is also internationally recognized as an example of success story that microfinance can be an instrumental tool to help the poor break the vicious cycle of poverty and improve quality of life. Presently, there are more than 80 MFIs actively operating in Cambodia and about 50 of them are already integrated into formal financial system through license and registration with the NBC.

In recent years, the microfinance sector in Cambodia has played a leading role in delivering financial services to the rural poor and facilitating credit provisions to rural small and medium enterprises. The sector has experienced rapid growth especially over the last five or six years, reaching over a million borrowers and more than 520,000 savers. By the end of 2008, the total loan portfolio in Cambodia was almost US$440 million while deposits were more than US$490 million. From 2006-2008, the number of borrowers grew at a very rapid rate at 23%, 29% and 31%, respectively, while total MFI lending increased at a rate of more than 55% a year (IFC(2009)).

Figure 2-1 | The Number of Borrowers and Total Loan Portfolio of Microfinance Sector in Cambodia



Source : IFC(2009), Microfinance in Cambodia: Taking the Sector to the Next Level

In order to examine the performance of Cambodian MFIs more in detail, we look into Microfinance Information eXchange(MIX) database. The database reports the performances of 15 large MFIs in Cambodia and is believed to cover almost 90% of the Cambodian microfinance sector in terms of important variables such as loan portfolio outstanding and deposits. <Table 2-1> illustrates total assets, gross loan portfolio, the number of active borrowers, deposits and the number of depositors at the end of 2008. Total assets reported by 15 MFIs were more than 1 billion U.S. dollars. ACLEAD was the biggest player with 693 million U.S. dollars followed by AMRET and PRASAC. Total loan portfolio outstanding was 739 million, among which 62.8% was held by ACLEDA[21]. More than 1 million borrowers were able to secure loans from MFIs.

21) In Figure 2-1, IFC reports that total outstanding loan at the end of 2008 was only 440 million U.S. dollars. The difference between numbers in Figure 2-1 and Table 2-1 can be mainly attributable to different data collection schemes used by the two institutions. ACLEDA still maintains its micro-credit business unit even though majority portion of its business is done in the area of commercial banking. While IFC excluded commercial banking operation of ACLEDA in their report, MIX database did not try to differentiate two separate operations of ACLEDA.

Table 2-1 | Indicators of Cambodian MFIs (2008)

Name	Total Assets	Loan portfolio	Number of borrowers	Deposits	Number of depositors
ACLEDA	692,877,455	464,477,809	214,337	487,802,546	487,803
AMK	29,520,328	23,423,582	188,696	154,523	15,552
AMRET	69,697,502	54,555,481	226,262	635,542	983
CBIRD	1,137,976	1,018,303	2,037	123,688	2,480
Chamroeun	443,505	375,737	4,213	116,568	6,379
CREDIT	20,665,049	19,060,212	33,887	863,484	3,246
HKL	36,065,096	29,050,403	44,467	1,194,239	48,852
IPR	4,066,051	3,228,145	3,457	0	0
Maxima	1,665,779	1,373,074	N.A.	0	0
PRASAC	61,262,237	59,380,115	100,116	62,956	2,920
SAMIC	5,096,774	4,778,709	10,340	2,947	1,736
Sathapana	41,441,994	37,595,818	37,159	1,854,786	21,174
Seilanithih	7,400,168	5,479,165	6,700	365,256	6,700
TPC	28,304,461	18,603,766	97,239	80,899	5,228
VFC	23,073,394	17,052,891	78,092	72,516	72
Total excluding ACLEDA	1,022,717,769	739,453,210	1,047,002	493,329,950	603,125

Note : Figures are in U.S. dollars and number of persons.
Source : MIX Market database

The total deposits held by 15 large MFIs in Cambodia amounted to USD 493 million. The dominance of ACLEDA was even more conspicuous in case of deposit-taking. The share of ACLEDA in deposit-taking was 98.9% while two MFIs, IPR and Maxima, did not take deposits from clients. About 600,000 or 115,000 excluding ACLEDA, had deposit accounts with MFIs in 2008. One thing to note from Table 2-1 is the fact that only 66.7%of loans by 15 large MFIs were financed through deposit-taking. The number is quite misleading since MIX database does not separate two banking operations by ACLEDA. Excluding ACLEDA, we obtain a deposit-to-loan ratio of 2%. Even the bigger players in Cambodian microfinance market like AMERT and PRASAC had extremely poor ability to mobilize savings from the public. It might be understandable to note the fact that public confidence in financial institutions, especially smaller ones like most MFIs, is still very fragile in Cambodia. Majority of Cambodian MFIs are forced to rely on borrowing from external sources such as multilateral development agencies, microfinance investment funds or in some cases, NGOs as well

Table 2-2 reports several performance measures of 15 Cambodian MFIs that are included in MIX database. The profit opportunity for microfinance industry seems very strong. Average return on asset was recorded as 2.8%, which was relatively high for the financial industry that generally depends more on volume rather than margin. If we exclude Chamroeun that went through a severe problem in 2008, the figure rises to a surprising level reaching 4.85%. In addition, the average write-off ratio defined as the ratio of amounts of un-recoverable loans to the size of total loan portfolio was 0.13%. Legerwood (1999) argued that MFIs with write-off ratio lower than 1% would be considered as financially viable. Considering the performance indicators in Table 2-2, we can conclude that larger Cambodian MFIs have already secured a firm foundation for economic viability as well as long-term sustainability.

Table 2-2 | **Performance of Cambodian MFIs (2008)**

MFI	Debt-to-equity	ROA	ROE	Write-off ratio
ACLEDA	658	3.34	27.57	0.06
AMK	182	4.28	12.69	0.28
AMRET	411	6.37	32.91	0.03
CBIRD	423	3.32	17.84	0.49
Chamroeun	206	-27.96	-85.26	0.07
CREDIT	341	5.59	22.41	0.04
HKL	431	6.86	39.72	0.07
IPR	216	9.68	30.42	0.15
Maxima	400	3.27	13.25	0.04
PRASAC	209	5.54	15.79	0.09
SAMIC	452	6.7	28.66	-
Sathapana	590	6.08	38.48	0.05
Seilanithih	682	1.00	5.56	0.04
TPC	484	4.95	24.97	0.15
VFC	399	3.01	12.85	0.29
Average	406	2.80	15.86	0.13

Note : Figures are in percentage.
Source : MIX Market database

3.3. Regulatory Framework for MFIs

The most important documents in regulatory framework for microfinance sector in Cambodia is the “Law on Banking and Financial Institutions” enacted in 1999 and the government sub-decree (Prakas) issued in 2000. The legal documents recognize three categories of banking institutions; commercial banks which require at least $13 million worth of registered capital and operate in all banking activities, specialized banks which require minimum registered capital of $2.5 million and are allowed to operate in limited range of banking activities specified in license, microfinance institutions which require minimum registered capital of KHR 250 million.

MFIs are further divided into two groups, the licensed and the registered, according to the size of credit portfolio and saving accounts. MFIs are required to obtain license when they either hold loan portfolio outstanding no less than KHR 1 billion or have no less than 1,000 borrowers. They are also required to acquire license if either the savings mobilized from general public amount to KHR 100 million, or the number of their depositors is no less than 1,000. Other MFIs not satisfying the thresholds for registration are required to obtain neither license nor registration.

The fundamental differences among three categories of MFIs lie in the scope of business operation and corresponding regulatory requirements. Though the complete regulatory framework for MFIs is too complicated to discuss in this paper, we examine four important areas related to prudential supervision. Capital adequacy regulation is based on the idea that financial institutions are less likely to fail if it is obliged to maintain buffer stock against negative external shocks. Therefore, capital adequacy ratio requires MFIs to maintain the ratio of equity capital and its equivalents to total assets, either weighted by risk factors or non-weighted, above the prescribed level. A licensed MFI is required to maintain at least 20% of capital adequacy ratio. This ratio is calculated as the ratio between eligible capital and total risk weighted assets. Eligible capital is divided into two categories, Tier I and Tier II. Tier I capital consists of core capital such as paid-in capital or retained earnings. Tier II capital includes hybrid capital instruments that can be used to absorb losses such as non-refundable subsidies, public guarantee funds to cover risks on credit to the clientele, and subordinated debts. Reserve requirement regulation imposes on deposit-taking MFIs the duty to keep minimum reserve equal to certain percentage of demand deposits.

The primary reason for the reserve regulation is to prevent MFIs from declaring default due to temporary shortage of cash to cope with withdrawal demand from depositors. Reserve regulation can be used as a tool for monetary policy since the regulation has a powerful effect on the quantity of money circulating in the economy. A licensed MFI should deposit at least 5% of the demand deposits into its own account with the NBC.

Liquidity risk refers to temporary difficulties in matching two opposite directional cash flows, inflow and outflow even if the institution is fundamentally solvent. Higher than expected rate of delinquency or inability to sell marketable securities can do severe harm to institution's ability to meet the demand for cash outflow. On the other hand, financial institutions have incentives to reduce unnecessary liquidity holdings since more liquid asset holding results in lower revenue. It is customary that financial institutions including MFIs to establish their own level of liquidity based on past experience and future prospects of economic environment and financial market conditions. However, it is also true that supervisory authorities in all countries require financial institutions, especially deposit-taking ones, to require financial institutions to keep minimum amount of liquidity prescribed by the regulation. Licensed MFIs in Cambodia are obliged to maintain a liquidity ratio of at least 100 percent. The ratio is calculated from a complex formula specified by the NBC, but the fundamental idea is that while the numerator includes cash and all assets that can be immediately converted into cash, the denominator represents a reasonable expectation on cash outflow due to withdrawal demand.

Another important risk factor in regulation of credit institutions is credit risk. In spite of the much-cited high repayment rates in microfinance around the world, the weak contract enforcement mechanism and fragile income source of borrowers pose a considerable credit risk in microfinance sector. Therefore, it is very important that MFIs must organize their internal accounting information system in such a way that they are able to constantly monitor the healthiness of loan portfolio and provide adequate information to the supervisory authority in a prompt manner. The regulation requires that MFIs should classify their loans into the four classes according to the punctuality of payments and set aside different provision for each category; none for standard, 10 percent for sub-standard, 30 percent for doubtful and 100% for loss categories[22)].

The regulatory framework for MFIs in Cambodia seems to be reasonably comprehensive and designed well enough to ensure the financial strength and viability of the regulated institutions and support the stability of the financial system. However, these regulatory measures also incur significant costs to MFIs that should comply with the regulatory requirements. Stronger regulation, in general, causes costs in funding and operation to increase and makes it difficult for MFIs to extend loans. Therefore, it is always a delicate task to strike a balance between urge for stronger grips on credit institutions and market's demand for less regulation to achieve lower funding cost.

Many MFIs, most of whom are licensed or registered, point out the possibility of regulatory arbitrage under the current system in Cambodia. Smaller MFIs that do not reach legal threshold do not have to comply with stringent regulatory requirements imposed on registered or licensed institutions so that they enjoy unfair competitive edge created by regulation. Cambodian Microfinance Association(2008) listed the problem as one of the top priorities regulatory authority should address to ensure fair and competitive market environment. However, it is neither economical nor practical to encompass all MFIs in formal regulatory system since it may seriously deter the development of small scale experimental operation seeking to serve the group of people for whom even microfinance institutions cannot be reached.

3.4. Financial Sector Development Strategy and Microfinance

The Financial Sector Development Strategy(FSDS) is the outcome of joint efforts between the Cambodian government and Asian Development Bank(ADB) to design a long-term strategic

22) A loan is classified as standard when it is considered in a good financial condition and has not shown any record of delay in paying principal and interest, as sub-standard when principal and or interest is overdue by 30 days or more, as doubtful(loss) when payments are overdue by 60(90) days or more for a loan with maturity no longer than a year or 180(360) days or more for a loan with maturity longer than a year.

plan to stimulate development of the financial sector in Cambodia. The first version of the plan, FSDS 2001~2010 was drafted and adopted by the Cambodian Government as the official documents in 2001. The plan offers a comprehensive roadmap as well as the fundamental philosophy for financial sector development.

The overall objective of FSDS is to support the development of a sound market-based financial system to support resource mobilization, effective financial resource allocation, and broad-based sustainable economic growth (RBC(2007)). To achieve the objective, FSDS sets up visions in six important categories encompassing;

- Appropriate legal, institutional and policy foundations to promote market based finance and support good governance and the rule of law
- A competitive, integrated and efficient banking system that is properly regulated and supervised and effectively mobilizes savings to provide financing to support economic growth, a reliable payment system and financial safety net
- A viable, pro-poor and effective microfinance system that will provide affordable financial services to enable the poor to enhance income and to reduce poverty
- An insurance sector that protects businesses and individuals from catastrophic events and a pension system that will support retirement planning, both of which can provide capital for long-term investment
- Financial markets which appropriately address risks, remove obstacles to financial development and support risk management and financial resource accumulation and allocation
- Openness to financial product and institution innovation that creates more balanced financial structure, increase the depth of the financial sector, and promotes competition in the context of financial stability

It is not difficult to infer that Cambodian government takes microfinance very seriously as an important ingredient in financial system. The third vision statement makes it clear that microfinance sector is considered as the major channel to ensure accessibility to financial services for the poor. Taking into account the fact that majority of the populations reside in rural area where banking service is still a luxury, one can easily grasp the importance of the roles of microfinance sector that are expected to play in Cambodian financial system.

Since the inception of FSDS in 2001, much had been achieved to make Cambodian financial sector more functional and effective. Microfinance sector was not an exception. Self-assessment by Cambodian government on five key areas in microfinance highlighted by FSDS 2001-2010 claimed that much had been achieved for the first five years, though not completely satisfactory. In implementing and enhancing rural credit policy, the most important achievement was the establishment of the Credit Committee for Rural Development (CCRD) as the central framework to implement rural credit policy. Under the new scheme, the Ministry of Economy and Finance, in close cooperation with the NBC and many MFIs, plays the key central role in making the policy framework and strategies to stimulate and support development of microfinance sector. The second priority set out by FSDS 2001~2010 was to strengthen supervision and regulation in microfinance sector.

Cambodian government took a very cautious approach in intervening the market that was still in nascent stage and tried to clearly delineate the boundary of government intervention. Defining the proper boundary of regulation and supervision on financial institutions is a delicate task requiring special care. Even though concerns on stability of financial system and consumer protection make heavy regulation on financial institutions a norm rather than an exception in almost all countries around the world, policy makers should always try to avoid taking excessive measures, which may result in suffocating the fragile industry. While Cambodian government seems to exercise a considerable degree of self-restraints in imposing regulatory framework on financial institutions, some observers argue that progress is too slow to cope with the speed of growth in financial industry.

The framework for prudential regulation for microfinance sector was already established even before FSDS was launched. We observe steady improvements in applying prudential regulation to licensed or registered MFIs. Specifically, common reporting systems are agreed and common performance standards will be agreed sooner rather than later to provide the basis for conducting performance analysis and supervision as well as assigning meaningful ratings to MFIs. FSDS 2001-2010 stressed the importance of developing the linkage between commercial banking sector and microfinance. Microfinance sector requires a constant inflow of liquidity to maintain operation and expand into new business areas.

However, low confidence on MFIs by the public hinders MFIs from relying on internal funding source such as deposits in securing enough funding to support their operations. A feasible domestic alternative source that can satisfy funding demand by MFIs is commercial banks. An intricate network between commercial banks and MFIs are being established and much progress has been achieved recently. However, many MFIs still have difficulties in obtaining funding from commercial banks. Commercial banks are reluctant to make loans to MFIs due to concerns about credit risk in micro-lending and various regulatory measures. Institutional capacity building of MFIs is the area where remarkable progress has been achieved since the inception of FSDS in 2001-10.

Many MFIs have already secured the institutional foundation to maintain profitability and sustainability but the success is confined to a small group of larger and commercially-oriented MFIs. There are still many MFIs that strive to build business cases with different layers of customers or regional outreach. Building institutional capacity covers a wide variety of areas including staff training, financial expertise and infrastructure enhancement. Last but not least, as Cambodian microfinance sector expands its outreach and strengthen customer basis, priorities are changing. While MFIs with stronger emphasis on sustainability show good performance in spite of unfriendly economic and financial circumstances, some commentators argue that the fundamental motivation for the microfinance may lose its ground. Microfinance is motivated by the notion that access to financial resources is a crucial element in helping the poor to exit the vicious cycle of poverty by themselves and should be provided through a resource allocation scheme mimicking market mechanism as close as possible. It is the former part of notion, not the latter one that seems to lose its ground. Extra efforts are called for to put more emphasis on women, people with disabilities, and those residing in very remote rural areas.

In 2005, Cambodian government decided to revise the long-term development plan for financial sector to re-establish strategic priorities, and consequently FSDS 2006~2015 was released. The new plan identifies five key priorities for financial sector development such as;

- Improving enforcement of contracts and mechanics for resolution of commercial disputes;
- Improving fiscal, macroeconomic and monetary policy implementation;
- Developing a safe and efficient payment and settlement system;
- Improving financial sector supervision to appropriately address risks while, at the same time, providing incentives for financial development and innovation;
- Supporting human capital development and financial education across the full spectrum of Cambodian population.

The key word was to build confidence in Cambodian financial system. Lack of confidence in financial system not only deterred the development of financial market in Cambodia, but also acted as the major obstacles to economic growth and poverty reduction by restricting access to financial services. Consequently, microfinance sector was again identified as one of the instrumental vehicles in pursuing economic development and poverty reduction as well as financial sector development. The issues specifically raised by FSDS 2006-2015 include funding strategy for MFIs, deposit taking by MFIs, and regulatory parity among different layers of MFIs.

As for funding strategy, the primary task is to put more efforts on developing commercial funding apart from NBC or international donors to fortify the foundation for long term sustainability. The development of payment system, interbank market, and continuing improvement in financial information system will make it easier to construct a reliable link between banks and MFIs. Deposit taking may be a reliable and inexpensive way to acquire funding for loans by MFIs. Under the current regulation licensed MFIs are allowed to take deposits from the public. However, progress is slow and MFIs still confront with a wide range of problems. The importance of appropriate regulatory framework for deposit taking by MFIs cannot be emphasized too much. The regulatory system should be progressive and supportive toward institutional building. Different regulatory standard should be applied to MFIs with different level of activities. Finally, in order to keep regulatory parity, all organizations conducting microfinance business, regulated or not, should be treated equally from a regulation point of view.

FSDS 2006-2015 categorizes important tasks that are necessary to achieve the long term strategic plan. The tasks are structured into three different levels-macro, meso, and micro levels, depending on the scope of tasks. At macro level, Cambodian government and regulatory authorities should continue their efforts to improve the institutional capacities of NBC to regulate and supervise the microfinance sector while making sure that all deposit taking institutions are subject to regulatory and supervisory requirements based on the size and complexity of institution's activities. Second, agreement on common reporting standards is required to establish the practice of a through and sound analysis on financial performance and to protect the public by providing more information. Third, it is required that regulatory authorities should study structural risks associated with the MFIs in terms of governance and ownership structures and overcome the structural weakness. Fourth, the exact territory and scope of microfinance industry in Cambodia should be delineated. More and improved statistical analysis on geographical and sectoral segmentations of the market is necessary. There is also a strong demand for defining and elaborating on the scope of alternative funding sources at the local level such as money lenders, family, friends, village banks, cooperatives, to name a few. Fifth, governmental level efforts to support small community-based and non-registered MFIs are called for to serve wider spectrum of customers and introduce greater variety and flexibility into the system.

Meso level tasks propose several measures to help MFIs build institutional capabilities. First, it is pointed out that it is very important to establish facilities that can provide off- and on-the-job training for all employees with different level of skill sets. More specifically, the training program should cover all fields of tasks necessary in the field such as training of trainers, task analysis, assessment of organizational needs, budgeting and on-the-job delivery, appraisal methodology, accounting, and reporting. Second, more efforts should be made to improve the provision of management information system (MIS) for MFIs. The quality of software as well as hardware varies very significantly with majority of small MFIs unable to access workable information system. Third, a wholesale market for loan financing should be developed. Private sector should be in charge of developing the market, linking MFIs to commercial banks with relatively ample funding sources. Presently, MFIs have considerable difficulties in acquiring riel-denominated debts. The difficulties are mostly attributable to the lack of efficient wholesale payment system and inter-bank loan market in Cambodia. It is specifically pointed out that the potential for providing interim guarantee measures should be considered. The loan guarantee facility will enable commercial banks to get involved in transactions with MFIs and to be willing to assume more active roles. Fourth, the roles of recently established Cambodian Microfinance Association (CMA) should be further extended. CAM should cooperate with Cambodian government and NBC to develop better policy options, to improve communication between the industry and the public sector, and to promote research and information exchange. Fifth, it is identified as a long term goal that local MFIs should be equipped with the effective credit scoring system for their customers. Credit scoring system should be based on a reliable framework of credit information exchange that includes both positive and negative information. If properly implemented, the system will contribute to better credit risk management by MFIs and at the same time help customers of MFIs graduate to commercial banks by providing credible credit history. Finally, equity capital investment in MFIs from domestic and international investors should be promoted.

At micro level, first key task highlighted by FSDS is to strengthen retail institution particularly those that have not yet achieved the size large enough to be asked to get license from NBC. Second, alternative forms of MFIs such as community-based or non-registered should be promoted to ensure greater variety and flexibility of the system. Third, further link should be created between NGOs dealing with the extreme poor and MFIs. This will allow destitute people to have opportunities to escape from the poverty.

4. Funding Sources for MFIs

In an ideal world with effective and efficient financial market, domestic financial markets in developing countries should be able to supply adequate funding to all forms of financial institutions including MFIs. Financial service providers rely on various forms of sources for funding such as deposits by the public, loans from other financial institutions, bond issues, and stock markets. In most of the cases, majority of funding comes from domestic financial market and limited amounts of funding finance from international market would be used.

In reality, most MFIs are not fully integrated into domestic financial system and many of them have difficulties in obtaining sufficient amount of funding to support growing operation. Though it is true that a few large leading MFIs already tap both domestic and international financial markets, international subsidies have played important role in development of MFIs especially in earlier stage of growth. International donors both public and private have provided various forms of subsidized money microfinance sector.

We can also classify funding sources according to funders' objectives. On one extreme, there are funders with social missions such as poverty reduction or gender empowerment. Important contributors include multilateral development agencies, international donor agencies and foundations. On the other end, there are funders motivated primarily by pursuit of commercial purposes. Most funders in domestic financial market are commercially motivated and some international investors are also pursuing competitive financial return from investment on microfinance sector. There are many alternative options in between. Important contributors include international financial institutions established by multilateral development agencies and microfinance investment fund created by socially responsible investors from private sector. The ultimate objectives they pursue are not different from those of international donors. But, one key difference is that they take different approaches in pursuing the objectives by relying partly on market mechanism. They do not offer funding for free or at heavily subsidized rate. Instead, they ask MFIs to pay prices that are reasonably close to the market rate. The purpose of chasing two seemingly contradictory objectives is two-fold. One is to impose market discipline on MFIs. The other is to ensure long term sustainability for investors through investment income.

The biggest advantage of classifying different funding sources for MFIs is that, by doing so, we can easily identify the possible funding sources distributed extensively around the world. Moreover, scrutinizing the list of pros and cons for each category of funding source makes it possible for MFIs to locate proper channels that fit their own needs. Once identified, Cambodian MFIs should be able to develop a strategic plan to induce more funding from less expensive but reliable sources.

4.1. Domestic Funding Sources

Domestic funding has at least three advantages. First, deposits taken in domestic market have shown to offer a relatively stable funding flow to MFIs. Second, domestic funding helps financial institutions to avoid foreign exchange risk. Third, domestic funding is most likely to come from commercially motivated sources, so one does not have to worry about the crowding out of funding to some other social or development purposes.

Most domestic financial systems have excess liquidity. It is true even in the developing countries constantly pursuing foreign savings. The pursuit is motivated not by the need for liquidity but by the need for hard currency. Banks in developing countries have been fairly successful in mobilizing excess resources, mostly from corporate, institutional, and wealthy clients. Moreover, many MFIs also rely on deposits as the primary funding source for loans.

The large numbers of savings accounts in these institutions imply the potential for mobilization of deposits in a massive scale from poor and low income people. Beyond savings, other potential sources of domestic financing for microfinance include debt from commercial banks, certificates of deposit and bonds issued by MFIs, and equity investment from private domestic individuals or funds.

There are few MFIs that succeeded in taking advantage of opportunity offered by domestic funding sources and majority are still relying on foreign investors, citing easiness or lower cost of funding. Given the fact that many international investors adopt the model that pursues both financial and social objectives, it is not surprising to see many MFIs perceive foreign funding sources as cheaper one than domestic ones. However, too heavy dependence on foreign investors may result in negative impacts on development of domestic financial market. MFIs accustomed to subsidized cheap foreign fund tend to take less effort to mobilize savings in domestic market.

However, many MFIs, mostly larger and regulated ones, began to recognize the importance of domestic funding sources and take measures to establish access to domestic savings market. Deposit mobilization has many benefits. First, it allows financial institutions to better meet the needs of poor clients by offering more diverse services. It can also lower the overall costs of financing and diversify the sources of funds. Savings are relatively stable over time and can be more reliable than donors or other funders, who may change their strategies or simply decide not to fund.

Another important reason for MFIs' inability to mobilize domestic deposits is the lack of confidence on both MFIs and financial institutions by depositors. Most developing countries have experienced serious crisis in financial market and depositors have to assume significant portion of loss. Much effort has been taken to gain public confidence. Regulatory framework was re-aligned to ensure incentive compatibility of regulatory authority as well as financial institutions. Enforcement activities by regulatory authorities were fortified. Still, there lies a long road ahead until financial institutions in developing countries achieve full trust from the public. Absence of transparent accounting practice, poor governance structure of MFIs, and weak regulatory process are the issues that are frequently pointed out for further improvement.

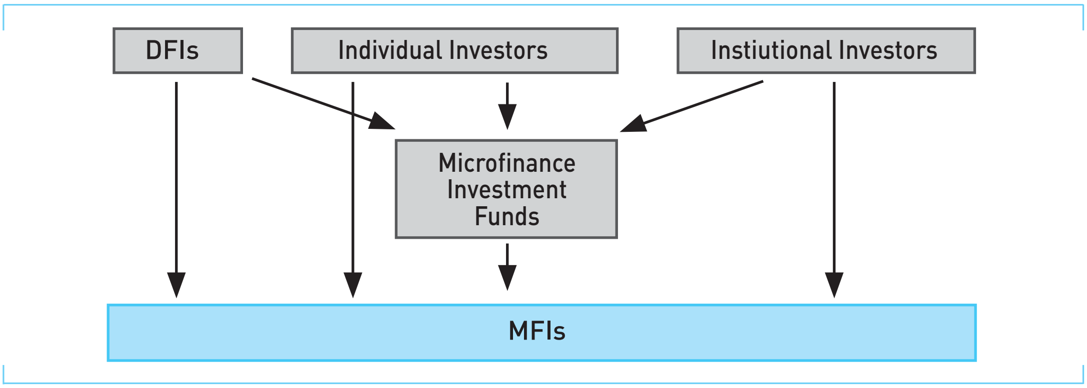
A few leading MFIs have made use of debt instruments in local capital markets. For example, Compartamos in Mexico and Mibanco in Peru have placed bonds on their local markets. BancoSol listed itself on the Bolivian stock exchange and issued the equivalent of $3 million in bonds in 1997. In Eastern Europe, the ProCredit microfinance banks are also tapping into domestic capital markets by successfully issuing bonds. The success of these deals was achieved fundamentally due to the strength of issuing MFIs and good prospects on the industry. However, it is also true that they have benefited at least partially from credit enhancement provided by guarantee commitments from donors and multilateral development agencies.

In most developing countries, capital markets are not mature enough to support a large scale financing campaign initiated by relatively weak entities such as MFIs. Even if we observe continuous improvement in funding through domestic capital market, it is pre-mature to predict that domestic capital market would replace international investors as the main funding source for MFIs in developing countries in near future. Therefore, one cannot deny that deposit mobilization is practically the only reliable domestic funding source for MFIs. Surely, a lot of work should be done to rely on deposits for the main funding source for MFIs. The lack of competition and inefficiency in the banking sector means higher funding cost as well as scarcer funding availability. In addition, most of funding is in short term, and few markets can support issuance of longer-term financing instruments.

4.2. Foreign Funding Sources

There are three main categories of international microfinance investors; public entities known as development finance institutions (DFIs), individual investors and institutional investors. They invest either directly on MFIs in developing countries or indirectly through microfinance investment funds (MFIF). While DFIs prefer direct investment, individual and institutional investors choose MFIF as the main vehicle for microfinance investment. Since information on microfinance industry and MFIs in developing countries is very hard to acquire and expansive to analyze information on individual basis, individual and institutional investors are more likely to rely on MFIFs in investment on microfinance sector. On the other hand, as DFIs in general have enough financial and human resources to do the task by themselves, they used to put more emphasis on direct investment. As more investors begin to notice the improved performances of MFIFs around the developing countries, DFIs also start to increase involvement in MFIFs and has become a major funding provider for MFIFs.

Figure 2-2 | **Foreign Investment on Microfinance**



DFIs are private-sector investment arms of development agencies owned by government or multilateral development institutions. They invest in microfinance as a part of their official mission to support sustainable private sector growth in developing countries. Most DFIs started to establish relationship with microfinance sector in the late 1990s, following the grant funding of donor agencies for the sector since the 1970s. The innovation by DFIs is a new approach to funding for MFIs. Contrary to donor agencies that provided free funding through the governments of developing countries or apex institutions established to distribute donor money among MFIs, DFIs took a more commercial approach by providing quasi-commercial loans, equity, and guarantee to MFIs capable of offering at least some level of return for investment. DFIs played the most important role in microfinance funding until MFIFs supported by both public agencies and private investors undertook the leading role in the late 2000s. Except for a small group of large and established ones, most MFIs still have serious difficulty in securing stable and adequate funding sources. DFIs are playing a dominant role as funding providers to those MFIs with relatively weak business foundations.

Socially motivated individual investors play an important role in funding microfinance. Oikokredit, the Calvert Foundation, Dexia Microcredit, responsAbility, and Triodos Fair Share Fund are examples of prominent names and most of them are participating in the market by acquiring shares of MFIF. Over 80 percent of individual investors in those MFIFs are based in European countries, mainly Germany, Holland, and Switzerland. In recent years, super-rich people with extremely high net worth started to engage in microfinance investment as a way to fulfill philanthropic motive. They are typically successful at self-made entrepreneurs searching for a new and better way to use their money and business experiences to help the poor by scaling up microfinance. Pierre Omidyar, the founder of eBay, gave $100 million to his alma mater Tufts University to create the Omydiar-Tufts Microfinance Fund, and Robert Patillo, a real estate super rich, established the Gray Ghost Fund that invests in MFIs rather than directly in MFIs. Grameen Foundation also succeeded in soliciting over $30 million from nine high net worth individuals to establish a guarantee fund for MFIs. It is now possible that even an ordinary individual can make investment in microfinance through online peer-to-peer lending initiatives. For example, Kiva, an online fund raising channel for microfinance sector, enables MFIs to acquire interest free debts directly from individual investors through internet. Kiva investors can specify the micro-entrepreneurs of their own choice as the beneficiary of the investment and receive regular update on their projects[23)].

Over the past several years, institutional investors such as banks, pension funds, and insurance companies have started to pay attention to microfinance investment from either social or financial motive. Large commercial banks were the first to take interest in the sector in response to client demand for microfinance investment. Deutsche Bank created a microfinance investment fund in 1998 through its philanthropic department. According to a survey conducted in 2006, wholesale services to MFIs such as direct loans, guarantees, and technical assistance are the most widespread form of international commercial banking engagement in microfinance. For example, loans to MFIs by international banks reached nearly $100 million in 2005. In addition to funding provision, international commercial banks also contributed to introducing mainstream financing technology into the industry, which helped lowering funding cost of MFIs to a considerable degree. Citigroup arranged the first wholly private placement of bonds issued by a Peruvian MFI, Mibanco and the first investment grade local currency bond issued by a Mexican MFI, Compartamos. It also arranged and invested in the pioneering securitization deal of a Bangladesh MFI, BRAC and structured the first local currency loan syndication for the Romanian subsidiary of a German MFI, ProCredit Bank.

23 Another example of online investment facility is MicroPlace. It is the first broker-dealer registered with the Securities and Exchange Commission that specializes in microfinance securities for individual retail investors in the United States. Unlike Kiva, this fund provides some returns to investors. Such business models are based on the notion that microfinance sector can benefit from making use of both the growing participation in online social communities and the desire of individuals to make a difference.

Large investment banks with global scale operation were the main players in the next generation of institution investors into microfinance sector. They offer MFIs investment banking and fund distribution services and act as the intermediaries between security issuing MFIs and investors in international capital market. Morgan Stanley, for example, arranged and distributed the BlueOrchard Loans for Development I and II bond offerings.

Large insurance companies and pension funds also started to seriously consider microfinance investment as a part of their socially responsible investment(SRI) portfolio. The latest new comer into the industry is private equity investors. A few prominent names such as Sequoia, Blackstone Group, and Carlyle Group have made microfinance investment. They are focusing on well-established and proven MFIs and target a narrow niche market of high-growth MFIs capable of offering competitive market return.

4.3. Microfinance Investment Fund

MFIF has already assumed the position of the most important vehicle for investment in microfinance sector. The fact is understandable in that while dominant majority of demand for funding comes from developing countries, most of funding providers are from developed countries, especially western European countries. As the funders do not have enough information to directly engage in lending business, funders from developed countries are naturally led to rely on expertise of local MFIs in pursuing investment goals.

Table 2-3 | Microfinance Investment Funds

Microfinance Investment Fund	Total Asset	MF Asset	Average Return
Oikocredit World Partnership Investment	304,662,000	80,764,000	2%
ProCredit Holding Aktiengesellschaft	110,918,700	89,181,767	5~6.5%
Calvert Community Investment Notes	80,000,000	20,000,000	3%
Dexia Microcredit Fund	51,669,512	46,334,570	5.5~7.5%
Blue Orchard Microfinance Securities	40,069,833	38,000,000	4.55~8.8%
ASN-Novib Fonds	28,421,190	9,473,730	1.20%
AXA World Funds	23,073,410	1,481,556	5.10%
Impulse Microfinance Investment Fund	15,413,875	15,413,875	4%
Triodos Fair Share Fund	14,583,596	6,983,086	2~4%
Accion Investments in Microfinance	12,969,985	12,512,329	8~10%
responsAbility Global Microfinance Fund	11,449,977	11,449,977	3.56%
ALTERFIN	11,084,244	3,628,790	6%
Partners for the Common Good	7,095,500	300,000	3%
Latin American Bridge Fund	5,340,505	1,450,000	0~2.875%
CRESUD	2,483,480	1,490,088	2.75%

Note : Total assets and MF assets are in US dollars.
Source : http://www.microcapital.org

Approximately half of all microfinance investments from DFIs, individuals and institutional investors are estimated to be channeled into MFIs in developing countries through MFIFs. These investment vehicles consist of a diverse range of organizations in terms of origin, investor base, philosophy, instruments, and target rate of return. Table 2-3 lists 15 biggest MFIFs in terms of total asset under management. ProCredit, a German investment fund that manages the biggest microfinance investment portfolio in the world puts emphasis on "green field equity investment" and pursues competitive market return. On the other hand, another big player in the field, Oikocredit, takes microfinance investment primarily as an instrument to support poverty reduction in developing countries. And then, more commercially oriented funds, such as Dexia Microcredit Fund and responsAbility Global Microfinance Fund emeged and they are becoming increasingly important in the echelon of investment funds in the industry.

First of all, various types of MFIFs can be classified by their investment objectives. The main factor is the balance between the financial objective and the social objective. The objective of a fund is typically identified by types of investors, terms of contract between MFIF and MFI, and target customer group. We classify them into three categories, commercial MFIFs, Quasi-commercial MFIFs, and MF development funds. The commercial and quasi-commercial funds are usually set up as traditional investment funds or investment companies. Their aim is to provide a financial return to socially responsible investors or commercially motivated investors, while maintaining social and developmental objectives at its core. The distinction between the two lies in the nature of targeted investors.

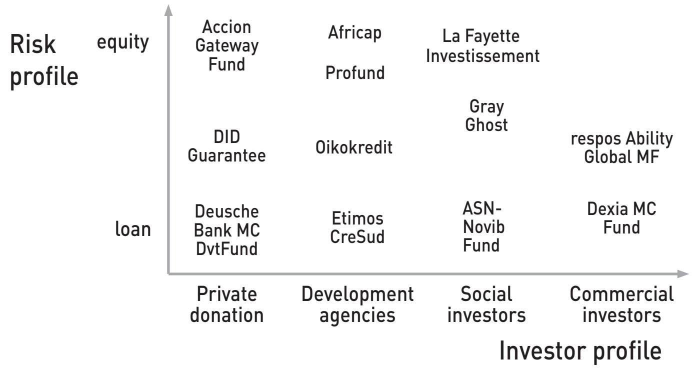
Commercial MFIFs generally target private and institutional investors. In some cases, multilateral or bilateral development agencies and donors participate in early stages assuming the role of facilitators by taking the position in subordinate tranches. The nature of investors targeted by commercial MFIFs suggests that these funds should have clear investment objectives. For example, an institutional investor with commercially motivated investment objectives would require much information on the investment such as investment type and target return. Very few MFIFs provide adequate and sufficient information on important variables of interest such as financial return, cost structure, expense ratio, and loan loss provision. The lack of enough information makes it very difficult for traditional investors to initiate microfinance investment on commercial basis. As commercial MFIs become more active, the quality of information will also improve. Commercial MFIFs mainly invest in loans to MFIs, majority of which are guaranteed by donors or development agencies. ASN-Novib Fund, AXA World Funds, BlueOrchard Microfinance Securities I LLC, Dexia Micro-Credit Fund, responsibility Global Microfinance Fund are the important players in this category.

