



CDRI - Cambodia's leading
independent development policy
research institute

SECTORAL COMPOSITION OF CHINA'S ECONOMIC GROWTH, POVERTY REDUCTION AND INEQUALITY: Development and Policy Implications for Cambodia



ROTH Vathana

Working Paper Series No. 68

March 2012

A CDRI Publication

**SECTORAL COMPOSITION OF CHINA'S
ECONOMIC GROWTH, POVERTY
REDUCTION AND INEQUALITY:
Development and Policy
Implications for Cambodia**

CDRI Working Paper Series No. 68

ROTH Vathana



CDRI

Cambodia's leading independent development policy research institute

Phnom Penh, March 2012

© 2012 CDRI - Cambodia's leading independent development policy research institute

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the written permission of CDRI.

ISBN-10: 99950-52-64-5

**Sectoral Composition of China's Economic Growth, Poverty Reduction and Inequality:
*Development and Policy Implications for Cambodia***

CDRI Working Paper Series No. 68

ROTH Vathana

Responsibility for ideas, facts and opinions presented in this research paper rests solely with the authors. Their opinions and interpretations do not necessarily reflect the views of the Cambodia Development Resource Institute.

CDRI

📍 56, Street 315, Tuol Kork
✉ PO Box 622, Phnom Penh, Cambodia
☎ (+855-23) 881-384/881-701/881-916/883-603
📠 (+855-23) 880-734
E-mail: cdri@cdri.org.kh
Website: <http://www.cdri.org.kh>

Layout and cover design: OUM Chantha

Printed and bound in Cambodia by Angkor Offset, Phnom Penh

Table of Contents

Acknowledgements	v
Abbreviations.....	vi
Executive Summary	vii
1. Introduction	1
2. Poverty Reduction in Cambodia	3
2.1. Sectoral Growth and Poverty Incidence	3
2.2. Government Policies on Poverty Reduction	5
2.3. Government-led Poverty Reduction Strategy and Initiatives.....	6
3. Learning from China on Poverty Reduction and Inclusive Growth	9
3.1. Overview	9
3.2. Economic Growth and Poverty Alleviation	10
3.2.1 Trade Liberalisation	10
3.2.2 Industrialisation	11
<i>Industrial Diversification</i>	14
<i>Industrial Competitiveness</i>	15
<i>Absorption Capacity</i>	17
3.3.3 Agriculture and Rural Development	19
3.3.4 The Role of State	22
3.3. Government-led Poverty Reduction in China	24
3.3.1 Poverty Reduction Policies and Programmes.....	24
3.3.2 Poverty Reduction Institutions	25
3.4. Lessons: Poverty Reduction Strategy.....	27
4. Differences and Constraints on Model Replication	29
5. Role of China and other Emerging Middle Income Countries in Inclusive Growth in Cambodia	31
6. Conclusion and Policy Implications	35
References.....	37
CDRI Working Paper Series.....	42

List of Figures

Figure 1: Sectoral Share of GDP in Cambodia, 1993-2009.....	3
Figure 2: Employment Share by Sector, Cambodia 1993-2008	4
Figure 3: Per Capita Disposable Income of Urban and Rural Households in China.....	9
Figure 4: Sectoral Share of GDP in China, 1993-2009	12
Figure 5: Growth of Output in China and Cambodia, annual percent change.....	15
Figure 6: Employment Share by Sector in China and Cambodia 1993-2008.....	18
Figure 7: Contribution of the Three Strata of Industry to GDP Growth in China	20
Figure 8: Employment and Output Growth in Agriculture.....	21
Figure 9: Governance Indicators in China and Cambodia, Percentile Rank	23
Figure 10: Cambodia's Government Expenditure by Function.....	24

List of Tables

Table 1: Current Government Social Protection Interventions.....	7
Table 2: Total Value of Imports and Exports in China.....	12
Table 3: Main Indicators of Industrial Enterprises in China.....	13
Table 4: Main Indicators by Industrial Sectors in China, 2009	14
Table 5: Doing Business in Selected Asian Countries, 2010.....	16
Table 6: Investment Climate and Openness Indicators of Selected Countries	17
Table 7: Crop Yields, Technology Usage and Infrastructure in Cambodia and the Region ...	22
Table 8: Development-oriented Poverty Programmes in Rural China	26
Table 9: Science and Technology	30
Table 10: Development Partner Disbursements	31
Table 11: China's Disbursements by Sector, 2005-10.....	32
Table 12: Top 15 Investors in Cambodia, 2000-April 2011	33
Table 13: Chinese Investment by Sub-Sector, 2000-April 2011	33

ACKNOWLEDGEMENTS

The author is indebted to a number of organisations and people for their valuable contribution and support.

The paper would not have been possible without financial and technical support from the Asian Development Bank through its Poverty Network Programme. I would also like to express my thanks to the American Friends Service Committee (AFSC) who supported two Fellows (Dr Tong Kimsun and I) to conduct a short field research in Beijing, China. The trip was an opportunity for us to see the reality of Chinese development, growing modernisation, and some combined determinants that make China largely successful in its poverty reduction efforts. Information gathered from meetings and interviews with partners and colleagues has been utilised to improve the content of the paper. With this, I would like to thank the many Chinese researchers, professors and independent observers whose names are not mentioned here for their time and inputs.

I would like to gratefully acknowledge the critique and suggestions from reviewers, Dr Armin Bauer, Dr Rebecca F. Catalla and Susan Watkins. My special thanks go to Mr Jason G. Tower and Miss Li Shuqin for their support during our stay in China. I am also grateful to Mr Larry Strange, CDRI Executive Director, Mr Ung Sim Lee, CDRI Operation Director, Dr Tong Kimsun, CDRI Programme Coordinator of Economy, Trade and Regional Cooperation Unit and Mr Sen Sina, CDRI Senior Administrator for their support and interest.

Lastly, my thanks extend to the ETRC team for their comments and knowledge sharing which enriched the content of the paper.

ABBREVIATIONS

AFTA	ASEAN Free Trade Area
CARD	Council for Agriculture and Rural Development
CMDG	Cambodia Millennium Development Goals
MIC	Medium Income Country
NDRC	National Development and Reform Commission
NSDP	National Strategic Development Plan
SEDP	Social-Economic Development Plan
SEZ	Special Economic Zone
SME	Small and Medium Enterprise

EXECUTIVE SUMMARY

Although country contextual differences and pre-conditions must be carefully considered when attempting to replicate economic growth and poverty reduction models, Cambodia could consider experiences of some Asian countries like China, India, South Korea, Thailand and Vietnam to further improve its poverty reduction strategies and implementation. Cambodia could also utilise foreign assistance and international cooperation by redirecting resources to support activities which have the highest possible effects on poverty alleviation.

In the case of China's development experience, Cambodia can learn from its dual focus on poverty reduction: committed growth-oriented poverty reduction policies by the government with programmes that address mechanisms to ensure income redistribution and pro-poor inclusive economic growth (e.g. through geographical targeting). China's transformation from planned to socialist free market economy, and probably to free market when it enters its next cycle of reform, has provided economic leverage for the country's development taking advantages of increased productivity, trade liberalisation, job creation, foreign direct investment and private sector development (see, for example, Perkins 1988; Harrold 1992; Qian & Wu 2000; Lin 1994; Wang & Yao 2003). The speed of China's reforms has been gradual and experimental, learning through trial and error before initiatives were scaled-up (Woo 1999). China's reform started with agricultural development through improved essential hard and soft infrastructure for rural enterprises and shifted to labour-intensive light manufacturing and services. Exports and trade liberalisation have also been the main focus in China's development agenda (IPRCC 2010).

On the economic front, Cambodia can draw lessons in the areas of trade liberalisation; industrialisation focused on diversification, business competitiveness and urban-rural linkages; agriculture and rural development; and the role of the state in directing and coordinating the development agenda. In terms of sectoral composition of economic growth and poverty reduction and among the four pillars of the economy, garments, tourism, construction and agriculture, agricultural development remains crucial to poverty alleviation efforts as about 80 percent of the population lives in rural areas and relies mainly on agriculture-related occupations. Despite low value-added to GDP, agriculture continues to play a significant role in the overall economy in terms of job creation and income source for the majority of rural households. Enhancement of agricultural and food exports can be beneficial to overall macro-economic growth and help reduce income inequality (Kobayashi *et al.* 2008; Ravallion & Chen 2007; Ravallion 2009; Dethier & Effenberger 2011). However, this sector has faced serious constraints and problems: low productivity, insufficient irrigation system, poor rural infrastructure, lack of research and development, difficult access to finance and limited access to market information, especially by smallholder farmers. Thus, in the short and medium terms, removing these constraints for a more sustainable, productive, and pro-poor growth oriented rural development should be the number one priority for the Cambodian government, for it will not only help Cambodia diversify its economy but also contribute to reduced poverty and narrowed inequality.

On the poverty reduction front, the Chinese government has led its poverty reduction campaign by channelling funds through government-led institutions at all levels – provincial, district, and county – to help households that are economically poor through development-oriented programmes such as cash-for-work, micro-credit, training, and science and technology demonstration, and the extremely poor through direct relief and cash (see, for example, Wu & Cheng 2010). Specific poverty reduction schemes have been piloted in targeted communities to ensure that resources are spent wisely and have the most bearing on poor households.

Cambodia can learn two lessons in particular from the Chinese experience on poverty reduction:

- Cambodia should strengthen its poverty reduction agency – currently the Council for Agriculture and Rural Development (CARD) is the inter-ministry coordinator on poverty reduction programmes – and allocate more resources for rural development where the majority of poor households are. CARD could be made a more specialised national poverty reduction agency and professional capacity development of key staff should be invested in rather than largely relying on external consultants;
- More resources should be allocated to building rural physical infrastructure (roads, bridges, land improvement and irrigation) to allow poor households greater and easier access to markets for their income-generating activities. Cash-for-work, where a certain amount of cash is given to poor households in exchange for their labour in infrastructure building, could be further explored. Soft assistance such as training and demonstration on science and technology and production should also be complemented.

Implementation of the proposed programmes would not be without difficulties and constraints given the economic endowments and development context of both countries. China has transformed itself from one of the world's poorest countries to the world's second largest economy. This indicates China's greater ability to allocate funds for different development initiatives. With a strong and committed administrative system, China is also able to quickly mobilise poverty reduction funds and relief to address the needs of the poor and vulnerable and help them escape the poverty trap (Wu & Cheng 2010).

By contrast, even with rapid economic growth over the last decade, growth in Cambodia has been uneven: poverty rate decreased yet remained high, and inequality increased. This is largely because of lack of resources due partly to corruption and insufficient revenue collection mechanism, weak institutional arrangements and governance, limited capacity of the key poverty reduction agency, heavy political interference in economic matters and aid dependence in which certain donors' agenda and conditions need to be fulfilled (see, for example, Guimbert 2010). The border conflict with Thailand has further undermined resource allocation for economic and social reconstruction efforts as a substantial amount of money is expected to fund the defence budget. If prolonged, the conflict could also jeopardise the livelihoods of thousands of relocated households who live in or near the conflict zones.

Moving forward, Cambodia's economic prospects in the short and medium term remain healthy with a projected growth of about 6.7 percent per annum (ADB 2011; IMF 2011). This will translate into, at least by the trickle-down effect, higher income for average Cambodians and gradual ascendance up the development ladder for Cambodia, soon to join the medium income countries (MICs). Nonetheless, achieving MIC status while leaving hundreds of thousands of people in poverty and widened inequality would likely be a hollow victory as these economic and social disparities make shaky foundations for long-term and sustainable growth. Thus, there is a need for the government together with development partners to ensure that poverty reduction programmes are continuously integrated into the broad-based development agenda so as to make the growth process inclusive.

INTRODUCTION

Alongside its rapid GDP growth rate, at an average of 8 percent per annum for the last ten years, Cambodia has achieved a modest¹ reduction in poverty rate from approximately 50 percent in 1997 to 30 percent in 2007 (World Bank 2009). This accomplishment was reinforced by improvements in increased consumption per capita and a wide range of other social indicators related to service delivery and human development. Income per capita of an average Cambodian grew at an annual rate of 5.3 percent from USD209 in 1993 to USD550 in 2010 (World Bank 2011a). In the latest Human Development Report, Cambodia ranks 124 out of 169 countries with Human Development Index of 0.494, a one-point increase between 2005 and 2010 (UNDP 2010a).

Cambodia has also made progress in the course of attaining the Cambodia Millennium Development Goals (CMDG). Considerable improvement has been achieved in reducing child mortality (CMDG4) and combating HIV/AIDS, malaria and other diseases (CMDG6) where key indicators of the goals are on track. CMDG9 (De-mining, ERW and Victim Assistance) is moderately off-track, though there is a framework in place to achieve the target. CMDG2 (Primary Education) and CMDG3 (Gender Equality) demand attention because some of the indicators have fallen behind, while CMDG1 (Poverty and Hunger), CMDG5 (Maternal Health) and CMDG7 (Environmental Sustainability) are off-track and need strong and robust interventions and commitment. For CMDG1, lagging indicators include the share of the poorest quintile in national consumption and proportion of working children aged between 5-17 years (MoP 2010).