Quasi-commercial MFIFs also have clearly stated financial objectives but are currently targeting mainly private donors and development agencies. These funds will ultimately be transformed into commercial MFIFs once they succeed in soliciting private individual investors and institutional investors by demonstrating business case. Quasi-commercial MFIFs focus on both debt instruments and equity investment on MFIs. The distinction between commercial and quasi-commercial MFIFs does not imply any indication of the profitability of investments. Sometimes, quasi-commercial MFIFs show better performance than commercial ones primarily due to higher degree of involvement in equity investment on MFIs. Accion Investments in Microfinance, Africap, La Fayette Investissment are the prominent names among quasi-commercial MFIFs.

Microfinance development funds are commonly non-profit entities with the aim of making capital available to MFIs through sustainable mechanisms to support their development and growth without necessarily seeking financial returns. The investors in this category pursue a social return, trying to maintain the real value of their original investment if possible. This investment mission is often translated into very favorable conditions to MFIs. For example, heavily subsidized funding is offered at well below the market rate. Private donors and development agencies as well as charitable foundations are the main investors in this category of MFIFs. MF development funds focus primarily on preparing MFIs for access to capital markets by emphasizing sustainability, including green-field investment. As MFIs become sustainable, commercial MFIFs should take over the role of funding provider by offering larger resources on market terms.

Another way of classification of MFIFs can be done according to two dimensions of investment characteristics - investment profile of investors and risk profile of investment. The classification is illustrated in Figure 2-3. On the horizontal axis are identified profiles of investor. The funds with more commercial orientation lie toward the right and the ones with more developmental orientation toward the left. Two different investment objectives, financial and social, are not exclusive of each other but the matter of relative weights placed on two objectives are different. The risk profile is determined by the relative proportion of three main investment instruments in MFIFs' portfolio - equities, loans, and guarantees. MFIFs with more

Figure 2-3 | Classification of MFIFs by Risk Profile



commercial emphasis tend to pay a greater attention to loans and guarantees while MFIFs with more developmental objective invest more to equities.

4.4. Domestic vs. International Funding

We can summarize advantages and disadvantages of domestic and international funding sources for MFIs which was discussed in the previous sections. Domestic funding sources have four main advantages. First, domestic funding can better serve the poor by combining wider range of financial products, especially savings and loans. Second, it is not exposed to foreign exchange rate risk since domestic funding is provided in local currency. Third, mobilization of domestic savings for the purpose of utilizing for funding source of MFIs can stimulate development of domestic financial market. Fourth, domestic funding source, especially deposits, is repeatedly proven to provide more stable and continuous flow of funding to MFIs than international sources that are very sensitive to environment in global capital market.

Domestic funding sources also have disadvantages. First of all, deposit taking by MFIs is an extremely difficult proposition to achieve. It is very hard for MFIs to comply with strong regulations imposed on deposit taking institutions. Second, there exists a weak linkage between banking sector and MF sector. Commercial banks in developing countries possess a large amount of deposits that can be channeled into MFIs. However, in most cases, for the sake of security, banks ask MFIs to offer collaterals or guarantees for their loans, which is simply an insurmountable task for MFIs. Third, other debt instruments or equity investment are not available in domestic capital market in most of the developing countries because of unsatisfactory state of financial market development in those countries and, tapping domestic capital market is possible only in exceptional cases.

The advantages of international funding sources can be summarized into four categories. First, since diverse investors with different investment objectives participate in investment in microfinance sector and MFIs have considerably diverse needs for investment, it is much easier to match MFIs with investors. Second, funding from international capital market offers better opportunity of risk diversification for both MFIs and investors. Third, disciplines imposed by international investors can enhance development of MFIs' business practices in developing countries. International investors have the tendency to ask MFIs to adopt more transparent and efficient business practices to guard security of their investment interests. MFIs, in most cases, have no choice but to comply with the standards required by international investors. Fourth, international capital market can provide flexible financial instruments according to the needs of MFIs. Debt instruments, equity capital, guarantee, and structured products are all available in international capital market to satisfy the needs of both MFIs and investors.

The biggest obstacle to attracting international investors to MFIs in developing countries is the lack of information. Without sufficient information on MFIs and their loan portfolios, international investors are reluctant to provide money. When they provide funding, higher interest rates are imposed to compensate for being unable to assess the exact degree of credit risk. Second, conformity with international standards is extremely expensive in developing countries. It costs a lot especially in developing countries to comply with international best practices. It can also contribute to higher funding cost and higher interest rate when lending to the poor. Third, since most of funding from international capital market is denominated in hard currencies rather than local currency, MFIs are constantly exposed to foreign exchange rate risks while adequate hedging devices are not available.

5. Policy Agenda to Secure Stable Funding for Cambodian MFIs

In this section, we explore policy measures to secure stable and ample funding sources for Cambodian MFIs. Among others, we discuss four issues that possess the utmost importance in attracting sufficient and less expensive money into the sector - establishment of a guarantee facility for loans to MFIs by commercial banks, taking advantage of financial innovation in international microfinance market, enhancement of international linkage, and strengthening of microfinance-related infrastructure.

5.1. Establishment of a Guarantee Facility

According to Table 2-4, Cambodian MFIs, except for ACLEDA, predominantly depends on external funding sources for loans, most of which come from international investors. At the end of 2008, 17 MFIs were licensed and allowed to take deposits. But, they were able to finance only 1.6% of their total loan portfolio through deposit taking. On the other hand, ACLEDA, which is one of the largest commercial banks in Cambodia and still maintains small loan business as a legacy of its origin as an NGO-initiated MFI, accepted much more deposits than the amount of micro-lending they actually have accumulated at the end of 2008.

If we can come up with a device through which ample amount of deposits accumulated by commercial banks in Cambodia such as ACLEDA can be channeled to cash starving MFIs, it would help extending the scope and size of microfinance sector into next stage. It will also contribute to achieving lower interest rates for micro-lending by offering less expensive alternatives to currently dominating funding source. As discussed in the previous section, the biggest obstacle to establishing a linkage between banking sector and MF sector is the reluctance of banks to extend loans to MFIs without sufficient collaterals which MFIs simply do not possess. One possible solution is to ask MFIs to buy guarantee for their loans from an external entity with sufficiently credible resources. The guarantee facility can be commercially based or socially motivated one.

Table 2-4 | Deposits and Loans by Cambodian MFIs

Organization	Loan Outstanding		Deposit Balance	
	Amount in Millions USD	Number of Borrowers	Amount in Millions USD	Number of Borrowers
ACLEDA(Small Loan)	161.42	194,613	487.21	421,523
17 MFIs	277.06	825,238	4.64	108,266
Ending of Year 2008	438.48	1,019,851	491.85	529,789
Ending of Year 2007	272	777,481	350	355,951
Increase	166.48	242,370	141.85	173,858

Source : Cambodian Microfinance Association, 2009.

By making guarantee service available to MFIs in developing countries, we expect several important changes in the industry. First, guarantee can facilitate access to loans from local banks. Guarantees are meant to encourage loans from banks that would not otherwise lend to MFIs because of lack of MFIs; creditworthiness. By covering all or part of banks' credit exposure, guarantee will increase banks' willingness to extend loans to MFIs and hopefully offer loans even without guarantees in the future. Second, MFIs can utilize guarantee service to mitigate foreign exchange risk. Many MFIs lack effective mechanisms to manage foreign exchange risk stemming from borrowing in hard currency and lend to their clients in local currency. The guarantor can fix the guarantee amount in hard currency, while local bank lends to the MFIs in local currency, leaving MFIs with no foreign exchange risk. Third, guarantee services can help overcome problems of asymmetric information by demonstrating the real risk of MFIs to lenders who perceive the risk to be higher than it actually is. A guarantor acts as an industry specialist that increases the flow of information about MFIs to potential lenders.

Guarantee is not cure-all for problems MFIs are facing. Most of all, guaranteed loans are in general costly for MFIs. The terms of loans are the same as those to typical SME borrowers since the primary customer base of MFIs' is almost equivalent to SMEs in many aspects. Interest rates are well above the prime rate and real collateral requirements on unguaranteed portion of loans are high. MFIs also have to pay guarantee fees that raise the interest rates on MFIs' customers. Moreover, guarantors do not measure all costs of providing guarantees. Guaranteeing bank loans to MFIs requires subsides, explicit or implicit, that are not often recognized or measured. The fee income from the transactions is not sufficient to cover the cost of issuing the guarantee. It is expensive to appraise MFIs since it is impossible to acquire a reliable credit rating or information on the operation of MFIs. Also, in many cases guarantors are required to provide various supporting services to facilitate the closing of a guarantee deal. Most of all, the guaranteed loans make a small contribution to MFIs' assets, less than 5% in most cases. It could be considered a success if an MFI is able to borrow from local banks without a loan guarantee at a rate better than the one in retail market. But, the results are rather mixed. Depending on the nature and maturity of the market and MFIs themselves, we observe wide differences in benefits MFIs get from guarantee services. Therefore, it is a fair assessment to conclude that the benefits of guarantee services are modest for most MFIs due to limits in outreach and size.

Many studies suggest that in most markets where deposits taking is a practical option, guaranteed commercial bank loans are not a viable long-term source of significant funding for MFIs with serious growth plans. However, guarantees should be very useful for development of small, non-deposit taking MFIs that are unable to attract adequate capital from local or international capital markets and have few alternatives to fund their growth. They also have opened the door to subsequent lending, helped overcome regulatory obstacles to foreign financing, and facilitated loans in local currency.

ACCION International established Latin American Bridge Fund to provide guarantee service for loans to MFIs. Since its inception in 1984, it has provided guarantees to ACCION affiliates in Latin America and the Caribbean for nearly $70 million in loans, enabling 23 MFIs in 12 countries to access loans from local commercial banks. Those MFIs that benefited from the guarantees the fund provided have issued $140 million in micro-loans to an estimated 300,000 micro-entrepreneurs. Considering its historic and practical importance, it is worthwhile to examine the structure and business activities of the Fund.

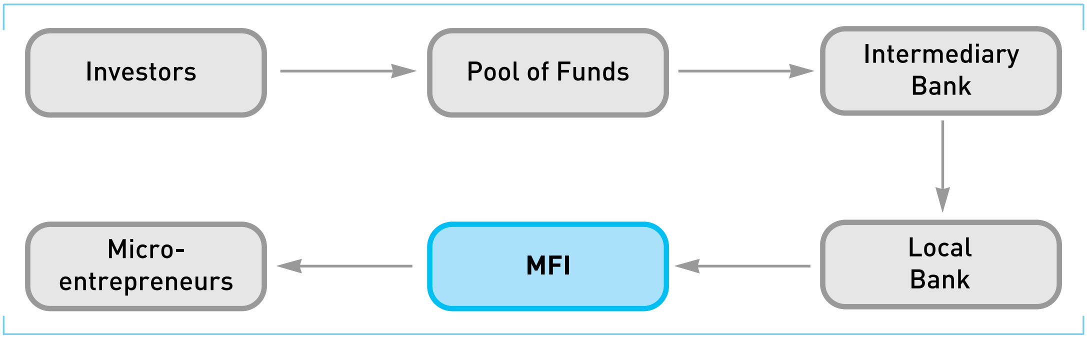
ACCION's Bridge Fund connects socially responsible investors with micro-entrepreneurs. ACCION raises a pool of funds from investors who lend their money in U.S. dollars to the ACCION Bridge Fund. These investors include individuals, foundations and trusts. Next, ACCION deposits these funds into an investment account at a mainstream U.S. bank to create a guarantee fund. An MFI applies to ACCION International for a Bridge Fund guarantee that enables it to access funding from a local bank. Once it is determined that the applicant MFI meets the Bridge Fund's financial and non-financial criteria for eligibility, ACCION requests the intermediary bank to issue a standby letter of credit to the local bank, using the pool of the Bridge Fund as collateral. Assured of repayment on the guaranteed portion of the loan, the local bank lends the money, generally in local currency, to the MFI, which closes a cycle of guarantee provision. If the MFI defaults, the local bank makes a claim to the Bridge Fund which confirms the claim with the MFI. ACCION pays the local bank the agreed upon percentage of the loan. The payment on the defaulted loan comes from the loan loss reserve, held at the intermediary bank in the U.S. The loan loss reserve is derived from USAID funds and donations, and equals a minimum of 5 percent of the outstanding balance of all outstanding obligations and can be used to cover losses without accessing funds from investors. If the loss exceeds the amount of the Bridge Fund loan loss reserve, investors lose a percentage, or in some case all of the funds they have lent to the Bridge Fund on a pro-rated basis.

Latin America Bridge Fund guarantees were designed to be temporary in order to help MFIs "graduate" to capital unsecured by a guarantee once the lenders gained confidence in their creditworthiness. For this reason, the maximum Latin America Bridge Fund guarantees was set at up to 90 percent of the value of first-time loans. The expectation was that the guaranteed portion would decrease as the MFI demonstrated its creditworthiness through successful repayment. This allowed MFI to establish a relationship with the bank and to bridge information and cultural gaps. In most cases, the proportion of guarantee dropped progressively, until it was eliminated. On average, MFIs used Bridge Fund guarantees for five years.

A total of twenty-three MFIs have benefited from guarantee service from the Bridge Fund, most of which were not mature enough to solicit from local banks. Five of the beneficiaries are now regulated institutions with multiple sources of commercial credit. These institutions are no longer need guarantees or use them only in a limited way. Eight MFIs the Bridge Fund provided guarantees remain NGO-based institutions, but they now possess multiple sources of commercial credit. They have dramatically decreased or eliminated the need for guarantee. Four MFIs that received guarantees defaulted. Three defaulted and closed and one is revitalized to become a regulated institution with multiple sources of commercial credit.

The Latin America Bridge Fund has been sustainable, covering full range of operating expenses as well as financial costs during most of the years in operation. The Fund earns money in two ways: interest income from the investment pool of the Fund kept on deposit at the intermediary bank and fee income charged to MFIs that receive guarantees. The annual fee for typical guarantee service is 3%.

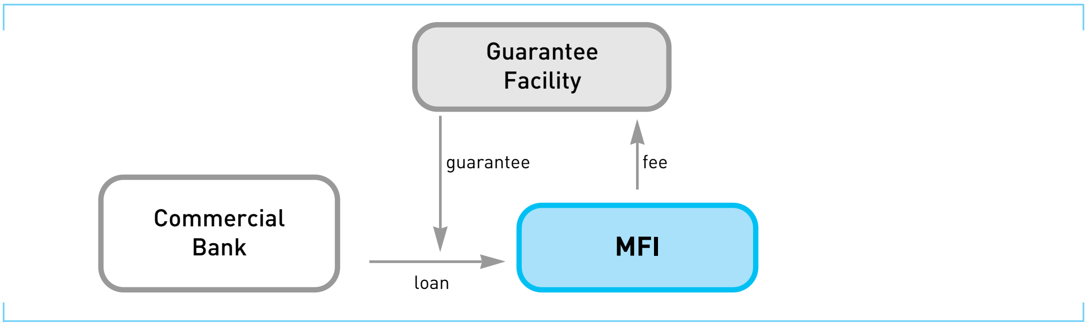
Figure 2-4 | **Latin American Bridge Fund**



We can point out six key factors that has resulted in successful performance of the Fund: diverse sources of capital, prudent stewardship of the funds, careful approval process, reasonable risk sharing mechanism, minimization of exchange rate risk, and saving operating costs through affiliation in the network in which ACCION operates. The Fund has been funded by various forms of investors such as government, foundations, private investors and in some cases, religious organizations. Most of the investment comes from socially responsible investors who consider social issues as well as financial return when undertaking investment activities. The Fund has received almost 200 loans from almost the same numbers of investors. This kind of diversified investor base offers a great opportunity to mitigate the risk that may be materialized when any one funding source withdraws its investment interest from the Fund without adequate notice. ACCION's Financial Services Department invests the pool of the Fund in the financial markets with several carefully designed principles such as proper tolerance for interest rate and principal risk, match of assets and liabilities, and adequate liquidity as well as loss reserves to account for potential investor withdrawals and eventual losses. MFIs that receive guarantees from the Fund are required to demonstrate their own financial soundness. They should submit annual audited financial statements, a detailed list of bank loans and liabilities, a breakdown of the institutions portfolio showing loan losses, past due loans, and refinanced or restructured loans, and any other documents that are considered important by the Fund. The Fund management reviews the credit of the MFI at least once a year, depending on the term of the guarantee. Loans guaranteed by the Fund have two layers of protection, MFI and the Fund's reserve to protect investors from losing the principal lent to the Fund. The loans issued by local banks to MFIs with a guarantee are senior to the equity, quasi-equity, and reserve of the MFI. The guarantee cannot be called upon unless these remedies are exhausted. Loan loss reserves covers losses from defaults on guaranteed loans that exceed the reserves of the MFIs. If the Fund's reserve is exhausted, the principal from investors is used to fulfill obligations on guaranteed loans. In order to avoid foreign exchange rate risk, the Fund issues guarantees in U.S. dollars from U.S. banks to support lines of credit to ACCION's affiliate programs from local banks denominated in local currency. This arrangement enables the Funs to sidestep foreign exchange risk because there are no foreign exchange transactions except for the case of default. Finally, the fact that the Fund is a part of ACCION International that operates an extensive network of MFIs in Latin America contributed to reduction of operating costs of the Fund in the form of reduced infrastructure costs and sharing information with experienced workers from ACCION International.

Cambodian government may take initiatives in establishing a guarantee facility that offers guarantees for loans to MFIs from local commercial banks. The facility can be established through the contributions from the Cambodian government, commercial banks in Cambodia, and international development agencies as well as grants from foreign government based on bilateral agreement. The facility can be operated by the National Bank of Cambodia, the legal authority responsible for supervising MFIs or the Rural Development Bank of Cambodia, the apex institution for microfinance in Cambodia. The primary target of the guarantee facility could be relatively young and smaller MFIs. They typically do not possess firm customer bases for deposit-taking. In addition, they have difficulty in accessing loans from local commercial banks. In order not to interfere with market discipline, fees the facility charges on the guarantee should be high enough to reflect the results of careful assessment on the credit risk of MFIs.

Figure 2-5 | Conceptual Illustration of Loan Guarantee for MFIs

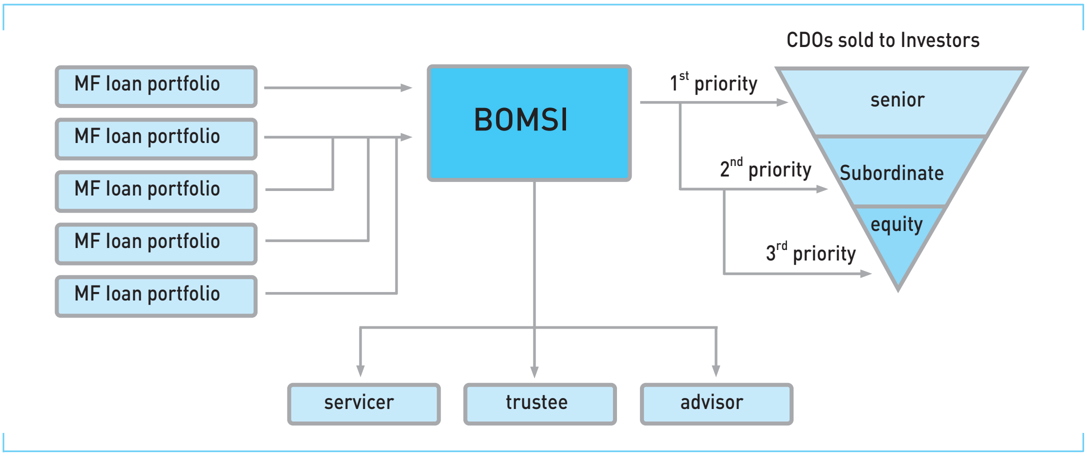


5.2. Taking Advantage of Financial Innovation in International MF Market

Many innovations are achieved in international capital market in the process of searching for more diverse and less expensive sources of funding for MFIs. MFIF now becomes the centerpiece of investment vehicles in microfinance sector. A series of attempts to overcome difficulties in risk diversification and funding costs turn out to be quite successful. We will examine the structure and performance of a new innovative product introduced into microfinance sector. We also examine feasibility and necessity of the new product in Cambodian microfinance market.

In 2004, after six years of operation and with $45 million under management, BlueOchard started to consider providing longer-term funding to MFIs and more attractive investment opportunity for investors with better rate of return. It partnered with DWM, an emerging markets fund manager and advisor to create the first collateralized debt obligation (CDO) in the microfinance industry. In the transaction, loans were made to MFIs for seven years based on the proceeds of issuing fixed rate bonds with the same maturity. As the bond investors were not entitled to their principal until the bonds' maturity, there was no need to keep large quantities of cash on hand to deal with redemptions. Furthermore, MFIs had use of the fund for the full period with no interest rate uncertainty. The CDO was named as BlueOrchard Microfinance Securities I (BOMSI). The first closing of $40 million occurred in July 2004 and a subsequent closing of $47 million was accomplished in April 2005. Since BOMSI is not a fund, investment decisions are not handed off to a professional fund manager and there is no asset substitution or active collateral management. Investors in BOMSI have a single source of repayment consisting of a static pool of 14 loans to MFIs taken on at closing. Investor should rely on their own assessment of credit risk of the MFIs. Legally, BOMSI is a special purpose vehicle registered in the U.S. Cash flow from debtors to creditors pass transparently through the vehicle. When the loans are paid off and the liabilities mature, BOMSI makes its final repayments to investors and be liquidated.

Figure 2-6 | The Structure of BOMSI



BOMSI's funding is stratified in five trenches; senior, three classes of the subordinated, and at the bottom equity. The cash flow from BOMSI's loans to MFIs is applied according to a strict order of precedence, known as cash waterfall. Only when senior investors are paid completely, the other classes are paid in the order of precedence. Equity investors do not get returns on their investment but if, after all MFI loans have reached maturity and all other investors have been repaid, there is residual cash left, it will be distributed among equity investors.

BOMSI investors except for equity investors do not possess units or shares in a fund and have made loans to BOMSI. Rather, they have purchased bonds and equities. This feature is pointed out as a key factor in successful launching of the facility by attracting many institutional investors[24)]. Moreover, BOMSI securitized loans to only 14 institutions in nine countries, which is much less diversification than typical CDOs or other securitization transactions in developed markets.

We can identify three key factors that enabled BOMSI to succeed in attracting attention from investors. First, the sponsor of the issuance was able to construct MFI loan portfolios with very low default rate. All participating MFIs reported default rates below 1 percent. Although reporting system was not consistent or the validity of the reports was not verified from independent evaluator, the expertise on the sector and track record of MFIs themselves added credibility. Second, BOMSI offered a favorable risk-return profile to investors. The tiered capital structure enabled BOMSI to offer high returns to investors of trenches with higher risk while providing investors with low risk tranches with a substantial degree of collateralization.

24) This element is common to CDOs of other forms of securitization in more developed asset classes such as mortgages, corporate loans, auto loans, or student loans, with substantial amount of data going back a number of years describing default performance under various kinds of scenarios on economic conditions. In the microfinance industry, by contrast, MFI write-off policies vary widely and data on micro-loan defaults typically are not consistently recorded with a unified standard. Considering these kind of various difficulties, the success of BOMSI seems to be a remarkable achievement.

Not all investors were asked to discount their return expectations in return for the presumed social value of microfinance. With a variety of securities offering different risk and return combinations, it was possible to segment the international investor base and appeal to a wide spectrum of potential investors. Third, BOMSI offered familiar investment instruments to investors. BOMSI debt investors purchased bonds issued in their language, and carrying features common to other corporate bonds. They benefited from the appointment of a trustee to safeguard their investment, as is the case in most bond issues in developed country where most of them are based and operate. The bonds are transferable and each series is endowed with a unique system that facilitates record-keeping and valuation. These features helped investors have a high comfort level with the form of investment and could focus squarely on the underlying risk and return profile.

As an alternative to traditional funding source of foreign investors, larger MFIs in Cambodia may consider securitization of their microloan portfolio. Due to the lack of transparency and accurate information on loan performance, it would be difficult for them to take an easier and more straightforward route of utilizing simple pass-through. Rather, they can resort to recent development in international capital market for microfinance sector. One obvious candidate is CDOs which is collateralized by a healthy portfolio of microloans from large and mature MFIs in Cambodia. Since international investors are already familiar with securitized product such as CDO, it would be possible for Cambodian MFIs to successfully liquidate their loans as long as they can provide enough information requested by investors and offer products that can fit into investors' appetite. However, securitization may not be a proper instrument for smaller MFIs since it would very costly for small MFIs to prepare the information investors require. Cross-border alliance could be also considered as one way to facilitate the liquidation if it is not possible to establish portfolio of collaterals only form Cambodian MFIs. Assets from large MFIs in the region - say, Cambodia, Indonesia, Thailand, and the Philippines - can be offered as collateral in the process of securitization. Securities backed by assets from several countries can offer better opportunity of diversification for investors and have better chance to be successfully floated.

5.3. Enhancing International Linkage

Cambodian microfinance sector already has a strong linkage with international community of microfinance. Microfinance was introduced by foreign humanitarian agencies and subsequent development was also led by funding from foreign donors and international capital market at least until the late 1990's. Cambodian microfinance sector still maintains the strong linkage with these institutions.

One notable achievement in this area is the establishment of Cambodia Microfinance Association (CMA) in 2004. CMA's mission is to ensure the prosperity and sustainability of microfinance sector in Cambodia. At more concrete level, CAM plays a pivotal role in capacity building of MFI operators, information exchange, and industry advocacy. It also participates very actively in building network both domestic and international by organizing its own conferences and sending people to international meetings of microfinance experts. Initiated by seven MFIs in 2004, CAM has expanded itself to become the largest and the only advocacy group of microfinance industry in Cambodia consisting of 17 members.

By pursuing stronger relation with international player, especially international microfinance networks, Cambodian MFIs would be expected to benefit in several aspects. First, they can acquire management practices accepted at global level. In order to attract international investors, MFIs in developing countries have to conform to their demand for information and transparency. Most international microfinance networks provide technical assistance to MFIs as well as funding, and it is a part of non-profit operation of the networks. Technical assistance covers all areas of MFI management such as risk management, accounting, marketing and long term business planning. These business skills are rare in developing countries and changing very fast. A constant and close contact with international discussion on the subjects is a critical factor in keeping competitive edge and establishing a strong linkage with international microfinance network is one of the convenient ways.

Next, linkage with international microfinance network also enables MFIs to acquire up-to-date information related to microfinance funding in international capital market. Building a reliable and low-cost source of funding base is a very important task to ensure long term sustainability. Members of Cambodian microfinance sector can also benefit from the opportunity to disseminate detailed and latest information on them. It is commonly observed that familiarity with investment target is a key factor in investment decision.

International microfinance networks also help Cambodian MFIs expand the service into remote rural areas where almost entire population are not served by any form of modern financial services. People agree that lack of proper financial devices contributes in a significant way to extreme poverty in Cambodian rural area.

5.4. Fortifying Microfinance related Infrastructure

The importance of infrastructure cannot be emphasized too much in all areas of economic and social development. Microfinance is not an exception. Despite remarkable improvement, Cambodia is still in need of microfinance related infrastructure, which is vital form Cambodian microfinance sector to leap into the next stage in development process. Especially, strong and efficient infrastructure plays a vital role in mobilizing domestic savings and attracting foreign investors by lowering cost and speeding up information dissemination.

Corporate governance of MFIs should be improved in order to persuade both international and domestic investors into taking more serious investment position in Cambodian MF sector. It is a pressing task since a lot of MFIs still retain the old-fashioned informal governance structure even if they are now commercial entities and no longer NGO-led humanitarian aid institutions.

In particular, international investors are very keen to governance structure of MFIs that guard their investment interests against risks factors such as fraud, misuse of funds, and ill-guided staffing policies. Transparency is another issue that should be solved before Cambodian MF sector becomes a truly attractive investment opportunity to domestic and international investors. Better reporting practice should be established and accounting principles acceptable by international investors should be firmly introduced sooner rather than later. Without transparency, investors would not accept the information produced by Cambodian MFIs at face value and the premium to compensate for the risks stemming from unreliable information would ultimately raise MFIs' cost of capital. Most of all, Cambodian government should build a stable and predictable macroeconomic environment that is essential to provide favorable investment conditions. For example, strong performance of Cambodian economy will fortify investors' confidence in Cambodian MF sector and induce investors to revise assessment on credit risk. It will also bring more stability in foreign exchange market and encourage foreign investors to take bigger investment positions denominated in local currency.

6. Conclusion

In this paper, we discussed policy measures to secure stable funding flow to Cambodian MF sector. It was not long ago that many commentators expressed worries about excessive funding and consequent crowding-out of private money by heavily subsidized public funding sources. However, the global financial crisis had changed the terrain of international capital market, and MF sector was also affected in a fundamental way. Funding used to be a minor issue in many previous discussions among experts and practitioners. Once it became obvious that international financial market is vulnerable to external shocks and microfinance sector could be an easy victim of severe liquidity contraction, many observers are now not reluctant to identify funding as an issue with priority.

After a careful examination on the history and current state of Cambodian MF sector, we recommend four policy measures that have, in our opinion, the utmost importance to establish a strong funding base for the sector. First, it is recommended that the Cambodian government, in a close cooperation with international development agencies and foreign governments, to establish a guarantee facility that provides guarantee service for loans to MFIs by commercial banks in Cambodia. Second, larger Cambodian MFIs may look into financial innovations in international MF market and try to secure additional source for liquidity through securitization of their MF loan portfolio. Third, pursuing stronger relation with international player, especially international microfinance networks, is also recommended. Stronger international linkage will help MFIs acquire better access to advanced management skills and information on international MF investors. Fourth, MF related infrastructures should be further strengthened to induce more international investors.

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Chapter 03

The Role of Microfinance in Rural SME Development

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The Role of Microfinance in Rural SME Development

Taehoon Youn (KDI)
Keosothea Nou (Cambodia Development Resource Institute)

1. Introduction

It is natural to see Cambodia as an agrarian based economy with the agriculture remains the dominant sector, contributing 29.6%, 29.7%, and 34.4% to GDP in 2006, 2007, 2008 respectively. Agriculture employment in 2008 is about 60 percent of the whole labor force. For the past decade, however, Cambodia's business sectors such as garment, construction, tourism, etc. has made remarkable growth with vast investment from abroad. Cambodia, therefore, was seeking for alternative growth engines in those rather newly booming industries, while it has traditionally been considered as an agrarian based economy.

Due to the recent global crisis, however, newly growing sectors are extremely stagnated due to notable decrease in the flow of foreign capital as well as the decrease in demand from global recession. So it is natural to say that the global crisis has revealed vulnerability of Cambodia's new growth engines to the outside shock. The Royal Government of Cambodia is, therefore, searching for ways to promote agricultural sector, hopefully along with the SMEs in rural areas as a more stable source of growth. This does not imply that the Royal Government of Cambodia has totally abandoned other business sectors, but it rather means that Cambodia is now searching for more balanced and stable way of growth strategy. The RGC sees rice processing facilities as one of the key areas that can boost up the productivity as well as profitability of the rural areas in this regard.

To seek for ways to promote the sector, it is imperative to first identify the obstacles in the way. There are several impediments to agricultural growth and land cultivation by farmers as well as to rural SME development. First of all, about 80% of the poor live in the rural areas and depend on agriculture. It is also true that the growth in the agricultural sector has been slow due to the limited access to arable land markets. The productivity in the agricultural sector is still low due to poor soil fertility, low level of irrigation development, inadequate extension services. And most of all, access to formal credit or quality agricultural inputs such as certified seeds, let alone access to the fund needed for SME development is very limited due to inadequate rural finance structures.

While it is the government's top priority to increase farmers' access to rural credit, expansion of such services is constrained by the lack of rural banking facilities in countryside and lack of experienced personnel rural finance. The MF operations of NGOs are virtually the sole financial service providers in rural areas, but despite the significance of their operations, access to credit is limited to an estimated 10 percent of rural households. Therefore, financing issue is considered to be one of the key obstacles to the development of agricultural sector and rural areas.

In fact, most commercial banks are reluctant to provide loans to SMEs, especially the rural ones. Business networks of commercial banks in rural areas are insufficient and those banks are very much concerned with SMEs' lack of accounting transparency. On the other hand, MFIs are not able to provide active lending service to them due to insufficient funds and information as well as regulations on loan size, despite the fact that those are the institutions that have comparative advantage in SME financing. In other words, Cambodian financial sector is at an early development stage, and therefore there is not enough information regarding the potential borrowers and their repayment ability as well as their future business prospect. That is typically why other countries introduced many policy tools to mitigate such informational asymmetries at their early development stage. While the Cambodian MFIs have broader operational presence in the rural areas, the rural branch networks are not intense enough to perform monitoring and education to the new and existing SMEs.

To overcome all these impediments, and to achieve the intended goal of rural SME promotion, the Royal Government of Cambodia is first required to identify policy priorities for rural SME promotion. While few disagree with SMEs having positive externalities, it is still typical for SMEs to be under financed due to market failures without proper government intervention even in the more developed region in the world. These are partly due to market failures such as informational asymmetry, therefore, it should be considered as the top priority to correct various market failures in rural SME financing. Secondly, it should also be noted that without continuous supply of proper and willing entrepreneurs, it is hard to expect the active promotion of rural SMEs. Therefore, promoting the entrepreneurship through various measures is required. The promotion of entrepreneurships for rural SME can be even further accelerated through a voluntary reform movement in rural areas.

In this regard, this chapter seeks building blocks for policy suggestions in the area of rural SME promotion from various past and present experiences of more advanced regions in the world. We will review representative experiences and search for relevant implications in following cases: EU'MF policies along with recommendations from other international organizations, Korean SME policies including credit guarantee system, Korean 'Saemaul Undong' as well as agricultural cooperatives, syndicated loan, etc.

In the next section, first the current status of rural sector and SME development in Cambodia will be reviewed. In following sections, the building blocks for policy suggestions will be reviewed one by one. The last section attempts to summarize the policy suggestions from the previous sections and provide the concluding remarks.

2. Current Status of Rural Sector and SME Development in Cambodia

2.1. Agricultural Sector in Cambodia

Cambodia is an agrarian based economy with the agriculture remains the dominant sector, contributing 29.6%, 29.7%, and 34.4% to GDP in 2006, 2007, 2008 respectively. Agriculture employment in 2008 is about 60 percent of the labor force. Below are some details on the current status of major agricultural production in Cambodia.

First, rice is considered to be Cambodia's most significant agricultural product and staple food. During the 1960s, Cambodia was among the world's leading rice exporters in Asia. During the last 10 years (1999~2008), the total rice (wet and dry season rice) production in the country increased from 4.17 million tons of paddy in 1999 to about 7.15 million tons in 2008. These are mainly the results from better climate condition, farm management, enhancement in farming techniques, new high-yielding rice seed variety, etc. Currently, rice production takes up about 2 million hectares of Cambodia's agricultural land, and the average yield is 2.75 tons per hectare. In addition, rice production has been exceeding local needs since 1998, and the surplus is estimated around 2 million tons (3 million tons in paddy) in 2008 which is considered to be the historical record.

Cambodia has had a surplus of rice production and has been exporting them for the past several years. There, however, still is an import of rice from neighboring countries at the same time. This can be explained by the following: Changes in the global climate condition led to reduction in rice productivity and this, coupled with the population increase, raised the price of rice in 2008. These, in addition to the trends towards free market economy, have led Cambodia to export rice to meet increased world demand, and at the same this leaves the locals to import rice.

On the other hand, Cambodian rice production has been affected by natural calamities such as insufficiency of water resulted from droughts, insect destruction and flooding occurrences in some production areas since wet rice production contributed about 80% of the total rice production. Because of these problems, the production normally fluctuates in accordance with the natural condition (especially, floods and droughts).

Table 3-1 | Six Years of Rice Production from 2003-2008

	Unit	2003	2004	2005	2006	2007	2008
Total cultivated area	ha	2,314,285	2,374,175	2,443,530	2,541,433	2,585,905	2,615,741
Wet season	ha	2,030,735	2,075,646	2,121,591	2,212,015	2,241,114	2,255,104
Dry season	ha	283,550	298,529	321,939	329,418	344,791	360,637
Total harvested area	ha	2,242,036	2,109,050	2,414,455	2,516,415	2,566,952	2,613,363
Wet season	ha	1,967,036	1,815,619	2,093,564	2,188,726	2,222,596	2,252,733
Dry season	ha	275,000	293,431	320,891	327,689	344,356	360,630
Average Yield	T/ha	2.101	1.977	2.479	2.489	2.621	2.746
Wet season	T/ha	1.951	1.725	2.261	2.272	2.413	2.540
Dry season	T/ha	3,175	3.536	3.901	3.938	3.959	4.030
Total Production	T	4,710,935	4,170,284	5,986,179	6,264,123	6,727,127	7,175,473
Wet season	T	3,837,957	3,132,581	4,734,300	4,973,694	5,363,690	5,722,142
Dry season	T	873,000	1,037,703	1,251,879	1,290,429	1,363,437	1,453,331
Food requirement per year	T	1,936,565	1,905,896	2,013,533	2,053,983	2,096,025	1,970,270
Surplus/deficit of mill rice	T	686,496	416,118	1,319,571	1,433,880	1,649,640	2,025,033
Surplus/deficit of paddy	T	1,072,650	650,184	2,061,830	2,240,438	2,577,562	3,164,114

Source : Annual report for Agriculture, Forestry and Fisheries 2008-2009

Next, in case of other agricultural products, including the four main crops, the cultivated areas for subsidiary and industrial crops are fluctuating according to the market demand. In general, the production of subsidiary and industrial crops is increasing. It should be noted that cassava and maize production has increased much due to the increased demand from local use and exports as it is used as raw materials for processing industries, especially in neighboring countries.

In this light, the rectangular strategy-II of the Royal Government of Cambodia clearly define the enhancement of agricultural sector as the dynamic element for enhancing the economic growth and poverty reduction by focusing on the improvement of agricultural productivities and diversities, land reform, and forestry and fishery program. The Ministry of Agriculture, Forestry and Fisheries (MAFF) has formulated an action program for agricultural development within this strategies.