Nonetheless, the development agenda is far from complete. Cambodia needs to focus on achieving existing targets and also dealing with new emerging issues such as inflation, business competitiveness, lack of productive job opportunities for all, faltering social safety nets and inequality. One concern that has surfaced is the sizeable variation of the contribution of economic growth to poverty reduction—poverty elasticity of economic growth. A wide

¹ Cambodia's economic growth, though contributing to a modest poverty reduction, has in principle not yet been pro-poor and inclusive because the growth elasticity of poverty is small, indicating that the increase in average income of the bottom quintile has been slower than the increase in overall average income of the economy. Using cross-country data, Dollar and Kraay (2002) found a strong positive association between average income of the poor and overall income in the country with a coefficient of close to 1. This means that a 10 percent rise in overall income per capita would statistically translate into a 10 percent increase in income of the poorest quintile. Nonetheless, the relationship is far from one to one in Cambodia. For instance, between 2004 and 2007, overall income of an average Cambodian grew at an annual rate of 7.5 percent; yet, annual consumption of the poorest 40 percent of the population rose by only 2.6 percent (World Bank 2009). Kakwani et al. (2004) argued that pro-poor growth is the growth that benefits "the poor" more than "the non-poor". The pro-poor growth is measured by examining what they call "poverty equivalent growth rate" which gives more weight to the income of the poor; if PEGR is higher than the actual rise in average income, the growth process is said to be pro-poor and vice versa. Given this measurement, Cambodia's growth process is not pro-poor: between 2004 and 2007, consumption of the top 20 percent of the population grew at an annual rate of 6.7 percent, faster than the 2.5 percent consumption growth of the poorest 20 percent given the 7.5 percent growth of overall average income over the same period. Jalilian et al. (forthcoming) found that growth elasticity of poverty in Cambodia is about 1 which is far from the estimated elasticity [1.5-5] usually observed in developing countries. Rising inequality in income and other economic opportunities is also an indication of exclusion. With similar rate of growth, China has achieved unprecedented reduction in poverty from 60 percent prior to reform to 7 percent in 2007 (Dollar 2008). But China is also confronting rising inequality (Gini coefficient) which already stood at 42 percent in 2005 (World Bank 2011a).

range of disparities from income and education to freedom of expression are on a rising trend. Although the poverty headcount index decreased from 34.8 percent in 2004 to 30.1 percent in 2007, overall inequality measured by the Gini coefficient went up from 0.396 (39.6 percent) to 0.431 (43.1 percent) in the same period (World Bank 2009). Compared to other ASEAN countries which have the same level of per capita consumption, Cambodia has the highest disparity between the rich and the poor. Socio-economic disparities are also rising between rural and urban and within rural areas *per se*.

The government has made poverty reduction an integral part of the country's development strategy. Poverty alleviation framework is outlined in the Social-Economic Development Plan (SEDP) I 2004-09 and SEDP II 2010-15 and the National Poverty Reduction Strategy (NPRS) 2003-05 which consists of six key poverty reduction actions: promoting economic opportunities, improving rural livelihoods, expanding job opportunities, improving capabilities, strengthening institutions and improving governance, reducing vulnerability and strengthening social inclusion, and promoting gender equity (RGC 2002a). These elements have since been incorporated into the updated National Strategic Development Plan (NSDP) 2009-13. However, project and programme implementation in support of poverty reduction has lagged and is unsatisfactory due largely to limitations in government expenditure (CDRI 2011). There is no systematic and effective mechanism for social protection; activities are *ad hoc* and largely dependent on donors' sources of funding (RGC 2011:15).

This study aims to: (1) analyse the current economic composition—agriculture, industry, and services—in China and Cambodia; (2) assess the appropriateness for Cambodia of learning from some underlying pro-poor policies that China has adopted since its political and economic reforms to assist the process of income (re)distribution to urban and rural households; and (3) examine possible developmental and policy implications Cambodia can draw upon against its existing economic endowments and sectoral composition.

The study does not attempt to provide rigorous empirical and econometric tests of the relations between composition of economic activity, poverty, and inequality either in China or Cambodia. Rather it has the objectives of revisiting China's success story by analysing the sectoral policies, specifically those that are pro-poor and inclusive, which have been adopted by the Chinese government since the reform. This study is to build upon developmental and policy implications and insights, where necessary, into Cambodia's policies given its development context.

The study is timely. Reform in Cambodia has increasingly intensified in almost every sector of the economy from industry to agriculture and services. There is also growing interest or partnerships between South-South countries to exchange development experience and expertise. China recently signed a Memorandum of Understanding with the United Nations Development Programme to strengthen South-South cooperation with the intention to further assist developing countries. Cambodia has been identified as a pilot country by the Chinese government to implement the initiative.

The rest of the paper is structured as follows: Section 2 highlights Cambodia's economic structure and surveys its poverty reduction policies, projects and programmes. Section 3 details lessons Cambodia can learn from China to enhance its economic growth and poverty reduction efforts. Section 4 discusses constraints Cambodia might face in replicating economic growth and poverty reduction models. Section 5 examines costs and benefits of China's ODA and the impact of its direct investment on overall economic development and poverty reduction in Cambodia. Section 6 concludes the paper.

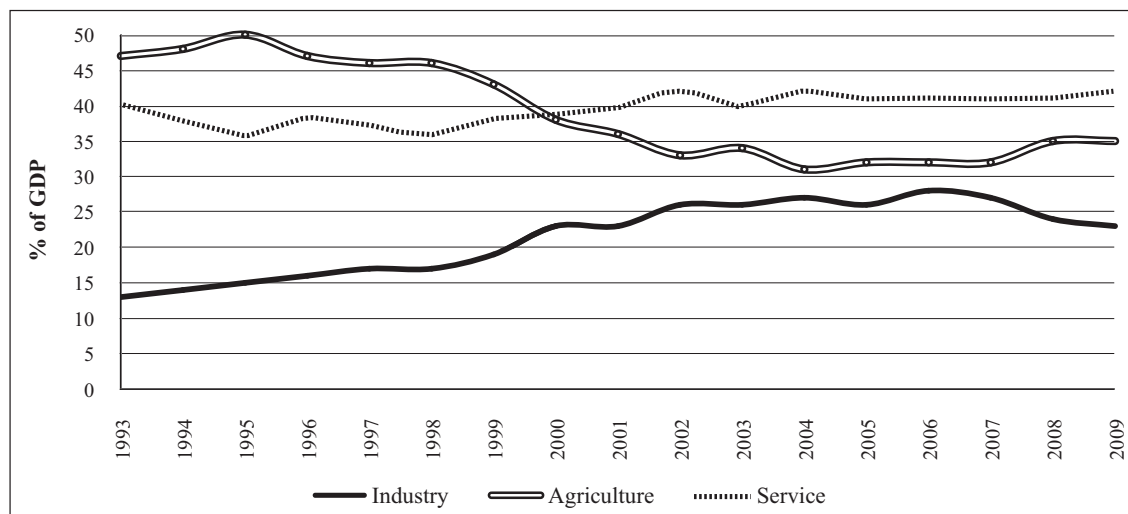
POVERTY REDUCTION IN CAMBODIA

2.1. Sectoral Growth and Poverty Incidence

The government has developed a number of country strategies and action plans to boost the economy and to ensure that the income generated is distributed efficiently and equitably. The newly revised National Strategic Development Plan (NSDP 2009-13) outlines strategies and a reform agenda to improve and enhance the growth of the four pillars of the economy: agriculture, industry, construction and tourism. Two main goals were set in the Industrial Development Action Plan 1999-2003: the development of export-oriented industries and import-substituting production of selected consumer goods (for a brief review of Cambodia's industrial policy see, for example, Tong 2010).

Between 1993 and 2009 Cambodia's industry was the fastest growing sector, with an average annual growth rate of 13 percent compared to 8 percent for services and 5 percent for agriculture (Figure 1). However, compared to agriculture (39 percent) and services (40 percent), industry's share of GDP (21 percent) was low. Manufacturing has been the main driver of growth. Between 2003 and 2007, manufacturing contributed on average 19 percent of GDP, within which textiles, clothing and footwear contributed 14.3 percent and food, beverages and tobacco 2.4 percent. Construction is the second largest industrial contributor to GDP, accounting on average for 6.1 percent (NIS 2008).

Figure 1: Sectoral Share of GDP in Cambodia, 1993-2009

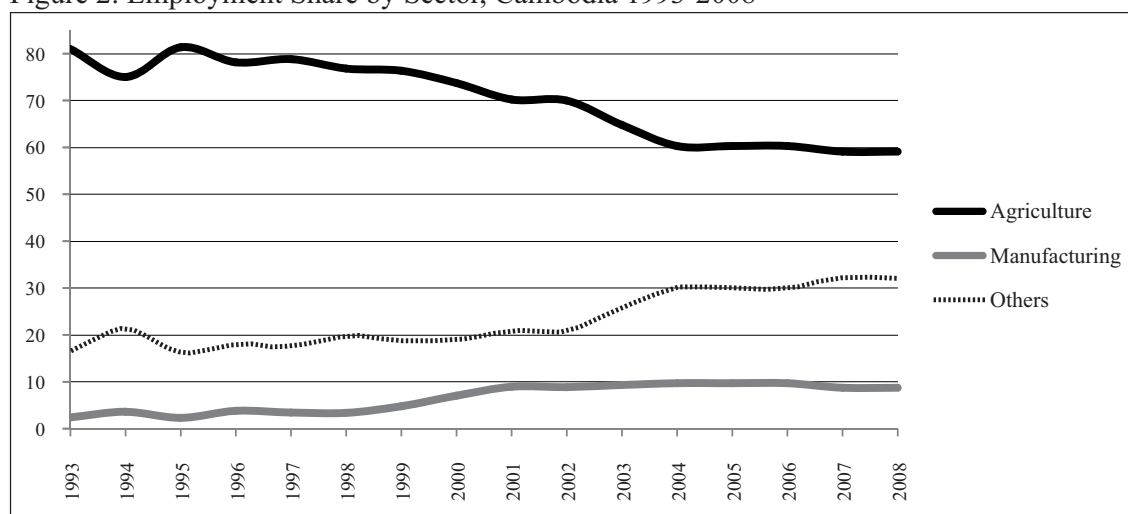


Source: World Bank Open Data 2011a

Agriculture still contributes a large percentage to GDP and is the primary source of rural employment given that about 80 percent of the population were living in rural areas in 2008. However, the sector has been underdeveloped with limited fixed capital investment, and the use of traditional production techniques is common. Albeit highly fluctuating, the direction of industrial and service sector output growth looks very much like that of China where industry grew on average at a rate of 13.1 percent and services at 8.1 percent per year compared to 4.2 percent for agriculture (China's NBS 2010).

Although industry has started to employ more workers, agriculture remains vital to employment (Figure 2). From 1993 to 2008, agriculture employed on average 70.3 percent of the total employed labour force per year compared to 6.5 percent in industry and 23.1 percent in other sectors such as services. The annual growth of agriculture employment is still positive, amounting to 3 percent compared to 14.4 percent in industry and 9.6 percent in other sectors. Absorption of the rural labour force into industrial work has been low given the narrowly based industrial structure focusing mainly on garments and textiles.

Figure 2: Employment Share by Sector, Cambodia 1993-2008



Source: ADB Key Indicators 2010

This has resulted in the continuing outflow of surplus labour to neighbouring countries such as Thailand, Malaysia and Vietnam and a growing interest to work in East Asian countries like Japan and South Korea. Although migration, as many believe, is not a long-term objective for rural development where the benefit of farm work is low and lack of variety in non-farm occupations is common, it can be seen as a short and medium term development goal. Thus, a strong and vibrant industrial sector can play a complementary role in urban-rural migration for employment (see, for example, So *et al.* 2007) where rural living standards can be indirectly improved through workers' remittances².

As pointed out, the rapid economic growth has coincided with a modest reduction of poverty incidence in Cambodia. This has confirmed the findings of a considerable array of literature, that there is a negative relation between economic growth and poverty reduction (World Bank 1990, 2000; Ravallion & Chen 1997; Fields 2001; Kraay 2006; Dollar & Kraay 2002). It also asserted the claim of “economic growth first, distribution later”. However, another aspect that has emerged is the sizeable variation in the contribution of economic growth to poverty reduction—poverty elasticity of economic growth (Montalvo & Ravallion 2010; Motonishi 2006; Wan & Zhang 2006; Wan & Zhou 2005). Although the absolute average income in Cambodia's rural areas has been skewed to the right (suggesting that more people are moving to higher income brackets), the urban-rural income gap is rising. This has immediate implications for the applicability of typical trickle-down effects of economic

² According to World Bank Data (2011a), in Cambodia, workers' remittances accounted on average for 3 percent of GDP per year from 1999-2009.

growth, and demands interventions that go beyond logic to eventually reduce inequality and social disparity.

2.2. Government Policies on Poverty Reduction

Recognising the need to address poverty reduction and enhance rural development, the Cambodian government has made these objectives top priority since its first mandate. Various policies and strategic frameworks have been well documented in a series of national strategies and plans.

Socio-Economic Development Plan Phases I (1996-2000) and II (2001-05) outlined broad-based economic growth as a prerequisite to poverty alleviation and specific supplementary government interventions aimed directly to tackle root causes of poverty incidence. It identified private sector development and improved governance conducive for business investment as key to higher economic growth and therefore poverty reduction. Other pro-growth and pro-poor strategies included: (1) macroeconomic stability to achieve economic growth of 6-7 percent for the planning period, (2) decentralisation to allow local participation in strategic planning and decision making, and (3) agriculture and rural development through improved access to market information, better land titling, water resources management and improved physical infrastructure (RGC 1997, 2002a).