The strategic development plan of 2006-2010 for MAFF for long term vision is “to ensure enough and safe food availability for all people, reduce poverty reduction, increase GDP per capita and sustainable natural resource management and conservation." In order to achieve this long term vision, the supporting activity for the development have been made by providing high quality supporting services and ensuring the availability of adequate and safe food, especially increasing the agricultural production and gross value added on a sustainable and cost effective basis to agricultural sector. MAFF also clearly defined the goals by subsectors for agriculture development as followings:

1. Food security, productivity and diversification
2. Improvement and strengthening of agricultural research and extension
3. Market access for agricultural product
4. Improving institutional capacity and legislative framework
5. Fisheries reform and
6. Forestry reform.

However, it is still true that about 80% of the poor live in the rural areas and depend on agriculture, and that the growth in this sector has been slow as access to arable land markets remains limited. There are several known impediments to agricultural growth and land cultivation by farmers, and these include (but are not limited to):

1. Absence of an efficient marketing system: The biggest obstacle to an expansion of areas under crop agriculture and intensification of cropping systems in irrigated areas is a lack of a market for rice and other food crops. According to CDRI(2005), market mechanisms to facilitate the movement of agricultural products from farmers to end-users (both domestic and international markets) do not function well. Farmers seem to have less bargaining power than middlemen, and their products are priced much lower than they would be if market competition existed. At present, there is no national marketing institution. Only the Market Information Service under the Ministry of Agriculture, which receives assistance from the FAO, is undertaking marketing development. In addition, considering the level of cereal consumption, there is not much scope for greater domestic absorption of incremental production. Unless export possibilities are enhanced, the potentially negative effect of increased production on output prices (i.e., lower prices leading to reduced profitability) will continue to serve as a disincentive to greater investment for and efforts towards improvements in farm productivity.

2. Low productivity: According to CDRI(2005), current yields of rice and other cash crops are very low compared with those under similar ecosystems in many Southeast Asian countries. In addition, production of other fields and cash crops has been weak, hindering the development of agriculture-based processing industries. A lack of basic infrastructure such as irrigation systems, roads and transport is a major impediment to increasing farm productivity, and thus to agricultural growth(CDRI, 2005). In most lowland areas, poor

soil fertility is a major production constraint that has to be addressed by suitable soil and fertilizer management. The low degree of irrigation, coupled with the poor performance of existing irrigation facilities, discourages diversification of farming. Without good water management and control, farming remains highly risky. Farmers are hence unable to take full advantage of modern farming technologies (e.g., seeds, seedlings, soil, fertilizer and pest management). Clearly, export potentials of the agriculture sector can only be fully tapped if surpluses are consistently achieved and product variety (and quality) is attained.

3. Inadequate Extension Services: The institutional arrangements and mechanisms for the effective delivery of agricultural support services such as extension programs are either not in place or are inadequate(CDRI, 2005). It is widely recognized that agricultural extension services are very weak, and a fully functioning system for extending support services-and, more importantly, spreading technology-to the rural population has yet to be established. Technical information is mainly conveyed through informal channels, which include neighboring farmers, non-governmental organizations, agricultural technicians and distributors of farm inputs. Farmers have very limited access to improved technologies because extension services are unsupported by R&D. State institutions are unable to deliver essential services and functions on a timely basis in support of productive, intensive and diversified farming.

4. Inadequate rural finance structures: Lack of access to financing is also seen as a major problem for business. Most farmers have very limited access to formal credit or quality agricultural inputs such as certified seeds. Local financial institutions are still in their infancy and far behind international banking institutions in products and services(EIC, 2005). Although the Government accords top priority to increasing farmers' access to rural credit, the expansion of such services is constrained by the lack of rural banking facilities in the countryside and lack of personnel with experience in rural finance. The micro-finance operations of NGOs are virtually the sole financial service providers in rural areas, but despite the significance of their operations, access to credit is limited to an estimated 10 percent of rural households. It is difficult, if not impossible, to secure a bank loan solely with a good business plan and no collateral. There is a need to support the expansion of rural credit and saving services by encouraging the entry of private licensed micro-finance institutions and commercial banks, and by strengthening the Rural Development Bank (RDB). In its role as a wholesaler, RDB will provide stable and long term funding needed to encourage retail institutions to expand and to make longer-term loans necessary for increased capital investment.

5. Ineffective government bureaucracy is also seen as a major impediment to growth. According to the World Bank(2004), "Cambodia's bureaucracy is politicized, cumbersome and inefficient, and this creates problems for both potential and existing businesses".The country's public institutions are particularly weak in two areas: contract

and law enforcement and governance/transparency.

6. Lack of an educated workforce and physical infrastructure also appears as a major impediment. As a result of the destruction during the Khmer Rouge period and decades of conflict, the human resources available to both public and private institutions are severely limited. Beyond human and social capital, physical infrastructure is lacking. Cambodia's indicators for road density, telecommunications density, electricity generation and availability of water are among the lowest in the East Asia and Pacific region(World Bank, 2004). The EIC's Executive Opinion Survey produced similar findings. According to the survey, 85 percent of business executives assess infrastructure in general as inadequate and of low quality. Public utilities are too expensive and subject to frequent supply interruptions; railways, port facilities and inland waterways are relatively underdeveloped. Although access to mobile telecommunications technology is widely considered as comparable to the world's best, most public infrastructure is perceived to be underdeveloped.

7. Regulatory uncertainty and regulatory burdens are also identified as substantial constraints on firms. The interpretation and enforcement of regulations are not consistent and predictable. Seventy-six percent of firms surveyed identified laws and policies affecting them as to some extent unpredictable(World Bank, 2004). In addition, certain categories of regulation, such as customs and trade, business registration, business inspections, environmental regulations and labour regulations, clearly constrain exporters considerably more than firms producing for the domestic market.

To further promote the development of Cambodian agriculture, it is necessary to address the overall constraints this sector is facing. Bold commitment and further resources should be devoted to providing sufficient basic infrastructure, extension services and effective public institutions.

Clearly, Cambodia needs an improved enabling environment for the agricultural sector. Effective public institutions, an adequate regulatory framework, sound policy framework and adequate infrastructure are the key components that support an enabling environment. The government should make a bold commitment and take measures to improve the enabling environment; development partners may provide further financial and technical assistances to the government, but with close supervision of progress and achievements.

In its diagram of building blocks for enhancing supply-side capacities, UNESCAP(2004) has identified an enabling policy and regulatory framework, and efficient institutions and good governance as the first layer or foundation, and general education and infrastructure as the second layer. These components are keys to supporting other necessary measures to increase productivity, which include access to finance, business support services, managerial and technical skills and increased linkages to global supply. The foundation also supports measures to reduce the costs of trade such as streamlined procedures and documentation and to improve transport and information communications technology and market information. So to build supply-side capacity and competitiveness, it is necessary to improve the foundations and productive capacity and reduce the costs of conducting trade.

There is a general agreement in the business community that certain reforms, such as public administrative reforms, legal and judicial reforms and financial and banking reforms, are the most critical. In addition, social and economic infrastructure should be further developed to respond to the needs of the private sector. An adequate power supply, good roads, railways, ports and information and communication networks provide the basis for efficient transport and communication and are thus of crucial importance for an internationally competitive private sector.

2.2. Small and Medium Enterprises in rural Cambodia: Rice Mills

There are about 257 rice mills for 9 provincial associations. An average rice mill has the capacity to mill rice from 400 to 1500 kilograms per hour while a smaller rice mill is able to mill less than 400 kilograms of rice per hour. These mills are only capable of milling rice for local use as they are old and therefore the produced rice are not of exportable standard.

Despite the fact that the export of rice without processing can be considered as a loss for agricultural industry, it is inevitable due to the old facilities, poor management and the lack of financial reserves to buy and stock rice as well as the shortage of technology and technological know-how in drying rice.

Cambodia, therefore, needs more mills and capacities. There, however, are many obstacles of Cambodia having equipped with more mills and more processing capabilities. There is not enough capital investment for drying mill machines and rice miller machines. Small mills produce rice only for domestic supply, partly due to the fact that local rice(local seed) does not meet the standard for export. In addition, there is not enough information about external market

In addition to the facility expansion, Cambodia also needs improvement in the equipment of rice mill such as drying machine, rice mill machine and other machines necessary in order to increase quantity and quality of rice. One strategy to cope with this problem is for the existing rice mills to merge into bigger ones or to establish an association to facilitate the collaboration among rice millers. Provincial rice mill associations have been established in some provinces, starting from 1998. They include Kandal, Takeo, Prey Veng, Kampong Cham, Svay Rieng, Pursat, Battambang, Banteay Meanchey and Siem Reap provinces. In the year 2000, associations from these 9 provinces together formed a Federation of Cambodia Rice Mill

Associations (FCRMA) and registered No 898 SCN dated 28 August 2001 at the Ministry of the Interior.

The association aims at: (i) solidarity and cooperation among the members in rice mill business in food safety and development, (ii) representing all provincial associations in order to protect their benefits, extent coordination and maintain close relationship between market and rice products, (iii) enhancing relationship with farmers and cooperation with relevant institutions to facilitate and encourage the promotion of the rice products. FCRMA provides loans to farmers and purchases rice for domestic food supply and processing for export. To support export to the external market, all rice miller associations established a market in each province. Through these markets, FCRMA collects rice to meet demand from the external market. The association has capacity to collect rice from 10 to 15% of the whole rice production.

The rice mill association also has plans for increasing the rice production for export, in cooperation with the Green Company Limited that is working closely with farmers by providing rice seed, financing, chemical fertilizers, etc. This company is also preparing a big rice machine for drying and rice millers and warehouse.

In addition, the Government has allocated a specific budget to the Rural Development Bank[25] who is to further provide credit to Rice Mill Associations to enable them to increase their rice stocks, buying them from farmers, to curb unwanted flows of rice into neighboring countries during the harvesting season since 2005. More specific objectives of this support are as follows: (1) to enable rice mill factories to have the capacity to compete with neighboring countries in buying unhusked rice, (2) to establish a rice market for farmers in which they could sell their products at more standardized and acceptable price level, (3) to help curb possible and extreme fluctuations of price of rice.

This financial support, however, lasts only for a year, after which the RDB has to repay the money back to RGC. So, financial support is meant to be used as circulating capital. On the other hand, most RMAs need longer-term credit as investment capital and so the provision of a longer-term credit (3 to 5 years) with low interest, from RGC through RDB would be of greater benefits for it would enable RMAs to invest in quality milling machines and rice drying kilns or fields, and to establish and increase rice stocks which would help strengthen the country's food security, hence its economy.

25) The RDB's main objectives are to provide micro-financing and credit services in support of agricultural development and general economic activities, and to reduce poverty and raise the standard of living of the Cambodian people. For these, RDB refinances credit funds and services to licensed financial institutions, commercial banks, specialized banks, MFIs, associations, development communities and small and medium enterprises that take part in the rural development in Cambodia. Current status and future direction of RDB will be dealt in more detail later.

Table 3-2 | Rice Collected by 257 Mills in 2005-2006

Name of Province	Number of rice mill	Total rice collected (T)
BattamBang	78	101,400
Banteay Meanchey	23	30,000
Siem Reap	21	22,100
Pursat	19	9,500
Kandal	32	9.600
Takeo	14	4,200
Svay Reang	23	2,300
Prey veng	28	14,000
Kampong Cham	19	9,500
Total	257	202,600

Source : Rice Mill Association

2.3. Infrastructure: Electricity

Electrification is one of the key infrastructures in modern economies. The growth of this sector is crucial in fostering economic development and improving quality of life. Electricity is needed for (i) household uses, such as lighting, space heating, cooking and other appliances; (ii) for agricultural uses, such as irrigation and post-harvest processing; and (iii) for commercial uses such as processing, milling and mechanical energy and process heat. Electricity is also an input to water supply, communications, commerce, health, education and transportation.

At industry level, electrification has stimulated more productive and efficient enterprises by enhancing: (i) complementary infrastructure-such as roads, transport, markets, bank, and adult literacy; (ii) stock of equipment and tools of microenterprises; and (iii) hours of operation. According to WB(2006), electrified communities had a significantly higher number of facilities-post office, restaurant, market, roads, transport, water, school, and health- and a significantly higher percentage of households operating microenterprises as their primary or secondary occupation than the non-electrified communities. The same study using cross-sectional Living Standard Measurement Survey (SLMS) data in Peru, Ghana, Philippines and Lao PDR also found that: (1) access to electricity increases hours household members put into the business; (2) access to electricity increases use of equipment and tools, thereby increasing productivity; (3) access to electricity improves community infrastructure required to reap economic benefits; and (4) improved community environment, increased productivity, and hours of operation result in increased profits.

Despite all these benefits of electrification, however, the current situation in Cambodia in the area of electrification cannot be considered to be favorable. Even the Royal Government of Cambodia identifies the high cost of electricity as a barrier to increased competitiveness. From a national perspective, the electricity sector suffers from several basic deficiencies, namely: (i) the high tariffs for all consumers regardless of supplier; (ii) the limited extent of wired system coverage; and (iii) the high up-front costs for new consumers, which particularly affect the poor.

Electricity is a key input for small-scale enterprises and other industrial and commercial activities, which are important for economic growth and employment. Improvement in this field would also reduce the barriers to expansion and will lead to productivity enhancement.

2.4. Financial System

After the political instability and institutional destruction of the late 1970s and early 1980s, Cambodian financial sector has been undergoing rapid development based on private sector participation. At the end of December 2008, the formal financial system comprised National Bank of Cambodia, 20 private commercial banks, 5 specialized financial institutions (including 1 state-owned bank, the Rural Development Bank), and 2 representative offices of foreign-based banks, 16 licensed and 26 registered microfinance institutions (MFIs), and 6 insurance companies. There is no bonds market yet, but securities market is established with the support of Korea International Cooperation Agency (KOICA) and waits to witness the very first IPOs in near future.

However, the predominantly rural nature of the economy, high transaction cost, inability of the real sector to put together bankable projects, and low creditor confidence have been the main factors resulting in low formal intermediate and outreach within the financial sector. There has also been a slow development of non bank financial institutions, with a limited range of products and services being offered. The past and current situations of banking sector will first be reviewed briefly, followed by more detailed reviews on microfinance institutions in Cambodia.

First, all registered banks are adequately capitalized following the relicensing process that set the capital requirement at US$ 13 million equivalent (2002) and the initial minimum capital adequacy requirement (CAR) at 20%. This CAR was then appropriately reduced to 15% in 2004. While banks are free to set their own interest rate (since 1995), average interest rate spread tends to be high at around 11% in 2007 (decline from 15% in 2004) and most banks continue to maintain high liquidity. The number of active borrowers reached a total of more than 209,000 (1.5% of total population) at the end of June 2008 with potential for further growth. Most of banks operates in the city or town or potential economic areas, but ACLEDA is only one bank has activity in the 24 municipalities and provinces of the whole country with total of 227 branch offices. ACLEDA delivers a range from micro loan to small and medium loan in rural and urban areas with total loan outstanding US$442.63 million and 230,930 active clients as of May 31, 2009.

Next, Cambodian microfinance first started in 1992 under the control of Ministry of Interior with Non Governmental Organization status. Now, however, the microfinance institutions are registered and licensed under the 1999 Law on Banking and Financial Institution and circular (Prakas) issued by the National Bank of Cambodia (NBC) in 2000 entitled the "Licensing of Micro-Finance Institutions".

As can be seen in the table below, the microfinance sector was growing rapidly for the past decade. The number of MFI, number of borrower, amount of loan outstanding, amount of deposit balance and number of depositor were increasing from year to year. It can be said that the microfinance industry is expanding rapidly, providing the link between the formal financial sector to rural households and micro enterprises. The number of active borrower availing rural household credits, micro business loan and small business loans reached a total of more than 899,155 clients (6.42% of total population) at the end of December 2008 with potential for further growth. Microfinance lending has also grown from 160 million USD in 2007 to 292 million USD in December 2008, with reported nonperforming loans below 3%.

Voluntary savings remain very small and access to local finance by MFIs and NGOs has been very limited at 6.38 million USD. Total assets of MFIs increased about nearly two times from 182 million USD in 2007 to 333.83 million USD in 2008 (as of December 31). A few institutions dominate the market such as AMRET, PRASAC and CEB accounted for more than half of the assets in 2007. Loan advances account for 86% of total assets. Loan duplication affects asset quality. With technical assistance from ADB, NBC issued a Prakas in December 2007 setting out the criteria for MFIs that are eligible to mobilize voluntary savings. A public campaign to promote MFI saving has commenced. NBC supervision unit for MFIs regulates the operation of MFIs and further support will be required to enhance its offsite and onsite supervision capabilities.

Reviewing the demand-side of the credit, microfinance institutions (MFIs) and NGOs operate in rural and urban areas in order to provide loan to clients or rural households for different purposes, including farm production, family rural businesses, healthcare, home consumption. Farmers need credit to purchase inputs and implements, fishermen for boat and fishing gear, and tradesmen and processors for working capital to buy produce (paddy or fish) and capital investment. Size of loans varies from 50 to 5,000 or even 10,000 USD. Processors and traders have easier access to formal credit than producers and farmers although formation of village banks and self-help group improve prospect for obtaining formal credit. Also, due to their abject poverty, the poor households are often forced to divert production credit to current consumption.

It is also true that MFIs are not equally accessible to all segments of rural clients. The credit demand in the formal market is constrained by availability of provider, lack of financial resources, lack of appropriate products, high interest rate and transaction cost, low repayment capacity and fear of losing asset including land due to loan delinquency, small size of loan, short term nature of loan, lack of perceived need for credit, low return on credit financed investments, lack of collateral, admissible purpose of loan, repayment schedule, period of loan, credit history, risk of calamity and loan procedure, etc.

On the other hand, in the supply-side of the picture, credit is supplied by informal lenders, commercial banks, MFIs and others. For example, in Kandal Province, seed credit is available from the provincial Department of Agriculture while general credit is extended by bank like the Provincial Village Bank and ACLEDA, and micro credit MFIs such as AMK, CEB, PRASAC and others. Supply in the informal market is constrained by relationship with client, personal assessment of the lender and availability of funds with the provider. Access to credit from banks and MFIs is limited as these demand land as collateral and/or individual income guarantee. This leaves out almost 70% of households in some areas.

Based on the table below, the total households in rural areas of the provinces only about 40~50% can access formal credit. In many parts of Cambodia, farmers have to fall back on local money lenders. Farmers can access to formal credit only with the required collateral according to the policies set by each microfinance institutions or NGOs in case of individual loans, and for group lending, clients are require to guarantee each other to be eligible for the loans.

Table 3-3 | Microfinance Portfolio and Outreach in Cambodia for Selected Years (in USD)

	2004 (June)	2005	2006	2007	2008
Lending Portfolio					
ACLEDA	49,771,076	98,460,298	156,570,764	310,681,263	457,422,134
Licensed MFIs	19,019,774	49,750,007	88,013,288	154,515,353	284,667,424
Registered NGOs	8,144,821	2,321,194	3,959,585	5,919,774	7,631,379
Total	76,935,671	150,531,499	248,543,637	471,116,390	749,720,937
Total Borrowers					
ACLEDA	n/a	n/a	n/a	n/a	n/a
Licensed MFIs	n/a	356,587	450,128	630,486	825,652
Registered NGOs	n/a	20,918	20,898	23,604	46,503
Saving Portfolio					
ACLEDA	21,603,048	61,901,125	123,149,783	344,533,315	487,803,546
Licensed MFIs	1,124,129	2,116,580	2,527,061	5,304,013	5,410,923
Registered NGOs	138,074	274,421	411,634	765,021	969,206
Total	22,865,251	64,292,126	126,088,478	350,602,349	494,183,675

Source : NBC

Despite its limited coverage, it cannot be denied that MFIs have played a critical role in poverty reduction and have contributed effectively to the economic development of the country. Microfinance in Cambodia has been filling the gap between the poor and financial services by setting up branch networks in rural areas to provide access to convenient banking services. MFIs have gained strong support from all stakeholders: investors, creditors, donors, public sector and especially customers. Most of the poor in Cambodia accepted microfinance as their best partner in economic development.

For those Cambodian poor who were qualified to have access to credit loans were able to start new businesses and expand existing ones. This allowed them to invest in different business sectors such as agriculture, small and medium trade, handicrafts, services, construction, transportation etc, and enable them to become the owners of the business. This is a confirmation of the theory of economic development that the only way to move people out of poverty is to empower them as business owners.

Micro and medium sized enterprises play an import role in the country’s economic development. Microfinance service has been expanding to poor people in more remote areas, and as a result microfinance services have become very popular with the micro and small entrepreneurship market. Because MFIs are present in a timely way serving the market and supplying the demand for banking services, the economic development of the poor moved forward successfully and micro finance has thus become a new technology for Cambodians “that is the key to breaking the poverty cycle”. This is not only true for Cambodia but it should be for all developing counties in the world.

On time repayment rates are in excess of 99% reflecting the acquired business acumen of clients and also the disciplined management of microfinance operators. Interest rate charges have declined every year, with current rates ranging from 24% to 36% per annum. This is the result of free market economic policies encouraged by the Royal Government of Cambodia. In order to manage interest rates at a very competitive level, while maintaining profits for shareholders, operators had to increase capacity in operations to reduce costs. Overall microfinance in Cambodia has attracted ongoing trust from international financial markets. Many different independent evaluations done by international investors demonstrate that microfinance in Cambodia has been improving very rapidly in the last five years on loan service, and became a leading country in terms of management practices. MFIs in Cambodia are very effective, with decreasing interest rates and increasing outreach and expansion.

2.5. Agricultural Cooperatives

Significant challenges to Cambodian agricultural development still remain as was seen earlier. Individual farmers cannot overcome these challenges on their own. There are, however, a few successful case studies, which show that farmers can work collectively to ameliorate some of these challenges[26]. The development of agricultural cooperatives in Cambodia, however, is currently still at a very early stage. By the end of 2005, there were only about 54 agricultural cooperatives in Cambodia registered with the Ministry of Agriculture, Forestry and Fisheries (MAFF). The practice of farmers working collectively together, however, is not new in Cambodia. Such collectives are called Farmer Organizations (FOs). A recent study on the national inventory of FOs shows a dramatic increase in number of FOs, from 1,065 FOs in 1999 to 13,017 FOs in 2005(Julie et al., 2005).

In this section, the inventory of farmer organizations will be reviewed, some of the main issues facing existing farmer organizations in Cambodia will be identified, and empirical experiences on specific strategies to access low-interest credit and the incentives provided by government policy on farmer organizations in Cambodia will be presented.

First question will be why agricultural cooperatives are created. The core value of agriculture cooperatives is in providing self-help, self-responsibility, democracy, equality, equity, and solidarity-for farmers or rural people to come together to solve their problems through collective action. It is generally agreed that in order to be sustainable, an association or cooperative must be economically successful, and hence able to compete with other cooperatives and the private sector. They must offer both their customers and their members competitively priced goods and services. The relationship between members and the cooperative is also unique as members are integrated as shareholders or co-owners of the cooperative, yet act as the primary clients of the services provided. For this reason, member participation is essential at all functional levels of the cooperative - entrepreneurial, financial, managerial, and social(Couture et al., 2002).

Cambodia, currently a member of the WTO, is engaged in a free market economy. The country is located between two large agriculture countries: Thailand and Vietnam, which provide market competition at all levels. Cambodian farmers face many production and marketing constraints. Thus, agricultural cooperatives are very important in assisting with managing changes in the environment and to address farmers' needs when individual farmers cannot compete. Cooperatives also provide means through which development agencies can reach and work with farmers. Collective actions through farmer organizations help to reduce transaction costs and regulate the markets. In addition, farmers are interested in agricultural cooperatives to provide security in selling products, achieving better prices for inputs and products, getting technical support, and reducing investment costs by sharing machinery, processing, and storage facilities. Therefore, it can be said that the main functions of FOs are in

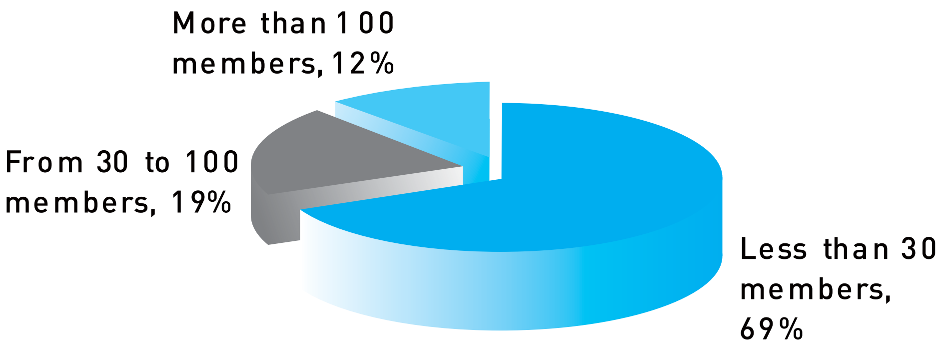
26) The Royal Government of Cambodia through its Rectangular Strategy recognizes agriculture as a leading sector contributing to economic growth and poverty reduction in rural areas. The four main principles of the Strategy include: (1) producing in accordance with the physical status of environment and to meet the demand of the market; (2) facilitating and providing?incentives?to producers such as marketing, credit, sharing technology, and providing seeds; (3) helping to build management and human resource capacity; and (4) facilitating the establishment of agricultural cooperatives to ensure the price of products.

providing technical and financial services to their members, representing member interests, and in providing social investments. Technical and financial services are popular, especially among poor farmers.

Currently Cambodian farmer organizations are at an early stage of development and are supported by government and NGOs. FOs are diverse in terms of origin, membership, function, size, and their relationships with supporting agencies. Most of the FOs are very small, mono-functional, diverse in form and locally established. Most FOs are not registered within a legal framework, have untrained management and leadership, and also have problems accessing services from government or micro-finance institutions. Although almost all FOs are supported by NGOs or government, there are a number of farmer groups formed by private companies such as: British America Tobacco (3,000 contract farmers in Kampong Cham) and the C.P. Group in Cambodia.

The history and objectives of FOs vary according to their location and the interests of farmers they represent. According to an inventory of FOs in Cambodia (Julie et al., 2005), there were 1,065 FOs in 1999, increasing to 13,017 FOs in 2005. The provinces with the largest number of FOs are Kampong Cham, Kampong Thom, Bantey Meanchay, Svay Reing, and Kompong Speu. Sixty-nine percent of FOs have fewer than 30 members, 19 percent have between 30 and 100 members, and only 12 percent have a membership larger than 100(Figure xxx). The study also shows that 63 percent of FOs was formed after the year 2000.

Figure 3-1 | Member Size of FOs



Source : Julie et al, 2005.

Julie et al., 2005, categorized FOs into five types: farmer groups, associations, communities, cooperatives and federations. Table below clearly shows that the majority of FOs are farmer groups at about 80 percent of the total.

Table 3-4 | Number of FOs by Types

FOs	Number	%
Farmer groups	10,487	80.5
Farmer communities	1,769	13.6
Farmer associations	662	5.0
Agricultural cooperatives	93	0.7
Farmer federations	6	0.05
Total	13,017	

Source : Julie et al, 2005.

The Cambodian government already has several legal frameworks to help promote agricultural cooperatives. MAFF supports cooperatives by providing technical assistance to improve the quality and quantity of products and capacity building for cooperative leaders and members. Presently, there is a sufficient legal framework to support FOs. However, most FOs and supporting agencies still know very little about the legal framework covering their field of activities.

As farmers are being strongly encouraged by national and local government to form farmer groups and register as official cooperatives, the incentives are likely to put pressure on the development and competitiveness of small, newly-formed cooperatives. Those unable to meet the requirements to secure a contract are likely to miss out an access to important government services and programs, such as credit from the RDB.

In summary, agricultural cooperatives are still young and lack financing and trained management and leadership. The current incentives to form cooperatives are being pushed in different directions by the interests of various stakeholders, including the farmers, local-level government officials, business interests, and the other agencies. Factors driving successful cooperative development have been identified as an interrelated system of capacity development, financial and economic aspects, cooperative principles and governance, the institutional environment, and meeting the needs of its members. Government should carefully monitor the impact of their legislation and the ways in which these various stakeholders react to policy, market signals, and their interaction with each other.

3. Microfinance

In this section, microfinance related initiatives of EC as well as related recommendations from other international institutions will be reviewed. Brief review of Cambodian situation and relevant implications as well as potential policy directions will be drawn and suggested.

3.1. EC's efforts to promote SMEs and its lessons

European Commission has put a lot of efforts to promote small and medium enterprises as promotion of SMEs is one of the top priorities in EU's Lisbon Agenda and Cohesion Policy. Lisbon agenda is an action and development plan for the European Union. Its aim is to make the EU "the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010". It was set out by the European Council in Lisbon in March 2000. On the other hand, Cohesion policy is referring to the policies adopted by the European Union and member countries to help the poorer regions in Europe to balance out the effects of further economic integration. Through various Structural Funds programs, the Union has invested in the 'less favoured' regions since 1988.

While it is true that the banks usually provide access to finance for existing micro-enterprises and traditional start ups, they are reluctant to deal with those who lack collateral, steady employment or a verifiable credit history, although the default rate on micro-loans is quite low. In addition, operational costs are not proportionate to the size of the micro-loan. Access to finance is therefore a real problem for those non-bankable customers. As a result, only part of the potential demand for micro credit is satisfied. All indications point to high potential but unmet demand from people who, for various reasons, are unable to obtain loans in the traditional banking sector.

For such demand for credit, microfinance has been used very successfully in less developed countries, and there has already been some action in this field in the EU, both at Community and at national level. In the EU, demand for this type of finance - typically, loans averaging around 7,700 Euros - is overwhelmingly from people setting up small companies in the service sector.

In line with these goals and constraints as well as other initiatives, EC, partnered with EIBG, introduced a new initiative named JASMINE. This initiative seeks to improve access to finance for small businesses and for socially excluded people, also ethnic minorities, who want to become self-employed. This initiative, in line with the Lisbon Strategy for growth and jobs, aims to make small loans, or micro-credit, more widely available in Europe to satisfy unmet demand. The purposes of JASMINE, in more detail, are as follows: It aims to promote a favorable legal and institutional and environment for micro-credit in Europe. It also aims to help non-bank financial intermediaries who want to act on the microcredit scene to reach a high standard in terms of governance and lending standard in terms of governance and lending practices. It aims to help them raise funds on the private capital market and attract borrowers in confidence, and at the same time, to help them grow and reach sustainability.

The main aspects of the initiative are as follows: First, it invites Member States to adapt their national institutional, legal and commercial frameworks needed to promote a more favorable environment for the development of micro-credit. This should include making changes to their National Reform Programs under the Lisbon strategy for jobs and growth, in order to set themselves meaningful targets in this field. Secondly, it recommends setting up a new European-level facility with staff to provide expertise and support for the development of non-bank micro-finance institutions in Member States. This would equip micro-financers to offer not just a loan, but a service mentoring the borrower to help develop and ensure the success of their business. This kind of accompaniment is the key to the success of micro-credit operations. Thirdly, to find more capital for micro-credit providers, this initiative proposes setting up a micro-fund in the new facility. This would help finance the loan activities of micro-finance institutions which can also expect to draw in contributions from a range of investors and donors.

More specifically, it sets up, in inter-institutional partnership with the European Investment Bank group (EIB), a new European facility with staff to provide to MFIs, operational technical assistance like mentoring, training, information, toolkits, as well as general support measures like a code of conduct, a quality label, etc. It also plans to provide flexible funding of around 50 million Euros to selected MFIs (equity, loans, grants, or their combination) through a co-financing facility established in the EIF and involving EIB, European Parliament, Commission, private or public financial partners.

JASMINE will also draft a code of good conduct for MFIs to spread ethic and customer-friendly best practices among MFIs. JASMINE will design a micro-credit quality label which will be awarded under strict conditions to MFIs to acknowledge their reliability, to help them attract borrowers in confidence and to raise funds on the private capital market. Grants to be used as start-up "equity" to help MFIs cover their operational costs and become sustainable. A pilot project to gain experience in delivering Funds and support to non -bank MFIs will be helpful.

The lessons that can be earned from EU's experiences are as follows: Self-sustainability of the MF activity should be the major aim of relevant government policies. The intensity of public support to microfinance sector should be digressive, based on achieved performance and adapted to the targeted businesses. The main issue for SMEs remains access to finance. At the same time, however, non-financial services, in particular mentoring, is also essential to increase the chance of survival of SMEs. MFIs need performance evaluation/disclosure, and effective synergies with business support services. To achieve these goals, comprehensive and systematic management are considered efficient and effective. In doing so, MF activities should be monitored on a regular basis.

3.2. Recommendations from Other International Organizations

CGAP[27](2005) is proposing 'Agricultural Microfinance Model' that combines the most relevant and promising features of traditional microfinance, traditional agricultural finance, and other approaches-including leasing, area-based insurance, use of technology and existing infrastructure, and contracts with processors, traders, and agribusinesses-into a hybrid defined by 10 main features. The model is based on a few significant, successful experiences in various developing countries. The main features of the model can be summarized as follow:

1. Repayments are not linked to loan use. Lenders assess borrower repayment capacity by looking at all of a household's income sources, not just the income (e.g., crop sales) produced by the investment of the loan proceeds. Borrowers understand that they are obliged to repay whether or not their particular use of the loan is successful. By treating farming households as complex financial units, with a number of income generating activities and financial strategies for coping with their numerous obligations, agricultural microfinance programs have been able to dramatically increase repayment rates.

2. Character-based lending techniques are combined with technical criteria in selecting borrowers, setting loan terms, and enforcing repayment. To decrease credit risk, successful agricultural microlenders have developed lending models that combine reliance on character-based mechanisms- such as group guarantees or close follow up on late payments-with knowledge of crop production techniques and markets for farm goods.

3. Savings mechanisms are provided. When rural financial institutions have offered deposit accounts to farming households, which helps them to save funds for lean times before harvests, the number of such accounts has quickly exceeded the number of loans.

4. Portfolio risk is highly diversified. Microfinance institutions that have successfully expanded into agricultural lending have tended to lend to a wide variety of farming households, including clients engaged in more than one crop or livestock activity. In doing so, they have ensured that their loan portfolios and the portfolios of their clients are better protected against agricultural and natural risks beyond their control.

5. Loan terms and conditions are adjusted to accommodate cyclical cash flows and bulky investments. Cash flows are highly cyclical in farming communities. Successful agricultural microlenders have modified loan terms and conditions to track these cash-flow cycles more closely without abandoning the essential principle that repayment is expected, regardless of the success or failure an any individual productive activity-even that for which the loan was used.

27) Consultative Group to Assist the Poor

6. Contractual arrangements reduce price risk, enhance production quality, and help guarantee repayment. When the final quality or quantity of a particular crop is a core concern-for example, for agricultural traders and processors-contractual arrangements that combine technical assistance and provision of specified inputs on credit have worked to the advantage of both the farmer and the market intermediary.

7. Financial service delivery piggybacks on existing institutional infrastructure or is extended using technology. Attaching delivery of financial services to infrastructure already in place in rural areas, often for nonfinancial purposes, reduces transaction costs for lenders and borrowers alike, and creates potential for sustainable rural finance even in remote communities. Various technologies show enormous promise for lowering the costs of financial services in rural areas, including automated teller machines(ATMs), point-of-sale(POS) devices linked to "smart cards", and loan officers using personal digital assistants.

8. Membership-based organizations can facilitate rural access to financial services and be viable in remote areas. Lenders generally face much lower transaction costs when dealing with an association of farmers as opposed to numerous individual, dispersed farmers-if the association can administer loans effectively. Membership-based organizations can also be viable financial service providers themselves.

9. Area-based index insurance can protect against the risks of agricultural lending. Although government-sponsored agricultural insurance schemes have a poor record, area-based index insurance-which provides payouts linked to regional levels of rainfall, commodity prices, and the like-holds more promise for protecting lenders against the risks involved in agricultural lending.

10. To succeed, agricultural microfinance must be insulated from political interference. Agricultural microfinance cannot survive in the long term unless it is protected from political interference. Even the best designed and best-executed programs wither in the face of government moratoriums on loan repayment or other such meddling in well-functioning systems of rural finance.

Asian Development Bank(2006) acknowledges that microfinance has evolved differently in different environments and that new variants of approaches are emerging as the microfinance system is not static. However, it still finds that some common elements for success are present. Those characteristics are as follows:

1. Successful microfinance institutions (MFIs) know their market.

2. Lending outlets are located near the client, application procedures are simple, and loans are disbursed quickly.

3. Interest rates are market-oriented to cover both operational and financial costs, recognizing that the poor are willing to pay for access and convenience.

It also concludes that the Central Asian countries need strong rural retail banking institutions capable of serving microenterprises and everyone else besides. Given the low population densities in the region, providing a broader array of products to many customer segments makes strong economic sense for banks. There is an important role for other financial institutions to play in rural financial markets as well, leasing companies, NGO-MFIs, investment funds, not the least among them. In localized markets, credit unions can provide strong competition on the basis of price and quality of service to commercial banks. Institutional diversity in rural financial markets, therefore, is a goal worth striving for across the region. In addition, informal financial providers will continue to play a major role in developing rural financial markets. But in strengthening the banking sector, which means improving the skills and capacity of commercial banks to innovate, and improving their balance sheets, transparency and governance are of primary importance. Foreign investment and technology are likely to be the key drivers in this process of institutional development.

NGO-MFIs can contribute by transforming themselves into commercial banks dedicated to serving more of the underserved than just microenterprises and the poor. For their part, policy makers in CARs should maintain and nurture a free flow of ideas about how to develop inclusive rural financial systems in their countries, without being dogmatic, to benefit from the growing knowledge and experience related to rural financial market development in CARs and elsewhere.

3.3. Policy Recommendation

Small and medium enterprises and their potential founders often have no adequate access to external finance. The insufficient supply of loans is a major issue, and government sponsorship on the supply of loans, especially the microloans is therefore an issue of entrepreneurial proliferation and economic growth. Most of MFIs are not active enough in this sector of business. In the majority of rural regions in Cambodia, the shortage of credit supply remains a major constraint for business creators and the growth of small enterprises. As financial institutions often perceive microcredit as a high risk and low return activity due to high failure rate and high operational cost for loans, it should be acknowledged that there exists a market failure based on information asymmetry.

The Royal Government of Cambodia introduced various measures to bridge the gap in this area, but with the evidence of a still existing market gap, additional measures may need to be introduced. Public support can be offered by providing funds through a rural SME financing promotion institution to individual MFIs, by sharing part of the risk with credit guarantees and more professional business support services.

In the context of the need for public support to SME financing, the Royal Government of Cambodia may introduce an agency acting as a 'rural SME financing through MFIs support center' in charge of various necessary activities. This agency, maybe in the form of state owned financial institution, will be in charge of promotional services for credit or risk sharing as well as other business support services that are essential to promote the rural SME financing via MFIs. This would be particularly useful when the scale of funding required is larger than the size of funding an average MFIs can afford. Therefore, the agency should provide flexible funding to those selected MFIs in the form of co-financing. To do so, the agency should develop transparent selection criteria for the recipients. It should also develop and standardize operational technical assistant procedures to MFIs as well as rural SMEs. The technical assistance includes, but is not limited to, mentoring, training, information, toolkits, etc. It should also monitor and regularly evaluate the performance of funded MFIs on its promotion of rural SMEs. Credit guarantee schemes also can facilitate the process with reduction of risk exposure, but this topic of credit guarantee scheme will be discussed separately in more detail later.

As was already mentioned, the Cambodian government has put a lot of effort in this area, and the establishment of the Rural Development Bank is one of the initiatives. The current objectives and activities of RDB fit with the description of the comprehensive MF and rural SME promotion agency. RDB began its operation at the beginning of 1999. It was established in January 1998, and obtained a banking license from NBC in June 1998 as the specialized bank. RDB's source of funds consists of RDB's own funds, borrowing from government(special loan) for purchasing paddy stock, grants from AFD on Family Rubber Plantation Project on Kompong Cham Province, borrowing from ADB and IFAD as well as grants from Gret-Kosan on Clean Water in Takeo Province.

Its main objective is stated as supporting rural agriculture development and general economy by providing micro-financing and credit services in order to reduce poverty and raise people's living standard. Its main activities are financing and cooperation with microfinance institutions, financial institutions, small and medium enterprises which have activities in supporting the rural economy, as well as special project of RGC or development partners. It negotiates with development partners in order to attract grants and concessional loans for expanding the bank's operation. It also provides technical trainings to MFIs.

RDB's loan outstanding as of June 2009 is $27 million but its clients base is still limited. RDB's clients are 6 Licensing MFIs, 6 Registered MFIs, 9 Rice Miller Association, 6 licensed SMEs, 2 licensed communities, 3 licensed associations in addition to 700 households under Rubber Plantation Project and RDB's Staffs. RDB has 3 deputy director generals and under one of them, it has Credit Department and R&D Department as well as Project Management Unit. Under Credit Department, 1) MF, Association & Community, 2) SME, 3) Special Loan from the Government are in operation.

Under R&D Department, 1) Strategic Plan, 2) Market Research and Development, 3) Consultation are in operation.

The objectives and activities of RDB, therefore, fits with the description of the comprehensive MF and rural SME headquarters, but to acquire full functionality, it may require further efforts. RDB is a very strong candidate to be in charge of this function, however, it needs additional reforms so that SMEs can be offered digressively by on-lending practice through MFIs with specifications on the borrower qualifications.

It should also cooperate more closely with membership-based organizations as the targeted potential rural entrepreneur. It should also develop and standardize operational technical assistant procedures to MFIs as well as rural SMEs(R&D). It is required to fortify technical assistance function (Dissipation). Monitoring and regular evaluation function on MFI and SME performance should be routinized. As will be discussed later, syndicated loan facilities can be a part of its functions to be offered.

4. SME Policies

4.1. Korean Experience in SME Policies

Korea had recognized the importance of SMEs from the 1960s and set the fundamentals to promote the growth of SMEs accordingly. To enhance this process, the Fundamental Act for SMEs was legislated to prepare a comprehensive supporting system for SMEs. Furthermore, the government had implemented protection and promotion policies by designating exclusive business areas for SMEs and establishing SMEs support institutions in the 1970s. Up until 1980s, Korean government's approach toward SME promotion had focused on protection and nurturing.

During the 1990s, however, a structural reform of SMEs had been required with joining WTO in 1995, followed by the financial crisis in 1997. Consequently in 2000s, there was a major change of supporting policies for SMEs. Since then, Korean SME policy has experienced transition toward reinforcing self-sustainability and competitiveness of SMEs. This was achieved through more indirect support combined with market-based selection mechanism. In other words, Korean government allowed the selection by market competition, and more focused on support for those selected in the market for more efficient resource allocation. It should, however, be noted that despite this transition, they did not forget to provide extra support for micro enterprises (~10 employees) and for small enterprises (~ 50 employees) because these are the ones in the most desperate needs.

All in all, it is still true that Korean government has been very actively involved in various SME support policies, most notably in the form of SME financing policies. It is widely accepted that SME financing policy provides SMEs with easier access to capital funding by offsetting their numerous financial shortcomings. SME financing policy achieves this goal by addressing the market failures in SME financing, and most countries have some form of SME financing policies in place. Below is a brief overview of Korean experience with SME support in the form of financial assistance.

It is often viewed that SME financing policies can be categorized into two types, one is availability expansion which aims to expand the supply of funds available to SMEs, and the other is accessibility enhancement that aims to provide SMEs with greater accessibility to financial institutions by offsetting their weak credit profile and collateral. The government has been trying to be active in both areas and at the same time trying to keep policy portfolio in balance between these two different domains.

First of all, Korean government set up a few SME-specialized policy banks since 1961 to support SMEs, micro companies and regional SMEs. While they had played a vital role in the promotion of financing SMEs, there is currently only one of them, IBK, left operating. These banks were institutionalized to supplement the SMEs' lack of funding from commercial banks; to facilitate the fund flow into government selected industrial sector or area such as start-ups, commercialization of new technology, etc.

Korea also has obligatory SME loan ratios combined with aggregate credit ceiling loan system by the Bank of Korea. The Bank of Korea has guidelines for commercial banks to maintain given ratio of their loan portfolio provided to the SME sector since 1965. To encourage compliance with the recommendations, the Bank of Korea offers special low interest rate loans to banks who meet the specified ratios. This short term funds at lower than market interest rates are called the aggregate credit ceiling loan system and acts as the facilitating device for the obligatory SME loan ratio. Through this policy of favorable funding, the BOK encourages commercial banks to be more active in their SME lending practices, which in turn, may lower the interest rate available to SMEs.

There are also various policy loans, or sometimes called SME promotion funds and policy funds supported by Small Business Corporation (SBC; a state owned enterprise) as well as local authorities for regional industry and SMEs. For example, the SME Promotion Fund operated by the SBC, was established in 1979 and since then it has been run to promote and support the SME sector. These funds aim to promote equipment investments, restructuring and commercialization of new technologies, and to assist start-up activities that are often not financed through private market arrangements. Such loans are often justified because, despite its low expected private returns, their social and economic benefits may be anticipated to exceed all corresponding costs involved.

While these policy tools are to increase the total volume of funds that are to be flowing to the SME sector, there are also export guarantee system and credit guarantee system that are designed to promote the accessibility of SMEs to the funds from financial institutions.

Export guarantee system is introduced to protect exporters and the banks that provided loans to the exporters from commercial and political risks that are not covered by the typical commercial insurance system. Here the commercial risk includes risk from importers' breach of contract, bankruptcy, refusal of payment, etc., and political risk refers to the risks such as war, political commotion, etc. When SMEs receive trade credits from other buying corporations, these bills or trade receivables are insured by the Korea Export Insurance Corporation set up in 1992. With those risks offset by the system, the government intends to promote overseas exports by SMEs that are not able to be protected through commercial insurance system.

Last, but not least, there is the credit guarantee system provided by the government-sponsored agents. Such system was first introduced in 1961 to alleviate the financial difficulties of SMEs, and to initiate a new loan practice of business prospect being a major barometer. Credit Guarantee Institutions offer banks a guarantee of debt repayment on behalf of the SMEs with weak credit profiles. In case there is a default on a loan, the guarantee institution is to repay the guaranteed liabilities. There are 2 major credit guarantee funds sponsored by the central government along with 14 regional credit guarantee foundations established by local autonomous entities to promote local industries and companies.

Korea Credit Guarantee Fund (KODIT) is a public financial institution established in 1976. Its objective, as stipulated in Article 1 of the Korea Credit Guarantee Fund Act, is extending credit guarantees for the liabilities of promising SMEs which lack tangible collateral. It also intends to stimulate sound credit transactions through the efficient management and use of the credit information

Korea Credit Guarantee Fund provides enterprises with credit guarantee services for the repayment of liabilities assumed by business enterprises in transactions with other companies or institutions. By doing so, the credit guarantee services facilitate the financing of SMEs through the credit guarantees and stimulate the sound credit transaction through the efficient management of credit information. Credit guarantee services involve a series of interactions among three parties: the guarantor (KODIT), the debto (enterprises), and the creditor (financial institutions). If the debtor defaults, KODIT pays the guarantee obligation to financial institutions in place of the debtor.

KODIT has a five-step procedure in providing credit guarantee services. Through this procedure, KODIT investigates and evaluates the credit standing of the applying company, and decides whether to accept the credit guarantee, along with the guarantee amount. The five steps are application, consultation, credit investigation, credit evaluation, approval and issuance of letter of credit guarantee.

Application is the first step in requesting our credit guarantee service, a company must submit an application to KODIT by one of two ways: by Web (Cyber) Application or by Direct Application

Next, Consultation is the process of checking the credit status of the applicant and preliminarily inspecting the adequacy of the application. Consultation is done when the applicant visits a KODIT branch office, a KODIT staff member visits the applicant and Teleconsultation. If the applicant has reason to be disqualified, such as a conflict with the internal regulations of KODIT, the application for the guarantee service can be denied.

The third step is credit investigation. At this stage, KODIT reviews all the documents and information submitted by the applicant or collected from other sources. After documents are reviewed, KODIT personnel make an on-site inspection and evaluate the applicant's facilities, production capabilities, and operations. Visiting the applicant's office or factory allows KODIT to confirm the information submitted and to obtain additional information that could not be acquired otherwise, such as the employees' morale.

Then KODIT personnel compile a report on the credit status of the applicant. The contents of the report include information on business operations, credit records, financial status, personnel and management, etc.

The fourth step is the overall evaluation of the applicant's credit. Credit evaluation is the process by which KODIT evaluates the credit status of the applicant, decides whether to accept or reject the application, and decides the guarantee amount if accepted. There are three different credit evaluation methods, which are applied according to the guarantee amount and the type of guarantee.

When the application is approved, KODIT makes a credit guarantee agreement with the client, receives the guarantee fee, and issues a letter of credit guarantee. In cases of guarantee for bonds issuance, guarantee for acceptance of trade bills, and guarantee for commercial bills, KODIT stamps its signature on the face of the bond or the bill instead of issuing a letter of credit guarantee.

The total amount limit of the credit guarantee shall be prescribed by the Presidential Decree, within the limit of not exceeding twenty times the total amount of the fundamental property and earnings carried-over by the Fund. For each guarantee, the ceiling amount of general credit guarantee for a company, including its affiliates, is 3 billion KRW. Indeed, for certain types of guarantees specially designated by the Financial Services Commission, the credit line in general can be 7 billion KRW. However, as a special measure for overcoming the economic crisis, this special credit line has been heightened to 10 billion temporarily (valid until Dec. 2009).

To encourage the credit analysis capability of lending financial institutions and strengthen the financial standing of KODIT, KODIT has implemented partial coverage of credit guarantees since 1998 unless full guarantees are inevitable. Guarantees for corporate bonds, commercial bills, execution of contract and tax payment are not participated by financial institutions. Therefore, those guarantees are fully guaranteed. The portion of the risk shared by KODIT depends on the credit standing of the guaranteed company ranging from 50%~85%.

Meanwhile, as a measure of 'Intensive Rescue Plan in 2009', the credit guarantee coverage ratio has been widened up to 95%~100%. For example, the guarantees for priority sectors are covered by 100%, and 95% is applied for other guarantees in general (valid until Dec. 2009).

The Guarantee fee of KODIT varies according to the credit rating of the applying company within the range between 0.5% and 3.0% APR of the outstanding guarantees. Large enterprises are charged 0.5% higher fee than SMEs with a same rating. In the meantime, a fixed rate applies to certain types of guarantees.

Next, Korea Technology Finance Corporation (KOTEC) was founded in 1989 by the Korean government as a non-profit guarantee institution under the special enactment, Financial Assistance to New Technology Businesses Act which went through a full-scale revision and was newly titled Korea Technology Finance Corporation Act in 2002. The mission of KOTEC is to contribute to the national economy by providing credit guarantees to facilitate financing for new technology-based enterprises while promoting the growth of technologically strong SMEs and venture businesses.

Since its foundation, KOTEC has provided a total of 99.7 billion USD worth of guarantees to SMEs that possess prominent technology and business prospects but lack security for financing. In particular, more than 80% of the total guarantee amount was first provided to the companies who desired to develop or apply new technologies via the Technology Credit Guarantee System. Meanwhile, in order to provide objective and fair evaluation on an intangible asset (technology), KOTEC opened the Technology Appraisal Center (TAC). These TACs contribute to forming an advanced financial environment where SMEs who possess outstanding technology can easily obtain loans from financial institutions without collateral. In total, more than 74,000 cases of evaluation had been made, and the Centers are evolving both in quantity and quality by continuously developing new evaluation models and acquiring advanced evaluation techniques.

4.2. Policy Recommendation

Most of all, it is recommended that the Royal Government of Cambodia should introduce a credit guarantee system so that promising rural SMEs (including start-ups) without collaterals or established track records can be financed from MFIs or other financial institutions. This would facilitate financing for potential and existing entrepreneurs and cooperatives by reducing the risk exposure of microfinance institutions in a informational asymmetry situation.

In setting up the system and establishing the institute in charge, Korea's credit guarantee funds can provide the required know-how's. The newly introduced fund or institution should be equipped with ability to identify the promising business opportunities and abilities. This fund should work very closely with the fore-mentioned comprehensive MFI and rural SME financing promotion agency.

Pros and cons of introducing other initiatives for SME promotion in accordance with other countries' best practices should also be measured following the set up of a credit guarantee system. However, introduction of such more direct promotion policies may require huge additional fiscal budget of the government and therefore the government may have to wait until other priorities are fulfilled and fiscal status is improved.

5. Rural Area Development and Agricultural Cooperatives

In this section, the issues of rural area development and agricultural cooperatives will be reviewed. These two topics may seem to be remotely related to the central topic of rural SME promotion. These issues, however, are not at all irrelevant with rural SME since breeding of entrepreneurs in the rural areas is essential for Cambodia to observe new SMEs being established and entering the market. The past experience of Korea can show you why the voluntary and cooperative reform movements along with organized cooperatives are important in rural SME promotion.

5.1. Saemaul Undong[28)]

Saemaul Undong along with 5 year economic development plans were the two driving forces behind Korea's high economic growth during the 1970s. While the 5-year plan can be characterized as an economic plan designed with a macro point of view and top-down approach, Saemaul Undong is defined as a nationwide development movement devised with a micro point of view and bottom-up approach. They both could be figuratively compared to the two wings of a plane, which helped the Koreans to maintain high economic growth during the 1970s.

Saemaul Undong's main focus was on concurrent development of the economy and the mentality of Korean people. The Korean society has experienced a great deal of changes through Saemaul Undong. Therefore, it is necessary to grasp the implementation details of the movement to learn about and to make a further use of such a rapid growth.

28) This section draws heavily on Chung Kap Jin(2010).

Saemaul Undong was initially suggested by the late president, Park Chung Hee on April 22, 1970. Even though the movement is still carried out nowadays on a smaller scale, the 1970s witnessed the most successful Saemaul activities in the history of Korea.

That is because Saemaul Undong boosted Korea's poverty-stricken, war-torn status in the 1950s to the unprecedented industrialization era which led to the modern Korea of today. Moreover, Saemaul Undong was a great success in terms of popularity and citizens' voluntary participation.

In fact, the Korean society had been heavily influenced by the movement during the 1970s. The modernization process by Saemaul Undong began in rural villages, and started to spread to urban cities, to factories and work places, and to schools and militaries propelled by the force of 'excitement' to become a nationwide development movement.

When examining Saemaul Undong's 30 year long history, it becomes apparent that there were different stages of the movement with distinctive characteristics of its own. More specifically, Saemaul Undong has gone through dramatic changes, originally from being a government-led plan to modernize rural villages of Korea to a non-governmental movement consisting only of volunteer activities. With regard to Saemaul Undong's implementation entities, achievements, and points of stress, we can categorize it into 3 stages.

The first stage refers to the entire decade of the 1970s, and is called 'the stage of government planning'. Starting from the creation of Saemaul Undong by the government on April 22, 1970, the end of this stage is marked on December 1, 1980, when the Saemaul Undong Headquarters was established and registered as a corporation. Saemaul Undong at this stage has put an emphasis on rural village development activities with an amazingly high participation rate by villagers, and produced concrete and visible achievements. Therefore, from Saemaul Undong's point view, this early 10 years can be called the period of rural community development.

The second stage is during the 1980s and is called 'the stage of cooperation between the government and non-government entities' where a non-government entities, Saemaul Undong Headquarters, played a main role in implementing the movement while the government provided assistance in terms of administration, finance, and technology. Major national issues at the time were to successfully hold the Asian Games in 1986 and the Seoul Olympics in 1988. For the purpose, the headquarters organized Saemaul National Olympic Committee to propagate three social values of order, kindness, and cleanliness in an attempt to advance consciousness of the general public. In all, the second stage is often referred to as the period during which Saemaul Undong became an advocate of national values.

Starting from the 1990s until now, current Saemaul Undong has been operated as a non-government movement. In September 31, 1988, the government replaced the Division for

Saemaul-related Guidance in the Ministry of Home Affairs with the Division for Citizens Movement Assistance. The replacement marked the start of a purely non-governmental system for Saemaul Undong and, at the same time, marked the end of the bilateral management system of the 1980s since the term, Saemaul, disappeared from the central government. In this regard, the current implementation entity of Saemaul Undong has been reborn as a NGO for volunteer services in Korea. Nowadays, many of Saemaul Undong activists participate in daily activities for their communities as volunteers to live up to the ideals and spirit of Saemaul Undong.

As we can see, Saemaul Undong has gone through the 3 stages with 3 distinctive characteristics of its own: modernization of rural villages (the first stage), propagation of national values (the second stage), and volunteer activities (the current stage). One of the strategic elements of Saemaul Undong was that the government and the private sector cooperated with each other in carrying out Saemaul projects. Which entity had a leadership not only depends on project's characteristics and execution procedures, but also bears little meaning in terms of an achievement. Therefore, it is much rational practice to focus on each entity's role in naming Saemaul Undong's stages. In this sense, 'the stage of government leadership' becomes 'the stage of government planning', and 'the stage of leadership by the private sector' becomes 'the stage of autonomous movement'. One benefit of this approach is to prevent the accusation that Saemaul Undong was carried out based on enforced mobilization of its participants.

Table 3-5 | Characteristics of Saemaul Undong by Stage

Period	Leadership	By Characteristics
1st Stage (1970s)	the Government	Modernization of rural villages
2nd Stage (1980s)	Cooperation between the Government and Private Sector	Propagation of national values
Current Stage (from 1990s)	Private Sector	Volunteer activities

While it is true that Saemaul Undong had evolved continuously, from the context of Cambodia, Saemaul Undong in the 1970s are the most relevant, therefore, a review and policy implications to the Cambodia will be provided with emphasis on the 1970s.

Saemaul Undong is said to have realized the modernization of rural villages in three problematic domains. They were: (1) enlightenment of rural communities (mental reform of agricultural populace), (2) improvement in rural living conditions (improvement of village environment, renovation on housing, and provision of electricity and telephones), and (3) development of agricultural economy (construction of infrastructures and higher income for agricultural households).

Representative contribution of Saemaul Undong to the rural communities can be shown as follows. First, Saemaul Undong contributed to the reduction of income disparity between rural and urban populace. In just four years after the launching of Saemaul Undong, the level of income of agricultural households became similar to that of their urban counterparts. That was thanks to various pro-agricultural policies in addition to Saemaul Undong which maximized the potential of farmers. Income comparison between urban and rural households is shown in the table below.

Table 3-6 | Income Comparison between Urban and Rural Households

(Unit: Won)

Year	Average Income for Urban Households(A)	Average Income for Rural Households(B)	Rate(B/A)
1970	381,240	255,804	67%
1971	451,920	356,382	79
1972	517,440	429,394	83
1973	550,200	480,711	87
1974	644,520	674,451	104
1975	859,320	872,933	102
1976	1,151,760	1,156,300	100
1977	1,405,080	1,432,800	102

Source : The Ministry of Home Affairs, 1978.

Another positive effect of Saemaul Undong was the increase of employment rate thanks to the utilization of idle labor in the agricultural communities. The number of people that joined the Saemaul projects during the period from 1972 to 1980 was 1,858 million in total. In addition, 9.4 million people were hired for 78 thousand wage-paying projects during the period from 1974 to 1980 and were paid 226 billion won in total.

Saemaul Undong also increased bank savings and investment by villagers. The rate of bank savings by farmers and fishermen in comparison to their average income during the 1960s was 10% and the rate further increased to 20% in the 1970s. The proportion of the amount of savings to the National Agricultural Cooperative Federation by farmers was 20.6% in 1963 which increased to 50.5% in 1980. The amount of investment by villagers on Saemaul Undong during 1971~1980 was 1,691.2 billion won, which was 49.4% of the total. The number of Saemaul projects was 320 thousand in 1972, which increased by more than 8-fold to 2.6 million in 1978. In 1972, the total monetary value of investment into Saemaul projects by villagers, in terms of cash, labor, land and commodities, was 27.3 billion won, which was 86.6% of the total expenditure for the projects.[29)]

29) Moon Pal Yong, Modernization of Rural Community & Saemaul Undong, p462~p465

Lessons that can be drawn from the outcome of Saemaul Undong in the 1970s can be summarized as follows: It is important to eradicate poverty through a reform of mindset and effective policy provision, to modernize agricultural communities with comprehensive development strategies, to pursue a nationwide development model which brought about dynamic social changes, and to carry out a strategy that enabled the transition of government policies from focusing on export-driven industrialization to maintaining concurrent development of agricultural and industrial sectors.

Implementation details of Saemaul Undong in the 1970s would be helpful in designing policies related to economic development in many respects. First of all, much effort was put to help villagers to develop positive mentality in a natural way. Villagers participated in communal projects and became confident of their capabilities since they actually accomplished something by themselves. The government came up with strategic policies to motivate villagers to overcome poverty by their own efforts.

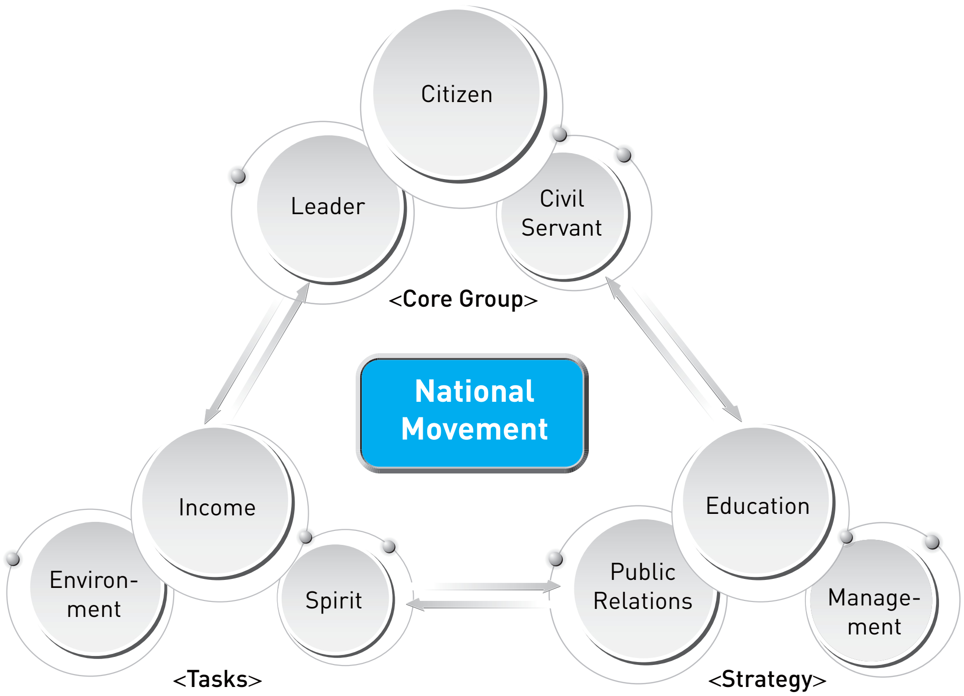
Next, as Saemaul Undong progressed, villagers made voluntary donations of labor, cash, or land on behalf of Saemaul projects. That was because Saemaul leaders as well as various strategic measures to promote villagers' voluntary participation became available. Some examples of Saemaul's development strategies were: (1) improvement of rural living conditions by means of villagers' participation and expenditure sharing, (2) transformation of farmers'mentality and life styles as well as physical development of villages, (3) a joint work between the government with its active support and villagers with their voluntary participation, etc.

Saemaul Undong was initially launched to modernize agricultural sectors of Korea. However, its unexpected success and corresponding social vitality in rural communities made Saemaul movement spread quickly across the country, turning into a national theme for Korea in upgrading the countryside to a modernized development. The movement that was vigorously carried out throughout the country not only brought social unity but also positive attitude amongst the people. A popular phrase at that time was "We Can Do It! It Can Be Done! And Let's Do It Together." What started as a small project to modernize the rural areas has spread to become the national agenda in successfully modernizing the old, backward villages around the country.

The government continued to focus on investment into the agricultural sector through the 3rd and 4th 5-Year Economic Plan (1972~1981). The scale of the investment was 4 times bigger than that of the 2nd plan, and 8 times bigger than that of the 1st plan. The strategies for the agricultural development, with an objective of balanced development between the agricultural and industrial sectors, are summarized as (1) improvement of infrastructures including the renovation of housing, provision of electricity and telephones, and construction of farm roads, (2) increase in a food production rate and realization of self-sufficiency of food, (3) maintenance of farmland and water supply systems for multi-purpose farming, (4) automatization in farming to overcome labor shortages, and (5) improvement of storage and distribution systems.

The government put a dual rice price policy in effect and extended the distribution of Tong-Il rice in 1969. Furthermore, the government increased its investment into the agricultural sector by means of Saemaul Undong in 1970, so that the productivity of agricultural products increased by a large margin. In 1974, the average income of agricultural households began to exceed that of the workers in urban cities due to the government's effort to concurrently develop agricultural and industrial sectors. The successful development and resultant financial stability of the agricultural communities became a foundation for the continuous success of Korea's industrialization process.

Figure 3-2 | Core Elements of Saemaul Undong



Summarizing the implications from the Saemaul Undong in the 1970s to Cambodia, community development led by autonomous civil movement combined with appropriate government support should be the key success factor for rural development and the growth of relevant sectors. Even if the government has limited resources to finance the whole movement, as long as the government utilizes the limited resources wisely to invoke the voluntary participation from the rural residents, bearing of the required labor and resources by the residents themselves will fill the gap. Apparently the policy of government using a competitive system played a key role in causing the total involvement of rural community. Importance of the dedication of internally elected and motivated leaders cannot be emphasized enough.

5.2. Agricultural Cooperatives

Korea's Agricultural Cooperatives and the National Agricultural Cooperative Federation (NACF) have been performing a pivotal role in the balanced economic achievements of the nation's agriculture for the last 50 years. The Kwang-ju Local Financial Association, set up in 1907, is regarded as having been the first modern cooperative organization in the country. The Associations were, however, still far from being voluntary self-help cooperatives in that they had very little equity capital and received too much interference from the government. In its true meaning and role, it would be more proper to see the beginning of agricultural cooperatives as the establishment of NACF in 1961.

In 1961, the government organized the NACF with the personnel and facilities of the former Agricultural Cooperative and Agriculture Bank. The Agriculture Bank had been established as a joint-stock company in 1956, by restructuring the Financial Associations which was set up during the colonial period. The Agricultural Cooperative Law was passed in 1957, and the Agricultural Cooperative was founded in 1958 to engage in the supply and marketing businesses.

After the National Agricultural Cooperative Federation was founded, the federation, in turn, provided guidance and assistance for the establishment of member cooperatives. At the beginning, village cooperatives were small in scale, and their role was limited due to lack of funds and competent managers, despite the cooperative restructuring, up until 1968. At the end of 1960s, to make village cooperatives more self-sufficient and to allow more freedom in decision-making, they merged village cooperatives into fewer, larger cooperatives of the township level (called primary cooperatives).

Primary cooperatives became very much integrated with the Saemaul Undong and the Farm Machinery Joint Utilization Project in 1977. Efforts were made to promote joint marketing groups and to expand product distribution facilities (collection points, warehouses) and processing facilities. Agricultural cooperatives also began rural housing improvement projects.

In 1981, agricultural cooperatives streamlined their three-tier organization into a two-tier system, by placing the city/county cooperatives under the federation. The agricultural cooperatives gained more autonomy eliminating clauses restricting their self-control. They also expanded agricultural marketing and processing facilities. Many agricultural collection points, cold storage warehouses, and fruit sorting centers had been established, and the number of agricultural supermarkets, direct marketing stores, and shipping centers has increased. Modern rice processing complexes for drying, storing, milling and packing harvested rice were established. Agricultural cooperatives were also actively involved in raising the value added on products, such as adding processing plants.

In 1994, the Agricultural Cooperative Law was amended, and the names of the primary cooperatives and the specialized agricultural cooperatives were changed to the Regional Cooperatives, the Special Cooperatives, respectively. During this period, they added new agricultural marketing channels and strengthened rural extension services.

The NACF focused its retailing marketing efforts on the "Agricultural Marketing Complex" engaged in both wholesale as well as retail marketing in major cities equipped with collection and distribution rooms, cold storages, warehouses, packinghouses, as well as sales corners. For more effective rice marketing, the NACF has established modernized rice processing complexes (RPCs) as well as Drying and Storing Centers (DSC) in major producing areas. The rice-processing complexes are facilities used to dry, store, mill and pack a large volume of raw rice seeds into white rice in an integrated batch system using new modern machines reducing management and labor costs.

Later in 2004, the government and the NACF ran management evaluation of the existing RPCs, and restructured them through M&A and corporate restructuring. 109 RPCs were restructured and there are 296 RPCs as of 2006.

5.3. Policy Suggestions

While many sees that financing is the major issue in promoting rural SMEs, breeding sufficient potential entrepreneurs is more fundamental issue. Cambodia does not have enough willing entrepreneurs to establish new SMEs especially in rural areas. Currently the Royal Government of Cambodia focus more on financing the existing rural SMEs than finding and promoting new rural SMEs. The true promotion of rural SMEs can only be achieved by lively entrance of newly established SMEs.

As was seen earlier, Saemaul Undong and Agricultural Cooperatives in Korea worked in harmony which turned out to be reciprocally beneficial. Among the many outcomes lies the vigorous establishment of rice processing facilities, retail and whole sale distribution facilities, as well as food processing facilities. Majority of those facilities were built and owned by independent, regional cooperatives.

It is often said that significant challenges to Cambodian agricultural development still remain and individual farmers cannot overcome these challenges on their own. This is partly due to the fact that the development of agricultural cooperatives in Cambodia is currently still at an early stage and lack financing and trained management and leadership. In fact, by the end of

2005, there were only about 54 agricultural cooperatives in Cambodia registered. Of course, there are roughly 13,017 Farmer Organizations in Cambodia as of 2005. The FOs, however, have not reached the size and the level of efficiency to pursue more organized and significant businesses.

Despite its development stage, however, agricultural cooperatives are very important in assisting with managing changes in the environment and to address farmers' needs when individual farmers cannot compete. Cooperatives also act as a liaison between farmers and the development agencies. Cooperatives also can provide security in selling products, achieving better prices for inputs and products, getting technical support, and most importantly reducing investment costs by sharing machinery, processing, and storage facilities.

Therefore, it is clear that the agricultural cooperatives are the strongest candidates as the breeding ground of rural SMEs in addition to the existing ones. However, many additional reforms and supports are needed for them to initiate voluntary entrepreneurial movement. So it is urged that the Royal Government of Cambodia sets up a strong and centralized agricultural cooperative network. For this, setting up a simplified and more unified legal framework for agricultural cooperative is required. Once the network is in place, the government should provide technical and financial assistances from government and related institutions. This can be done using the Federation of Agricultural Cooperatives.

There is also a need for support from local authorities. Therefore, more integrated planning and action of the central as well as the local government with regional agricultural cooperatives along with village or township level voluntary reform movements can be realized. The government also needs to set up an education system for building strong leadership, management skills, financial management knowledge, and business plan development for community leaders. The federation (or the centralized headquarters) should provide network for sharing information, knowledge, experiences, and working capital, etc.

6. Syndicated Loans

6.1. Basic Concepts and Practices[30)]

Facing with the problem that the size of the required funding to build and operate a SME (for example, rice mills) may be too large and the accompanied risk may be too high for an MFI to execute given its capital size and imposed regulations, financial technique of syndicated loan may provide a solution to this problems associated with MFIs' rural SME investments.

30) This section draws heavily on S&P(2009).

A syndicated loan is one that is provided by a group of lenders and is structured, arranged, and administered by one or several commercial or investment banks. It is a loan offered by a group of lenders (called a syndicate) who work together to provide funds for a single borrower. The borrower could be a corporation, a large project, or even a government. The loan may involve fixed amounts, credit line, or a combination of both. Interest rates can be fixed for the term of the loan or floating based on a benchmark rate such as the London Interbank Offered Rate(LIBOR).

Most small companies deal with one or a few individual banks, negotiating individual loans and lines of credit separately with each institution. The next financing step, however, may be to consolidate banking activity through one syndicated facility. While business owners and executives prefer not to run the risk of alienating banks with which they have long done business, the simple reality is that companies can outgrow their traditional banks and need new capabilities or an expanded bank group to fund their continued growth. Analogically speaking, in the context of Cambodia, new and existing SMEs or their potential projects are already too big to be funded by a single microfinance institution.

If a business tries to deal with multiple lending institutions, each bank needs to come to an understanding of your business and how its financial activities are conducted. A comfort level must be established on both sides of the transaction, which requires time and effort. Negotiating a document with one bank can take days. To negotiate documents with four to five banks separately is a time-consuming, inefficient task. Staggered maturities must be monitored and orchestrated. Moreover, multiple lines require an inter-creditor agreement among the banks, which takes additional time to negotiate.

Given these obstacles, business owners and executives often express interest in syndicated loans, which offer consolidation of effort and the possibility of making new banking contacts. Lenders support their use as well. Lenders like syndications because they permit them to make more loans, while limiting individual exposures and spreading their risk within portfolios more widely. Moreover, administration of the loan is extremely efficient, with the agent managing much of the process on behalf of the participants.

Syndicated loans hinge on the creation of an alliance of smaller banking institutions who, by joining forces, are able to meet the credit needs of the borrower. This creation is spurred by selection of an agent who manages the account. In consultation with the borrower, the arranger will assemble a group of banks to form a syndicate, with each bank lending portions of the required amount.

One advantage of syndication loans is that this market allows the borrower to access from a diverse group of financial institutions. In general, borrowers can raise funds more cheaply in the syndicated loan market than they can borrow the same amount of money through a series of bilateral loans. This cost saving increases as the amount required rises.

Globally speaking, in the last several years, the popularity of this type of loan has exploded. The businesses that are choosing this option to finance their growth have expanded beyond the listed companies in the advanced countries that were its first users. Initially developed to address the needs of huge, acquisition-hungry companies, they have now become a flexible funding source for both mid-sized companies and smaller companies that are on the cusp of moving into mid-sized status.

Typically there is a lead bank or underwriter of the loan, it is called “arranger”, “agent”, or “lead lender.” The arranger serves the investment-banking role of raising investor funding for an issuer in need of capital. The arranger may put up a proportionally bigger share of the loan, disperse cash flows among other members, or perform other administrative tasks. Main goal is to spread the risk of a borrower default across multiple lenders. Syndicated loans tend to be much larger than standard bank loans. The issuer pays the arranger a fee for this service, and this fee increases with the complexity and risk factors of the loan. Before formally launching a loan to these retail accounts, arrangers will often get a market read by informally polling select investors to gauge their appetite for the credit. After this market read, the arrangers will launch the deal at a spread and fee that it thinks will clear the market.

There are basically three types of syndicated loans. First the underwritten deal is one for which the arrangers guarantee the entire commitment, and then syndicate the loan. If the arrangers cannot fully subscribe the loan, they are forced to absorb the difference, which they may later try to sell to investors.

Next, best-efforts syndication is the one for which the arranger group commits to underwrite less than the entire amount of the loan, leaving the credit to the vicissitudes of the market. If the loan is undersubscribed, the credit may not close, or may need major surgery to clear the market.

Finally, the club deal is a smaller loan, usually $25 million to $100 million, but as high as $150 million, that is pre-marketed to a group of relationship lenders. The arranger is generally a first among equals, and each lender gets a full cut, or nearly a full cut, of the fees.

6.2. Policy Recommendations

It is recommended that the Royal Government of Cambodia newly establishes an institution or utilize an existing institution to work as the arranger for facilitating syndicated loans to rural SMEs by MFIs. RDB is one of the strong candidates to perform this function, but there may exist conflict of interest among its functions since RDB is supposed to play the role of co-financer of MFIs’ rural SME lending as well. How to manage such conflict would be the first obstacle to fully utilizing RDB as the complex rural RDB promotion agency.

The arranger should be equipped with capability to examine and identify the investment opportunities as well as the ability of raising outside investor funding as well as funding by domestic MFIs. Finally, regarding the type of syndicated loan, club deal is more likely to be the proper format of syndication scheme for rural SME financing in Cambodia.

The arranger may also work closely with the credit guarantee unit to facilitate funding for rural SMEs by MFIs. The RDB may include the credit guarantee unit as a subsidiary or even as a division. In this case, however, some kind of strong firewall system needs to be introduced between the divisions due to potential conflict of interest as was the case for the co-financing function.

7. Summary and Conclusion

For the past decade, Cambodia's business sectors such as garment, construction, tourism, etc. has made remarkable growth with vast investment from abroad. Cambodia, therefore, was seeking for alternative growth engines in those rather newly booming industries, while it has traditionally been considered as an agrarian based economy.