National Poverty Reduction Strategy (2003-05) was developed based on experiences and lessons learnt from previous poverty reduction efforts and further charted the necessary interventions government as well as donors should implement. Some of the priority actions included: (1) maintaining macro-economic stability through sound financial systems, improvement in investment climate, legal and judicial reforms and others; (2) improving rural livelihoods through better land titling, water resources management and improved physical infrastructure; (3) expanding job opportunities through private sector development; (4) improving capabilities in education, health, and nutrition; (5) strengthening institutions and governance; and (6) strengthening social inclusion (RGC 2002b).

Cambodia Millennium Development Goals (2003) represent another key milestone to poverty reduction the government has been committed to achieve. CMDG1 aims at halving poverty by 2015. Some of the key indicators of this goal include: (1) decreasing the proportion of people whose income is less than the national poverty line³ from 39 percent in 1993 to 19.5 percent in 2015; (2) increasing the poorest quintile's share of national consumption from 7.4 percent in 1993 to 11 percent in 2015; and (3) decreasing the proportion of working children aged between 5-17 years old from 16.5 percent in 1999 to 8 percent in 2015 (RGC 2003). There has been a series of CMDG progress reports (2005 & 2010) tracking achievement, remaining work and challenges of each goal.

National Strategic Development Plan Update (2009-13) acknowledges the importance of directing poverty reduction schemes to grassroots level, helping households cope with the recent financial crisis and beyond. The plan continues to prioritise macroeconomic stability by fighting corruption, reforming legal and judicial framework and public administration; enhancement of the agriculture sector by improving agricultural productivity and diversification, land reform and mine clearance and fisheries and forestry reforms; further construction and improvement of physical infrastructure which includes roads, bridges and irrigation systems; private sector

³ National poverty lines: KHR3092 per capita per day in Phnom Penh, KHR2704 per capita per day in other urban and KHR2367 per capita per day in rural areas (World Bank 2009)

development through job creation, promotion of small and medium enterprises (SME) and creation of social safety nets; and human resources development (RGC 2009).

2.3. Government-led Poverty Reduction Strategy and Initiatives

The Council for Agriculture and Rural Development (CARD) has been responsible for charting the course of rural policy development and measures on social safety nets for the poor and vulnerable to help them escape the poverty trap and to lessen the shocks resulting from the global financial crisis. Some of the poverty reduction schemes which have been implemented by relevant line ministries are (Table 1):

1. Food-for-work programmes to build physical infrastructure that enables local beneficiaries greater access to school, health services and markets;
2. Health equity fund which provides relief through health fee waivers, scholarship for education, and targeted distribution of agriculture inputs to smallholder farmers to increase their productivity;
3. Cash transfer to poor households, for which the government encourages all implementing ministries to select programme beneficiaries using data from the National Identification System for Poor Households; and
4. Integration of social protection measures with decentralised development planning at sub-national levels.

CARD has also been working with line ministries and development partners to outline and draft the first five-year National Social Protection Strategy (NSPS) 2011-15 which has been under the consideration of the Council of Ministers. The main goal of the NSPS is that “poor and vulnerable Cambodians will be increasingly protected against chronic poverty and hunger, shocks, destitution and social exclusion and benefit from investments in their human capital” (RGC 2011:15).

Some of the short-term objectives of the newly drafted NSPS are to ensure that: (1) the poor and vulnerable receive support including food, sanitation, water and shelter to meet their basic needs in times of emergency and crisis; (2) the working-age poor and vulnerable benefit from work opportunities to secure income, food and livelihoods while contributing to the creation of sustainable physical and social infrastructure assets; and (3) vulnerable groups, including orphans, the elderly, single women with children, people with disabilities, people living with HIV, people with TB and other chronic illness receive income, in-kind, psycho-social support and adequate social care (RGC 2011: 78-79).

The Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY), Ministry of Labour and Vocational Training (MoLVT) and the Ministry of Women’s Affairs (MoWA) are responsible for the implementation of certain special social protection programmes to assist poor and vulnerable households. Some other interventions such as health fee waivers, scholarships and other exemptions that help poor households keep their children in school have been carried out by the Ministry of Health and Education (MoH) and the Ministry of Economy and Finance (MEF) (RGC 2009: 152-154). The National Committee for Disaster Management has been helping people cope with the effects of disasters by providing food, shelter and access to basic services such as clean drinking water and sanitation.

Table 1: Current Government Social Protection Interventions

Programmes	Description	Implementing agencies
Public works (food-for-work)	Improve and/or reconstruct rural infrastructure after disasters or help meet needs of the poor by paying them for working on these programmes	MEF
Food distribution	Free distribution of rice in emergencies such as the aftermath of the Ketsana storm, and for victims of mines	MEF
Budget support	Agriculture smallholder and social protection development policy interventions	MEF
Commune transfer for emergency assistance	Emergency assistance in cash or in kind to communes to support the achievement of CMDGs	MoI
Nutrition programmes	Promotion of health and nutrition practices, for example, the production and distribution of iodised salt	MoH
Scholarship in cash	Provide scholarship to poor households to allow their children to attend elementary, primary and secondary school	MoEYS
Second chance education programme	Provide various training courses, for example, TVET pilot on post-harvest technology and skills, special training programmes for indigenous and vulnerable people	MoLVT
School feeding	Provide meals to targeted students	MoEYS
Financial support	Micro-credit for self employment in the National Poverty Reduction Fund	MoLVT
Fee waivers	Fee exemptions at rural health care facilities for poor patients	MoH
Social welfare	Includes protection for people with disability, the elderly and orphans. Some of the programmes provide physical rehabilitation centre or community-based rehabilitation services for people with disability and social services, and care for children and families of mine victims and those affected by HIV/AIDs	MoSVY, MoLVT and MoH
Health and Safety at the Workplace	Ensure decent and safe working conditions for employees in small enterprises and informal sector, and a social safety net for inter-country migrants	MoLVT
Labour market information	Skills training and employment policy	MoLVT
Social security and pension	Social security fund covers work injury and the pension is for retired civil servants and veterans	MoLVT and MoSVY
Insurance	Health insurance under the social security fund for all workers, civil servants, armed forces and police	MoLVT and MoSVY

CMDG = Cambodian Millennium Development Goal, TVET = Technical and Vocational Education and Training, MoH= Ministry of Health, MEF = Ministry of Economy and Finance, MoEYS = Ministry of Education, Youth and Sport, MoI = Ministry of Interior. Source: RGC 2011: 44-46

The above-mentioned social protection programmes are to be provided to various poor and vulnerable groups broadly classified into four categories with respect to relevant risks/shocks: (1) emergencies and economic crises, (2) human development constraints, (3) seasonal unemployment and income insecurity, and (4) health shocks. Various determinants of vulnerability, ranging from reduction in purchasing power of salaries and earnings to limitation in accessing income-generating activities, have been specified to identify eligible groups/individuals for programme coverage⁴. As outlined in the draft NSPS, vulnerable groups are categorised according to livelihood (mainly all poor and near poor), age (6-24), geographical location (e.g. people who live near flood and drought prone areas), and economic status (landless and land poor). The government is more likely to use the national poverty line, which is less than or equal to USD1 per capita per day, to determine the poor and near poor. This would actually limit programme coverage. Thus, if economic growth is to be redistributed equitably to ensure inclusiveness, there is a need for the government and development partners to extend social protection programmes by revising the existing national poverty line upwards to cover groups/individuals whose income per capita (consumption) is USD2 per day.

Additionally, even with these existing interventions to help the poor and vulnerable mitigate economic and natural disaster shocks, the implementation of these programmes has been unsatisfactory and needs continuous commitment and expertise. As pointed out in the draft NSPS, remaining challenges of the social protection programmes in Cambodia have been: lack of coordination and coverage resulting in duplication, limitations of resource allocation, poor quality programme delivery, poor link between training offered and employers' needs, limited quality of healthcare services and no pension for the poor. As far as effective and efficient provision of social protection schemes is concerned, capacity of implementing institutions and ministries, especially local government, is still low demanding immediate training and re-training of staff. In addition to the government's efforts, NGOs and development partners have played a significant role in providing both financial and human capital supports to achieve expected results.

⁴ For detailed determinants of vulnerability under each risk/shock category, readers are referred to the draft National Social Protection Strategy for the Poor and Vulnerable (RGC 2011: 38-40).

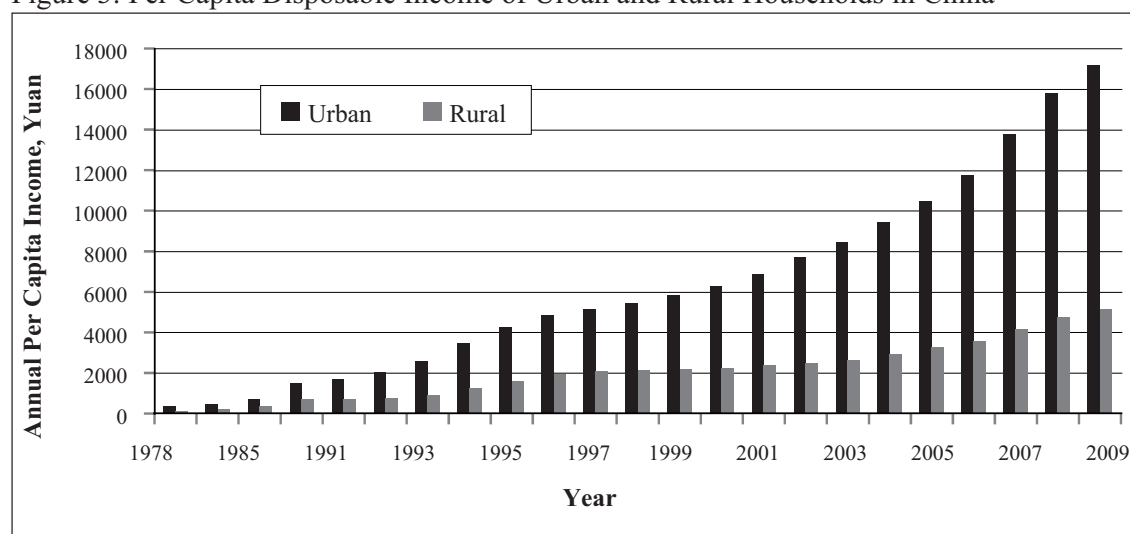
LEARNING FROM CHINA ON POVERTY REDUCTION AND INCLUSIVE GROWTH

3.1. Overview

One of the poorest countries in the world in the 1950s, China has changed its status remarkably to being the world's second largest economy with GDP of approximately USD4.9 trillion in 2009, and is home to 20 percent of the world's population (World Bank 2011; Maddison 2010). In the eyes of many, China is a success story in terms of its economic and, to a lesser extent, political reform – which initially took place in the early 1980s, with major improvements in the living standard of millions of Chinese people for the last three decades.

With an impressive 10 percent annual growth rate, China has been able to lift millions of its citizens from abject poverty, reducing poverty incidence from about 60 percent at the onset of reform to 7 percent in 2007 (Dollar 2008). From 1978 to 1995, over 200 million Chinese were lifted out of poverty (Yao 2000). Average incomes in China have been growing at an annual rate of 14 percent from 1990 to 2009, with an average annual income growth of 14 percent in urban and 12 percent in rural areas (Figure 3). The increased well-being of the Chinese can also be seen in the gradual decrease in the proportion of disposable income spent on food items (declining Engel's coefficient) (China's NBS 2010). Additionally, statistical data in China supports the claims that overall economic growth will benefit the poor given the positive correlation between average growth rate of urban-rural income and economic growth (China's NBS 2010; World Bank 2009).

Figure 3: Per Capita Disposable Income of Urban and Rural Households in China



Source: China's NBS 2010

3.2. Economic Growth and Poverty Alleviation

3.2.1 Trade Liberalisation

Prior to its reform in 1978, China was one of the most tightly closed economies in the region as well as the world, trading mainly with the communist bloc and the Soviet Union. However, since 1978, one of the key features of reform, which was initially included as a development goal in the sixth five-year plan (1981-1985), has been to open China to the world by expanding trade and encouraging more foreign investment (Winter *et al.* 2004).

In the post-reform period, an increasing number of firms were allowed to directly import and export, and by mid-1980 there were about 8000 companies in the country (Dollar 2007). A gradual decrease in overall tariff rate, which is relatively lower than that of some developing countries, is another key feature of China's reform. According to a customs report, China has been able to reduce overall tariff rate from 15.6 percent in 2000 to 9.8 percent in 2009; the average tariff rate on agricultural products was 15.2 percent whereas that on industrial goods was 8.9 percent in 2009. The reduction was partly attributable to phasing out tariff rates as a result of China's membership in the World Trade Organisation (WTO).

Low overall tariff rate might not be the sole indicative factor to boost foreign trade. China is famed for its successful development of Special Economic Zones (SEZs) and port facilities together with improvements in import and export procedures. It has developed a number of SEZs, three of which—Shenzhen, Zhuhai and Shantou—are located in Guangdong, the southern coastal province. In the Resolution of the Standing Committee of the National People's Congress on Approving the Regulations on Special Economic Zones in Guangdong Province, foreign investors are motivated to set up factories in the SEZs where they are subject to certain preferential treatments such as import duties exemption on a wide range of production equipment and materials, a 15 percent enterprise income tax compared to a normal 25 percent enterprise income tax, investors' overseas remittances, and simple and easy entry and exit procedures (as stipulated in Article 4 of the Law of the People's Republic of China on Enterprise Income Tax).

China has also constantly reformed the regime in doing business by simplifying procedures in a number of critical areas such as paying taxes, trading across border, getting credit, enforcing contracts, dealing with construction permits, and closing business. While required documents and time to export and import are comparable between the two countries, China charges approximately USD500 for export containers and USD545 for import containers compared to USD732 and USD872, respectively, in Cambodia (World Bank 2010a).

With these favourable conditions to liberalise foreign trade, China has achieved a strong and robust trade balance for the last three decades. For the first 10 years from 1985 to 1995 (Table 2) after the completion of the sixth five-year plan (1981-85), China's exports increased at 18 percent per annum to USD1487.7 billion in 1995 while growth rate of imports was 12 percent a year reaching USD1320.8 billion. China has been able to sustain this high growth even since it became a full member of the WTO, achieving an annual export growth rate of 15 percent to USD1286.0 billion in 2009 and import growth of 14 percent a year between 1997 and 2009 (MoC of China 2010a, 2010b).

Cambodia's trade policies are similar to China's. During the 1980s, Cambodia's economy was centrally planned, and trade was mainly with Vietnam, the Soviet Union and other communist countries. Since its first national election in 1993, Cambodia has aimed to

reintegrate its economy into regional and global communities and liberalise its foreign trade regime. Its full membership of ASEAN in 1999, particularly ASEAN Free Trade Area (AFTA), and the WTO in 2003 sealed trade deals and liberalisation of the country.

To date, in principle, Cambodia's trade regime is as open and liberated as China's. However, the government should have been stronger and more committed in improving port facilities and simplifying trade procedures to speed up the process thereby motivating importers and exporters. Doing business in Cambodia is still complicated, lengthy and costly in terms of trade-related procedures compared to China and other neighbouring countries except Laos (World Bank 2010a). Cambodia's membership of ASEAN and WTO pressures further reform in trade regime to be consistent and standardised with the organisations' rules and regulations and especially to be competitive. In response, Cambodia has attempted to reform trade procedures by reducing time, required documents and costs, yet they are still relatively problematic. The reform does not necessarily involve heavy policy design but the restructuring of organisation with clear and effective division of labour and responsibility.

3.2.2 Industrialisation

Industrial development has been and will be one of the main pillars of economic growth in China's continuing reform agenda. As outlined in the first five-year plan (1953-1957), the Chinese government emphasised industrial development at the onset of reform. The initial identified objective was to expand construction of the industrial base which was assisted by the Soviet Union and to build institutions and systems ready to take on privately owned enterprises' socialist reform at a later stage. At the close of the tenth five-year plan (2006-2010), further optimisation and upgrading of industrial structures had been achieved and enhanced.

Figure 4 illustrates China's GDP share by three sectors—industry, agriculture and services. The role of industry, as shown, has been strong and robust contributing on average 47 percent per year to GDP between 1993 and 2009 compared to agriculture (15 percent) and services (38 percent). Also, industry has been the fastest growing sector with an average annual growth rate of value-added to GDP of 12 percent compared to 4 percent in agriculture and modestly bypassed services at 11 percent.

Heavy industry has been an integral part of industrial development, growing at an annual rate of 12.2 percent between 1999 and 2009 compared to 8.3 percent for light industry in the same period (Table 3). Majority of industrial enterprises are domestically funded, sharing 82.6 percent of total industrial enterprises in 2009 compared to Hong Kong (7.9 percent) and foreign (9.4 percent) funded ones. However, annual growth rate of domestic-funded (10.3 percent a year) firms is slightly lower than that of foreign-funded ones (14 percent) between 1999 and 2008. This indicates that more foreign firms are interested in investing in China given the high per capita income and consumption of the Chinese for the last decades.

The big share of domestic funded enterprises reflects the mobilisation of high domestic savings (reaching 54 percent of GDP in 2009) and the fact that government and some sort of collectivisation still plays a significant role in investing and managing industry given the considerable number of state-owned, collective and cooperative enterprises. Another underlying feature of China's industrial structure is the relatively big share of small and medium enterprises. Table 3 shows that 393,074 of enterprises registered in 2009 were small, representing 90.5 percent of the total of 434,364; the remaining 8.8 percent were medium and 0.7 percent were large.

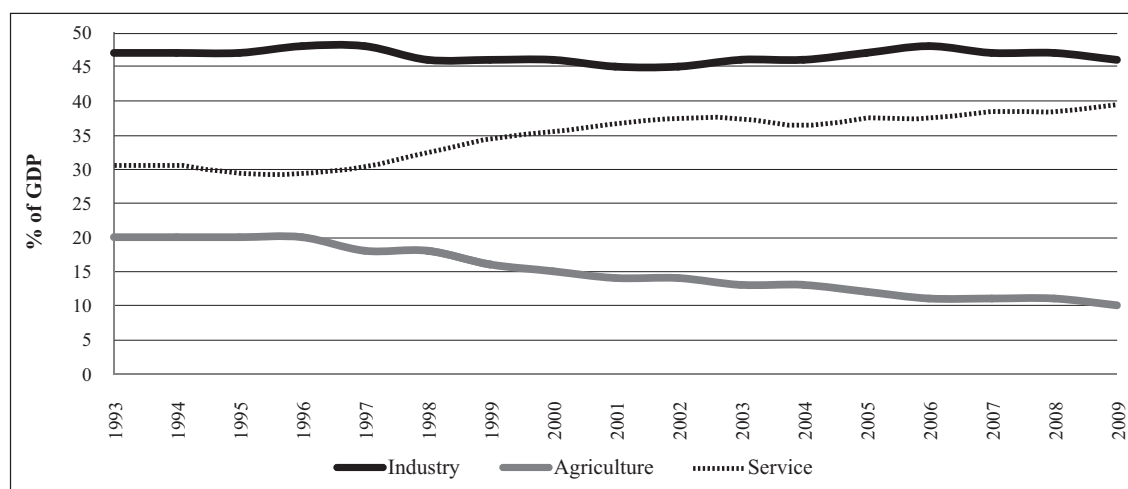
Table 2: Total Value of Imports and Exports in China

Year	USD 100 million			
	Total	Export	Import	Balance
1952	19.4	8.2	11.2	-3.0
1957	31.0	16.0	15.0	1.0
1962	26.6	14.9	11.7	3.2
1965	42.5	22.3	20.2	2.1
1970	45.9	22.6	23.3	-0.7
1975	147.5	82.6	74.9	-2.3
1978	206.4	97.5	108.9	-11.4
1980	381.4	181.2	200.2	-19.0
1985	696.0	273.5	422.5	-149.0
1986	738.5	309.4	429.1	-119.7
1987	826.5	394.4	432.1	-37.7
1988	1027.9	475.2	552.7	-77.5
1989	1116.8	525.4	591.4	-66.0
1990	1154.4	620.9	533.5	87.4
1991	1356.3	718.4	637.9	80.5
1992	1655.3	849.4	805.9	43.5
1993	1957.0	917.4	1039.6	-122.2
1994	2366.2	1210.1	1156.1	54.0
1995	2808.5	1487.7	1320.8	166.9

Source: China's NBS 1996

Note: Figures before 1979 are from the Ministry of Commerce and figures since 1980 are from Customs Statistics

Figure 4: Sectoral Share of GDP in China, 1993-2009



Source: World Bank 2011a

China's industry comprises mining and quarrying, manufacturing, production and supply of electricity, gas and water, and construction. Growth in the sector is mainly driven by manufacturing. In 2009, out of 434,364 industrial enterprises, 404,018 or 93 percent were registered as manufacturing-related firms contributing 87.1 percent of the total gross industrial output value (Table 4) and employing 87.2 percent of annual average employed workforce.

Table 3: Main Indicators of Industrial Enterprises in China (Units)

Year	Kind of industry		Size of industry			Status of registration				Total
	Light industry	Heavy industry	Large	Medium	Small	Domestic funded	Hong Kong funded	Foreign funded		
1999 ^a	81820	80213	7542	14371	139798	135196	15783	11054	162033	
2000 ^b	81902	80983	7647	13741	141161	134440	16490	11955	162885	
2001	86705	84551	8214	14398	148269	139833	18257	13166	171256	
2002	92525	89032	8752	14571	158234	147091	19546	14920	181557	
2003	92712	103510	1984	21647	172591	157641	21152	17429	196222	
2004	576319	798944	2136	25557	1347571	1269098	54910	51255	1,375263	
2005	-	-	-	-	-	-	-	-	-	
2006	133642	168319	2685	30245	269031	241089	29181	31691	301961	
2007	146612	190156	2910	33596	300262	269312	31949	35507	336768	
2008	178536	247577	3188	37204	385721	348266	35578	42269	426113	
2009	181580	252784	3254	38036	393074	358988	34365	41011	434364	

Source: Author's compilation using data from China's Bureau of National Statistics 1996, 2010

a) Size of industry excludes 322 super-scale industrial enterprises.

b) Size of industry excludes 336 super-scale industrial enterprises.

Table 4: Main Indicators by Industrial Sectors in China, 2009 (100 million yuan)

Industrial sectors	# of Enterprises (unit)	Gross industrial output value	Total assets	Total working capital	Annual average employed persons (10,000)
<i>Mining and quarrying</i>	19876	32855	46089	15421	771
<i>Manufacturing</i>	404018	477756	369429	195367	7705
Food, beverages and tobacco	39347	49570	31030	16394	639
Textiles, garments and footwear	59197	39842	25572	13986	1324
Wood, paper and publishing	37648	23058	17698	8311	586
Rubber manufacturing	4720	4768	3526	1726	98
Other manufacturing	263106	360518	291603	154950	5058
<i>Electricity, gas and Water</i>	9305	36257	77428	11764	341
<i>Recycling and waste disposal</i>	1165	1444	746	488	14
<i>National total</i>	434364	548312	493692	223040	8831

Note: some of the industries in other manufacturing include non-metallic manufacturing, basic metal and metal production, machinery and electrical equipment.

Source: author's calculation using data from China's Bureau of National Statistics 1996, 2010

Three messages that Cambodia could explore further from industrialisation in China are (1) industrial diversification, (2) competitiveness, and (3) absorption capacity of urban and rural labour force.

Industrial Diversification

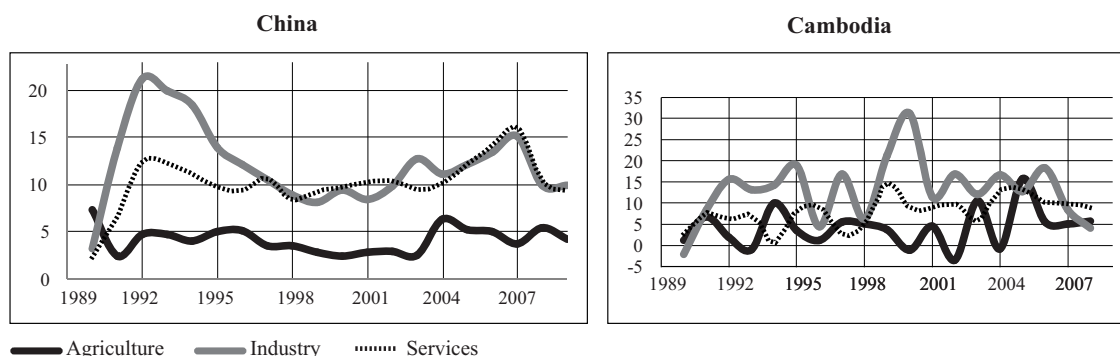
From a historical perspective, Cambodia experienced strong and robust industrial growth in the 1960s where a variety of factories manufactured diverse products from nails to furniture. Industrial activities declined in the 1970s and completely stopped during the Khmer Rouge regime (1975-1979) resuming with limited capacity in the early 1980s. In fact, excluding the garment industry, Cambodia's industrialisation was more developed in the 1960s and 1980s.

To date, most of the industrial firms in Cambodia are light and narrowly based, depending mainly on garments and textiles and construction which generate modest value-added to GDP and are extremely vulnerable to external shocks. Although the garment industry has largely contributed to manufacturing growth and the development goal of labour-intensive industries, this sub-sector has operated on preferential treatments (Most Favoured Nation and General System of Preference) granted by the US and some European countries. In addition, the sector has been and will be facing strong competition from garment-producing countries such as China, Bangladesh, Vietnam and India. The lack of diversification can also be seen in the fluctuation of annual growth of industrial output (Figure 5).

One of the key features in China's industry has been sub-sector diversification. Although garments, textiles, and food processing have played a significant role in manufacturing growth, sub-sectors such as pharmaceuticals, electronic appliances, and electrical machinery and equipment have grown in size, capacity and competitiveness, allowing China to create a strong and robust foundation for further industrialisation. Although Cambodia sees this as a lesson learnt, moving to heavy industry like machinery and electronics demands long-term and committed effort—in improving infrastructure, technical and managerial capacity of workers

and firms, and serious investment in quality technical/vocational training and education—of all players in the sector. This is precisely what Cambodia has lacked.