However, during the mid-2008, the US experienced financial downturn which quickly spread to Europe and finally led to a world financial crisis and eventually affected the financial flows and the economies of countries around the world. It is anticipated that this slowdown will continue for another two or three years.

Before the crisis, Cambodia achieved a two-digit economic growth. But it decreased to 6.8% in 2008 and it is expected to decrease even further in 2009. The sectors most badly affected by this downturn are garment, tourism, construction and real estate. Anyhow, it is hoped that Cambodia's agricultural sector, which has so far still able to retain its potential, will continue to grow gradually.

The Royal Government of Cambodia is, therefore, searching for ways to promote agricultural sector, hopefully along with the SMEs in rural areas. The RGC sees rice processing facilities as one of the key areas that can boost up the productivity as well as profitability of the sector in this regard.

To seek for ways to promote the sector, it is imperative to first identify the obstacles in the way. To overcome all these impediments, and to achieve the intended goal of rural SME promotion, the Royal Government of Cambodia is then required to identify policy priorities for rural SME promotion. In this regard, potential obstacles are identified and possible remedies are sought for by examining various past and present experiences of more advanced regions in the world.

It is clear that close cooperation and clear allocation of roles and responsibilities among the government, MFIs, and the business proprietors are the key success factors.

Regarding the business proprietors, the Royal Government of Cambodia needs to scout the core players who will act as the business proprietor to found and operate the rural SMEs. In doing so, utilizing membership-based organizations is the most attractive option. Cambodian government needs to set up a strong and centralized agricultural cooperative network (National Agricultural Cooperative Federation) and utilize them as the source of additional rural SMEs. In the mean time, RGC may continue the support for the existing rural SMEs and their associations, but its purpose should be limited to the full utilization of existing capacities.

The Cambodian government also has to educate and motivate such potential players with mental and technical stimuli. The government may announce a plan to support SMEs with inaugural and operational knowledge and skills once the MFIs invest in them in addition to the provision of funds. It might be necessary for the Royal Government of Cambodia to start a comprehensive rural SME policy initiative and establish a headquarters in charge. It would be possible and maybe even efficient to utilize existing Rural Development Bank with required reforms (such as further Cooperation with NACF, more fortified monitoring, R&D and dissipation functions, etc.)

The Royal Government of Cambodia also needs to devise a way to lower the informational asymmetry and credit risks so that the MFIs as well as commercial banks can provide loans to the rural SMEs at a lower interest rates. By introducing a credit guarantee system, those promising rural SMEs without collaterals or established track records can be financed from financial institutions including MFIs. This fund should work closely with the fore-mentioned comprehensive MFI and rural SME financing headquarters. This would facilitate financing for potential and existing entrepreneurs and cooperatives. Foreign partners may provide helps in securing the required resources including the know-how's.

The Royal Government of Cambodia also needs to devise a way to diversify the risks and to increase the size of the loan provided by the MFIs. It may newly establish an institution or utilize an existing institution (eg. RDB) to work as the arranger for facilitating syndicated loans to rural SMEs by MFIs. The arranger should work closely with the credit guarantee unit as well as with MFI association to facilitate funding for rural SMEs by MFIs.

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Chapter 04

Improvement on Legal and Procedural PPP System in Cambodia

Chapter 04

Improvement on Legal and Procedural PPP System in Cambodia

Kang-Soo Kim (KDI)
Touch Eng (Ministry of Economy and Finance)

1. Introduction

Infrastructure plays a decisive role in determining the overall productivity and development of a country's economy, as well as the quality of life of its citizens. Well developed infrastructure can raise industrial competitiveness by enhancing productivity and capacity to innovate. It helps reduce poverty and thus improve welfare and income distribution. However, there is also a growing gap and ensuing fiscal concerns between the needed infrastructure and the ability to provide public financing.

This chapter first analyzes the current state of infrastructure development in Cambodia, focusing mainly on challenges and investment needs. Given that vast infrastructure networks are in serious disrepair and in need of modernization, infrastructure investment is an urgent requirement, and infrastructure reform and new investments are necessary in order to sustain stagnant productivity and growth of the country. Infrastructure development, in this regard, is among the high priority and core targets in Cambodia. In the National Strategic Development Plan(NSDP), the Royal Government of Cambodia manifests its willingness to expand and develop infrastructure and provides targets and measures in various sectors for development. Challenges rest on how to ensure the upkeep and consistent maintenance of infrastructure and how to invest efficiently. In resolving these challenges, private sector involvement in infrastructure provision is emerged as a preferred method, and a solid and operational public-private partnership(PPP)[31] framework needs to be established to induce more private investments in order for the expansion of infrastructure investment to yield desired policy outcome.

31) Definition of PPP and its comparison to traditional procurement are provided in the Appendix.

PPP in infrastructure development in Cambodia started in the late 1990s, for which the process complies with the Law on Concessions, enacted with the aim to promote and facilitate the implementation of privately financed infrastructure projects. Nevertheless, Cambodian PPP legal framework is still in the course of development where many areas in terms of legal regulations and processes are yet to be covered. Hence much backlog in implementing PPP exits. Institutionally, unstructured and informal nature of PPP process that often does not follow a clearly documented and prescribed path to approval hinders coherent execution of a PPP project. Also, several institutions have key roles in the PPP process but usually lack capacity and clear institutional roles and responsibilities. Fundamental and critical reform to the current regulatory and institutional environment is required to mitigate political and regulatory risk. To ensure transparent and accountable implementation as well as strengthened governance for increased public and private partnerships in infrastructure, an entity solely responsible for PPP with improved legal framework seems necessary.

Korea has experienced challenges regarding PPP in infrastructure at its development stage and has also attempted at overcoming obstacles through various strategic approaches. Some were proven successful and are now stabilized as policies that permeate through everyday lives of the Korean people, while others, including certain PPP market promotion policies have resulted in additional fiscal burden. Notwithstanding, the decade-long undertakings have accrued valuable lessons and knowledge. With an attempt at minimizing the many trials and errors, this chapter draws policy lessons and establishes strategic direction for the Royal Government of Cambodia based upon Korea's experiences on infrastructure development. The focus, in particular, will be on legal framework, procurement and evaluation, and organizations (unit) for public-private partnership. Key policy recommendations are organized around three main points: the introduction to solid legal and regulatory framework; the creation of a PPP unit; and the establishment of transparent procurement process.

2. Infrastructure Investment in Cambodia

Efficient infrastructure has a vital role in sustaining economic growth and development. Recognizing that there can be no significant progress without the physical infrastructure being constantly improved, extended, and strengthened, infrastructure development is among the high priority and core targets Cambodia focuses its attention at national level. Only recently emerging from decades of internal conflict, the Royal Government of Cambodia has engaged in building basic institutions and legal system for socio-economic growth. Cambodia's National Strategic Development Plan (NSDP), 2006~2010 was formulated as the guiding and reference document with the immediate, medium-term vision for future development for pursuing prioritized goals and actions. Public Investment Program (PIP), formulated within the framework of a three-year rolling plan and prepared by the Ministry of Planning as integral part of NSDP, are specific strategies and policies to be prioritized for development. In the

Rectangular Strategy for Growth, Employment, Equity and Efficiency adopted in 2004 by the National Assembly, continued rehabilitation and construction of physical infrastructure is emphasized as one side of the "growth rectangle" which includes further construction of transport infrastructure.

2.1. Issues and Challenges

Despite the importance the RGC places on physical infrastructure and the numerous government plans for further infrastructure development, there are lingering challenges that need to be addressed. As seen in Table 4-1 Cambodia enjoyed impressive growth in real GDP between 2000 and 2007- a growth of 9.5%. However, the growth clearly shows signs of slowing down due to the recent global financial crisis. This reduction in growth could adversely affect investments in infrastructure. Meanwhile, the percentage of people living below poverty line, according to the Cambodia Socio-Economic Survey conducted in 2004, was estimated at 34.7%. 90% of the poor live in rural areas, which are affected by low access to various services including markets, safe water supplies and energy. As Table 4-2 shows, general access to basic infrastructure in Cambodia is relatively poor compared with its neighbors and countries at similar income levels. Furthermore, in Table 4-3 which ranks countries in descending order of infrastructure development, Cambodia, from 1991 to 2005, is placed among the lowest in the world.

Table 4-1 | Real GDP Growth (selected countries in Asia)

Country	Average Growth	Projected Growth		
	2000~2007	2008	2009	2010
Cambodia	9.5	6.5	2.5	4.0
Lao PDR	6.6	7.2	5.5	5.7
Malaysia	5.6	4.6	-0.2	4.4
Vietnam	7.6	6.2	-2.0	3.0

Source : IMF World Economic Outlook October 2008, ADB Asian Development Outlook 2009.

Table 4-2 | Access and Coverage Indicators (selected countries)

Country	GDP/capita	Electrical grid (percentage of households with connection)	Telephone (connections/100 inhabitants)	Piped water network (percentage of households with connection)
Cambodia	2,000	10	0.26	23
Lao PDR	2,100	20	1.62	39
Vietnam	2,800	51	32.65	36

Source : World Bank, *Private Solutions for Infrastructure in Cambodia Country Framework Report*, 2002; CIA 2008; ITU 2007.

Table 4-3 | Ranking According to the Level of Infrastructure Development (selected countries)

Country	1991		2000		2005	
	Index	Rank	Index	Rank	Index	Rank
United States	25.96	1	22.95	1	20.66	1
Japan	16.28	5	18.65	4	18.57	2
Malaysia	5.10	37	8.65	27	9.21	29
Vietnam	0.91	92	1.85	75	3.27	61
Indonesia	2.23	69	2.74	63	3.21	62
Lao PDR	0.55	99	1.19	84	0.87	92
Myanmar	0.97	90	0.79	91	0.76	95
Cambodia	0.45	100	0.66	93	0.55	98

Note : Index= Research and Information System for Developing Countries Infrastructure Index(RII) covering 104 countries, $RIIit = \sum Wjt\ Xjit$ where $RIIit$=RIS Infrastructure Index of the i-th country(104 countries) in t-th time (namely, 1991, 2000, 2005), Wjt=weight of the j-th aspect of infrastructure in t-th time, and $Xjit$=value of the j-th aspect of infrastructure for the i-th country in the-th time point. Each of the infrastructure variables is normalized for the size of the economy so that it is not affected by the scale. The Wjt are estimated with the help of principal component analysis(PCA). The aspects of infrastructure covered in the construction of the composite index are transport infrastructure, ICT infrastructure, Energy infrastructure and Financial Infrastructure.

Source : Kumar, N., and P. De., East Asian Infrastructure Development in a Comparative Global Perspective: An Analysis of RIS Infrastructure Index. Research and Information System for Developing Countries (RIS), 2008

As for land transport, Table 4-4 indicates that the percentage of paved roads as a proportion of total roads is significantly lower compared to not only other countries in the region but also to those countries with similar economic levels. Minimal level of progress can be observed in terms of rail lines, signaling that it serves as a grossly under-utilized asset (Table 4-4). Much of the roads are in critical need of upgrading owing to damages from long years of internal conflict. An important bottleneck in the rehabilitation of the road network and on the main national roads is the river crossings. Many existing bridges have load capacities below 20 tons, and their collapses are not infrequent.[32)]

Table 4-4 | Land Transport Indicators (selected countries)

Country	Roads, paved (% of total roads)			Rail lines (total route-km)(per 100 km.sq.)		
	1991	2000	2005	1991	2000	2005
Cambodia	7.50	16.20	6.29	0.33	0.33	0.36
Indonesia	45.30	57.10	58.00	1.90	1.91	1.93
Lao PDR	16.00	44.50	14.41	0.19	0.20	0.21
Malaysia	73.00	75.30	81.32	0.67	0.60	0.60
Myanmar	11.20	11.44	11.44	0.33	0.38	0.38
Vietnam	23.90	25.10	25.10	0.86	0.95	0.81

Source : World Bank, World Development Indicators 2008.

32) Royal Government of Cambodia, Socio-Economic Development Priorities and the Official Development Assistance Needs, May 2002.

Per capita consumption of electricity in Cambodia is only about 48 KWH/year and less than 15% of households have access to electricity (urban 53.6%, rural 8.6%). For the country as a whole, the electrification rate is far below the rates of neighboring countries. There are at present only 8.6 percent of rural households (equivalent to nearly 200,000 households) with access to electricity and less than 17 percent of Cambodian households can access electricity. This rate is stunning when compared with the 84 percent in Thailand, 81 percent in Vietnam and 41 percent in Lao PDR. Such limited access to electricity impedes Cambodians from accessing new technology, diversifying economic activities, increasing agricultural production, and improving living conditions. The current power supply deficiencies reflect years of neglect and lack of investment in new plants as well as lack of maintenance.[33)]

In terms of current situation of the water supply, Cambodia is an agricultural country in which 85% of population consists of farmers. At present, however, only 18% of the total rice growing area is irrigated and 82% of the total cultivated area is dependent on rains. The urban water supply and sanitation sector is weak in terms of both its technical capacity and financial performance as manifested in low coverage and inadequate service of poor quality. About 75 percent of the population in Phnom Penh and 13 percent in other provincial and district towns have access to piped potable water. This leaves about 9 million people in rural areas without access to clean water. It was estimated that only 29 percent of the rural and 48 percent of the urban population have access to the safe water. Regarding sewerage system, outside Phnom Penh Cambodia has no organized sewerage systems. Even in Phnom Penh most sewage drains directly into the river and none is treated.[34)]

2.2. Infrastructure Investment Gap

All the indicators above urge for implementation of reformative infrastructure development across the country. As such, infrastructure sector estimates in the NSDP and PIP constitute more than quarter- 25.14%- of all planned investments for development of Cambodia(Table 4-5). To attain the levels of sectoral growth as projected in NSDP, certain minimum levels of investments is necessary in various sectors. Cambodia, however, has been heavily dependent on foreign aid for procuring the finances for the provision of basic goods and services due to inadequate domestic revenue mobilization. The summary of overview of resource availability in the period of 2003~2008 in Table 4-6 shows that external aid has not served as a mere additional public resource; Cambodia relies nearly 90% on foreign aid for public expenditure, including support for public service delivery.

33) World Bank, *Private Solutions for Infrastructure in Cambodia Country Framework Report*, 2002.
34) Ibid.

Table 4-5 | Development Programs and Projects by Sector NSDP 2006~2010 and PIP 2006~2008 (Amounts in thousands of USD)

Sector	NSDP Allocation for 2006~2010	Total Cost of Programs and Projects PIP: 2006~2008	
		USD	%
Social Sectors	32.86%	668,467	33.85%
Economic Sectors	22.29%	469,745	23.78%
Infrastructure	25.14%	550,875	27.89%
Services & Cross Sectoral Programs	14.00%	285,912	14.48%
Unallocated	5.71%	-	-
TOTAL: All Sectors	100.00%	1,975,000	100.00%

Source : Royal Government of Cambodia, Public Investment Program 2006-2008.

Table 4-6 | Total Resource Availability 2003~2008 (Amounts in million USD)

	2003	2004	2005	2006	2007	2008(est.)
Government capital expenditure	-	-	78.8	95.2	110.3	133.3
Development assistance	539.5	555.4	610.0	713.2	790.4	887.9
Total resource availability	-	-	688.8	808.4	900.7	1,021.2
Aid as % of total	-	-	89%	88%	88%	87%

Source : Ministry of Economy and Finance, Department of Budget, from CDC, The Cambodia Aid Effectiveness Report, 2008.

The programs and projects within the PIP framework are financed from both the National Budget and with assistance from development cooperation partners. The PIP report contains expenditure required to implement the projects and reflects not only the proposals of the ministries and agencies but also their absorptive capacity, providing an indication of the gap between the demand for and the availability of investment capital (Table 4-7). Total financial outlay envisaged for 2006~2008 is USD 1,975 million. However, in addition to available

Table 4-7 | PIP 2006-2008: Committed Resources and Target Amount (Amounts in thousands of USD)

Sector	Total Cost of Programs and Projects PIP: 2006-2008	Committed Resources				Total Resource Mobilization Targets	
		Gov't		External Partners			
	USD	USD	%	USD	%	USD	%
Social Sectors	668,467	237,915	80.84	358,341	32.07	72,211	12.82
Economic Sectors	469,745	24,456	8.31	273,543	24.48	171,746	30.48
Infrastructure	550,875	25,073	8.52	336,003	30.07	189,800	33.69
Services & Cross Sectoral Programs	285,912	6,877	2.34	149,378	13.37	129,657	23.01
TOTAL: All Sectors	1,975,000	294,321	100	1,117,265	100	563,414	100

Source : Royal Government of Cambodia, Public Investment Program 2006~2008.

resources on pipeline and committed projects from the government and external development partners, the allocation of new resources for additional funds needed to implement development programs as projected in the PIP reaches USD 563.4 million.

As illustrated in Table 4-8, in the case of infrastructure sector, projecting the total figure of USD 551 million, the gap between the cost of the required investments and the resources at hand amounts to USD 189.8 million; 33.7% of the costs of all infrastructure projects have no identified source of funding. In seeking to improve its infrastructure, Cambodia will need to look for opportunities to expand coverage through new investments.

Table 4-8 | Development Programs and Projects: Infrastructure Sector (Amounts in thousands of USD)

Sub-sector	Total Cost of Programs and Projects PIP: 2006~2008	Committed Resources			Total Resource Mobilization Targets	
		Gov't	External Partners			
	USD	USD	USD	%	USD	%
Transportation	330,488	14,282	199,724	64.8	116,482	35.2
Water & Sanitation	96,119	3,541	64,241	70.5	28,337	29.5
Power & Electricity	87,315	4,000	70,845	85.7	12,470	14.3
Posts & Telecommunications	36,954	3,250	1,193	12.0	32,511	88.0
Total: All Sub-sectors	550,876	25,073	336,003	65.55	189,800	34.45

Source : Royal Government of Cambodia, Public Investment Program 2006~2008.

Table 4-9 shows estimated budget, current committed resources and additional funds needed for projects implemented by infrastructure-related ministries and government bodies, namely, the Ministry of Land Management, Urban Planning and Construction; the Ministry of Public Works and Transport; the Ministry of Industry, Mines and Energy; the Ministry of Economy and Finance; and the Council for Development of Cambodia.

Table 4-9 | Royal Government of Cambodia: by Infrastructure-related Ministry (Amounts in thousands of USD)

Ministry	Project Cost	Planned Investments 2006-2008	Committed Resources		Needed Fund
			Gov't	External Partners	
Ministry of Land Management, Urban Planning and Construction	131,860	47,124	2,426	30,633	14,065
Ministry of Public Works and Transport	1,918,432	312,517	13,131	189,664	109,722
Ministry of Industry, Mines and Energy	399,442	163,732	7,541	121,596	34,595
Ministry of Economy and Finance	44,639	13,253	-	3,197	10,056
Council for Development of Cambodia	84,529	23,682	7,158	16,524	-

Source : Royal Government of Cambodia, Public Investment Program 2006~2008.

To accommodate the required expenditures to reach all NSDP goals and targets, the total financial outlay estimates to be USD 3,500,000 (Table 4-10). As the Cambodian government has been heavily dependent on grant-aid from external development partners for public sector resources, the investment gap as elaborated above would further widen if allocation and use of funds, especially from donors, are not in full alliance with NSDP priorities.

Table 4-10 | Projected Levels of Investment Needed to Achieve NSDP, 2006~2010

(Amounts in thousands of USD)

Public Sector Investments as per Macro-Economic Projections	2,384.60
Additional Social Sector and Governance Expenditure	300.00
Technical Assistance, Training and Surveys	500.00
Additional Recurrent Expenditure	300.00
Reserves for Productive Sectors	15.40
Total Outlay	**3,500.00**

Source : NSDP, 2006-2010, Council for the Development of Cambodia.

Public resources alone, therefore, do not suffice in providing adequate public services. The private sector participation serves as an option to undertake and finance projects that otherwise may not be funded. Successful and timely implementation of NSDP strategies would require substantial additional investments, from not only the public sector with aid from donor, but also from the private sector. For the implementation of the strategy, in its NSDP report, the Royal Government of Cambodia recognizes partnership with the private sector business and investor community in development. The crucial role of the private sector as the locomotive and driving force for investments and economic growth cannot be over-emphasized. Attaching a high priority to facilitate private sector management, efforts must be continued to strengthen and deepen harmonious relations with the private sector, based on strict adherence to laws and regulations and focused on development priorities.

3. PPP system in Cambodia

3.1. Background

Public-Private Partnership in infrastructure development in Cambodia started in late 1990s after the end of civil war and the growth of foreign direct investment to the country. On 13 February 1998 the Royal Government of Cambodia introduced the government decree (Anukret) on Build-Operate-Transfer (BOT) Contract.

The BOT contract grants the concessionaire's sole management rights over the infrastructure project for a maximum period of 30 years which can be extended pursuant to the terms and conditions stipulated in the contract. The concessionaire is responsible for any cost related to the operation of the infrastructure as defined in the contract. The contract defines the modalities for collecting revenues in which the concessionaire has the authority to do so. The internal rate of return of the concessionaire is subjected to prior approval of the Royal Government of Cambodia or any other legal entity granting the concession.

The concessionaire pays royalties or partial revenues to the Royal Government of Cambodia or the concession's legal grantor as stipulated in the contract. The concessionaire transfers the related infrastructure projects and facilities in good operational conditions to the Royal Government of Cambodia or the concession's legal grantor at no cost. Such transfer is done at the latest at the expiration date of the management period as stipulated in the contract.

The ministry or a public legal entity could enter into a BOT contract with physical or legal person of Khmer or foreign nationality or with the consortium which was established by the above mentioned persons. Any company whose shares of at least 51% are held by Khmer legal or physical person(s) may be considered as Khmer legal entity.

3.2. Cambodia's PPI[35)] Legal Framework

The Law on Concessions of the Kingdom of Cambodia was enacted by the National Assembly and was approved by the Senate in 2007 with the aim to promote and facilitate the implementation of privately financed projects in Cambodia.

3.2.1. Eligible Facility Types

Article 5 of the Law on Concessions identifies facilities of the following sectors as eligible to be procured through private investment:

a. power generation, power transmission and power distribution;
b. transportation facilities systems, including, but not limited to roads, bridges, airports, ports, railways, channel;
c. water supply and sanitation;
d. telecommunication and information technology infrastructure
e. supra-structure related to tourism projects, but not limited to tourism resort museums;
f. gas and oil related infrastructures including oil and gas pipelines;
g. sewerage, drainage and dredging;
h. waste management and treatment
i. hospitals and other infrastructure related to health, education and sport sectors;

35) Public-Private Partnerships(PPP) in Infrastructure and Private Partnership in Infrastructure(PPI) are often used interchangeably. Although the form of PPP in Cambodia tends toward concession, the terms PPP, PPI, and Concession are used synonymously in this paper. Refer to Appendix for further information on different modes of service delivery.

j. infrastructure related to special economic zones and social housing;
k. irrigation and agricultural related infrastructure;
l. other sectors for which a specific law allows for the granting of Concessions.

3.2.2. Forms of Concession Contract

According to Article 6, concession contract may be provided by means of the following:

- Build, operate and transfer(BOT)
- Build, lease and transfer(BLT)
- Build, transfer and operate(BTO)
- Build, own and operate(BOO)
- Build, own operate and transfer(BOOT)
- Build, cooperate and transfer(BCT)
- Expand, operate and transfer(EOT)
- Modernise, operate and transfer(MOT)
- Modernise, own and operate(MOO)
- Lease and operate manage or management arrangements or any variant thereof or similar arrangement, including joint public-private implementation of infrastructure facilities.

3.2.3. Termination of Concession Period

The concession period may be extended when following circumstances arise:

- Completion delay or interruption of operation due to breach of contract by the Contracting Institution;
- Completion delay or interruption of operation due to an event of force majeure[36)]

3.2.4. Rights and Entitlements of Concessionaire

The Concessionaire has the right to create security interests over any of its assets, rights or interests, including those relating to the Concession Project, as required to secure any financing needed for the Infrastructure Project.

3.2.5. Land Ownership and Use

The law promulgated in August 1992 on land, the 1992 Land Law has no specific reference to industrial or commercial land ownership. The 1994 Law on Organization/Management of Territory, Urbanization and Constructions provides for mapping of zones for various urban land uses. The Land Law that took effect in August 2001 which seeks for systematic registration of

36) Force majeure may constitute an event entitling a party to terminate the Concession Contract(Chapter IV, Art. 38 of the Law on Concessions).

titles for all land in Cambodia called for reforms in granting economic concessions to private investors.

The Cambodian legislations on land primarily consist of general principles and lack sufficient detail for application. There is no specific reference to concession agreement nor does the law on concession refer to priority on the acquisition of land. Though there is a sub decree on economic land acquisition, the sub decree only applies to the case of farm expansion, not to construction of infrastructure facilitles.

Ownership of land, according to the Law on Investment of the Kingdom of Cambodia, is vested only to those holding Cambodian citizenship. Legal entity holding Cambodian citizenship is the legal entity in which more than 51 percent of the shares are owned by natural persons or legal entities holding Cambodian citizenship. Use of land is permitted to investors, including long-term leases of up to a period of 70 years, renewable upon request.

3.2.6. Investment Incentives

Incentives for investment in the area of physical infrastructure consist of the following:

- A corporate tax exemption of up to 8 years which takes effect beginning from the year the project derives its first profit. A 5-year loss-carried forward is allowed. In the event profits are reinvested in the country, such profits are exempted from all corporate tax;
- Non-taxation on the distribution of dividends or profits or proceeds of investments, whether transferred abroad or distributed in the country;
- 100% import duties exemption on construction materials, means of production, equipments, intermediate goods, raw materials and spare parts used by physical infrastructure industry.

100% exemption of duties and taxes is authorized for the construction enterprises, factories, building and the first year of production operation.

3.3. Roles and Responsibilities of Key Players

3.3.1. Contracting Authority

As one of promoters and sponsors of a PPI project, the contracting authority takes up the key public sector role in PPI projects. It is by law responsible for the delivery of the infrastructure services in question. It also develops and awards a PPI project, signs the contract with the selected private sector developer and monitors compliance with the contract terms. The contracting authority may be composed of the responsible line ministry, a parastatal entity such as a state-owned corporation or a provincial or municipal authority.

The role of the contracting authority is to:

- Define specific PPI projects, thereby moving from the project concept in the relevant sector infrastructure plan to a project specification;
- Promote the project and bring it to completion in a manner that is in the interests of service users and the wider public interest;
- Seek approvals-in-principle to proceed from the line ministry;
- Publicly notice the PPI project opportunity and issue the request for proposals(RFP);
- Receive and evaluate bids and select the preferred bidder;
- Negotiate the contract with the preferred bidder;
- Coordinate with CDC to obtain the various secondary approvals required for the PPI project;
- Sign the final contract with the private sector developer;
- Monitor compliance with and enforce the obligations of the private sector counterpart with respect to the contract.

3.3.2. Line Ministries

The line ministries with responsibilities for the infrastructure sectors include the Ministry of Industry, Mines and Energy, Ministry of Post and Telecommunications, and Ministry of Public Works and Transportation. They are responsible for preparing plans for infrastructure development and identifying PPI opportunities in their sectors, consistent with their responsibilities as set out in Cambodia Law.

The line ministries are involved in:

- The preparation and publishing of infrastructure policies defining the overall needs of the sector, priorities and types of projects;
- Identifying specific infrastructure needs and PPI opportunities consistent with the policies;
- Reviewing unsolicited bids for consistency with the sector infrastructure policy and identified needs. Where approved, they must ensure that these are subject to the appropriate degree of competition in accordance with the policy for unsolicited bids.

3.3.3. Council for the Development of Cambodia (CDC)

The Council for the Development of Cambodia is responsible for promoting, facilitating and registering PPI projects, in accordance with its duties under the Law on Investment and the Law on Concessions.

Functions include the following:

- Advising the Royal Government of Cambodia on concession policy issues and making recommendations for improvement of laws and regulations applicable to concession projects;

- Assisting other competent institutions in indentifying and evaluating particular opportunities for privately financed infrastructure projects and in the promotion of viable projects to the investor community;
- Developing, whether in the CDC or assessing externally, the necessary expertise to assist Contracting Institutions in preparing, tendering and monitoring complex concession projects;
- Proposing model selection procedures and model project documents in order to rationalize the financing, implementation and monitoring of concession projects;
- Coordinating the capacity building and training of officers and other civil servants involved in concession projects;
- Keeping a register of all concession contracts and concession projects for assessment and exchange of experience between Contracting Institutions.

CDC in addition to above promotes PPI development by

- Promoting PPI project opportunities in Cambodia to potential private sector investors and operators;
- Maintaining and publishing a list of proposed PPI projects, either identified by line ministries or in unsolicited proposals received directly from potential investors, showing the current status of each project;
- Coordinating between ministries and other government agencies and authorities, donor countries, and international organizations with respect to the PPI policy and process;
- Issuing and updating registration certificates for PPI projects in accordance with its responsibilities under the Law on Investment;
- Coordinating with the relevant ministries, agencies and authorities to obtain the various secondary approvals necessary for each PPI project;
- Providing support and capacity-building to ministries and other government agencies and authorities involved in the PPI process;
- Assisting Contracting Authorities in engaging external advisors for PPI transactions where necessary, including coordinating funding with the Ministry of Economy and Finance.

3.3.4. Ministry of Economy and Finance (MEF)

The Ministry of Economy and Finance ensures whether the balance of costs and benefits between service users, the Royal Government and the private sector is fair and reasonable, and whether the procurement process has been undertaken transparently and in consistent with the relevant laws and regulations. The MEF is responsible for assessing and approving the liabilities of the government under proposed PPI projects. Its role includes the following:

- Review the impact on government finances of proposed PPI projects and provide approval-in-principle, return for amendment or reject the proposed PPI project if the

impact on government finances is considered to be unsustainable;
- Submit proposed PPI projects to the National Assembly for approval or rejection where these involve a government guarantee;
- Review final contract documentation for consistency with previously granted approval-in-principle;
- Provide adequate budgetary funds to allow line ministries and other agencies and authorities to fulfill their functions under the PPI process;
- Ensure that contracting authorities have sufficient funding to hire external advisors for PPI transactions, either from the annual budget or, together with CDC, from funding from donor countries or international organizations.

3.3.5. Council for Ministers

The Council for Ministers is responsible for coordinating the development of infrastructure policies across line ministries. The roles are described as follows:
- Review and approve infrastructure policies developed by individual line ministries, ensuring consistency between them and across sectors;
- Resolve inter-sectoral disputes including designating the contracting authority for multi-sector PPI projects;
- Give approval for every large PPI projects exceeding the threshold defined in the Sub-decree on the Implementation of the Law on Concessions, to ensure that these are consistent with the policy of the Royal Government.

3.4. Procurement Procedure

3.4.1. Selection of Concessionaire

The selection of the Concessionaire for a BOT contract is supposed to be conducted through international or national(open or close) bidding process. There is, however, no detailed or standard selection procedure entitled for such process.

The selection is conducted through direct negotiation in the following cases: (1) the bidding process was not successful; (2) the project contains necessary specifications requiring the selection of a special concessionaire; and (3) the special criteria for the infrastructure project require qualified concessionaire to meet these special criteria. For cases of unsolicited projects (proposed by the private sector), direct negotiation without bidding process is conducted.

For any contract in which the Royal Government of Cambodia is a party, a consensus between the Minister in charge of the related project, the Minister of Economy and Finance and the CDC is required.

For any contract approved on behalf of the Royal Government of Cambodia, the technical and financial selection of the Concessionaire is defined by: (1) a joint decision made between the Minister in charge of the related project, the Minister of Economy and Finance and the CDC for investment project costing less than or equal to 5 million dollars; (2) a decision of the Prime Minister pursuant to a joint proposal of the Minister in charge of the related project, the Minister of Economy and Finance and the CDC for investment project costing less than or equal to 10 million dollars; and (3) a decision of the Council of Ministers pursuant to a joint proposal of the Minister in charge of the related project, the Minister of Economy and Finance and the CDC for investment project costing more than 10 million dollars. For contract approved on behalf of a public legal entity, the technical and financial selection of the Concessionaire is made by the supervising authority of that public legal entity.

3.4.2. Approval Process

When the selection proceedings are completed and the contracting institution is ready to accept a final bid or a negotiated proposal, the contracting institution should obtain approvals to the final terms of the concession contract. If the review of the concession contract adversely affects the rights and obligations of the selected candidate, the selected candidate may withdraw his bid or proposal without forfeiting the bid bond.

After approvals have been obtained in accordance with Article 12 of the Law on Concession, the contracting institution shall issue a notification of award to the selected candidate prior to execution of the concession contract. The contracting institution and the concessionaire shall sign the concession contract within 6 months of the notification of award.

At least within 60 days of upon receiving the notification of awards, the concessionaire should promptly establish and incorporate the legal entity that will implement the concession project and apply, to the Council for Development of Cambodia for a final registration certificate in accordance with the Law on Investment.

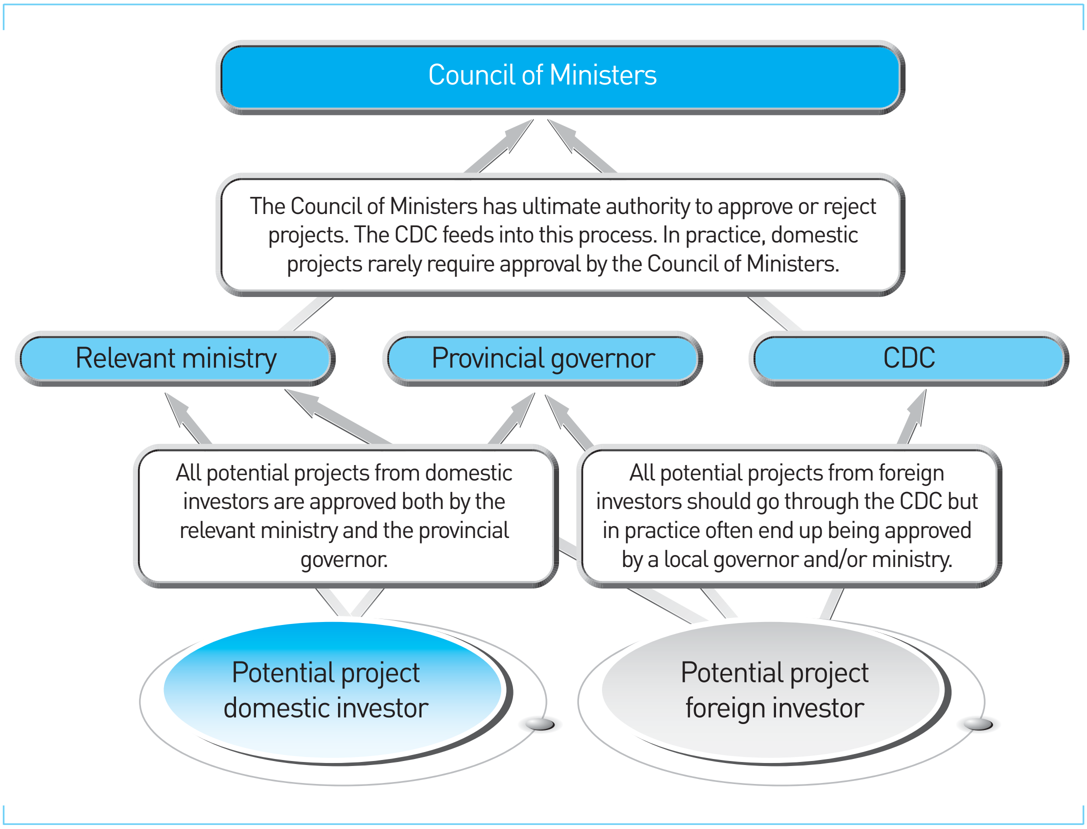
The Concessionaire should finance for the implementation of the infrastructure project, at its own cost and risk and without recourse to credits or guarantees made by the contracting institutions. In exceptional circumstances, a guarantee can be granted but only in accordance with procedures specified in the related financial management laws and regulation.

After selecting the concessionaire, the authority that approved the project issues a BOT license. The license is issued only against the concessionaire depositing its security deposit by the Ministry of Economy and Finance. Based on the BOT license, a detailed contract stipulating the rights and obligations of the contracting parties is prepared. The contract is signed by: (a) the concessionaire and the Minister in charge of the related project, the Minister of Economy and Finance and the CDC for any contract approved on behalf of the Royal Government of

Cambodia; (b) the concessionaire and the supervising authority of the public legal entity, the Minister of Economy and Finance and the CDC for any contract approved on behalf of the public legal entity. The concessionaire should form his company and register it under the laws of the Kingdom of Cambodia for implementing the BOT contract. The company objectives should conform to the BOT contract license and should comply with the applicable laws and regulations of the Kingdom of Cambodia.

The concessionaire under the BOT contract may freely buy or transfer any necessary foreign exchange for the purpose of fulfilling the obligations under the contract and pursuant to the Law on Foreign Exchange Management of August 22, 1997. The Concessionaire under the BOT contract is also entitled to incentives and benefits as described in the Law on Investment of August 5, 1994. All disputes arising under this BOT contract is settled through negotiations and arbitration in accordance with the terms of the specific contract.

Figure 4-1 | Outline of Approval Process



Source : Royal Government of Cambodia

3.5. PPP Project Highlights by Sector

3.5.1. Roads

In the transport sector, the priority is the rehabilitation of the road network and strengthening of its operations and maintenance capabilities. The focus has been on rehabilitation and upgrading of primary road network connecting neighboring countries, major arteries within the country and roads servicing remote rural areas. Between 1998 and 2004, out of a total of 11,310 km-4,695 km of primary roads connecting neighboring countries, provincial capitals and ports and 6,615 km of secondary roads connecting provincial headquarters to district headquarters-about 2,100 km were paved and upgraded. This consists 18.6% of the total road network. The quantitative target to be achieved during NSDP, 2006~2010 is to upgrade another 2,000 km of primary and secondary roads (38.3% of the total road network), taking the total of such upgraded roads to 4,100 km and to 4,336 km by 2010 and 2015, respectively (Table 4-11). Many of the secondary roads connecting rural areas were also repaired.[37)]

Table 4-11 | NSDP's Macro-Goals and Critical Indicators(Targets)

Major Goals: Targets/Indicators	2005	2010	2015
Length of paved roads(primary & secondary, out of 11,310 km)	2,100	4,100	4,336

km=kilometer
Source : NSDP, 2006-2010, Council for the Development of Cambodia

3.5.2. Energy

Following projects highlight achievement in energy sector, most of which were focused on hydro power. The estimated investment amount in the energy sector has reached a remarkable USD 1 billion.