Figure 5: Growth of Output in China and Cambodia, annual percent change



Note: China's data are from 1990-2009 while those of Cambodia are from 1990-2008

Source: ADB 2010

Industrial Competitiveness

Industrial competitiveness largely means producing the allocated resources at least cost. One of the main reasons that China can develop a vibrant industrial structure is its conducive business climate and relatively low production costs resulting from quality and reliable infrastructure such as electricity, roads, bridges, railway, government-related procedures, and cheap and capable labour force.

Albeit needing further improvements in certain aspects, as a result of government efforts to simplify business-related procedures China ranked 79 out of 183 economies in the World Banks' (2010a) ease of doing business study. For instance, it takes 14 days and costs 4.5 percent of per capita income to start a business in China. On the legal side, China ranked 15 in enforcing contracts, and costs are only 11.1 percent of the claim compared to 102.7 percent in Cambodia, 28.5 percent in Vietnam, and 27.5 percent in Malaysia. In addition, the development and condition of infrastructure in China are good for trading transactions (Table 5).

Doing business in Cambodia is still complicated, lengthy, and costly. Companies are required to go through long and sometimes unnecessary registration and legal processes. Cambodia is ranked 147 out of 183 economies in ease of doing business compared to China (79), Thailand (19), Vietnam (78) and Malaysia (21). Companies in Cambodia must complete nine required documents within 85 days and it costs 128.3 percent of income per capita to start a business. Companies in Vietnam take only half the number of days and it costs 12.1 percent of income per capita to get the same business set up and running (Table 5).

The legal process in Cambodia is still insufficient when dealing with commercial issues due largely to the difficulty in enforcing business contracts. For instance, companies need 401 days to enforce any contract and pay 102.7 percent of total claims compared to 295 days and 28.5 percent of claims in Vietnam. Cambodia was rated on the passing line only when it comes to protecting investors - i.e., a score of 5.3 on a scale from 0 to 10 of the strength of investor protection index (0 being worst protected) (World Bank 2010a). There is no specialised court to resolve commercial conflicts.

Table 5: Doing Business in Selected Asian Countries, 2010

Indicators	Cambodia	China	Thailand	Vietnam	Laos
Ease of doing business (rank)	147	79	19	78	171
Starting a business (rank)	170	151	95	100	93
Procedures (number)	9	14	7	9	7
Time (days)	85	38	32	44	100
Cost (% of income per capita)	128.3	4.5	5.6	12.1	11.3
Dealing with construction permits (rank)	146	181	12	62	115
Procedures (number)	23	37	11	13	24
Time (days)	709	336	156	194	172
Cost (% of income per capita)	54.2	523.4	9.5	128.4	131.3
Property registration (rank)	117	38	19	43	163
Procedures (number)	7	4	2	4	9
Time (days)	56	29	2	57	135
Cost (% of income per capita)	4.3	3.6	4.3	0.6	4.1
Protecting investors (rank)	74	93	12	173	182
Strength of investor protection index (0-10)	5.3	5.0	7.7	2.7	1.7
Paying taxes (rank)	57	114	91	124	116
Payments (number per year)	39	7	23	32	34
Time (hours per year)	173	398	264	941	362
Total tax rate (% of profit)	22.5	63.5	37.4	33.1	33.7
Trading across borders (rank)	118	50	12	63	170
Documents to export (number)	10	7	4	6	9
Time to export (days)	22	21	14	22	48
Cost to export (USD\$ per container)	732	500	625	555	1860
Documents to import (number)	10	5	3	8	10
Time to import (days)	26	24	13	21	50
Cost to import (USD\$ per container)	872	545	795	645	2040
Enforcing contracts (rank)	142	15	25	31	110
Procedures (number)	44	34	36	34	42
Time (days)	401	406	479	295	443
Cost (% of claim)	102.7	11.1	12.3	28.5	31.6

Source: World Bank 2010a

Table 6: Investment Climate and Openness Indicators of Selected Countries

Indicators/countries	Cambodia (2006)	China (2003)	Thailand (2006)	Vietnam (2009)	Laos (2009)	Malaysia (2007)
% of firms expected to pay informal payment to public officials (to get things done)	61.23	72.57	...	52.54	39.83	...
% of firms expected to give gifts in meetings with tax officials	60.25	38.74	...	33.68	26.20	...
% of firms expected to give gifts to secure a government contract**	76.79	27.04	...	43.74	...	...
Value lost due to power outages (% of Sales)	2.44	1.31	1.53	3.60	...	3.00
Delay in obtaining an electrical connection (days)	15.48	27.77	27.93	29.57	...	10.73
% of exporter firms	10.99	24.48	75.75	20.54	9.52	59.98
% of firms that use material inputs and/or supplies of foreign origin*	100.00	...	40.05	63.16	22.54	51.69
% of firms with line of credit or loans from financial institutions	20.70	...	72.52	49.93	18.53	60.44
% of firms using banks to finance investments	11.25	28.76	74.36	21.48	0.00	48.58
Value of collateral needed for a loan (% of the loan amount)	173.68	88.45	131.13	217.73	307.56	64.60

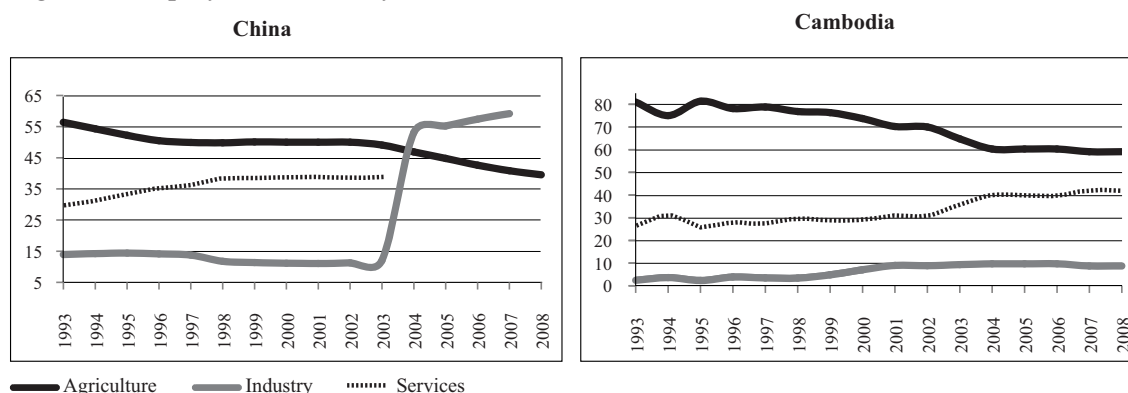
Source: World Bank 2007

Informal ways of doing business in Cambodia are still common: 61.2 percent of companies in Cambodia responded that they need to pay informal fees to public officials to get certain things done compared to Vietnam (52.5 percent) and Laos (40 percent); 60 percent of firms reported giving gifts when meeting tax officials compared to 39 percent in China, 34 percent in Vietnam and 26 percent in Laos (Table 6). The issue is more worrisome when securing government contracts given that 77 percent of firms responded that they give gifts while only 27 percent in China reported doing so. This has direct implications for the growth of firms in terms of cost competitiveness, and willingness and motivation in business investment (World Bank 2007).

Absorption Capacity

The employment share by sector—agriculture, industry and services—in both countries looked alike five or six years after reform. However, for the last five years or so, particularly as reform got into full swing, the similarity started to depart in a sense that industry in China has had the biggest employment share compared to Cambodia. As shown in Figure 6, from 1993 to 2002, China's agriculture employed on average 53 percent per year of the total employed labour force compared to only 13 percent in industry and 34.3 percent in services. However, from 2003 to 2009, industrial employment started to rise and finally bypassed agriculture employment in 2004 where industry shared on average 51.3 percent compared to 43.1 percent in agriculture.

Figure 6: Employment Share by Sector in China and Cambodia 1993-2008



Source: ADB 2010

China's growth rate of labour employed in agriculture actually decreased at an annual rate of 1.4 percent whereas that of industrial labour force increased by 9.5 percent between 1990 and 2009. This can also be verified by looking at the continuing 1.4 percent annual decline in China's rural population from 73 percent of the total population in 1990 to 56 percent in 2009, compared to 0.6 percent annual decline in Cambodia from 87 percent to 78 percent in the same period (World Bank 2011a). This shows the increasing share of urban population and a pattern where more and more rural workers, most likely unskilled, migrate to urban industrial jobs where benefit per worker is relatively higher than in agriculture. This will likely intensify industrial activities through decent and productive work which translates into high wages, contributing to economic growth and rural poverty reduction partly through remittances. Nonetheless, the jump in industrial employment could be a contributing factor in rising income (wage) inequality between urban and rural households. Although per capita annual income of urban and rural households grew at comparable annual rates between 1990 and 2009, the discrepancy was significant and averaged around 3556.6 yuan from 1993-2003 and 9097.6 yuan from 2004-2009.

In contrast, one of the fundamental challenges for Cambodia is to increase productivity growth and ensure that the productivity gains will be translated into good working conditions and high wages for workers. Overall labour productivity increased from KHR2.4 million (USD631) in 1998 to KHR4.2 million (USD1030) in 2008, growing at 5.7 percent per year for riel value or 4.9 percent for US dollar value. Over the period, highest productivity growth was in mining and quarrying (19.1 percent), followed by finance and other services (8.6 percent), transportation and communication (5.8 percent), and construction (3.7 percent). Average productivity growth in manufacturing was relatively low at 3.1 percent while that in agriculture was 1.7 percent. Cambodia's average value-added per person employed is also low compared to that of other ASEAN member countries (ILO 2010).

The extent to which the industrial sector can absorb rural surplus labour, mainly from agriculture, is largely dependent on how diverse the sector is. Because China's industry is quite diversified, urban and rural labourers have more options and can choose from various industrial sub-sectors. Industry was the fastest growing sector in Cambodia from 1993 to 2009, yet diversification in the sector is lagging. Manufacturing, from 2003-2007, has been the main driver of industrial as well as economic growth contributing on average 19.5 percent per year to GDP, within which garments contributed the most at 14.3 percent. From 1995 to 2008, garments employed on average 202,955 persons annually; majority of workers were female and low educated from rural areas. Nonetheless, this sub-sector is vulnerable to external shocks

as almost all garment products are exported mainly to US and European markets. Natsuda *et al.* (2009) argue that the garment sector is still uncompetitive and vulnerable due largely to insufficient infrastructure, labour unrest and corruption. The number of internal migrant workers increased slightly to 2.5 million in 2008 from 2.3 million a decade ago. Although migrant workers who found work in industry increased to 13.6 percent in 2008 from 7.3 percent in 1998, majority of them (51.5 percent) still ended up working in the primary sector⁵ (ILO 2010). This reflects the narrow-base of the industrial sector and its low capacity in creating new jobs.

3.3.3 Agriculture and Rural Development

China's reform started in rural areas, home to approximately 80 percent of the population and to primary industry—agriculture, forestry, animal husbandry and fishing—which played a significant role in rural occupations, sharing on average 77.3 percent per year of the total employed workforce from 1952-1980 compared to 12.2 percent in secondary industry and 10.6 percent in tertiary industry. Increased agricultural liberalisation post reform put more emphasis on individuals' decision-making in using and managing agricultural resources and materials particularly land, rather than collectivisation where individuals have little or no authority.

Two fundamental changes, among others, in agricultural reform were the introduction of "household responsibility" and "abolition of communes" (Johnson 1990: 29-32). Under the former system, land was allocated to a family which had full control over the net income generated. This entrusted the family to make the investment decision and freedom in the use of land. With the latter, the aim was to reduce the monopoly power of communes over the decision-making and investment of resources by decentralising decision-making to villages and townships. The system also intended to separate the communes' political economic power.

The effects of reform can be seen in the increase in total productivity and gross output value of agriculture. From 1978 to 1985, agricultural output grew at an annual rate of 10.6 percent, and the growth rate has remained at that level for the last two decades. Many factors could have contributed to the increasing agriculture growth rate since the reform, including increase in prices, economic freedom in terms of resource use by individual families thereby raising incentive for investment, and changes in productivity.

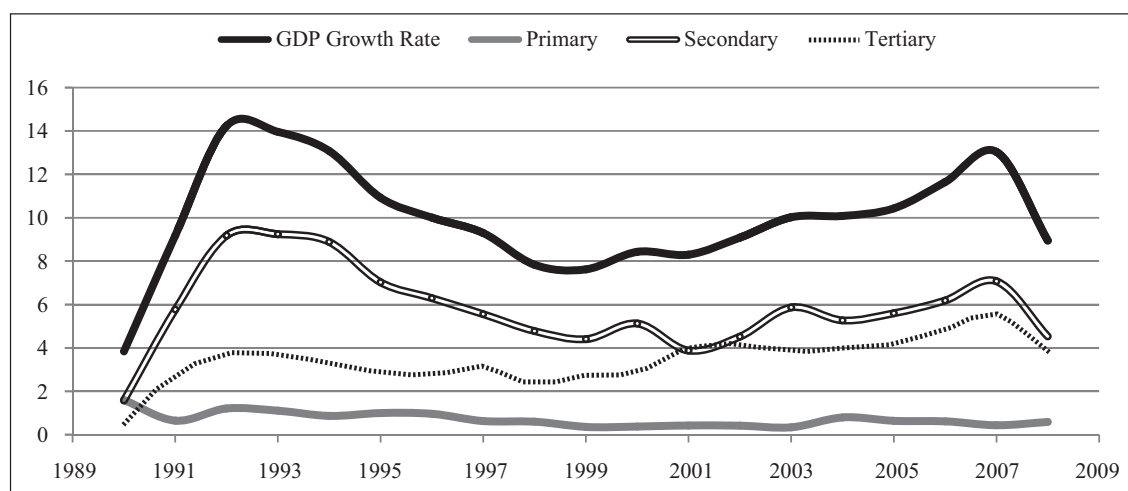
Despite strong growth in output value and productivity, agriculture's value-added to GDP and output growth rate are low compared to industry and services. This implies that China, as a resource scarce country, has focused on developing the urban industrial and service sectors where it has comparative advantages. From 1990 to 2009, China's GDP grew at an annual rate of 10 percent of which primary industry⁶ contributed about 0.7 percentage points per annum compared to 5.8 from secondary and 3.4 percentage points from tertiary industry. Agriculture's average output growth rate was relatively low at 4.2 percent per year; the figures were 12.1 percent for industry and 10.2 percent for services (Figure 7). This was also evident in the modest 6.9 percent annual growth rate of the total wage of the workforce employed in primary industry compared to manufacturing (13.8 percent), mining (17.8 percent), construction (16.6

⁵ According to NIS 2008, primary sector includes agriculture, hunting, forestry and fishing; secondary sector consists of mining and quarrying, manufacturing, electricity, gas and water supply and construction; tertiary sector encompasses trade, hotel and restaurant, transport, business and administration.

⁶ According to China's NBS 2010, primary industry includes agriculture, forestry, animal husbandry and fishing, and services in support of these industries; secondary industry encompasses mining and quarrying, manufacturing, production and supply of electricity, water and gas, and construction; and Tertiary industry consists of all other economic activities not included in the primary or secondary industries.

percent), and transport and storage, post and telecommunication (12.0 percent) between 2003 and 2009 (China's NBS 2010).

Figure 7: Contribution of the Three Strata of Industry to GDP Growth in China



Source: Author's compilation using data from China's Bureau of National Statistics 1996, 2010

Note: The data are calculated at constant prices.

Even with its low value-added to GDP, the agriculture sector remains crucial for poverty reduction in China as most of the poverty reduction targeting efforts have been concentrated in rural areas where agriculture is the main occupation for majority of the poor and vulnerable households. The benefits of agriculture as an engine for poverty alleviation in general or China in particular have been well documented. Montalvo and Ravallion (2010) indicated that though secondary and tertiary sectors have contributed significantly to overall economic growth, agriculture has been the driving force in lifting millions of Chinese out of abject poverty. According to the study by Ravallion and Chen (2007), primary sector growth (mainly agriculture) was the contributing factor to poverty reduction in China rather than secondary and tertiary sector growth. The reduction in poverty rate to 8 percent from 1980 to 2000 would have been achieved in 10 years if the sectoral composition of economic growth had been balanced. Ravallion (2009) also found that agriculture development to help small farmers should be prioritised in the near term. Tiffin and Irz (2006) also found strong evidence to support the claim that agriculture is the driving force for growth in developing countries while the trend is more mixed in developed countries.

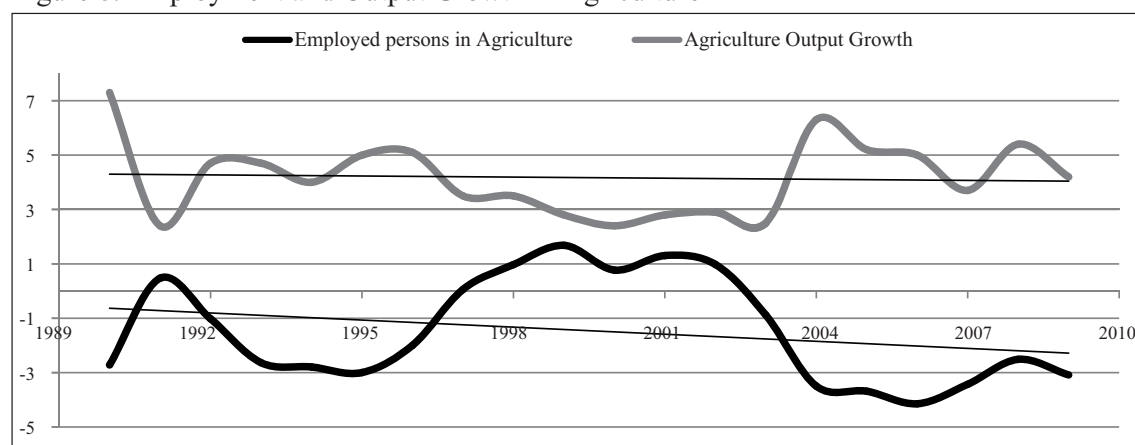
The agriculture reform agenda in Cambodia resembles that of China. Cambodia also moved from a collective system of resources and materials to an individual system where the family has full control over resources and any investment decision. Agriculture in Cambodia still contributes a large percentage to GDP and is the primary source of rural employment. However, the sector has been underdeveloped with limited fixed capital investment and the use of traditional techniques is common (Guimbert 2010).

Three messages are worth considering about China's success in the development of its primary sector (mainly agriculture) when viewed against Cambodia's agriculture and rural development: continuing government expenditure for agriculture, capital-intensive investment, and linkage between industrial and service sectors through labour absorption and value chain.

Since the reform, China's government expenditure for agriculture has remained relatively high. From 1978 to 1989, agricultural expenditure grew at 5.3 percent a year and made up about 10.7 percent of total government expenditure. The expenditure growth rate was even higher at 14.3 percent a year from 1990 to 2003; however, the percentage share to total outlay shrunk modestly to 9 percent. Spending was made for a wide range of agriculture-related activities such as supporting agriculture production, capital construction, science and technology promotion funds, rural relief funds, and others. This positive trend of expenditure for agriculture, forestry, and water conservation continues, accounting for 8.8 percent of total national expenditure in 2009 compared to 7.3 percent a year earlier. It also ranked fourth after general public services (12.0 percent), education (13.7 percent), and social safety net and employment (10.0 percent) (China's NBS 2010).

Attempting to improve productivity in the sector, China is moving from labour-intensive and family-based agriculture with traditional techniques to one that is capital and commerce-based. This can be seen in the continued increase in agricultural capital formation and output growth since 1978. Agricultural land is about 58 percent of the total land area, yet the uptake of agricultural machinery in terms of the number of tractors per 100 square kilometres of arable land was slow at 7.8 percent a year between 1993 and 2007, from 66.6 tractors in 1990 to 277.1 tractors in 2008 (Table 7). The movement is also evident by looking at agricultural employment and output growth (Figure 8). Although employed persons in agriculture decreased at an annual rate of 1.4 percent from 1993 to 2009, this did not necessarily translate into low output growth; rather, agricultural produce rose by 4.0 percent per year over the same period.

Figure 8: Employment and Output Growth in Agriculture



Source: China's NBS 2010

In contrast, Cambodia's government expenditure for economic services such as agriculture, industry and services has been low, comprising an average of 8.6 percent of total expenditure from 1994 to 2009; defence had 34.8 percent while general public services were allocated 15.4 percent. Agriculture had the third largest share of economic services expenditure at an average of 22.7 percent, compared to transportation and communication (33.8 percent) and industry (5.2 percent) over the same period. However, progress in terms of investment, capital formation, agricultural techniques, and research and development within the sector has been slow (ADB 2010).

Table 7: Crop Yields, Technology Usage and Infrastructure in Cambodia and the Region

	Cambodia	China	Vietnam	Laos	Thailand	Indonesia	Philippines	Myanmar
Cereal yields (kg/ha)								
1990	1362	4323	3073	2268	2009	3800	2065	2762
2009	2947	5460	5075	3808	2954	4813	3229	3585
Modern technology								
Tractor (per 100 sq. km of arable land)								
1990	3.3	66.6	47.0	...	33.0	2.2	65.2	13.6
2008	11.8	277.1	....	...	...	...	...	10.9
Fertiliser (kg/ha) (2008)	22.7	468.0	286.6	...	130.9	189.1	131.2	3.3
Infrastructure								
Paved roads (% of total road, 2000-08)	6.3	53.5	47.6	13.5	98.5	59.1	9.9	11.9
Mobile cellular subscriptions (per 100 people, 2009)	38	56	101	51	123	69	81	1
Electric power consumption (kWh per capita, 2008)	113	2455	799	...	2079	591	588	97

Source: World Bank WDI 2011b

3.3.4 The Role of State

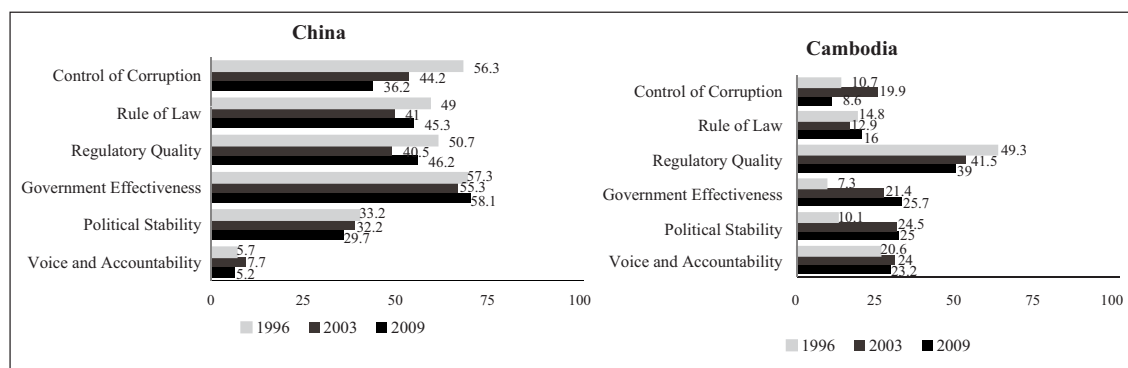
One of the most frequently asked questions to a country whose economy is in transition is what role the government should play—leadership, accountability, strategies, allocation of resources, and institutional capacity building—to help smoothen and hasten the process rather than hindering it. Ideological and theoretical lines have been drawn, albeit ambiguous, between those who preclude government interventions in the market and those who think that government presence and interventions are unavoidable. The difference between Washington and the Beijing Consensus, if compared, lies in the speed with which reform should go and the role played by the government, the latter preferring a quick and lesser role and the former favouring slow and experimental steps and relatively heavy government interventions (see, for example, Woo (1999) and Lindbeck (2006) for the discussion on the speed of China's reform and its merits and demerits).

When scrutinising the development experiences of East Asian countries such as Japan, South Korea, and recently China, one can clearly see that the developmental stages are by and large similar in that the government has been strong in providing public goods, performing coordination work, making sure that competition is just, and ensuring a good business climate conducive for investment.

A body of work on the role of the state has highlighted the economic distortions—mainly insufficient tax revenue collection thereby reducing incentives of those controlling the state and lowering investment in public goods—resulting from a “weak state” (Acemoglu 2005; Evans 2010; Besley & Persson 2010; Mauro 1995). Evans (2010) contends that two underlying roles

that a 21st century government should ensure are (1) capacity to provide basic public goods such as education, health services, and infrastructure (roads, bridges, schools), and (2) strong and able institutions for facilitation and coordination work. There is little doubt regarding the existence of government, but the question here is where the line of responsibility between the state and non-state actors should be drawn.

Figure 9: Governance Indicators in China and Cambodia, Percentile Rank (0-100)



Source: World Bank 2010b.

Note: Six percentile ranks are used in the classification: 0th-10th percentile, 10th-25th percentile, 25th-50th percentile, 50th-75th percentile, 75th-90th percentile, and 90th-100th percentile.

China's development experiences and reform are ones that Cambodia can further examine as heavy involvement of the Chinese government in the development process has contributed to its impressive growth for the last three decades. In other words, the Chinese government has been at the forefront, leading and directing development, putting in place necessary policies and strategies, ensuring that the private sector benefits from their investment, and allocating economic resources where market might not be efficient and equitable in doing so. Critics have raised concerns that the heavy government involvement in China might be counterproductive for long-term economic growth and could jeopardise sustainability. However, no one has been able to completely refute the Chinese model at a time when the American model with less government interventions has been tested during the financial crisis which many believe resulted from the neglect of regulating the market and from over-confidence in the notion that market is best for resources allocation.