Kiriom I Hydro Project: The Royal Government of Cambodia granted the concession of the development of Kiriom I Hydro Project to CITEC Company from China for 30 years period which excludes construction period of 3 years. The Ministry of Industry, Mine and Energy (MIME) signed the Implementation Agreement and Electric du Cambodge (EDC) entered into the Power Purchase Agreement (PPA) together with the company on 28 July 2000. The capacity of this project is 10MW and the investment cost worth USD 50 million. MIME granted the company throughout the concession period the exclusive right to design, finance, insure, operate as well as to maintain and manage. The company transfers the project on BOT basis and sells all the electricity generated from the project to EDC pursuant to the PPA between EDC and the company. This project is located in the Koh Kong Province, north western of Phnom Penh.

37) NSDP, 2006~2010, Council for the Development of Cambodia.

Kirirom III Hydro Project: an extension of Kiriom I Hydro Project, the MIME signed the Implementation Agreement. EDC entered into the Power Purchase Agreement together with the company in 2008. The capacity of this project is 8MW and the investment cost is USD 45 million.

Kamchay Hydro Project: The Royal Government of Cambodia granted the concession of the development of Kamchay Hydro Project to Shinohydro Company from China in 2005 for a 30-year period, on BOT basis, excluding construction period of 4 years. The capacity of this project is 180MW with the investment cost of USD 383 million. This project is located in Kampot province, south of Phnom Penh. The electricity generated from the facility is sold to EDC.

Lower Reisey Chum Krum Hydro Project: The Royal Government of Cambodia granted the concession of the development of Lower Reisey Chum Krum Hydro Project to Michealle Company from China in 2008 for a 35-year period, on BOT basis, excluding construction period of 5 years. The capacity of this project is 200MW with the investment cost of USD 483 million. This project is located in Koh Kong province.

Stung Atay Hydro Project: The Royal Government of Cambodia granted the concession of the development of Stung Atay Hydro Project to Yuan Corporation Company from China in 2007 for a 30-year period, on BOT basis, excluding construction period of 4 years. The capacity of this project is 183MW with the investment cost of USD 375 million. This project is located in Pursat province.

Stung Tatay Hydro Project: The Royal Government of Cambodia granted the concession of the development of Stung Tatay Hydro Project to China Heavy Machinery Corporation Company in 2008 for a 30-year period, on the BOT basis, excluding construction period of 4 years. The capacity of this project is 260MW with the investment cost of USD 560 million. This project is located in Koh Kong province.

Coal Power Plant Project: The Royal Government of Cambodia granted the concession of development of the Coal Power Plan to MKSS Company, a joint venture between a local company and a company from Malaysia in 2008 for a 30-year period excluding construction period of 4 years, on BOO basis. The capacity of this project is 200MW with the investment cost of USD 575 million. This project is located in Sihanoukville.

3.5.3. Bridges

Since 2000, transportation sector, especially roads and bridges, reached over USD 500 million to date.

Koh Kong Bridge Project: The Royal Government of Cambodia granted the concession to LYP Group Co., Ltd, a local company, to build a bridge with a length of 1,200 meters under BOT basis in 2000. The concession period of the project is 30 years with the investment cost of USD 45 million. This project is currently under operation and contributes to transportation efficiency between Cambodia and Thailand. Location of the project is Koh Kong province.

Tonle Sap Bridge Project: The Government approved project proposal and granted the concession to the LYP Group Co., Ltd in 2009 under BOT basis. The scope of this project is to build a bridge across the Tonle Sap River with 1,543 meters in length and 14 meters in width. The investment cost of this project is USD 50 million. The concession period of the project is 30 years excluding 4 years of construction period.

3.5.4. Airport

To promote the country's air transportation and tourist destination, the Royal Government of Cambodia granted the concession to the Societe Concessionaire des Aeroports (SCA) for the development of the Phnom Penh International Airport under BOT concession contract for 30 years in 1996. In 2001, SCA is granted the concession project under BOT concession contract for the development of Siemreap International Airport and the Sihanoukville international airport in 2006. The investment incurred by the three airport projects reached over USD 200 million.

As a result, the international airport in Siemreap was built, and in less than a decade passenger traffic skyrocketed by 285%. The Phnom Penh International Airport serving the capital city has also experienced significant changes, encompassing the renovation of the infrastructure and equipment, the improvement of security and safety and professionalism of its personnel. Sihanoukville airport resumed operation in January 2007. The floor surface of the terminal has doubled and the runway is extended to 2,500 meters from 1,300 meters.

4. Case Study: PPP in Korea

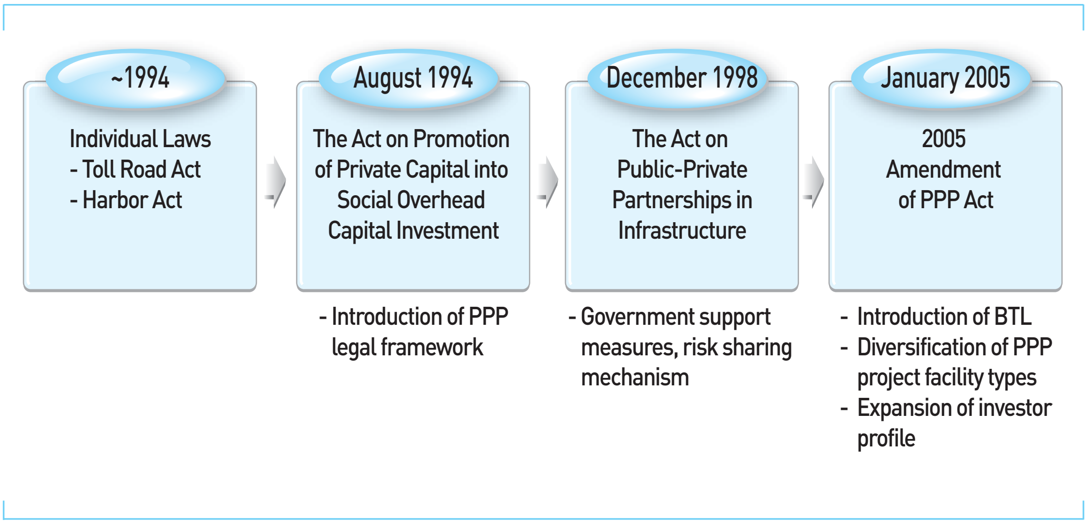
4.1. Legal Framework

Given that PPP projects typically involve significant investment by the private sector over a long period of time, insufficient legal protection of investors is the primary concern for investors. While a sound legal framework is critical for successful PPP, a single law cannot establish the necessary framework. Issues involving investment from both public and private sectors are usually very complex and many questions according to the situation of the country need to be answered. The followings are common questions and issues which should be considered in the PPP legal framework.

- Government entity for monitoring and regulating the PPP project. Following questions needs to be addressed: Which ministry or local government is involved, i.e. which body will be empowered to enter into implementation and monitoring of the project?
- The procurement process. Such questions can arise: is the tender and bidding process fair, transparent and objective? Are there conflicting procurement laws at the national, provincial and municipal levels? Are the evaluation criteria set out clearly in the law?
- Issues on foreign investment. Too much restriction on foreign investors such as ownership or currency conversions may hinder active foreign investor participation.
- Land issues. Limitation on private ownerships of land, expropriation of land owned by other parties, and planning permissions.

The legal framework of Korean PPP system was first designed in 1994 with the enactment of the Act on Promotion of Private Capital Investment in Social Overhead Capital. Overall revision of the Act into Act on Private Participation in Infrastructure (PPP Act) took place in 1999 after the financial crisis, where the revised Act strengthened risk-sharing mechanisms which greatly contributed to encouraging the private sector participation in infrastructure development. The PPP Act was amended again in 2005, when the Build-Transfer-Lease (BTL) method was introduced. Before the revision, PPP projects were used to mainly focus on transportation infrastructure, but since 2005 eligible facilities expanded to include social infrastructure facilities, such as education, culture, welfare, environment, and defense facilities. In addition, the Act established a PPP specialized agency, Public and Private Infrastructure Investment Management Center (PIMAC) at Korea Development Institute, to provide technical assistance to the Ministry of Strategy and Finance and the procuring authorities.

Figure 4-2 | History of PPP Act



Source : *Building a Better Future through Public-Private Partnerships in Infrastructure in Korea*, Ministry of Strategy and Finance and Korea Development Institute, 2009.

The PPP Act and the Enforcement Decree, the principal components of the legal framework for PPPs, clearly define eligible infrastructure types, procurement types, procurement process, conflict resolution, termination mechanism, and the roles of the public and private parties, policy supports, etc. The Act is a special act that precedes other Acts.

Hierarchy of the legal arrangements is as follows:

- PPP Act
- PPP Enforcement Decree
- PPP Basic Plan
- PPP Implementation Guidelines

Under the PPP Act, the Basic Plan for PPP and PPP Implementation Guidelines are formulated which address, in detail, policy directions, procurement steps and government supports. The PPP Act directs the Ministry of Strategy and Finance and PIMAC to issue the PPP Basic Plan. The Basic Plan provides: the PPP policy directions, details in PPP project implementation procedure, financing and re-financing directions, risk allocation mechanism, payment scheme of government subsidy, and documentation direction. PIMAC has developed the PPP Implementation Guidelines to improve transparency and objectivity in the process of PPP implementation. Detailed guidelines also include guidance for Value for Money (VFM) Test, preparation of Request for Proposals (RFP), tender evaluation, standard output specification by facility type, and standard PPP concession agreements. The Basic Plan and PPP Implementation Guidelines are annually updated according to other relevant changes and market conditions. Continuous development of the Act and related regulations demonstrate a strong commitment on the part of the government to strengthen private sector's confidence in PPP.

4.2. Specialized Unit for PPP

4.2.1. Need for PPP Unit

A specialized public-private partnerships (PPPs) unit is an organization designed to facilitate and manage infrastructure investments and to promote or improve PPPs. A PPP unit may not be a prerequisite or a guarantee for successful PPP, it functions as an entity trying to ensure that the PPP meets quality criteria such as appropriate risk transfer, along with affordability and value-for-money (VFM). It is usually mandated to manage multiple PPP transactions, often in multiple sectors, so as to distinguish itself from PPP teams working within a single ministry on specific transactions. A successful PPP unit can generally be described as providing the services that the government needs; complying with the legal and regulatory regimes as well as specific government policy on PPPs.

A government often finds itself unable to appropriately implement PPP programs, facing such problems as poor incentives for procurement of PPPs; lack of coordination within the machinery of government; lack of necessary skills; high transaction costs; and lack of information. Institutional weaknesses on PPP, on the other hand, result in poor quality control on bidding and contracts; few international investor participation; no clear communications channel; little progress in financing closure; and insufficient risk transfer to the private sector. PPP units are therefore created as a response to government's weakness in efficiently managing PPP programs, which prove to be ineffective when the PPP unit is just one of many responsible agencies.

4.2.2. Functions of PPP Unit

PPP units are established to provide technical assistance to the private and the line ministries in the process of procurement. They often function as policy formulator and coordinator, embodying the government's PPP policy. PPP units perform quality control of PPPs, making sure the government gets value-for-money and transfers optimal risk. They also act as promoter of PPPs, helping both the private sector and government agencies better grasp the potential benefits of PPPs. They generally make effort to standardize procurement and lower the transaction costs of procuring PPPs and to develop a well understood pipeline, thereby increasing bidder interest.

Although the functions of a specialized PPP unit may be designed mainly depending on to what extent the government performs its role in PPP implementation, some of the main functions can be described as below:

- Policy and strategy: provide government support in setting and advising overall policy for PPPs and in terms of macroeconomic aspect
- Technical assistance: identify suitable PPP projects; perform prefeasibility study and feasibility study to determine whether the project is technically feasible and would be financially attractive to private investor; determine whether the project offers risk-adjusted value-for-money compared to public sector comparator; manage procurement and tender process, from issuance of Request for Proposals with procurement documents to negotiation and management at ex-post
- Investment promotion opportunities: through conferences, seminars and investment road shows
- Research organization: conduct research such as international best practice; review previous transactions
- Capacity building: through education and training program for line ministries, local governments and private sector

4.2.3. Location of PPP Unit

Considerations about PPP unit location can be interconnected with considerations about the sort of authority the PPP unit will need in order to complete its objectives. For example, attaching a PPP unit directly to an existing government body that has the authority to stop or alter planned PPP agreements is the easiest way to grant authority to the PPP unit with an authority that allows it to put a stop to, or alter, planned PPP agreements.

An effective PPP unit tends to be located within a strong ministry of finance or treasury under which government resources are controlled. Treasury in many countries has important enforcement power especially when it approves a fiscal commitment to a PPP project before it can happen. This reflects the role of the treasury in coordinating government policies and expenditure and its mandate to manage fiscal risk. Moreover, location of a PPP unit within the treasury makes it consistent in terms of its goals and functions of PPP implementation. Line agencies may have incentives to enter into PPPs that provide infrastructure or services, but may not always have strong incentives to make sure PPP projects are affordable for the government as a whole, or offer the best value for money.

Some PPP units operate as quasi-independent bodies, such as PIMAC of Korea. Others are located within the countries' respective treasury departments (Partnerships Victoria of Victoria, Australia and Infrastructure UK within the HM Treasury of the United Kingdom).

4.2.4. Korea's PPP Unit: Public and Private Infrastructure Investment Management Center(PIMAC)

PIMAC is a branch of Korea Development Institute (KDI), and acts as a statutory professional organization established by the amendment of the Act on Public-Private Partnerships in Infrastructure (PPP Act) in January 2005.

Article 23-1 of the PPP Act stipulates the rationale for the establishment of PIMAC as follows: For comprehensive support of PPP as prescribed by the Presidential Decree, such as the review of Solicited Projects, analysis of project feasibility, and evaluation of the project proposals and other matters, the Public and Private Infrastructure Investment Management Center for Infrastructure Facilities is to be established within the Korea Development Institute established under the Act on the Establishment, Operation and Fosterage of Government-funded Research Institutions.

Article 20-1 of the Enforcement Decree of the PPP Act describes work of PIMAC as follows:

1. Support for work relating to the formulation of the Basic Plan;
2. Support for work regarding the formulation of the Request for Proposals as stipulated in the PPP Act;
3. Support for work regarding the designation of the Concessionaire such as review and

assessment of the project proposal, and conclusion of the Concession Agreement;
4. Review and assessment of the project proposal by a party in the Private Sector;
5. Processing various applications for such matters as the approval and permission regarding PPP Projects for other organizations;
6. Support services for foreign private investors such as investment consultation and other activities to induce foreign investment to the PPP Projects;
7. Review of Potential PPP Projects and feasibility studies thereof;
8. Development and operation of education programs related to the implementation of PPP Projects;
9. Improvement of private investment systems and research of related fields;
10. Finding Potential PPP Projects and support for work related thereto; and
11. Other work related to the implementation of PPP Projects.

Efficient management of PPP project requires that the market environment and changes in various circumstances be timely incorporated into PPP policy. Policy research is conducted independently of actual project implementation to give feedback to and assist the government in deciding its policy orientation. As stipulated by the Act and its Enforcement Decree, PIMAC provides actual administrative and technical support in the process of PPP project preparation and implementation. It develops guidelines for PPP procurement, conducts value-for-money tests and assists in RFP formulation, tendering and negotiation.

PIMAC is staffed with approximately 80 members, among which 42 are dedicated to PPP. PIMAC is funded by the Ministry of Strategy and Finance, and its additional resource comes from fees levied upon line ministry/local government for the service provided. The Head of PIMAC reports annually to the Minister of Strategy and Finance.

4.3. PPP Procurement, Invitation for Bid and Evaluation

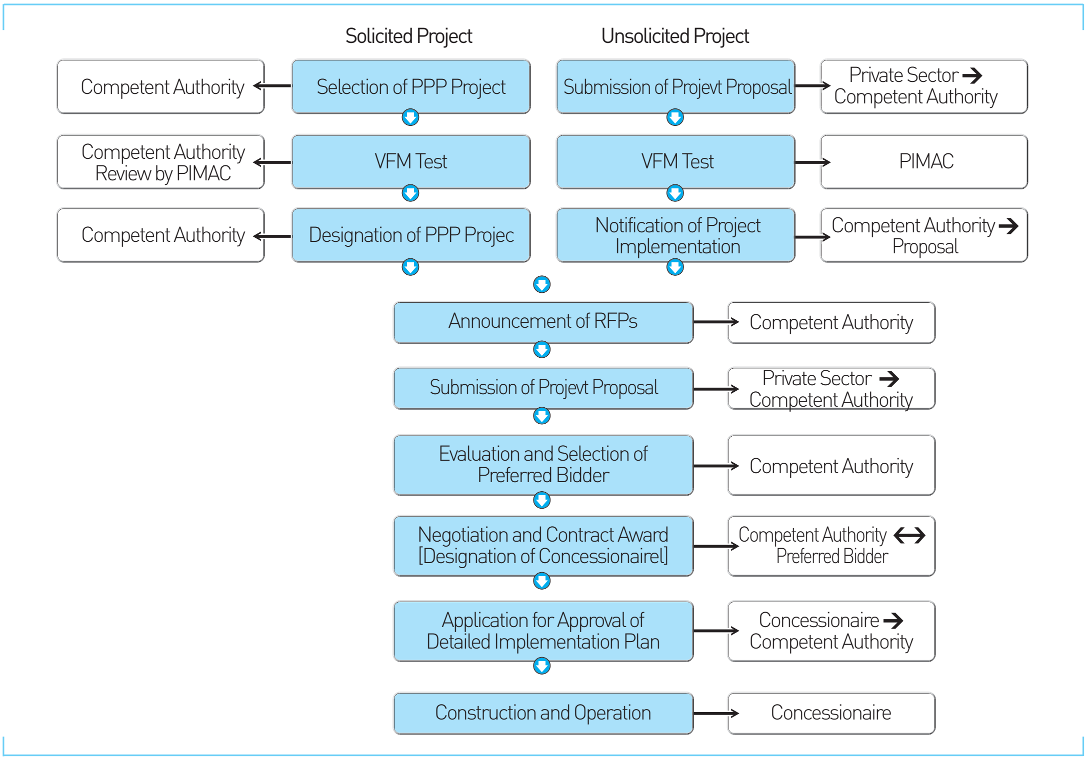
PPP procurement process is unique to each government and should be designed to reflect enabling market environment, political structure as well as market composition. Commonly used methods are competitive bidding which generally is conducted through two-stage bidding; direct contracting; and competitive negotiations, which combine elements of competitive bidding with direct negotiations. Common issues for optimal procurement involve project preparation and selection; implementation of transparent selection process; and fostering of a competitive market.

PPP projects in Korea are categorized into solicited and unsolicited, depending on who initiates the project. For solicited projects, the competent authority, central or local government, identifies a potential PPP project and solicits proposals from the private sector. In other words, competent authorities develop a potential project after considering related plans and demands for the facility. They then weigh the procurement options in order to determine whether the PPP procurement is more efficient than the conventional procurement. For unsolicited projects, the private sector identifies a potential PPP project and requests designation of the PPP project from the competent authority. The private sector proposes a project that is in high demand but has been delayed due to government budget constraints. After considering such factors as demand, profitability, project structure, construction and operating plans, and funding, the private partner creates a project plan and submits the proposal to the competent authority. The concessionaire is appointed under competitive bidding, although the initial proponent may obtain extra points in bid evaluation.

The procurement procedure is designed to secure or enhance value for money (VFM) of PPP projects. In the planning stage, VFM assessment of a potential project is carried out in order to ensure VFM of PPP procurement in comparison with traditional public procurement. In the bid selection stage, competitive bidding is mandatory both for solicited and unsolicited projects, which leads to further improving VFM of the project concerned by encouraging bidders to competitively propose heightened service qualities and reduced project costs.

Procurement Procedure for BTO Projects: After conducting a VFM test to evaluate its potential as a PPP project, competent authorities announce Request for Proposals (RFPs) and

Figure 4-3 | Procurement Procedure for BTO Project

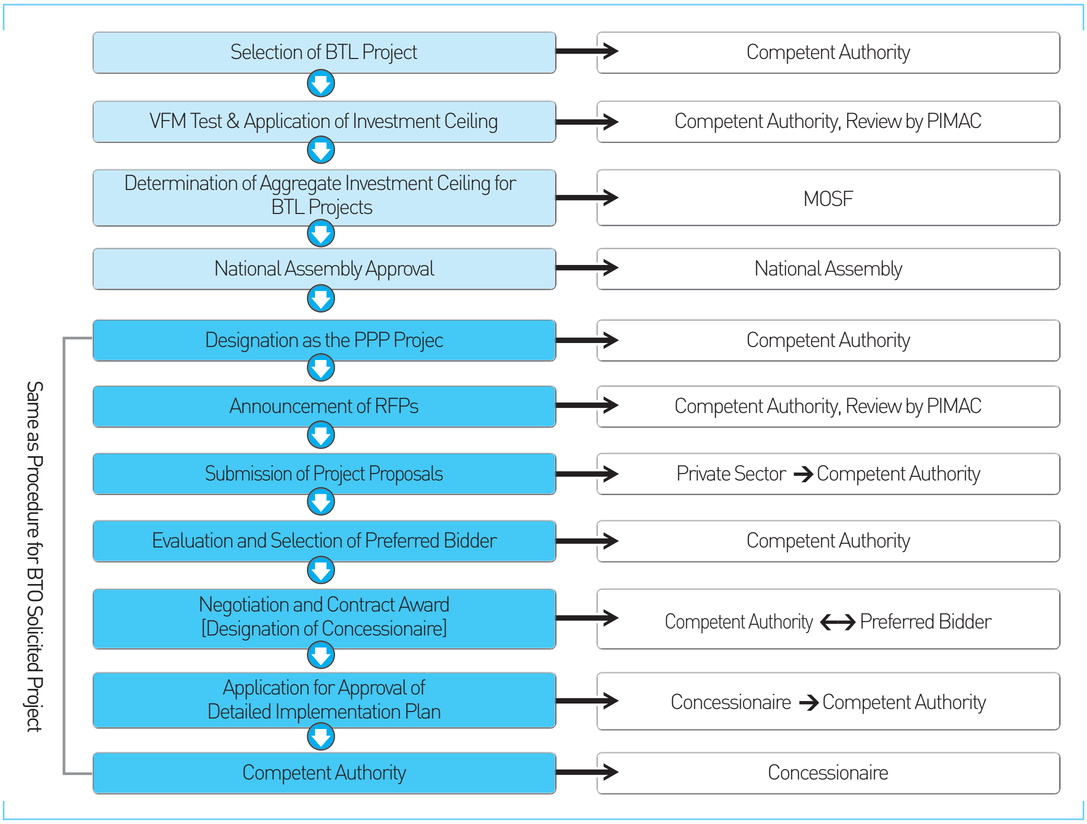


Source : *Building a Better Future through Public-Private Partnerships in Infrastructure in Korea*, Ministry of Strategy and Finance and Korea Development Institute, 2009.

evaluation proposals for selection. RFPs includes project plan and implementation terms and conditions, such as the project outline, total project cost, operational profit, construction and operation plans, and government supports.

Procurement Procedure for BTL Project: A BTL project is initiated by the competent authority, reviewed by the Ministry of Strategy and Finance to decide on an aggregate investment ceiling for BTL projects, which is then approved by the National Assembly.

Figure 4-4 | Procurement Procedure for BTL Project



Source : *Building a Better Future through Public-Private Partnerships in Infrastructure in Korea*, Ministry of Strategy and Finance and Korea Development Institute, 2009.

Evaluation Criteria and Point Distribution: The evaluation standards are kept as objective and quantitative as possible, and the calculation method and point distribution are to be presented in advance. For those matters that cannot be evaluated quantitatively, subjective elements are to be minimized by utilizing relative evaluation. Point distribution between engineering factor and pricing factor is to be at the ratio of 5:5 in principle, but the ratio is adjustable considering the complexity of construction and operation. When deemed necessary for efficient project implementation, favorable treatment in the process of evaluation is allowable.

5. Policy Recommendations for Cambodian PPP

5.1. Assessing Cambodian PPP

Cambodia's PPP legal framework is still in the course of development, with the Sub-decree in the process of being drafted. Many areas in terms of legal regulations and processes are yet to be covered, and hence there exists much backlog in implementing PPP. Given the current Law on Concessions along with related laws and regulations, some of the more important deficiencies to various stages of a PPP project cycle need to be addressed: 1) An effective and coordinated process across sectors for policy on developing or identifying potential PPP project; 2) Clear guidelines, conditions, and procedures for the approval to a project; 3) Whether certain legal and regulatory risk may be borne by the government, and to what extent the government will allocate and share the risk incurred in PPP project, particularly financial or performance guarantees; 4) Clear and transparent competitive bidding procedure with clearly identified entity that has the power to enter into negotiations that can take decisions on all types of infrastructure projects[38)]; 5) Principles of evaluation at ex-post.

Cambodian legal framework does not make provision for some of the important government policy support measures to facilitate and stimulate private investment in infrastructure, including a set of rules for land acquisition rights as well as the right to use national and state land free of charge; various tax benefits granted specifically for PPP projects.

Despite roles that several institutions are given in accordance to the Law on Concessions and other related laws, the unstructured and informal nature of PPI process that more than often does not follow a clearly documented prescribed path to approval hinders coherent execution of a PPI project in Cambodia. Several institutions have key roles[39)] in the PPP process but usually lack capacity and clear institutional roles and responsibilities.

Fundamental and critical reform to the current regulatory and institutional environment is required to mitigate political and regulatory risk. Strengthened governance for increased public-private partnerships in infrastructure rest on an entity solely responsible for PPI projects with improved legal framework to ensure transparent and accountable implementation. To create an

38) Although both the Law on Concessions(2007) and the Law on Investment(1994) established the CDC as the "one-stop service" organization responsible for evaluating and making decisions on all investment projects, numerous contracts were negotiated directly with the Council of Ministers or the Contracting Institutions. *(Cambodia Seizing the Global Opportunity: Investment Climate Assessment and Reform Strategy for Cambodia, World Bank Group, August 12, 2004.)*

39) The Council for the Development of Cambodia, established as a "one-stop" service organization for all investment in the country, is responsible for issuing registration certificate, through which investors are eligible for investment guarantees, tax incentives, and import duty incentives. The CDC refers large projects of over USD 50 million to the Council of Ministers. It is also responsible for obtaining on behalf of the applicant all of the licenses required from the relevant bodies, and requires that the latter issue the documents within 28 days. The Ministry of Economy and Finance plays the oversight and approval role of key aspects of the leasing or concession process. It assumes a central role in the management, sale, and letting of state property that is under the management of ministries, provinces, municipalities, state, and public enterprises.

enabling environment for PPI in Cambodia, the institutional and regulatory gap must be addressed.

5.2. Recommendation 1: Solid Legal and Regulatory Framework

It is generally agreed that a single law cannot establish the necessary framework for projects as complex as that of privately financed public infrastructure. The existing legal framework with loopholes that allows circumvention or avoidance of some of the most critical regulatory stages must be addressed. The legal, regulatory and governance framework must be solid and correspond to international standards with clear and consistent implementation procedures regulated by relevant act and practical implementation guidelines. In light of the current Cambodian Law on Concessions, legal gap must be addressed and complemented through immediate adoption of sub decrees, specifying principles and schemes for tendering, contracting, risk sharing and conflict resolution. A clear governance structure should be established, and the relevant authority must play a central role in this governance structure.

The first priority regarding development of country PPP legal framework is to formulate regulation for implementation of the Law on Concessions. Detailed procedure and guidelines need to be put in place through government and ministerial decrees. In this regard, the issuance of the government decree on the implementation of the Law on Concession and relevant regulations need speeding up to ensure the full implementation of the Law, especially the procedure of concessionaire selection. The selection procedure should focus on both the unsolicited and solicited project. The prequalification criteria should be based on legal status, technical as well as financial capacity. The evaluation factor should be based on the best technical and financial proposal and value for money.

Whether a strict hierarchical legal arrangement is required (of Act- Enforcement Decree-Basic Plan-Implementation Guidelines, as in the case of Korean PPP legal arrangement) is subject to the country’s legal system, but establishing detailed guidelines according to the type of infrastructure project is advised. Formulation of template agreements as part of detailed implementation guidelines is thus recommended. A comprehensive standard concession agreement, for example, is a prerequisite in assisting contracting institution to reach the win-win situation with the concessionaire and the user of the project.

Since many ministries and institutions involve concession project, a good institutional arrangement is the key for success and to ensure that the process in its entirety go smoothly. The government should determine the role and function of all the relevant ministries and institutions into the government decree on the implementation of the Law on Concession to avoid duplicative function and the conflicts of interest.

5.3. Recommendation 2: Specialized Unit to Assist PPP Program

A specialized unit for assisting PPP program is recommended to be established as advisory and project facilitating entity. Creating an enabling PPP unit with clear mandate in Cambodia is crucial not merely because it functions to coordinate PPP projects, but also through transparently conducting the necessary process, it can induce international investor participation, which is essential for project implementation in Cambodia. While in Korea an independent PPP entity is in work, many PPP units around the world are located within the respective financial ministry. A PPP center must be staffed with experts in relevant fields in order to accumulate the necessary competence and capacity over time. The rationale for the establishment of the PPP center, its functions and mandates as well as the organizational structure must be clearly stipulated in a sub decree.

To operate an enabling PPP entity, roles and coverage of the existing key players concerning concession projects in Cambodia first need to be clearly defined. The PPP entity should be granted the right authority as necessary. Many of the roles that the CDC now covers also need relocation, in order to avoid confusion.

As many PPP units around the world are located within the respective financial ministry, a PPP unit, or a Concession unit created to implement PPP projects in Cambodia is advised to be established under the Ministry of Economy and Finance[40] to play its role on behalf of the Ministry of Economy and Finance as following:

1. To be a counterpart with competent institution on behalf the Ministry of Economy and Finance;
2. Ensure the implementation of the Law on the Concession;
3. Participate in concession project process, from the identification phase until project implementation;

40) Creating such unit within the MEF of the Royal Government of Cambodia rather than the CDC encompasses reasons regarding public financial issue that are interrelated to that of concession projects.
1. Although CDC was created under the Law on Investment, its function is limited to an institution at inter-ministerial level.
2. Most of the concession projects are related to public financial matter such as revenue guarantee, government guarantees payment, project buyout, among others, which are core functions of the MEF.
3. The concession projects are long life projects up to 30 years or more and require on place inspection and auditing for revenue collecting or other financial matters. The MEF is tasked with the Cambodian public finance system.
4. The Ministry of Economy and Finance is the counterpart of the competent institution in terms of concession project from project identification to implementation phase, while CDC is arranged as the One-Stop-Service Meeting to formally adopt the concession project.
5. Matters regarding revenue sharing and user fee collection as well as tax duties are all involved with the functions of the MEF.
6. Negotiate, review, and endorse the Concession Agreement
7. Decide on user fee and financial term;
8. Review and endorse government payment guarantee, government subsidy policy or project buyout;
9. Monitor the project implementation.

4. Prepare, review, endorse the bidding document;
5. Evaluate the bidding proposal, including finance and technical proposal;
6. Negotiate, review, and endorse the Concession Agreement
7. Decide on user fee and financial term;
8. Review and endorse government payment guarantee, government subsidy policy or project buyout;
9. Monitor the project implementation.

It is important that officials of all relevant ministries know PPP implementation process. On the other hand they need capacity building in several areas such as negotiation, bid and evaluation, and evaluation of both technical and financial proposal. This capacity building and education program is recommended to be undertaken by the PPP unit.

5.4. Recommendation 3: Documentation for Procurement, Bid, and Evaluation

Transparent and effective procurement practice in developing countries carries as much importance as a sound legal framework. Documentation opts for transparency, which induces fair competition in bidding. Lower price and efficient management of publicly needed infrastructure facilities will ultimately lead to streamlining government fiscal expenditure.

PPP procurement, bid, and evaluation methods suggest ways for optimal procurement for transparent selection process, which contributes to fostering a competitive PPP market. Cost and time resources are required in a transparent tender process. Advocating competitive bidding process is required for Cambodia, with standardized sets of processes and guidelines. Ways to promote competition for proposals include addressing reimbursement issue of proposal preparation cost of unsuccessful proponents, announcing content of alternate proposals when pursing an unsolicited project, designating two or more potential concessionaires, and simplifying required documents for proposal. Transparency being a significant issue in tendering, clear access to information must be provided.

A procurement procedure in written form is recommended to be included in a guideline for concession projects. It is also recommended that a standard bidding document be formulated to be dispersed to those interested, whether domestic or foreign, in bidding for the project. A good standard bidding document will ensure that the selection process will proceed smoothly and transparently. This will help the contracting institution find the best concessionaire as a partner.

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Appendix :

Public-Private Partnership (PPP) in Infrastructure

Building infrastructure has traditionally been in the realm of the public sector. However, as governments often operate under expenditure limits or other budgetary constraints and thus lack the financial resources to undertake necessary infrastructure projects, the public sector in recent years has relied on the private sector not only to finance and construct infrastructure but also to operate the facility. Public-Private Partnership has become such scheme to provide for infrastructure that requires large capital resources.

1. Definition of PPP

While the literature currently does not offer single, widely agreed definition on the term "public-private partnership", different institutions implementing PPP offer several possibilities. According to the International Monetary Fund, PPP refers to "arrangements where the private sector supplies infrastructure assets and services that traditionally have been provided by the government." The European Investment Bank defines PPP as "relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services." The Asian Development Bank refers to PPP as an "arrangement where a private party delivers infrastructure services under a concession agreement." The OECD defines a PPP as an "agreement between the government and one or more private partners (which may include the operators and the financiers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners."[41] In simpler terms, the partnerships between

41) From OECD, *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money,* OECD Publishing, Paris, 2008, p. 17; UNESCAP, "A Legal Perspective of Public Private Partnerships," Training Material available at: http://www.unescap.org/ttdw/ppp/trainingmaterials.html#list.

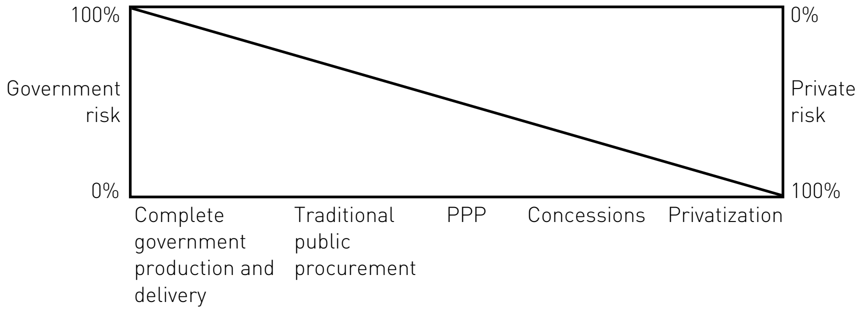
the public sector and participants (typically developers, investors, constructors and other service providers) to construct and operate core infrastructure assets such as highways, hospitals, schools and power plants under the term in concession agreements. Above definitions commonly imply gains on both the public and the private.

2. Modes of Service Delivery

PPP projects are part of a broader spectrum of contracted relationship between the public and private sectors to deliver a public service. Various modes of service delivery range from traditional public procurement to full private delivery. In the case of traditional procurement the government procures the assets and services from the private sector and also carries the risk involved. In the case of full private delivery, also widely known as privatization, the government is not involved at all, and it is the private providers that carry all the risks that are associated. Public-Private Partnership occupies a middle ground between traditional public procurement and privatization (Figure 4-5).

In the case of PPP, the government does not buy the capital asset directly from the private partner; it buys the stream of services that the private partner generates with the asset. The private partners therefore usually design, build, finance, operate and manage the capital asset. They then deliver the service either to the government or directly to the end users and receive payments either from the government or user charges levied directly on the end users. Among principal features of PPP include the government specifying the quality and quantity of the services it requires from the private partners. A sufficient transfer of risk from the public sector to the private partners ensures efficient operation of services. Furthermore, asset responsibility under a PPP is generally transferred only for a specified period.

Figure 4-5 | Spectrum of Combination of PPP Model(classified according to risk and mode of delivery)



Source : OECD, *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money*, 2008.

3. Comparison between PPP and Traditional Procurement

With PPP procurement, the private sector returns are linked to service outcomes and performance of the asset over the contract life. The private sector service provider is responsible not just for asset delivery, but for overall project management and implementation, and operation for several years thereafter. The timing of payments by the public sector to the private sector for the assets and service delivered is therefore dramatically different. For traditional government procurement, capital and operating costs are paid for by the public sector, who takes the risk of cost overruns and late delivery; while for PPP procurement, the public sector only pays over the long term as services are delivered. The private sector funds itself using debt plus shareholder equity. The returns on their equity will depend on the quality of services. Moreover, in PPP the private partner usually undertakes the capital expenditure, financing it through debt and equity. Also, the government may pay a fee to the private partner for the services provided, which the private party uses to pay operating costs and interest charges as well as to repay debt. Table 4-12 summarizes key differences between traditional procurement and PPP procurement.

4. Procurement Initiation and Methods of PPP Project

PPP Projects can be categorized into solicited and unsolicited, depending on which party initiates the project. For solicited projects, the competent authority, central or local government, identifies a potential PPP project and solicits proposals from the private sector. In other words, competent authorities develop a potential project after considering related plans and demands for the facility. They then weigh the procurement options in order to determine whether the PPP procurement is more efficient than the conventional procurement. For unsolicited projects, the private sector identifies a potential PPP project and requests designation of the PPP project from the competent authority. The private sector proposes a project that is in high demand but has been delayed due to government budget constraints. After considering such factors as demand, profitability, project structure, construction and operating plans, and funding, the private partner creates a project plan and submits the proposal to the competent authority. The concessionaire is appointed under competitive bidding, although the initial proponent may obtain extra points in bid evaluation.