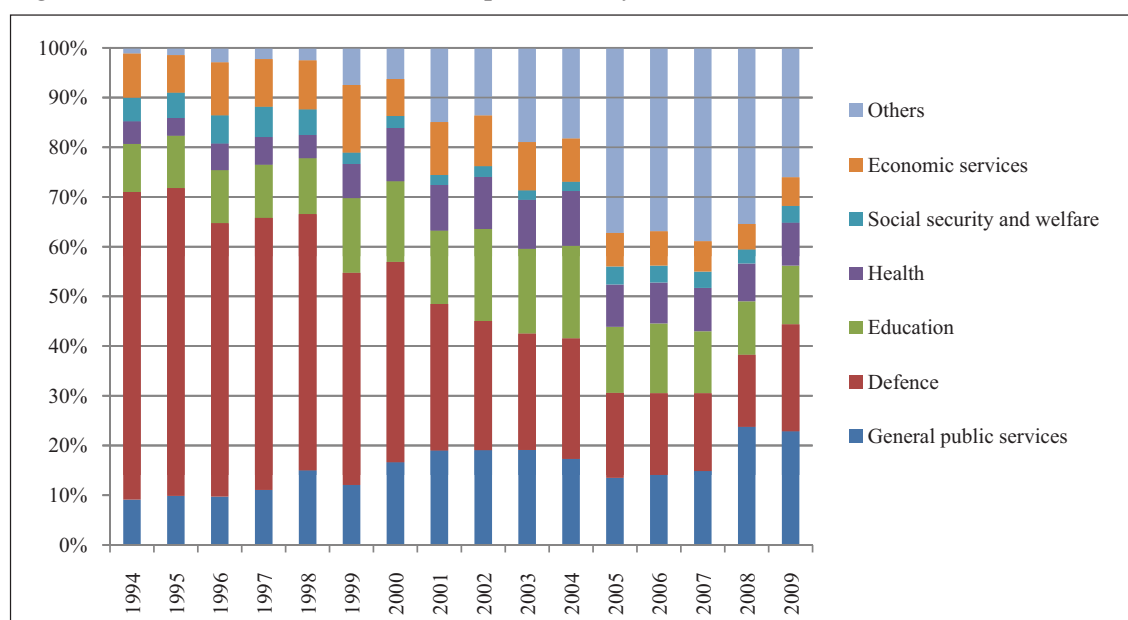
The Chinese government has performed quite well in terms of leadership, tax collection, policy and strategy design, provision of public goods (education, health and infrastructure), and facilitation and coordination in market resources allocation. From 1980 to 2009, the government's tax and non-tax revenue grew on average at a rate of 16.6 percent a year while expenditure growth rate accounted for 17.0 percent in the same period. The growth rate of budget deficits has been about 0.4 percent a year which is largely favourable for macroeconomic stability (China's NBS 2010). During 1990-2009, government expenditure shared on average 14.7 percent to GDP (current market prices) and was allocated to a wide range of economic purposes such as economic construction, social, cultural and educational development, national defence, administrative expenses and others. Since reform, expenses on economic construction and social, cultural and educational development have topped the list accounting for on average 44.7 percent and 24.0 percent per year of total government expenditure, respectively, compared to defence (9.9 percent) and administrative expenses (12.7 percent).

By contrast, the size of public expenditure in Cambodia is small, accounting on average for about 6.6 percent per annum to GDP (current market prices) compared to 85.5 percent of

private consumption. This shows that private consumption has been strong and contributed significantly to economic growth; however, private investment and public consumption have been weak. Low government expenditure partly reflects the lack of the government's ability and efficient mechanism to collect and mobilise revenue. There is also a need to formalise a large part of the informal sector (Guimbert 2010, p.6).

As shown in Figure 10, between 1994 and 2009, a substantial amount of government money was spent on defence (34.8 percent), general public services (15.4 percent) and covered the expenses of government agencies and other contingencies (16.5 percent) compared to 13.5 percent on education, 7.7 percent on health, 8.6 percent on economic services and 3.5 percent on social security and welfare. The current border conflict with Thailand will further increase the government's budget to cover military expenses which means even less money for social and economic development activities. Corruption remains an important issue demanding immediate and serious solutions. Despite its political practice, socialist with one party, China has made considerable progress on a number of governance indicators such as control of corruption, rule of law, regulatory quality and others compared to those of Cambodia. For instance, China, in 2009, was rated 36.2 on control of corruption compared to Cambodia's rating of 8.6 (see also Figure 9).

Figure 10: Cambodia's Government Expenditure by Function



Source: ADB 2010

Note: Others include information, other government agencies, and contingencies

3.3. Government-led Poverty Reduction in China

3.3.1 Poverty Reduction Policies and Programmes

Since the onset of reform, China has made serious and committed efforts to alleviate poverty particularly in counties where poor and vulnerable households reside. China's poverty reduction framework comprises four components: structural reforms to promote poverty relief (1978-1985), large-scale development-oriented poverty reduction (1986-1993), 8/7 poverty

reduction plan (1993-2000)⁷ and poverty reduction programmes (2000-10) (see, for example, Wu & Cheng 2010 and China's government 2006). The first stage is self-explanatory in a sense that achieving high and sustained economic growth was prioritised through various structural and institutional reforms that started with a reform on land management and decision making system—"household responsibility" and "abolition of communes"—to raise agricultural outputs (Johnson 1990).

The system that empowered smallholder farmers to decide how to manage and invest in their land together with a few other reforms such as relaxing control over the prices of agricultural products and devoting major efforts to developing township enterprises provided leverage for poverty reduction. These reforms conveyed a number of benefits to poverty-stricken people: higher prices for agriculture products, changes in agricultural production and structure which produced high value-added and employment of surplus rural labourers to industry and services (Johnson 1990; Yusuf *et al.* 2006: 5-6; China's government 2010). During this first phase, there were no poverty reduction institutions to coordinate activities.

As a result, from 1978 to 1985 grain output per capita increased by 14 percent in the countryside, cotton by 73.9 percent, oil-bearing crops by 176.4 percent, and meat by 87.8 percent. The net income per peasant grew by 3.6 times; the number of poverty-stricken people with problems feeding and clothing themselves decreased from 250 million to 125 million, the total population in the rural areas shrank to 14.8 percent, and the number of poverty-stricken people went down by 17.86 million per year on average (China's government 2006).

Albeit successful, economic, social and cultural disparities between poverty-stricken areas and other areas, especially the advanced coastal areas of the east, emerged. Certain groups of low income households could not fulfil their basic needs. Realising this regional poverty elasticity of economic growth, the Chinese government has adopted a number of policies since 1986 such as establishing "help-the-poor" work units, allocating special funds, formulating special favourable policies, thoroughly reforming the traditional relief-type approach and putting forward development-oriented poverty reduction policies.

3.3.2 Poverty Reduction Institutions

Established in 1986, the State Council Economic Development in Poor Areas Leading Group changed its name in 2003 to the State Council Leading Group of Poverty Alleviation and Development, a body under the State Council. The group is responsible for coordinating surveys and research projects; drafting guidelines, policies and plans for economic development in poor areas; coordinating solutions for key issues in poverty-alleviation development; supervising poverty-alleviation work; and organising exchanges of experience.

An office, namely "The State Council Leading Group Office of Poverty Alleviation and Development (LGOP)", has been established as the standing organisation for the group, and is responsible for performing the Group's daily work activities. LGOP consists of leaders from the National Development and Reform Commission (NDRC), Ministry of Agriculture (MoA), Ministry of Finance (MoF), the People's Bank of China (PBOC), Ministry of Education (MoE), Ministry of Health (MoH), Agricultural Bank of China (ABC) and other ministries (Wu & Cheng 2010). LGOP, NDRC, MoF and ABC are the four key government institutions which

⁷ 8/7 Poverty Reduction Plan is a national plan established in 1994 to reduce the still high poverty rate in China: 8 means that 80 million rural people were living below the government-defined poverty line; 7 means the government aimed to help these 80 million people move above the poverty line within 7 years (1994-2000).

manage the three main sources of government funds for poverty reduction: funds for cash for work programmes, government fiscal poverty funds and the subsidised loan programmes. Table 8 summarises major poverty reduction programmes with respective implementing agencies.

Table 8: Development-oriented Poverty Programmes in Rural China

Programmes	Start-up time	Description	Implementing agencies
Cash for Work	1985	Improve rural infrastructure by paying the poor for working on these programmes	NDRC
Poverty loans	1986	Subsidised loans targeting enterprises and households in poor regions	ABC and other banks
Fiscal development fund	1986	Improve farm production conditions through farmland improvement and agricultural technical extension	LGOP
Poverty reduction through science and technologies	1986	Promote the application of science and technology for agriculture in poor areas through demonstration and training	Science Commission and LGOP
Micro-credit	1996	Provide micro-loans to rural households in poor areas using subsidised poverty loans and/or donors' funds	LGOP and ABC, NGO, MFIs
Integrated village development plan	2001	Overhaul poor villages' infrastructure and improve local production and living standards using a relatively large amount of funds for each village through participatory village planning	LGOP
Training for migrant workers	2004	Prepare rural labourers from poor areas for working as migrant workers in urban areas by providing non-farm skill training	LGOP
Poverty reduction through industrial support	2004	Promote scale agriculture and agricultural specialisation in poor areas by providing marketing support and assisting dragon-head enterprises	LGOP
Village mutual help fund	2006	Promote endogenously generated cooperative credit services for poverty reduction by providing selected poor villages with an initial grant fund. This is a type of community development fund scheme applied in China.	LGOP

Source: Wu and Cheng 2010

China also uses the “level-by-level” responsibility system, with the provincial authority as the main player in its administrative leadership of the poverty reduction programmes. The provinces, autonomous regions and municipalities, especially areas with large concentrations of poverty, have put development-oriented poverty relief high on their agenda by formulating concrete local implementation plans in line with the state's poverty reduction programmes. The principal leaders of the provinces, autonomous regions and municipalities are required to personally supervise and oversee the work and assume overall responsibility. Central government issues the relief funds to local authorities and delegates “the funds, powers, tasks and responsibilities”. All the funds assigned to the provinces are arranged and used by the people's government at the provincial level, which organises the relevant departments to plan and implement the poverty reduction projects (China's government 2006).

The above-mentioned institutional and execution arrangement has provided more leverage to the government to mobilise resources quickly and effectively to address the needs of the poor and vulnerable households. The establishment of LGOP serves as a unified system from which strategies are designed and later followed by different levels of authorities to reach one common goal and that is people living in peace and dignity (Wu & Cheng 2010).

3.4. Lessons: Poverty Reduction Strategy

As shown, China's poverty reduction programmes have a number of distinct features: government-led, specialised national institutions to coordinate activities and mobilise resources for large-scale programmes, poverty reduction programmes that target poor counties and households and the shift from programmes that provide direct cash transfer to ones that assist the poor (mainly economically poor) to help themselves by building rural infrastructure, providing poverty loans, micro-credit and training and demonstration on production improvement and science and technology (see Table 8).

Cambodia's government can draw lessons from China's poverty reduction experience by making the existing institution, currently CARD, a specialised national agency to coordinate poverty reduction programmes with all relevant line ministries and development partners to make sure that there is no overlapping and programme coverage is expanded nationwide. Staff of CARD should be trained and re-trained for effective high quality implementation of poverty reduction programmes. The government should also consider allocating more resources for rural development in building infrastructure, providing more micro-credit and poverty loans, and conducting training and demonstrations based on needs assessment of the targeted groups. The government should also consider moving step-by-step from supplying direct assistance in cash or in kind (i.e., food distribution, budget support) to supports that help individuals and communities to help themselves for long-term income generation.

Because the rural poverty headcount still accounted for 34.7 percent and agriculture still shared 39 percent of GDP and 70.3 percent of total employment over the period 1993-2009 (see World Bank 2006; CDRI 2011; Tables 1 and 2), Cambodia's poverty reduction programme should begin with small-scale rural enterprises (formal and informal) operated by local farmers as the level of technology and management skills is low in poor areas. Financial support should be complemented by technical and managerial training (Wu & Cheng 2010).

Another lesson from China's poverty programme is the decentralised involvement of authorities at all levels with the province as the main actor in the planning process and resource allocation. With its decentralised mechanism, Cambodia should consider empowering and entrusting provincial authorities and the respective districts and communes to take on increasing tasks and responsibilities to formulate and implement local plans for poverty reduction with financial support from local and central government. Leaders of those bodies should be put in charge of overseeing and monitoring progress and effectiveness of poverty reduction programmes.

DIFFERENCES AND CONSTRAINTS ON MODEL REPLICATION

Before any applicable lessons can be drawn for Cambodia from China's experiences in either economic growth or poverty reduction programmes, it should be emphasised that there are differences in development context, economic endowments and pre-conditions to reform between the two countries.

China's transformation from one of the world's poorest countries to the world's second largest economy means greater flexibility and leverage to allocate funds for different development initiatives. With its strong and committed administrative system, China is also able to mobilise poverty reduction funds and relief quickly to address the needs of the poor and vulnerable (Wu & Cheng 2010). By contrast, even with rapid economic growth over the last decade, growth in Cambodia has been uneven: poverty rate decreased yet remained high, and inequality increased, largely because of lack of resources due partly to corruption and insufficient revenue collection mechanism, weak institutional arrangement and governance, limited capacity of poverty reduction agency, heavy political interference in economic matters, and aid dependency in which certain donors' agenda and conditions need to be fulfilled.

Human capital improvement remains an important issue for Cambodia. Government expenditure on education is relatively low accounting on average for 13.5 percent per year compared to defence (34.8 percent) and general public services (15.4 percent) (see also Figure 10). The level of education remains low with low rate of returns (Guimbert 2010). Although Cambodia has made considerable progress in achieving universal primary education, the net enrolment of which was 95 percent in 2009, the net enrolment rate in secondary schools stood at 34 percent and that in tertiary education was even lower (WDI 2011b).