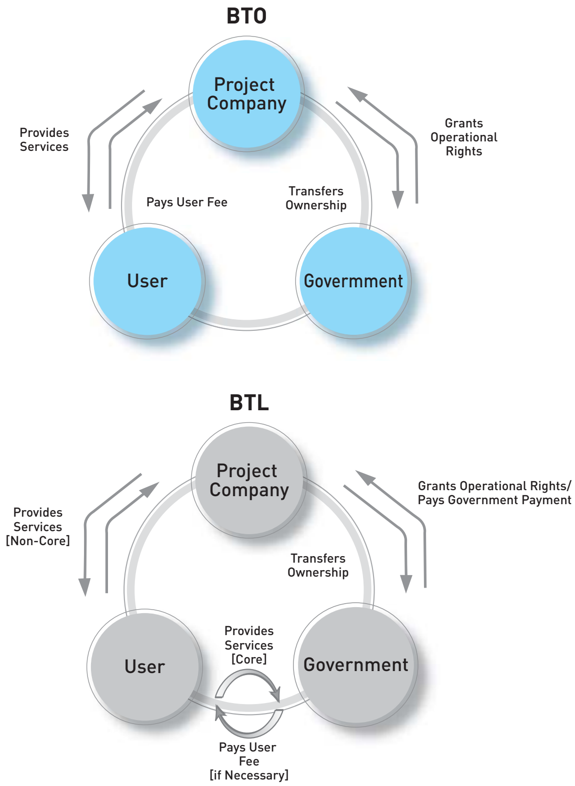
Eligible procurement methods are largely divided into Build-Transfer-Operate (BTO) and Build-Transfer-Lease (BTL) method depending on the structure in which the project is carried out. In BTO method, ownership of the facility is transferred to the government upon completion of construction, and the concessionaire is granted the right to operate the facility and gain return on the investment. Since the concessionaire recovers its investment cost directly from a user fee, commercial viability is a key element for implementing BTO projects on the part of the concessionaire. Most of the BTO projects are transportation facilities such as roads, railways, and seaports. For BTL, ownership of the facility is transferred to the government upon completion of construction, and the concessionaire is granted the right to operate the facility and receive government payments(lease payment plus operational cost) based on its operational performance for a specified period of time. Facilities eligible for BTL projects mainly consist of social infrastructure such as schools, welfare facilities, environmental facilities, military residence, among others.

Table 4-12 | Traditional Procurement and PPP Procurement

	Traditional Procurement	PPP Procurement
Government purchase	Government purchases an infrastructure asset	Government purchases infrastructure services
Contract	Short-term design and construction contracts	One long-term contract integrating design, build, finance and maintenance
Specifications	Input-based specifications	Output-based specifications
Asset risk	Government retains whole-of-life asset risk	Private sector retains whole-of-life asset risk
Mode of payment	Payment profile has a spike at the start to pay for capital costs, with low ongoing costs	Payments begin once the asset is commissioned. The payment profile is relatively even, reflecting the level of service provision over the longer term of the contract
Construction time and cost overruns	Government is usually liable for construction time and cost overruns	Private contractor is responsible for construction time and cost overruns
Operation	Government operates the facility	Government may or may not operate the facility
Management of contract	Government manages multiple contracts over the life of the facility	Government manages one contract over the life of the facility
Performance standards	Often no ongoing performance standards	Performance standards are in place. Payments may be abated if services are not delivered to contractual requirement
Handover quality	Handover quality less defined	End-of-term handover quality defined

Source : adapted from Commonwealth of Australia, *National PPP Guidelines Overview*, 2008.

Figure 4-6 | Structure of BTO and BTL Projects



Source: *Building a Better Future through Public-Private Partnerships in Infrastructure in Korea*, Ministry of Strategy and Finance and Korea Development Institute, 2009.

Chapter 05

Financing PPP Projects in Cambodia

Chapter 05

Financing PPP Projects in Cambodia

Seok-Kyun Hur (KDI)

1. Introduction

The purposed of this study is to introduce Korean experiences in financing SOC projects and suggest policy implications for Cambodia based on them. Currently, the economic and fiscal situations of Cambodia are different from those of Korea. Thus, not all measures effective in Korea are likely to be valid in Cambodia. Especially considering the narrow fiscal space and the low level of capital accumulation of Cambodia, massive mobilization of fiscal resources and domestic private capital seems not appropriate. In this context, we recommend PPI(Public Private Infrastructure Investment) through bond financing, which not only saves fiscal capacity but also attracts foreign investment in Cambodia.

Investment in SOC, such as transportation infrastructure (road, railways, and ports), electricity networks (generation facilities, transmission and distribution systems) and water supply (drinking water and irrigation for agricultural sectors) is a key determinant of economic growth. Furthermore, developing countries can get greater benefit from SOC building thanks to the higher rate of returns. However, domestic financial markets in developing countries have yet to grow up. They cannot afford the domestic demand for infrastructure investment. Therefore, financing SOC investment is a crucial pre-condition for a developing country to pursue a track of long-term growth.

The ways of financing an infrastructure project, depending on which entity is in charge, are classified as follows:

- Government finance
- Corporate finance by public utility corporations
- Project finance by private companies

First, in the case when a government finances the project, it can raise resources by collecting tax revenues, issuing government bonds, or receiving Official Development Assistance (ODA) loans from foreign countries. This approach of financing the SOCs is a straightforward measure of increasing capital investment in the specific areas, to which the government assigns socio-economic priorities. On the other hand, the government should bear the fiscal burden. Especially, taking in mind that developing countries like Cambodia are very limited in terms of fiscal space (in other words, tax bases), direct financing by the governments could be sustained only for a few occasions in the short-run.

Second, Public Utility Corporations (PUCs) could take a central role of investing SOCs in their own fields. In many countries, electricity, water supply and the services of railway and road are provided by PUCs. Those companies could accumulate physical capitals in their areas to extend their supply capacity and cost efficiency. They afford their investment demands by spending retained earnings or issuing corporate bonds. These PUCs are likely to hold high credit ratings, which will not require much additional yield premium. An additional financial advantage of this approach includes the separation of infrastructure investment from governments' budgetary constraints, and that their liabilities are treated as corporate liabilities with no recourse to the state. In this sense, it is anticipated that fiscal burden of the government would be relieved. However, the capacity to invest varies across PUCs and the heavy borrowing of PUCs, implicitly backed by the government, may weaken the fiscal stability, too.

Third, project finance usually takes the form of "one-project-one company." Under this scheme, a project pursuant borrows money based on the cash flow from the specific project. Such a financing scheme is applicable not only to private investment opportunities but also to public projects of building massive facilities. Private Public Partnership (PPP) is the most common example[42)]. PPP is a means of utilizing private sector resources in a way that is a blend of outsourcing and privatization. This method is quite attractive because it does not add much fiscal burden while encouraging the accumulation of SOCs.

Among these three categories, we are particularly interested in the third one. Developing countries are likely to be constrained by fiscal space whereas they have higher demand for investment in SOCs. Hence, project finance or PPP seems an appropriate strategy to attract private investment to the SOCs. However, the question still remains what specific financing vehicles to use in this category. In this regard, this study introduces a bond financing method for massive investments in building infrastructure with emphasis on the Cambodian context as well

42) PPP(Public-Private Partnership) is a contractual agreement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public. Depending on how to distribute risks and rewards potential in the delivery of the service and/or facility, PPP is classified into several sub-categories, such as BTO(Build-Transfer-Operate), BTL(Build-Transfer-Lease), BOO(Build-Own-Operate), and so on.

as Korean experiences[43]. In details, infrastructure bonds, infrastructure funds, and a credit guarantee scheme[44] are introduced. In addition, our paper also covers other measures for attracting PPP investment, such as tax benefits and Minimum Revenue Guarantee (MRG). Following these discussions, we provide policy recommendations for financing Cambodian PPP projects better.

2. Demand and Funding for Infrastructure Investment in East Asia

2.1. SOC and Growth

Gross Domestic Product (GDP), a standard measure of economic power and growth, is often conceptualized to be a function of labor, capital, and the total factor productivity (TFP). Simply put, labor, capital, and technology are three key factors of production. Accordingly, the national income is increasing in the aggregate amount of labor and capital as well as the level of production technology.

$$y_t = A_t f(L_t, K_t),\ \frac{\partial f}{\partial L_t} > 0,\ \frac{\partial f}{\partial L_t} > 0$$

The role of SOC can be easily understood by finding where SOC is positioned within the above aggregate production function. One possible location is K_t. In this case, K_t could be defined as the sum of privately owned capital and publicly owned capital, and the SOC is a part of them (mostly a part of the publicly owned capital). Thus, a higher level of SOC implies a higher accumulation of capital, leading to a higher level of income.

Another possible location is the level of production technology A_t. Unlike in the previous case, in this representation we perceive SOC not to be a direct factor of production but to be something, which raises the level of production. For example, well-maintained transportation infrastructure may lower the cost of production. Likewise, reliable supply chains of electricity will raise the utilization level of production facilities in the firm level. Hence, higher level of SOC implies higher level of technology, leading to higher level of production for the equal amount of inputs.

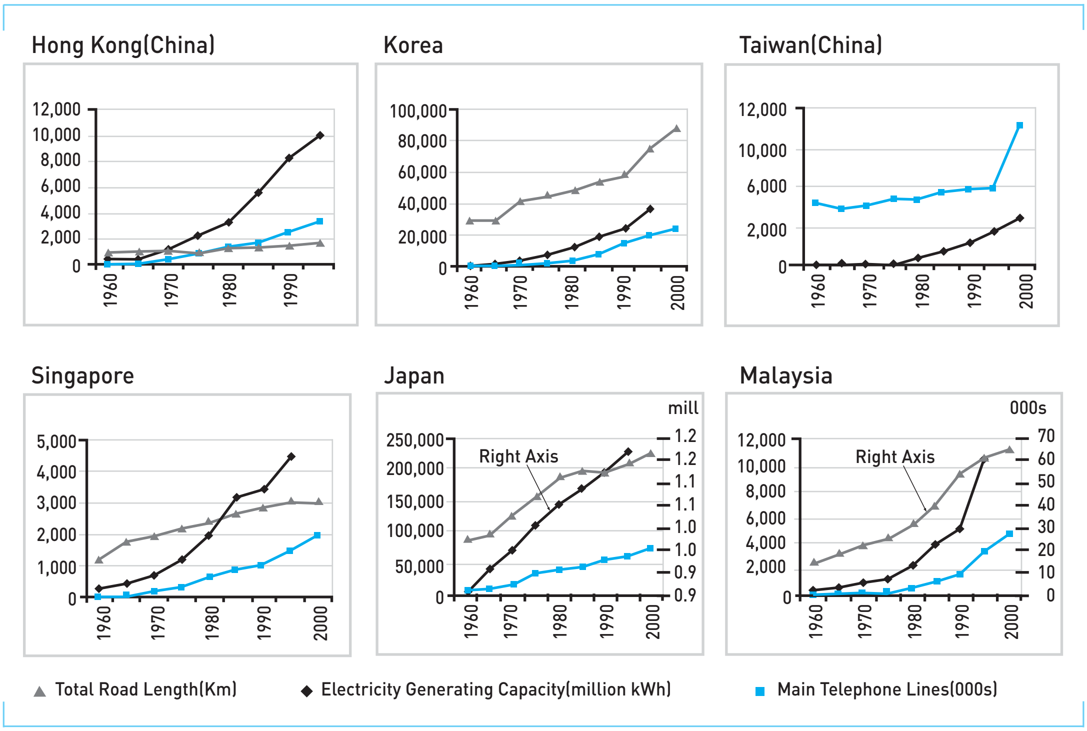
Regardless of representations, the relation between SOC and the level of production or the impact of SOC increment on economic growth seems quite evident. The following graph

43) The case of Korea is crucial in the following sense. First, Korea is one of the first countries in Asia that introduced infrastructure bonds and infrastructure funds along with various guarantee schemes for PPPs. Second, her developed legal and regulatory environments for PPPs will serve as a role model in the region.

44) KIGF(Korea Infrastructure Guarantee Fund) was established in 1994.

demonstrates the time trend of total road length(km), electricity generating capacity(million kWh) and main telephone lines(thousands) in the East Asian Newly Industrialized countries(NICs) from 1960 to 2000. Reminded that those economies achieved remarkable growth during the same period, we could also empirically confirm the importance of SOC in economic growth.

Figure 5-1 | Growth in infrastructure stocks, East Asian NICs, 1960~2000



Source: The World Bank.

Developing countries in Asia, being aware of such causality, tend to allocate a comparably big portion of GDP to infrastructure investment (see Table 5-1). China, Thailand and Vietnam are good examples, spending more than 7% of GDP. In contrast, Cambodia, Indonesia, and the Philippines belong to the lower infrastructure investment group compared with neighboring countries.

On the other hand, several international organizations provide an estimate of the demand for infrastructure investment in Asia for the next decade or so (see Table 5-2). Though the estimates differ by organizations, they agree that there will remain a huge amount of infrastructure investment need unfilled in this area. In order to fill the gap, it would be almost inevitable that each government should obtain resources from private sectors. In this context, PPP through bond financing seems to be a most promising option.

Table 5-1 | Infrastructure investment (% GDP)

0~3%	4~7%	Over 7%
Cambodia	Lao PDR	China
Indonesia	Mongolia	Thailand
Philippines		Vietnam

Source : East Asia and Pacific infrastructure strategy, The World Bank, 2004.

Table 5-2 | Infra Structure Demand in Asia ($bil./year)

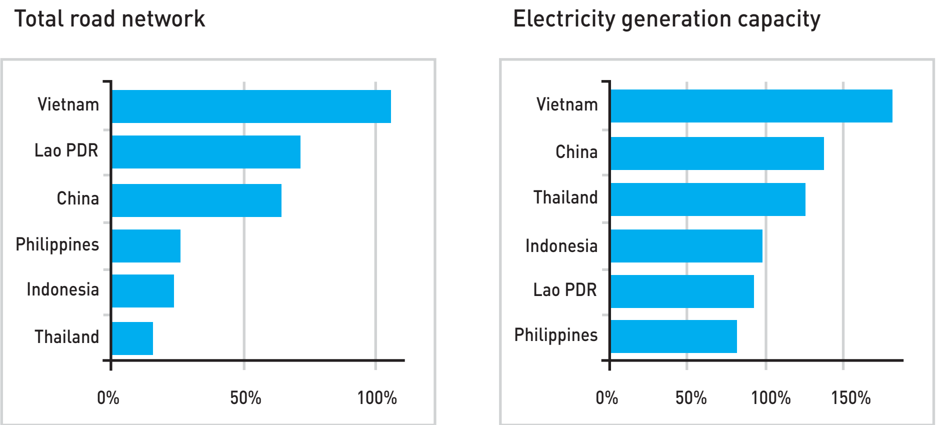
Sources	Est. Demand for Infrastructure	Financing Gap
ADB, JBIC and World Bank	228	180
Asian-Pacific Infrastructure Forum	300	
UN ESCAP	608	220

Source : East Asia and Pacific infrastructure strategy, The World Bank, 2004.

2.2. Infrastructure Investments in East Asia

As mentioned earlier, in addition to East Asian NICs, other Asian countries have also taken efforts in increasing their SOC stocks. Figure 5-2 shows how remarkable their achievements are in this regard. Especially the growth rates of total road work and electricity generation capacity in Vietnam and China were dramatic during 1990~2000. In this period both countries experienced astonishing economic growth. These observations confirm the existence of a good circle, that the accumulation of SOC raises the growth of an economy, which in turn has greater fiscal capacity to invest in SOC.

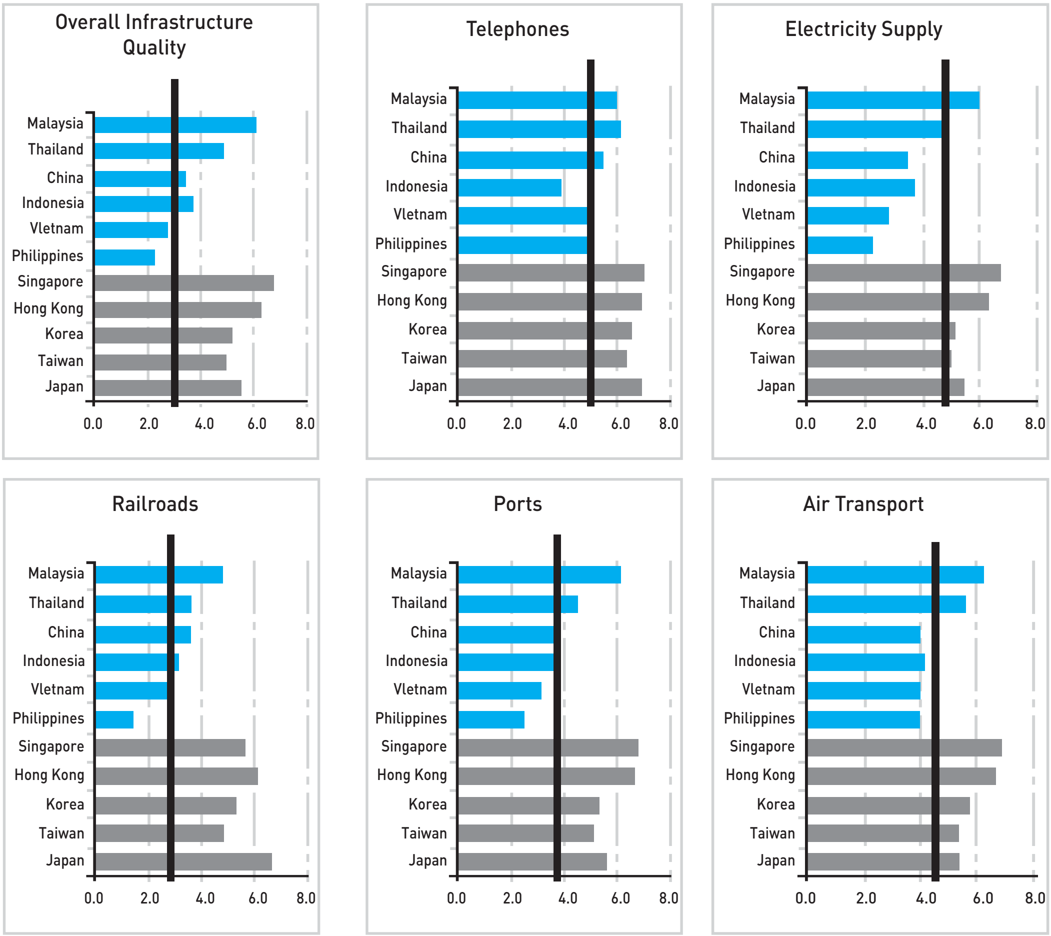
Figure 5-2 | Expansion of infrastructure stocks (1990-2000)



Source : Connecting East Asia: A New Framework for Infrastructure, The World Bank, 2005.

Remarkable accumulation of infrastructure in East Asia could be observed not only in quantity but also in quality. Mostly the quality of infrastructure in East Asian countries exceeds or is almost equal to the world averages (see Figure 5-3). Only in terms of electricity supply, some countries (China, Indonesia, Vietnam, and Philippines) are lagging behind the rest.

Figure 5-3 | Infrastructure quality ranking, World Competitiveness Report, East Asia



Note : Ranking are shown for developing East Asian economies(darker bars), and advanced East Asian economies (lighter bars). Vertical line is the average for all 102 surveyed countries, both within and outside of East Asia.
Source : East Asia and Pacific infrastructure strategy, The World Bank, 2004.

So far, East Asian countries have accumulated SOCs at remarkable speed. However, some of them still have to go further in order to catch up with the rest. In this context, the accumulation speed of SOCs should be maintained in the long run so that it can guarantee the sustainable future growth of those countries.

2.3. PPP Investments in East Asia

Admitting that SOC investment is crucial for economic growth, East Asian countries cannot increase their investments in infrastructure infinitely. The bounded fiscal capacity, characterized by narrow tax bases and not fully fledged government bond markets, constrains the growth of SOC. A way to get around the limited fiscal space is to attract private or foreign investments in the public area, for which PPP is intended.

In reality, however, only a few countries are actively utilizing PPP for infrastructure projects. Among the nine Asian countries, China, Indonesia, Malaysia, the Philippines, and Thailand have shown substantial records of SOC investment through PPP (see Table 5-5). In contrast, other countries including Cambodia, Laos, Myanmar, and Vietnam have not been active in utilizing PPP framework. Remembering that the latter groups of countries were significantly lagging behind the first group with an exception of Vietnam and the Philippines in terms of SOC investments, we could conjecture that PPP may be a very useful scheme in financing infrastructure projects without incurring too much fiscal costs.

While introducing the PPP framework to SOC investment, several countries have established separate institutions in charge of the PPP activities and supported them by enacting laws. In the case of Korea, PIMAC (Public and Private Infrastructure Investment Management Center) is in charge of carrying out a feasibility test for all the proposed PPP projects. All the procedures and the financing methods of PPP programs including the activities of PIMAC are stipulated by the "Private Participation in Infrastructure Act." Also, other countries like the Philippines, Indonesia, Bangladeshi and India have taken approaches similar to Korea. These observations indicate that each of these governments are aware that all the PPP related activities should be defined or protected under the law and an independent institution should be assigned to the evaluation of individual PPP projects for successful implementation of the PPP system.

Table 5-3 | PPP related Institutions, Acts and Performances

Country	Institutions	Act	Performances (USD)
Korea	PIMAC	Private Participation in Infrastructure Act	Approx.30 bil. Until 2005
Philippines	Build Operate Transfer Center	BOT Law	32 bil. (energy 15, transport. 4.3, water and sewage 8.1)
Indonesia	National Committee for the Acceleration of Infrastructure Provision Policy	Presidential Decree 67/2005	N/A
Bangladesh	Infrastructure Investment Facilitation Centre	N/A	N/A
India	Gujarat Infrastructure Development Board	Gujarat Infrastructure Development Act	1 bil. In transportation

2.4. Need for Financing PPP project through Bond Issuance

As forementioned, the biggest obstacle in implementing PPP framework for Asian countries is their under-developed domestic financial markets. Accordingly, it seems somewhat inevitable to take a detour of attracting the foreign funds. Already, 58% of infrastructure investment in Asia depends on foreign borrowing whereas 21.6% is domestic borrowing[45]. However, provision of funds from foreign investors to infrastructure projects in Asia could be enlarged further by solving the so called "Double Mismatch" in maturity and denomination currency. In this context, we suggest infrastructure bond as a solution, though not perfect, for double mismatch. Infrastructure bonds, backed by proper credit guarantee programs and denominated in various foreign currencies, could be issued for long maturities and relieve the worries over foreign exchange risk potential investors may have.

3. Demand and Funding for Infrastructure Investment in Cambodia

3.1. Current Level of Infrastructure[46]

The current levels of physical capital and infrastructure in Cambodia remain very low despite the recent progresses in private capital mobilization as well as in some areas of SOC. The road network has been significantly upgraded. International sea and air transportation ation is modern. However, railways and domestic water transportation are poorly developed. In addition, the infrastructure services are mainly concentrated in urban areas, where only 15% of Cambodian households live. For example, water supply is insufficient almost everywhere in Cambodia, except Phnom Penh. The services and the growth of Information and Communications Technologies (ICT) vary by the market segmentation and the geographical locations. Most of all, electricity is extremely expensive and in short supply in Cambodia, with very little hydro power generation facilities and thus mainly relying on power purchase from neighboring countries or small-scale generators.

To address electricity as a major constraint to industrial output growth, Cambodia needs to invest in large scale generation, build its national grid, and improve the operational and financial efficiency of this sector. A medium and long-term strategy in this area should be designed to expand generation, transmission and distribution and expand access in the rural

45) On the other hand, financing through bond and equity (by domestic or foreign investors) has been relatively small. Such heavy dependence on loan type financing reflects the severity of information asymmetry or uncertainty, which discourages potential foreign lenders from purchasing bond or equity and investing in SOC of developing countries.

46) For detailed information on the current level of infrastructure in Cambodia, refer to the preceding chapter in this volume written by Dr. Kang Soo Kim.

sector[47]. In addition, the fragile financial condition of EDC(Electricite Du Cambodge) should be carefully examined. In this context, it would be very beneficial if the government of Cambodia could help EDC to have better access to the financial markets, both domestic and foreign, and relieve the financial burden of EDC from electricity infrastructure investment. At the same time, by attracting PPP investments to the electricity sector, Cambodia could achieve the fast capacity building of the electricity industry and enhance its efficiency through competition and cooperation among EDC and private participants.

Table 5-4 | Private Sector Infrastructure Financing by Sources and Instruments (1994~2004)

(Unit: Million pesos)

	Bond F	Bond D	Loan F	Loan D	Equity F	Equity D	Total
Cambodia	0	0	0.75(100)	0	0	0	0.75
China	1812.2(5.0)	603.9(1.7)	24494.0(67.3)	5336.5(14.7)	4172(11.5)	0	36418.64
Indonesia	1280(4.5)	0	20985.3(74.5)	2523.9(9.0)	3314.4(11.8)	69.5(0.2)	28173.18
Myanmar	0	0	29.8(100)	0	0	0	29.8
Philippines	2027.5(14.1)	0	10661.6(73.9)	34.5(0.2)	1697.5(11.8)	0	14421.03
Vietnam	0	0	2347.7(89.9)	18(0.7)	246(9.4)	0	2611.70

Source : Park, Park and Oh, 2007.

Compared with neighboring countries, Cambodia relied wholly on foreign borrowing (Table 5-4) as a funding source of PPI investments. Such heavy dependence on the loans from abroad indicates that the domestic financial market cannot accommodate the demand for infrastructure financing. Foreign lenders, worrying about uncertainties, are very reluctant to invest in Cambodia without sharing risks with the Cambodian government or local financial institutions. Also, Table 5-5 shows that the volume of infrastructure investment in Cambodia by private sector participation is very small.

According to a projection by IMF (see Table 5-6), the financing gap of infrastructure investment will be persistent and may even increase. Accepting that there exists unfilled demand for infrastructure investment in Cambodia, the current low level of investment seems mainly attributable to the bottleneck in fund supply. Therefore, considering the growing demand for infrastructure investment and the persistent financing gap, attracting private investors and diversifying sources of funding through various supporting measures would be an essential option for Cambodian government. In this context, our paper introduces infrastructure bonds, supporting legal frameworks, and tax and financial incentives, based on Korean experiences.

47 According to ADB (2009), Cambodian government is currently planning to move in this direction with aids from ADB and other development partners. Furthermore, it is notable that Cambodian government focuses not only on expanding domestic power generation capacity but on establishing electricity supply chains, reliable and cheaper, with neighboring countries(Lao PDR, Vietnam and Thailand) and developing decentralized energy distribution channels reaching rural areas.

Table 5-5 | Total Investment in Infrastructure Projects in 9 Asian countries by Private Sector Participation ($ million) - by countries

	Cambodia	China	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Thailand	Vietnam	Total
1990	0	173	116	0	870	0	98	692	0	1,949
1991	0	2,379	11	0	0	0	433	268	0	3,091
1992	13	2,414	252	0	1,794	0	814	1,902	0	7,189
1993	18	3,369	602	0	4,702	0	1,934	2,631	0	13,256
1994	0	3,165	1,954	0	6,730	0	2,218	664	10	14,741
1995	122	1,447	4,977	0	4,111	394	3,222	3,615	256	18,144
1996	8	8,093	7,488	628	4,191	50	3,260	3,749	220	27,687
1997	205	13,220	4,857	0	3,070	325	12,111	2,846	180	36,814
1998	14	4,969	1,541	1	766	0	1,807	933	39	10,070
1999	17	7,247	2,413	7	805	0	888	698	121	12,196
2000	28	8,131	642	5	5,519	0	2,153	1,377	150	18,005
2001	97	1,861	1,458	12	2,868	0	2,738	3,257	241	12,532
2002	40	5,464	1,509	20	506	0	863	1,198	1,800	11,400
2003	17	7,831	1,749	6	4,056	0	1,388	2,079	642	17,768
2004	86	3,707	1,615	34	5,261	0	1,551	1,052	70	13,376
2005	94	8,797	1,445	1,260	2,666	0	768	2,560	0	17,590
2006	250	8,440	4,642	810	1,230	0	1,815	1,149	260	18,596
Total	1,009	90,707	37,271	2,783	49,145	769	38,061	30,670	3,989	254,404

Remarks : data on Brunei and Singapore are not available
Source : World Bank PPI Database.

Table 5-6 | Projected Shortfall for Infrastructure Finance: 2008-2013

	Annual Shortfall (current $ million)						Total Shortfall ($ million)
	2008	2009	2010	2011	2012	2013	2008~2013
Cambodia	520	583	650	721	800	881	4,156
China	206,536	232,138	260,963	291,987	326,681	365,539	1,683,845
Indonesia	25,579	28,095	30,785	33,840	37,195	40,780	196,274
Lao PDR	243	277	314	352	394	441	2,021
Malaysia	10,877	11,643	12,588	13,611	14,716	15,911	79,346
Myanmar	683	656	632	597	531	462	3,560
Philippines	9,083	9,792	10,597	11,479	12,447	13,496	66,892
Singapore	9,707	10,592	11,551	12,579	13,677	14,864	72,971
Thailand	14,279	15,415	16,733	18,089	19,593	21,319	105,427
Vietnam	4,262	4,792	5,435	6,110	6,865	7,659	35,122
Total	281,768	313,982	350,249	389,364	432,898	481,352	2,249,613
Total (excl. China)	75,231	81,844	89,286	97,377	106,217	115,812	565,768

Assumption : Infrastructure investment shortfall=5.24% of projected GDP, where 5.24%=6.2%-0.96% is an estimate
Source : International Monetary Fund IMF (2008), World Economic Outlook Database.

3.2. Priorities in Infrastructure Investment

The Cambodian government, being aware that the fast accumulation of SOC is critical for the future growth of the Cambodian economy, sets various macro goals and critical indicators as in National Strategic Development Plan (NSDP). In detail, to further advance Rural Development, along with Decentralization & Deconcentration, the Cambodian government will focus on building rural infrastructure - roads, markets, drinking water facilities, sanitation facilities, minor irrigation, school and health buildings, etc. Much of these projects will be carried out by devolution of funds through the commune councils. Also priorities will be given to rehabilitation of physical infrastructure, which includes primary and secondary roads, railways, airports, ports, irrigation facilities, telecommunications, electricity generation and distribution networks, etc., with maximum attention being paid to attracting the private sector to undertake the corresponding projects wherever possible.

Table 5-7 | Major Goal in Infrastructure

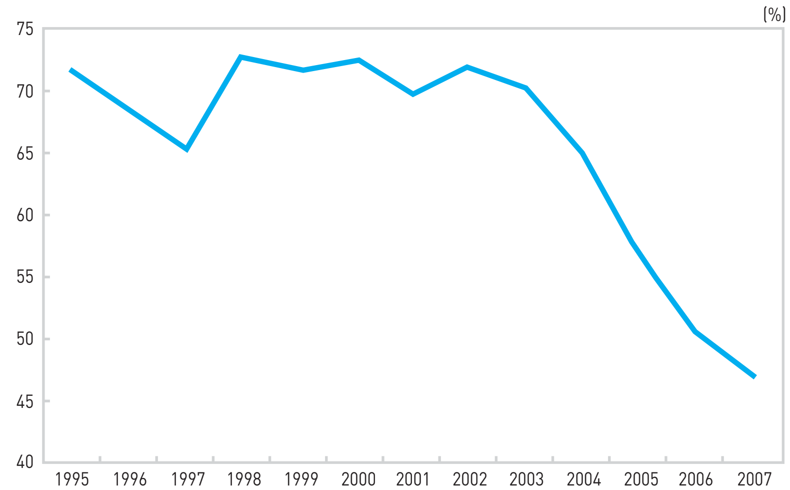
Major Goal in Infrastructure	2005	2010
Length of paved roads (primary & secondary) out of 11,310- kms	2,100	4,100

Source : Enhancing development cooperation effectiveness to implement the NATIONAL STRAGEGIC DEVELOPMENT PLAN 2006-2010, chapter III, CDC.

3.3. Fiscal Consolidation

Since the early 2000s the Cambodian government has maintained the fiscal surplus, due to which external debt stock was reduced from 70% to 45~50% of GNI (See Figure 5-4). Of

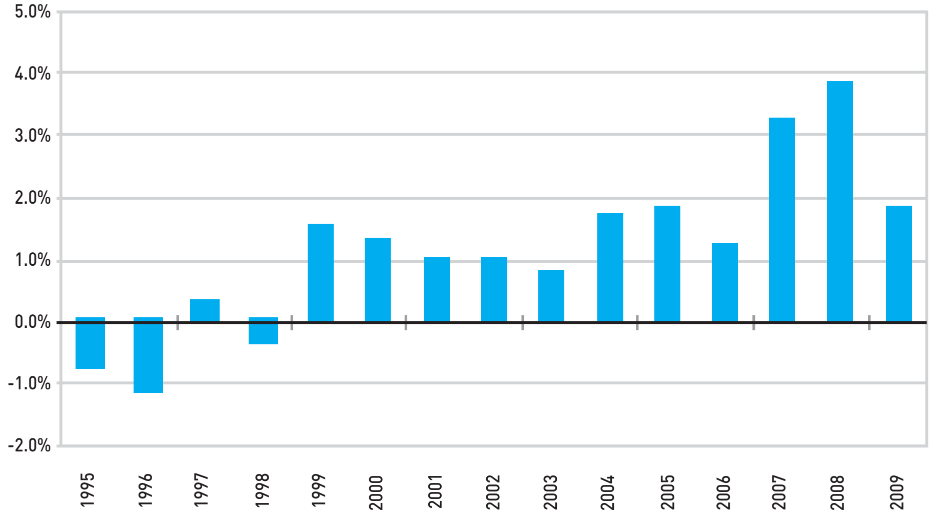
Figure 5-4 | External debt stocks (% of GNI)



Source : WDI 2008, The World Bank.

course, well-maintained fiscal balance is a necessary condition for greater fiscal capacity, which could be eventually directed towards funding infrastructure construction.

Figure 5-5 | **Current Budget Balance (% of GDP)**



Source : WDI 2008, The World Bank.

On the other hand, fiscal soundness may also result from lack of fiscal activities[48]. Likewise, such comparably low level of external debt may imply either that the country has more room to borrow or that foreign borrowers are less inclined to provide loans to the country.

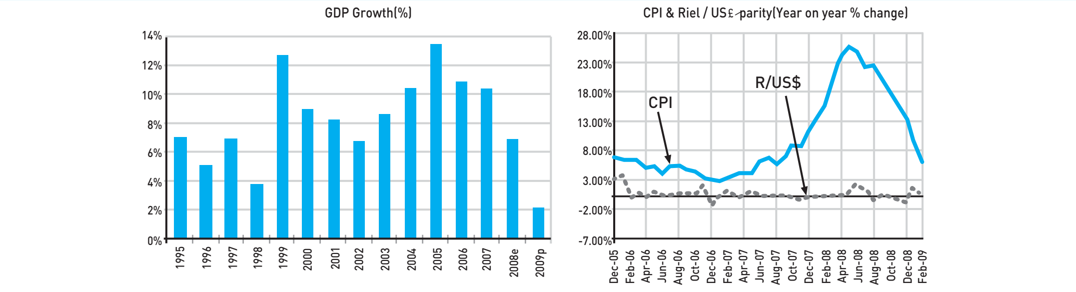
Considering the current situation of Cambodia, both of these conflicting stories are plausible. Foreign borrowing, once obtained, should be allocated to the most efficient sectors. Then, the payback process will be easier and more foreign lenders will provide funds to projects in Cambodia. This would be a new virtuous cycle for the Cambodian economy. On the other hand, tax bases are quite narrow and currently it may not be an option to raise tax rates.

3.4. Macroeconomic Performance

In the last decade, the Cambodian economy grew at an impressively high speed, which was faster than the average of developing countries in Asia (See Table 5-8). The economic turmoil triggered by the 2007 U.S. sub-prime mortgage crisis, however, transmitted the greater impact on Cambodia, which seems to be lagging behind the rest of developing countries in the recovery track.

48) The ratio of government expenditure to GDP is 13.9%(in 2008), which is much lower than those of developed countries(ADB (2009)).

Figure 5-6 | Real GDP growth rate(constant price 1993), Inflation and Exchange Rate



Source : Statistic Bulletin, National Institute of Statistics, Cambodia, July, 2009.

Table 5-8 | Annual GDP Growth Rate (year-on-year %)

	00-07 average	2004	2005	2006	2007	2008	2007[H1]	2009[Q3]	2009[P]	2010[P]
Developing Asia[1]	7.5	7.9	8.1	8.9	9.5	6.1	NA	NA	4.5	6.6
Emerging East Asia[2,3]	7.6	83.0	7.8	8.8	9.7	6.1	2.1	5.0	4.2	6.8
ASEAN,[3]	5.4	6.5	5.7	6.0	6.4	4.2	-1.1	1.2	0.6	4.5
Brunei Darussalam	2.3	0.5	0.4	4.4	0.6	-1.9	NA	NA	-1.2	2.3
Cambodia	9.5	10.3	13.3	10.8	10.2	6.7	NA	NA	-1.5	3.5
Indonesia[4]	5.0	5.0	5.7	5.5	6.3	6.1	4.2	4.2	4.3	5.4
Lao PDR	6.7	7.0	6.8	8.7	7.8	7.2	NA	NA	5.5	5.7
Malaysia[5]	5.6	6.8	5.3	5.8	6.2	4.6	-5.1	-1.2	-2.5	4.5
Myanmar[6]	12.9	13.6	13.6	13.1	11.9	NA	NA	NA	NA	NA
Philippines[7]	5.1	6.4	5.0	5.3	7.1	3.8	0.7	0.8	1.0	3.3
Thailand	5.1	6.3	4.6	5.1	4.9	2.5	-6.0	-2.8	-3.0	3.5
Viet Nam	7.6	7.8	8.5	8.2	8.4	6.2	3.9	5.8	5.0	6.5
NICs[2]	5.0	6.0	4.8	5.7	5.7	1.8	-5.4	-0.1	-1.3	4.2
Hong Kong	5.3	8.5	7.1	7.0	6.4	2.4	-5.7	-2.4	-3.0	3.5
Korea	5.2	4.6	4.0	5.2	5.1	2.2	-3.2	0.9	0.2	4.6
Singapore	6.0	9.3	7.3	8.4	7.8	1.1	-6.4	0.6	-2.0	4.5
Taiwan	4.4	6.2	4.7	5.4	6.0	0.7	-9.9	-1.3	-3.0	3.5
China	10.1	10.1	10.4	11.6	13.0	9.0	7.0	8.9	8.2	8.9
Japan	1.7	2.7	1.9	2.0	2.4	-1.2	-7.4	-5.1	-5.8	1.2
US	2.9	3.6	3.1	2.7	2.1	0.4	-3.6	-2.5	-2.4	2.0
Eurozone	2.1	2.1	1.7	3.0	2.7	0.6	-5.5	-3.9	-4.3	0.8

0. P=ADB forecasts
1. Developing Asia refers to the 44 developing member countries(DMCs) of the Asian Development Bank. 2. Aggregates are weighted according to gross national income levels(atlas method, current $) from the World Bank's World Development Indicators. 3. Excludes Myanmar for all years as weights are unavailable. Quarterly figures exclude Brunei Darussalam, Cambodia, Lao PDR, and Myanmar for which quarterly data is not available. 4. GDP growth rates from 1999-2000 are based on 1993 prices, while growth rates from 2001 onward are based on 2000 prices. 5. Growth rates from 1999-2000 are based on 1987 prices, while growth rates from 2001 onward are based on 2000 prices. 6. For FY April-March. 7. Figures for 2004-2006 are not linked to the GDP figures prior to 2003 due to National Statistics Office revisions of sectoral estimates

Source : ADB, Eurostat website (eurozone), Economic and Social Research Institute (Japan), Bureau of Economic Analysis (US), and CEIC.

Table 5-9 | Main Economic Indicators-I

2000	2001	2002	2003	2004	2005	2006	2007	2008e	2009p	Feb.09	Basic Indicators
14,083	15,633	16,781	18,535	21,438	25,754	29,849	35,042	41,968	45,815		GDP[1] at Current Prices(billion riel)
8.8%	8.1%	6.6%	8.5%	10.3%	13.3%	10.8%	10.2%	6.8%	2.0%		Real GDP Growth(Conatant Price 1993)(%)
2.1%	7.3%	6.1%	7.6%	12.9%	16.4%	16.0%	14.7%	20.2%	6.3%		Real GDP per capita Growth(%)
-0.8%	0.7%	3.7%	0.5%	5.6%	6.7%	2.8%	10.8%	13.5%	7.5%	6.2%	Inflation(% increase, YoY)
-0.8%	-0.9%	-0.1%	1.2%	3.9%	5.8%	4.7%	5.9%	19.7%	4.0%		Inflation(% increase, Year Average)
-3.4%	-2.5%	1.8%	1.5%	6.4%	8.4%	6.5%	10.0%	33.0%	33.0%	8.5%	Inflation, Food Group(% increase, YoY)
-3.1%	2.6%	0.7%	1.8%	4.8%	6.1%	4.6%	6.5%	14.0%	3.3%		GDP Deflator(%)
3,905	3,910	3,934	3,983	4,030	4,127	4,056	4,003	4,043	4,180	4,122	Riel/US$ Exchange Rate(EoP)
601	598	633	659	698	737.7	747.9	758.2	773.6	772.5		Real Effective Exchange Rate
12.7	12.9	13.1	13.3	13.5	13.8	14.2	14.5	14.8	15.1		Population(millions)
											Balance of Payments
23.7%	12.4%	11.7%	15.5%	27.7%	12.4%	26.9%	14.7%	6.8%	-3.8%		Merchandise Export Growth(% per year)
21.9%	7.9%	10.7%	10.4%	27.7%	20.1%	20.9%	18.1%	20.7%	-7.9%		Merchandise Export Growth(% per year)
-11.7%	-8.7%	-8.4%	-9.7%	-8.2%	-9.4%	-7.2%	-8.5%	-16.7%	-12.7%		Current Account Balance, excl. Of-Trf(% GDP)
-3.0%	-1.1%	-1.1%	-2.9%	-2.3%	-4.2%	-1.1%	-3.9%	-12.3%	-8.6%		Current Account Balance, incl. Of-Trf(% GDP)
1.7%	1.1%	1.4%	0.7%	0.6%	1.0%	2.7%	4.9%	4.7%	-1.1%		Overall Balance(% GDP)
11.7%	16.7%	10.5%	-9.9%	46.6%	33.3%	29.6%	14.4%	4.5%			Growth of Visitor Arrivals(% per year)
2.3%	2.5%	2.6%	2.4%	2.7%	2.2%	2.5%	3.2%	2.7%		4.8%	Net FX Reserves(months of imports G&S)
87.7%	83.3%	97.1%	77.1%	75.1%	72.9%	64.8%	57.1%	74.0%	74.0%	17.6%	Net FX Reserves(% of M2)

1 GDP : Projected by MEF
Source : Ministry of Economy and Finance, National Institute of Statistics and National Bank of Cambodia

Inflation, culminated in 2008(a year-on-year estimate of 13.5%, a year average of 19.7%), was projected to be reduced to a single digit figure in 2009(7.5% and 4.0% respectively). However, these figures are still higher than the other countries. Considering that Cambodian economy is heavily dollarized[49], the monetary authority cannot respond to inflationary pressures by changing short-term interest rates.

Another concerning sign can be found in the continuing trend of the current account deficit, which was particularly worsened in 2008. Such continuing imbalance may be sustained in the short run by counterbalancing surplus in capital account. However, the imbalance can not be sustained in the long run.

49) In this regard, ADB(2009) quotes an IMF estimate that the share of US dollar in currency in circulation is about 90% .

Reminding that the economy is heavily dollarized and the value of domestic currency Riel is almost pegged to USD, the capital account surplus can be obtained only by maintaining the domestic interest rate higher than the international one. In this case, high borrowing cost is likely to keep domestic investment and physical capital accumulation at a very low level.

Table 5-10 | Main Economic Indicators-II

2000	2001	2002	2003	2004	2005	2006	2007	2008e	2009p	Feb.09	Money and Finance
13.0%	14.3%	16.3%	17.0%	18.7%	17.9%	21.6%	30.1%	28.3%	33.9%	26.4%	M2/GDP(%)
27.9%	19.6%	26.4%	14.7%	25.2%	9.6%	22.4%	53.9%	-12.4%	-7.6%	11.7%	Real Growth of M2
68.0%	69.8%	69.3%	69.3%	79.0%	72.9%	74.9%	8.8%	78.2%	59.7%	78.0%	Foreign Currency Deposits/M2
18.7%	3.5%	9.3%	24.8%	31.5%	24.4%	24.6%	66.3%	29.5%	36.6%	47.6%	Real Growth of Credit to Private Dector(%)
											Interest Rates
4.2%	3.6%	3.1%	2.1%	2.7%	2.7%	2.7%	3.6%	3.6%	3.6%%	4.8%	Savings:3 month US$ deposit rate
6.2%	5.6%	5.0%	4.8%	4.8%	4.8%	4.8%	5.1%	5.1%	5.1%	4.7%	Savings:3 month US$ deposit rate
17.5%	16.8%	17.9%	17.9%	17.4%	17.4%	17.4%	16.8%	16.8%	16.8%	17.3%	Lending:3 month US$ lending rate
20.4%	20.4%	21.2%	21.2%	21.2%	21.2%	21.2%	19.2%	19.2%	19.2%	20.0%	Lending:3 month US$ lending rate
											Savings and Investment
17.6%	20.1%	21.3%	16.2%	16.3%	17.2%	21.7%	22.6%	10.3%	17.9%		Gross Savings Rate(% of GDP)
20.5%	21.2%	22.4%	19.2%	18.6%	21.4%	22.7%	26.5%	22.6%	22.7%		Gross Investment Rate(% of GDP)
											Other Investment Indicator(s)
											Public Sector*
1.3%	0.4%	0.7%	-0.1%	1.7%	1.8%	1.1%	2.8%	2.6%	3.1%	0.1%	Current Budget Balance(% of GDP)[1,2]
15.3%	15.2%	18.5%	27.4%	32.8%	32.8%	32.8%	18.4%	7.4%	33.4%	13.7%	Priority Sectors / current expenditures[2,3](%)
40.0%	44.0%	47.0%	40.0%	41.2%	42.4%	35.1%	35.9%	38.0%	-55.8%	44.4%	Capital over total expenditures[2](%)
5.9%	9.1%	13.6%	0.3%	21.6%	17.4%	10.8%	36.2%	19.5%	11.9%	15.2%	Current revenue growth(%)
8.5%	8.8%	20.1%	0.7%	-0.7%	13.4%	20.5%	27.3%	25.1%	21.3%	279.5%	Current expenditures growth(%)

1 GDP: Projected by MEF
2 Accumulated from Jan to Feb 2009.
3 Agriculture, Rural Development, Health, Education, Woman Urbanization and Constitution and Labor affaire and Vocational
* provisional Jan to Feb 2009.
Source : Ministry of Economy and Finance and National Bank of Cambodia.

Table 5-10 exhibits the following two notable points. First, there exists substantial discrepancy between saving rates and lending rates. For example, the three month USD lending rate minus(-) the three month USD deposit rate is 12.5%(=17.3-4.8) and the three month Riel lending rate minus(-) the three month Riel deposit rate is 15.3%(=20.0-4.7). Such interest rate differential between lending and deposit implies insufficient competition or the presence of information asymmetry in the Cambodian loan market.

Second, the gross savings rate tends to be lower than the gross investment rate. The difference between them is, of course, filled with foreign borrowing. In addition, the savings rate of Cambodia is lower than other countries[50], which also indicates that capital accumulation would be sluggish without foreign borrowing.

3.5. Crucial Factors to consider for PPP Investments in Cambodia

Where to invest, seems to be not a primary concern at the current stage in Cambodia. Instead, it would be more relevant to discuss who or how to finance infrastructure projects. The first candidate would be the Cambodian government, which has maintained fiscal balance relatively well for the last decade while reducing the external debt to a very low level. However, considering its limited fiscal capacity, raising tax rates is not likely to be a good option. Next, domestic borrowing by issuing government bonds will not be easy either, because the current two digit lending rates indicate a high cost of financing.

Second, it will not be easy to find domestic investors, who will provide funds to infrastructure projects. Several pieces of evidence support this argument: The low gross savings rate implies that domestic financial intermediaries cannot accommodate the whole demand for infrastructure investment in Cambodia (refer to Table 5-10), and the huge interest rate differentials between lending and borrowing, a proxy for risk aversion of domestic investors, implies that domestic investors are not willing to take risks. Furthermore, it is notable that the real GDP growth plus(+) inflation has not exceeded the lending rate in most years, which shows that domestic opportunities for capital investment are not attractive to the domestic investors in Cambodia.

A third candidate would be a foreign lender. Taking in mind that 58% of infrastructure investment in Asia depends on foreign borrowing whereas 21.6% is made by domestic borrowing, foreign borrowing could be a major source of funding infrastructure investment for the Cambodian economy. Then, it remains a question how to attract foreign investors to the SOC market of the Cambodia. Of course there is an easy and straight forward answer to this question. Private lenders, domestic or foreign, are very keen to profitability and accompanying risk. Their investment decision criterion is to check whether the project is likely to provide a higher return at a lower level of risk. Also, in order to assess the risk-return structure, fair evaluation on cash flows from carrying out the project is indispensable. All put into consideration, the best way to attract foreign borrowing is to reduce uncertainties by eliminating institutional complications, raising predictability of the government policies and enhancing

50) In case of Korea, gross savings rate runs around 30% which is much lower than that of China.

market transparency. These measures will not only work for foreign investors but also for domestic investors and will lead to the development of the domestic financial market.

The fourth potential source of funding would be international organizations, such as World Bank and ADB. Though non profit-motivated, these international organizations are also sensitive to their own policy goals, for example, a certain level and/or direction of socio-economic development. Hence, plausible performance measurement and monitoring schemes, matching their goals, should be prepared in order to invite their funding to SOC projects.

Before closing this section, it would be noted that not all the infrastructure projects can find private and/or foreign lenders or investors. Therefore, it seems appropriate to assign different types of financing methods to different infrastructure investment opportunities. For example, a toll way in a rural area may not be profitable, considering traffic volume, which is supposed to pay the toll fee. If this is the case, no private investors would be willing to take the road construction project. Then, the government would choose either to spend public money or to provide a certain level of revenue guarantee to the private investors.

Since electricity facilities and railways can get cash flows from users, these projects may easily attract private investment for Cambodia. Even in these cases, to reconcile with the existing public corporations in charge of these functions can be a challenge.

Summing up, it is evident that PPP is not a cure-all. But it is applicable to many areas of infrastructure building. Therefore the government could save fiscal space and use it for other areas of SOC and fiscal activities by utilizing the PPP framework. This explains why our study is focused on bond financing of PPP projects.

4. Korean Experiences

This section introduces Korean experiences on financing PPI projects through infrastructure bonds, running credit guarantee facilities, and providing tax incentives and revenue guarantee.

Before the Asian Financial Crisis in 1997, private sector participation in infrastructure investment was rare in Korea. The Crisis provided an important impetus for institutional completion of the Korean model for private participation in infrastructure investment. Since then, the Korean system has began to serve as a role model in Asia, with a developed and protective legal and regulatory environment for PPIs. The first country-specific infrastructure fund in East Asia was also developed in Korea[51]. It is also regarded as a benchmark case in the selective use of government guarantees to facilitate the mobilization of private sector credit to

51) Since Korean Infrastructure Fund(KIF) was established in Dec. 1999, 10 infrastructure funds, which are specialized in PPI investments in Korea, have been created and all of them are still active(as of Dec. 2008).

fund infrastructure investment.

4.1. Infrastructure Bond

In order to facilitate PPI (Private Participation in Infrastructure) in Korea, the Promotion of Private Capital into Social Overhead Investment Act (PPI Act) was passed and enforced for the first time in August 1994. The PPI Act and its Enforcement Decree, as the principal components of the legal framework for PPPs, define the "eligible facility types, implementation schemes and process, conflict resolution/termination mechanism, and the roles of the public and private parties."

The PPI Act was supplemented by the creation of institutional arrangements to facilitate infrastructure financing. An organization entitled the Public and Private Infrastructure Investment Management Centre (PIMAC) of the Korea Development Institute (KDI)[52)] was created. PIMAC forms the government's principal administrative entity for interface with the private sector on infrastructure investment, while KDI is a policy advice organization that reports to the Office of the President of Korea. PIMAC reviews solicited and unsolicited project proposals, helps negotiate concession contracts, and mediates disputes.

Private participants of PPI projects can raise required financial resources by issuing bonds. Depending on whether they are based on this act, Korean SOC bonds are broadly classified into two categories: PPI bond VS. non-PPI bonds[53)]. A non PPI bond is the SOC bond to be issued for financing the infrastructure project not based on the PPI Act (Private Participation in Infrastructure Act). Both types of bonds are again divided into two sub-groups: Straight type and ABS types[54)].

Non PPI bonds were issued several times to finance the construction and/or operation & management cost and to refinance the project expense after construction completion and it is not much different from a usual corporate bond. On the other hand, PPI bonds are defined, regulated and favored by the PPI act. For example, the separate tax rate shall be applied to the interest revenue from straight PPI bonds with 15 years of maturity or more (Article 29 of the Restriction of Special Taxation Act).

Infrastructure bond's gaining popularity is attributable to the rapidly growing Asian bond market after the 1997 Crisis as well as active PPP projects since early 1990s. Korea introduced infrastructure bonds in 1999. Since then, Korea tried variations of infrastructure bonds, some of

52) PIMAC of KDI was merged from PICKO(Private Infrastructure Investment Centre of Korea) of KRIHS and PIMA of KDI since 2005
53) Non-PPI bonds are not much different from usual corporate bonds in that they do not provide tax benefits to bond holders.
54) The straight type PPI bond is the SOC bond to be issued by the project company in accordance with the PPI act for covering the project cost. The ABS type PPI bond is the ABS bond based on the loan receivables to the project company for a specific PPI project. Accordingly, creditors transfer the loan receivables in the project, for securitization, to a special purpose company(SPC) established for ABS issuance and the SPC recovers actual receivables to reimburse the principal of the ABS bond.

which were successful and others which were not. Based on the Korean experience, good or bad, we hope the Cambodian government will introduce infrastructure bonds without incurring much implementation costs[55].

Table 5-11 | Cases of SOC Bond Financing in Korea

Project	Type	Issuing Date	Amount(KRW 100 mil)	Credit Rating
Inchon Airport Combined Heat & Power Plant	PPI	May 1999	1,000	AA
LG Power Co., Ltd.	Non PPI	Aug 2000	4,040	AA
Chonan-Nonsan Expressway	PPI(ABS)	Feb 2001	7,300	AAA
LG Energy Co., Ltd.	Non PPI	Oct 2001	1,600	AA
Daegu-Busan Expressway	PPI	June 2002	5,000	AA-AAA
Daejon Subway #1 Operation System	Non PPI (ABS)	May 2005	400	AAA
Total			19,340	

So far there have been six cases of SOC bond issuance reported and most of them were done in the early 2000s. Early popularity of SOC bonds was caused by difficulty in getting syndicated loans right after the 1997 Asian financial crisis as well as by preferential tax treatment.

Recently, however, there were very few cases of SOC bond financing. In this regard, the following reasons are suspected. First, it is because profitable SOC investment opportunities have been almost exhausted in Korea. Second, complicated conditions and procedures required for SOC bond issuance discourage potential private investors. For example, credit rating from outside agencies and approval from the Financial Supervisory Service are required while they are not necessary for conventional loans. Third, it is difficult, as always, to provide demand forecasts of PPI projects, the precision of which is crucial for profitability.

In response, the Korean government has already taken or considers the following measures in order to encourage infrastructure bond financing. First, it has strengthened the feasibility test for PPI. The feasibility test evaluates the ex-ante profitability of a certain project by Cost/Benefit (CB) analysis. Based on the results, it is determined whether the project is pursued further. Thus, intensified preliminary screening by strategic and financial investors as well as reliable demand forecast performed by the third party professionals would contribute to facilitating SOC bond financing.

Second, different financing tools need to be used for different qualities of the underlying SOC project. Syndicated lenders usually require the interest rate higher than that of SOC bonds,

55) One of the bad examples is excessive minimum revenue guarantee, which will be discussed later.

as was confirmed in financing packages for the Daegu-Busan Expressway Project. This means that syndicated loans are better to distribute during the construction period when the accompanying risk is relatively high and SOC bonds can replace it during the operation period when the risk is subdued. Diverse financing tools such as preferred stocks, ABS, subordinated loans as well as SOC bond have been used for Korean PPI financing. Relevant tools for financing should be selected so that they can match the risk structure of the target project.

Third, tax incentives for SOC bond investment need to be strengthened. For example, Article 29 of the Restriction of Special Taxation Act allows a separate tax rate to the interest revenue from SOC bonds with 15 years of maturity or more. This clause is intended to broaden the investor base in the SOC bond market. Korean people who earn over KRW 40 million as interest and dividend should report this income to the National Tax Service and the Service applies progressive taxation by adding it to their other income. Interest income accrued from SOC bond may be exempt from this taxation. This exemption, however, is only applied to SOC bonds with over 15 year of maturity which are scarce in the market. To encourage frequent issuance of SOC bond, this exemption clause could be extended to other SOC bonds with a maturity period shorter than 15 years.

Fourth, it is important to develop or activate the secondary market for SOC bonds. Absence of a well-functioning secondary market is one of the factors that made the potential issuers and buyers worry about the lack of liquidity and hesitate to invest in the SOC project and purchase SOC bonds. To facilitate secondary transaction of the bond, reduction of transaction costs including taxes and fees is needed.

In addition to these four points, the Korean government is also aware of the need to redesign the Minimum Revenue Guarantee program (MRG). MRG was introduced as an incentive scheme to facilitate PPI in Korea. The PPI Act, which was amended in 1999, introduced risk sharing and the minimum revenue guarantee (MRG) mechanism and again in 2005 allowed the Build-Transfer-Lease (BTL) scheme, diversification of facility types, and expansion of investor profile. Among these new institutional features, MRG is the most critical in that it incurs fiscal costs to alleviate the risk burden of the private participants. On the other hand, the level and the working conditions of MRG should be contracted before undertaking a SOC project. Thus, depending on the precision of the pre-feasibility test, MRG would bring about huge fiscal burden.

Using Korean examples, table 5-12 shows how MRG, based on the imprecise demand forecasts, could add fiscal burden. For example, in 2005 Incheon International Airport Expressway accommodated only half of the traffic volume which was previously forecasted. Accordingly, the Korean government had to support the private participants with KRW 481.7 billion. In the case of Woomyunsan Tunnel, the actual traffic volume was only a quarter of the forecast (2004).

Table 5-12 | Cases of SOC Bond Financing in Korea

(Unit: %, KRW billion)

	Traffic Volume		MRG Subsidy	
	Year	Actual Volume	Year	Amount
Incheon International Airport Expressway	2005	52.8%	2001~2005	481.7
Cheonan-Nonsan Expressway	2004	52.2%	2003~2005	118.0
Gwangju 2nd Beltway, Section 1	2004	62.2%	2001~2004	24.7
Woomyunsan Tunnel	2004	26.8%	2004	10.6

Source : Korea Fixed Income Research Institute.

It is true that MRG is an effective measure to attract private investors to SOC projects. However, it should not be excessive. Otherwise, the private partners will take excessive risks or undertake inefficient projects, which in turn will incur fiscal costs. Therefore, to prevent MRG from being excessive, the government should carry out a precise feasibility test on the project and make a MRG agreement with the private partners following the test results.

4.2. Infrastructure Fund

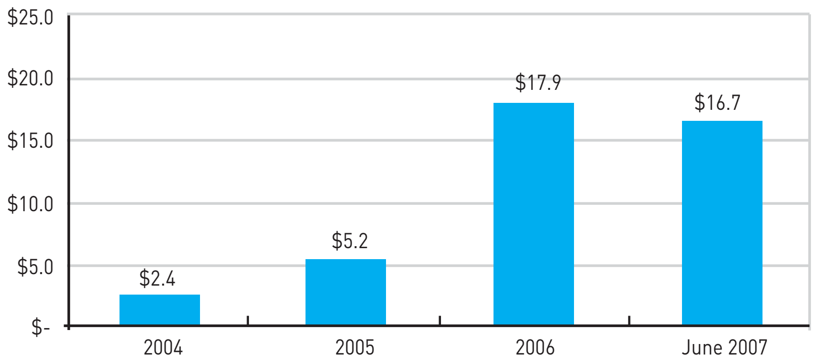
As a concept, "infrastructure funds" draw on the idea that infrastructure assets can be pooled into fund management entities, with participation windows("units") offered to the investing public through securitization. Accordingly, like all other investment funds, infrastructure funds can technically be listed and traded publicly in the financial market(for example the Singapore listed Macquarie International Infrastructure Fund, Ltd), although typically they are unlisted(for example Darby's Korea Emerging Infrastructure Fund).

Infrastructure funds are important especially in the financing of ASEAN's future infrastructure requirements for two significant reasons. First, investing in mutual funds, in this case, in infrastructure funds, broadens ordinary savers' opportunities, and this makes available retail savings for investment in infrastructure. Second, such funds also provide appropriate investment vehicles to pension funds and insurance companies and thus broaden the institutional investors' opportunity set. In addition, the scope of infrastructure funds could be extended further to financing both debt and equity of Greenfield infrastructure entities.

In reality it is a phenomenon, both regional and global that infrastructure funds are growing in number as well as in size. Among 24 funds created from 2005 to 2006, seven funds target Asia. Furthermore, according to Figure 5-7, Annual fund raising got tripled between 2005 and 2006 from 5.2 bil. USD to 18 bil. USD.

Figure 5-7 | Global Infrastructure Fundraising

(Unit: USD billions)



Source : Park, Park and Oh, 2007.

Focusing on the case of Korea, there are five active BTO infrastructure funds with a total contract amount of KRW 4,671 billion and six BTL funds worth KRW 1,768 billion. Based on the PPI Act, the following regulations and incentives are applied to the infrastructure funds in Korea :

First, limit on investment amount is lifted (10% of the same company stocks), while debt financing is allowed for the fund.

Second, the required minimum fund size is KRW 10 billion with the minimum management amount of KRW 5 billion.

Third, to secure return on investment, infrastructure funds are obliged to be listed on the Korean Stock Exchange.

Fourth, exception is allowed on the requirement of minimum holdings of subsidiaries (30% for the listed and 50% for the unlisted).

Korea has been the Asian pioneer in establishing infrastructure funds. For example, the Macquarie Korea Infrastructure Fund, established in 2002, is engaged in the investment of infrastructure assets in Korea. Listed on the Seoul Stock Exchange, it invests in concession companies that construct or operate infrastructure assets that are constructed under the Private Participation in Infrastructure Act (PPI Act), such as expressways, bridges and tunnels in Korea. The Macquarie fund invests in these concession companies through equity, debt and hybrid instruments. In 2006 the fund had in its investment portfolio, nine operating assets and six assets under construction.

Another infrastructure fund in Korea is KB Asset Management, which is a joint venture with

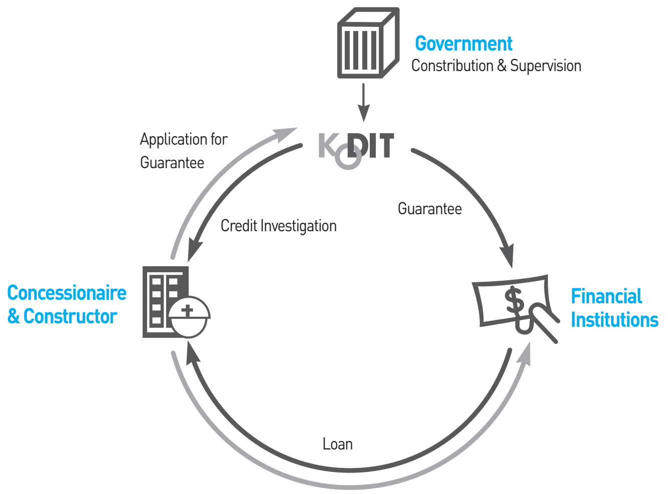
ING group and Korea Kookmin Bank Consortium of 17 domestic pension funds and insurance company investors. The fund is valued at USD 1.2 billion.

4.3. Infrastructure Guarantee Funds

The infrastructure guarantee program through Korea Infrastructure Credit Guarantee Fund(KICGF) proved to be important in helping overcome private sector risk aversion to infrastructure investment particularly so after the Asian Financial Crisis.

The Korean government established KICGF[56] in August 1994 under the PPI Act to mitigate private sector risks, and to enhance the timely payment of debt service by providing credit guarantees to infrastructure developers[57]. The mission of KICGF is to guarantee the credit of concessionaires, who intend to obtain project financing from financial institutions for private investment projects. The Ministry of Planning and Budget report for 2007 states that since December 2005 the KICGF has approved credit guarantees for 65 projects such as roads, airports, bridges, terminals, harbor projects, etc., and its guarantee approval balance has reached approximately 2.5 billion USD. The selective use of guarantees extended to support project revenue and those to provide credit support to infrastructure investment companies are possibly the most important policy lessons to be learnt from Korea. While these have been very successful, the government has also become more selective in extending such guarantees as the PPI process has matured.

Figure 5-8 | Infrastructure Guarantee Funds



Source : Korea Credit Guarantee Fund (www.kodit.co.kr)

56) http://eng.kodit.co.kr/
57) Initially, KICGF was operated by three institutions: Korea Development Bank, Korea Technology Credit Guarantee Fund, and Korea Credit Guarantee Fund(KODIT). Later, in Jan 1999, KODIT took over the funds of the other two institutions and became the sole operator of KICGF.

The current guarantee mechanism provides important two-way protection. It protects the private financial institution which provides the facility to the concessionaire, while ultimate receipt of the minimum revenue guarantee payment in many ways protects the KICGF itself. Guarantee fee is assigned in two steps: annual 0.3% as a standard fee and annual 0.2-1.3% as a differential fee. The next Figure shows a transaction flow of Korean IGF.

Table 5-13 | Guarantee Contents

Product	Guarantee Contents
Guarantee for Facility Loans	Guarantee for the construction loans to the concessionaires of the PPI projects
Guarantee for Bridge Loans	Guarantee for insufficiency of operating capital due to temporary delay of government financial support
Guarantee for Refinancing	Guarantee for refinancing from the existing high interest loans to the new low interest loans or infrastructure bonds
Guarantee for Operating Capital	Guarantee for insufficiency of operating capital due to the policy change such as the reduction of minimum revenue guarantee
Guarantee for Infrastructure Bonds	Guarantee for infrastructure bonds issued by the concessionaires of the PPI projects

Source : Korea Credit Guarantee Fund (www.kodit.co.kr)

There are five guarantee products currently provided by KICGF and the total cumulative guarantee worth of KRW 4.7 trillion has been provided to 79 PPI projects. Most of the credit guarantee is concentrated in road construction and seaport building. These projects are less uncertain in terms of the future cash flows compared with education facilities or environmental projects. Thus, they could get more attention from potential private investors.

Figure 5-9 | KCGF Guarantee Performance by the Project Type

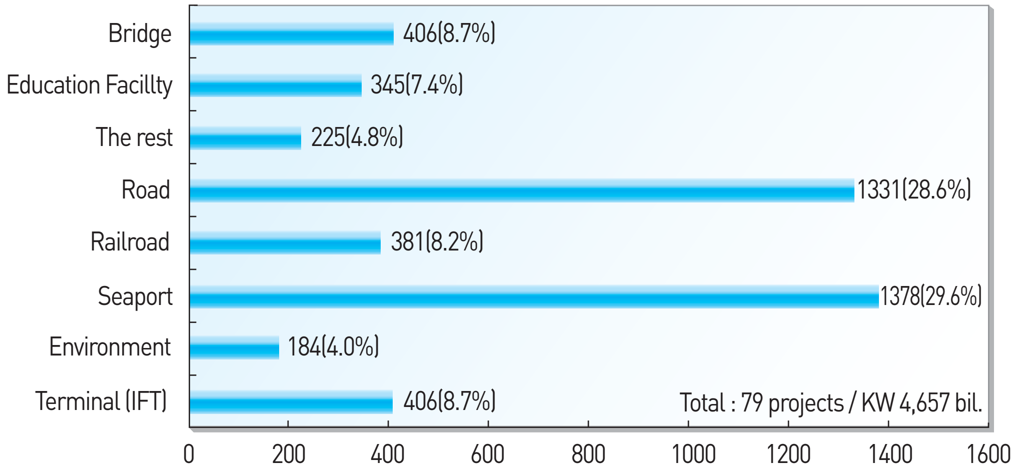


Table 5-14 | KCGF Guarantee Performance

	Guaranteed Balance Approved	Guarantee Balance
1995	270	250
1996	370	348
1997	570	507
1998	830	632
1999	1,718	1,240
2000	2,929	1,785
2001	5,368	1,634
2002	6,744	2,176
2003	9,882	2,281
2004	17,662	2,329
2005 (estimated)	25,341	364.7

4.4. Other Measures for Encouraging Infrastructure Investment

The Korean government provides various types of financial support and tax incentives in order to attract and secure private sector participation in financing infrastructure projects. To name a few, the following are most notable. First, construction cost subsidies are given when considered necessary, and a certain level of demand is supported by the provision of minimum revenue guarantee. These demand ("off-take") guarantees function to minimize project revenue risk for private investors, and may be for as much as 65-75% of projected operational revenue for selected projects for specified periods.

Second, there are preferential corporation tax arrangements applied to selected PPI projects in various forms, for example, the application of a 0% Value-added Tax on PPI facilities and reductions in acquisition tax, registration tax and local taxation.

Third, Government incentives further include supporting the acquisition of land, security of buyout rights, and explicit compensation in the event of the termination of project-related contracts (Ministry of Planning and Budget, Republic of Korea, 2007).

4.5. Applicability of Korean Infrastructure Bond Framework to Other Neighboring Countries

Development of the PPI market is a prerequisite to that of the infrastructure bond market. To activate their PPI market, governments are to develop overall feasibility of the PPI market and may seek an alternative of facilitating syndicated loan financing as well as providing tax benefits prior to infrastructure funding. In addition, to facilitate infrastructure bond transaction and financing in Asian countries, the following is needed:

(1) Infrastructure fund

The presence of infrastructure fund enhances the liquidity of infrastructure bonds, which in turn loosens the bottleneck of fund supply in SOC investment. Furthermore, the funds themselves are profitable investment vehicles for investors both institutional and individual.

(2) Credit guarantee fund

The infrastructure guarantee program through the KICGF proved to be important in helping to overcome private sector risk aversion to infrastructure investment generally, and particularly so after the Asian Financial Crisis. In a country with less developed financial markets, information asymmetry may prevail and lead to market failure.

(3) Credit ratings and investor protection

Bond-rating systems have also become more important with the increased issuance of infrastructure bonds, but also with the issuance of non-guaranteed bonds. In August 1998, the Korea Investors Service (KIS) and Moody's Investors Service joint ventured to produce the first credit rating system in international standards in Korea. This was important for the acceptance of infrastructure bonds by institutional investors.

(4) Legal and institutional arrangements

The planning of legal and institutional arrangements governing infrastructure development and investment in Korea forms an important example for developing countries in Asia. The comprehensiveness of the system also provides an important international example of integrated thinking about the economics of financing and financial markets consideration of infrastructure.

PPI bond financing takes much less fiscal cost than the case of direct government funding. However, it is not completely free from fiscal concern. For example, a credit guarantee fund should start with a certain amount of seed money, which would be paid in by the government. Also, most PPI projects rely (at least partly) on government subsidies (see the case of Korea in Table 5-15) and sometimes the reliance on fiscal resource may be extended to the operation period in a form of MRG. Hence, the efforts to reduce the fiscal burden of PPI projects should be searched for.

A most basic solution to this fiscal cost issue would be to refine the methodologies of the project feasibility test and the demand forecast. Unless they are properly done, the results from the feasibility test and the demand forecast will not be trusted and potential private participants will request higher levels of revenue guarantee, subsidies or preferential tax treatment.

Table 5-15 | Expected Private Sector Participation in Infrastructure Investment 2002-2011

(bil. USD)

Infrastructure Asset Class	No. of Projects under Consideration	Total Project Cost (USDbn)	% to be Funded by Government Subsidies	% to be Funded by Private Investment
Road	18	15.5	29.7	70.3
Rail	23	10.2	39.2	60.8
Port	29	5.3	39.6	60.4
Environmental Facility	80	3.0	43.3	56.7
Other	20	15.4	4.5	95.5
Total	179	48.4	25.6	74.4

Source : Fitch(2006) quoted from PIMAC

5. Policy Recommendations

In principle, any kind of financing can be done by either equity or bond. In reality, however, there exist a variety of other ways between the two. Each financing method differs by magnitude and the direction of risk-sharing between the parties involved. Hence, depending on the current position and risk-exposure, they will determine a different combination of equity and bond for financing.

Likewise, country specific factors may prescribe a different way of financing a public project for each country. Accordingly, the Cambodian economy, in terms of various measures, such as macro-performance, fiscal soundness, credibility of the capital budgeting system, and the level of financial market development, needs to be examined for this occasion.

From these standpoints, the economic growth Cambodia achieved in the last two decades is remarkable. However, depending on the SOC accumulation, however, speed of the future growth may vary. Thus, how to finance infrastructure investment will be a key to sustaining the future growth of the Cambodian economy. Also, considering the unfledged domestic financial market and the limited fiscal space of Cambodia, foreign investment seems to be a sole option to raise funds for SOC investment, at least for now.

Following this line of logic, we first recommend PPI investment through infrastructure bonds. According to Korean experiences, it is supported that bond financed PPI projects, backed by credit guarantee facilities, various tax incentives and the minimum revenue guarantee schemes, have contributed to substantial accumulation of SOCs in Korea after the 1997 Asian financial crisis, while minimizing fiscal burden.

Second, a reasonable capital budgeting system, including well-established feasibility evaluation methodologies, should be introduced. By improving transparency, it will reduce investors' uncertainty and invite more funds to the PPI finance market. Considering that Cambodia is substantially constrained in obtaining required funding for infrastructure investment domestically, reducing risk factors in infrastructure investment from the standpoint of foreign investors are critical. In the same context, enhanced market transparency through a reliable credit rating system will also alleviate risk aversion of private partners in PPP projects as well as infrastructure bond holders.

Third, appropriate tax incentives and Minimum Revenue Guarantee (MRG) should be provided to encourage PPI investment and infrastructure bond financing. However, so as not to be excessive, all these incentives should be examined thoroughly. The recent experience of Korea regarding MRG confirms how imprecise demand forecasting not only adds fiscal burden but also distorts the incentives of the private partners over time.

Fourth, a credit guarantee program for infrastructure investment should be introduced, remembering how crucial the role of KICGF was in expanding the infrastructure bond market. Fees and the level of guarantee should be well balanced for the sustainability of the credit guarantee fund itself. On the other hand, funding credit guarantee programs may come from various sources. For example, regional or international organizations, such as ADB could form a partnership with Cambodia in establishing the credit guarantee fund.

Fifth, the following points emphasized by the Indonesian government would also be helpful in attracting more PPI projects:

(1) Liberalizing and lowering the entry barrier to the infrastructure market
(2) Eliminating legal and institutional uncertainties
(3) Establishing the principle of distributing fees and risks on a fair ground
(4) Efficient mechanism of conflict resolution among the involved parties

Before wrapping-up, we also would like to restate that not all infrastructure investment opportunities can attract private partners[58)]. On the other hand, that doesn't mean that those projects are less important for the Cambodian economy. Thus, it would be our sixth recommendation that bond financing should not be treated as a panacea. Other financing methods than PPI or infrastructure bonds (for example, syndicated loans) could also be designed for different occasions.

58) Depending on its characteristics, each PPP project may require a different financing scheme. Typically, each PPP project differs by uncertainty and duration of cash flow, and different cash flows may require different treatment especially in an incomplete financial market.

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