Cambodia can take advantage of its growing labour force, with annual growth rate of 3.1 percent compared to 1.0 percent in China, particularly young people given that youth constituted more than a quarter of the total labour force at 25.8 percent as of 2010 (ILO 2010). However, one of the prevailing issues is the mismatch of required skills given that many young graduates are being trained in management and few in specific and technical skills such as IT and engineering (Guimbert 2010). Cambodia is also lagging behind in the field of research and development with only 0.05 percent of GDP spent on R&D compared to 1.4 percent in China. The number of researchers is very low with only 17 researchers per million people compared to 1071 in China (Table 9). Thus, improving general education and focusing more on preparing young Cambodians in secondary and tertiary education should be one of the policy priorities.

Cambodia also faces resource constraints due partly to corruption, insufficient revenue collection mechanism, weak institutional arrangement and governance. Resource allocation is still problematic. As pointed out, more financial resources have been spent on defence and general public services the main item of which is the payroll, than on economic construction, education and health. As a low income country where many things could become constraints on economic growth, prioritisation is unavoidable. In terms of poverty targeting, more needs to be done in improving both the institutional arrangement and capacity of staff who work with poverty reduction programmes. Coordination between line ministries and specialised institutions and coverage of programmes are still weak. In addition, the ID Poor, the system

used for identification of the poor and vulnerable, has to be updated and upgraded so that the right people are covered in the programmes.

Table 9: Science and Technology

	Cambodia	China	Vietnam	Laos	Thailand	Indonesia	Philippines
Researcher in R&D (per million people) 2000-08	17	1071	115	16	311	205	81
Technician in R&D (per million people) 2000-08	13	...	...	...	160	...	10
Scientific and technical journal articles 2007	26	56806	283	12	1728	198	195
Expenditure on R&D (% of GDP) 2000-08	0.05	1.44	0.19	0.04	0.25	0.05	0.12
High technology exports							
USD million 2009	4	348295	1685	...	28655	5940	21531
% of manufactured exports 2009	0	31	5	...	26	13	66

Source: World Bank WDI 2011b

Despite these constraints and shortcomings, there are a number of strengths and opportunities Cambodia can utilise to improve the weaknesses. Cambodia has gone through quite aggressive reform from socialist to free market economy where rules and regulations have been formulated to assist the country in its development efforts. Various policy measures are in place to ensure that the country is on a sustainable path to economic growth and that income is redistributed in a more equitable way to reduce poverty and inequality. Cambodia is also well integrated into regional and global markets to take advantage of expanding markets, attracting FDI and learning new knowledge and technology. Cambodia's membership in the World Trade Organisation is another achievement reflecting the country's acceptance by the international community. Cambodia has also achieved a sound macro-economy and political stability.

One of the driving factors for the rapid growth of Cambodia's economy is the exploitation of natural resources (Guimbert 2010). Recently, the discovery of off-shore oil and natural gas and particularly the expected revenue from production could be a good opportunity for the country's economy if the revenue is effectively managed. This would provide the government more leverage to address weaknesses and more available resources to invest in infrastructure, education and health. Therefore, a shift in the role of the current state will be one of the most crucial pre-conditions for Cambodia to realise this potential (UNDP 2006).

ROLE OF CHINA AND OTHER EMERGING MIDDLE INCOME COUNTRIES IN INCLUSIVE GROWTH IN CAMBODIA

Cambodia remains heavily dependent on official development assistance (ODA). In 2009, external aid accounted for 55 percent of government budget and 90 percent of resources available for financing capital expenditures. Aid flows to Cambodia continued to increase despite the impact of the global economic downturn on donor countries from USD955 million in 2008 to USD990 million in 2009 and projections for 2010 in the order of USD1.1 billion. The volume of ODA from “emerging donors”—such as China, India and Korea—is rapidly increasing. China’s disbursement to Cambodia increased from USD32.5 million in 2004 to USD114.7 million in 2009 (Table 10).

Table 10: Development Partner Disbursements (USD million)

	2006	2007	2008	2009	2010 projected
UN (core resource)	54	58.3	68.3	74.8	95.8
World Bank	24.5	47.5	44	60.4	122.7
IMF	83.5	0.9			
ADB	67.5	69.4	145.7	89.5	124.5
Global Fund	21.9	21.1	38.6	47.9	41.2
UN and multilateral	251.2	197.1	296.6	272.6	384.2
Belgium	7.3	7.2	2.8	3.1	1.2
Denmark	4.1	9.8	10.1	14.2	16.4
Finland	4.5	5.2	6.6	6.3	1.6
France	21.8	21.7	31.3	25.5	26.7
Germany	32.4	20.7	36.5	32.5	60.2
Netherlands	0.1	0.1	2.2	0.7	1.2
Spain	2.8	3.5	6.5	16.8	22.9
Sweden	16	17.3	15.9	22.9	26.7
UK	20.7	23.7	29.6	32.5	31.6
EC	46.5	44	47.2	50.3	57.8
EU partners	156.1	153.2	188.6	204.8	246.3
Australia	22.5	29.6	31.2	23.7	36.3
Canada	7.9	12.6	17.2	13.1	7.9
China	53.2	92.4	95.4	114.7	100.2
Japan	103.7	117.2	126.2	148.4	104.7
New Zealand	1.7	4.5	2.8	2.7	3.3
Rep of Korea	13.3	31.3	33	46.5	26.5
Switzerland	2.4	3.6	3.9	2.8	2.8
USA	51	58.1	55.7	56.9	61.2
Other bilateral	255.7	349.4	365.5	408.8	343
NGO (own fund)	50.2	77.7	104.9	103.3	112.4
Total	713.2	777.5	955.6	989.5	1086

Source: Cambodia Aid Effectiveness Report (CDC 2010)

China's role in Cambodia's economic development has been increasingly vital in both ODA and direct investment. Majority of China's ODA has been disbursed to building and rehabilitating physical infrastructure such as roads and bridges (Table 11). These projects have benefited people who live along or near the constructed or rehabilitated roads or bridges through shorter travel time, easier and greater access to market, health centre, school and other social services, and have attracted more business investment. Ouch *et al.* (2010), for instance, found that with the rehabilitation of National Road No. 7 from Kratie to Trapeang Kriel, people who live along or near the road can reduce travel time and cost by almost half and children have greater access to school and health centre. Other benefits include higher prices for crops and agricultural land and attraction to agro-business companies.

In reinforcing South-South cooperation where Cambodia has been identified as a pilot country by the Chinese government, there has been a trilateral partnership between China-UNDP-Cambodia to operationalise the Memorandum of Understanding (MoU) signed by China and UNDP in 2010. According to a draft concept note developed by UNDP, a number of potential projects have been pre-selected for further feasibility studies: (1) Kompong Trabek River Flood Control Project in Prey Veng province, (2) the Kanghot Irrigation Development Project in Battambang province, and (3) the provision of 300 bio-digesters to support rural energy. The first two projects were particularly recommended for further collaboration (UNDP 2010b).

Table 11: China's Disbursements by Sector, 2005-10 (USD million)

	2005	2006	2007	2008	2009	2010	Total
Health		0.13					0.13
Education		0.38			0.08		0.46
Agriculture	1.71	0.07					1.78
Manufacturing, mining and trade	0.05						0.05
Information and communications			8.85				8.85
Post and telecommunication		8.46					8.46
Transportation	25.83	12.68	42.31	87.12	114.62	100.20	382.76
Community and social welfare services	18.53	19.04	26.22				63.79
Culture and arts		0.28	0.30				0.58
Environment and conservation		0.02	0.02				0.04
Government and administration	0.52	12.18	14.75	8.29			35.75
Total	46.64	53.24	92.45	95.41	114.7	100.2	502.65

Source: Cambodia Aid Effectiveness Report (CDC 2010); Ouch *et al.* 2010: 45

Another opportunity that Cambodia can further explore is the growing investment of Chinese firms in the country (Tong & Hem 2010). Between 2000 and the first half of 2011, China was the top investor in Cambodia, accumulating 232 business investment projects with total fixed assets approved at USD9205.1 million, followed by South Korea with fixed assets of USD4851.1 million (Table 12). Sectoral investment-wise, FDI in Cambodia is unevenly distributed with the garment sector attracting the most investment. Majority of China's direct investment projects also went to garments (125 projects between 2000 and April 2011) (Table 13).

Table 12: Top 15 Investors in Cambodia, 2000-April 2011

Country	No. of projects	Fixed assets (USD million)
China	232	9205.1
South Korea	95	4851.1
United States	33	948.0
Malaysia	46	777.7
Russia	5	615.3
Thailand	35	594.3
Vietnam	38	577.3
Taiwan	108	448.3
Singapore	38	434.2
France	13	189.2
Australia	12	129.5
Hong Kong	23	117.3
United Kingdom	17	71.2
Canada	13	37.9
Japan	11	20.5

Source: Council for the Development of Cambodia (2011)

Table 13: Chinese Investment by Sub-Sector, 2000-April 2011

Sub-sector	No. of projects	Average employed labour	Average fixed assets (USD million)
Garments	125	1315	1.3
Socks	2	685	2.1
Shoes	8	2931	3.8
Mining	7	733	63.0
Energy	6	262	199.0
Pharmaceuticals	3	192	1.3
Wood processing	2	701	1.2
Food processing	1	247	0.7
Other industries	43	344.3	5.2
Energy services	1	112	113.0
Telecommunication	2	186	22.5
Construction	1	384	9.4
Hotel	2	456	12.1
Tourism	7	3087.5	426.0
Other services	2	61	1.7
Agro-industry	18	3061	20.2
Animal feed	1	173	3.3
Agriculture	1	2006	3.7

Source: Council for the Development of Cambodia (CDC 2011)

China's investment projects in the secondary sector such as hydro-power dams and mineral resources have increased in size and technology transfer. To date, six Chinese firms have invested USD1.6 billion to construct five hydro-electric dams with a total capacity of 915 megawatts. Another 23 companies are exploring mineral resources such as metallic minerals, titanium, bauxites and copper. Cambodia can take advantage of these investment projects in terms of technical know-how to build the capacity of Cambodian workers and firms. However, these projects, if mismanaged, could have serious consequences for the environment and livelihoods of surrounding households.

Rutherford *et al.* (2008) cautioned that thousands of Cambodians could be displaced and the environment could be seriously damaged; that is, livelihoods of the local populace could be affected by Chinese firms' hydropower projects if proper impact assessments and public consultations are not conducted. In the study of China's investment in Cambodia's hydropower development, Middleton and Sam (2008) recommended that Chinese firms who invest abroad and their financiers should be committed to implementing international standards in infrastructure development. This shows that the capacity and standards of some Chinese firms are questionable and that host countries, like Cambodia, should be extremely careful prior to contract approval. However, this has been a challenging issue due largely to the politics that usually heavily underpin the granting of investment rights to such big projects.

Besides the overall positive impacts that China's ODA in the reconstruction and rehabilitation of physical infrastructure is having on the livelihoods of the beneficiaries of the projects, China should consider diversifying its ODA to help build more necessary infrastructure that benefit more directly the poor and vulnerable—roads, bridges and irrigation systems—and sharing R&D knowledge and agriculture and agro-business techniques. This is to ensure that the cooperation with China is worthwhile for Cambodia's long-term economic growth and not merely focussed on natural resources exploitation (Tong & Hem 2010; Rosario 2011).

CONCLUSION AND POLICY IMPLICATIONS

As shown, China and Cambodia have undergone tremendous policy and institutional reforms in their efforts to gradually and sustainably grow their economies. Prior to its reform in 1978, China shared similar social, political and economic characteristics with other developing countries such as India, Bangladesh, Indonesia and the Philippines—large population, low per capita income, scarce resources, low incentives, and inefficient resource allocation (Dollar 2007; Lin 1994). However, China stood apart from the group when it started the reform process, steadily growing faster than those countries.

China has significantly expanded its economic growth at an average of 10 percent per annum for the last two decades, attributable to trade liberalisation and openness, gradual privatisation of state-owned enterprises, construction of quality and standard infrastructure, and agriculture and rural development. Efforts to build capacity and make changes to public institutions have also been incorporated into the reform agenda. China has also been successful in lifting millions of Chinese out of abject poverty through overall economic growth and poverty reduction programmes targeting poor counties and households as implemented by dedicated and capable government-led institutions.

Economists, policy makers, practitioners, and international organisations have eyed China's successful reform, beneficial to economic growth and poverty reduction, as a model that developing countries, Cambodia among others, that have been slow or even unsuccessful in fighting extreme poverty could adapt, learning from China's development experiences and identifying the determinants that have contributed to this impressive growth that could apply to their own country context.

Despite contextual differences and economic endowments that have to be taken into account, Cambodia can look to China's development experiences in general and poverty reduction in particular in the areas of trade liberalisation and openness, industrialisation, agriculture and rural development, and the role of the state in "marketisation" rather than aggressive privatisation. Government-led institutions which have contributed significantly to poverty reduction efforts in China (i.e., through various projects and programmes to construct rural infrastructure, provide micro credit and build capacity of the poor to improve their income and livelihoods) have immediate implications for Cambodia to further strengthen its poverty reduction agency.

It is important that China and Cambodia continue to strengthen their cooperation. With an increase in both official development assistance and foreign direct investment, China should further provide more for Cambodia's poverty reduction initiatives and programmes through training staff and civil servants who work for poverty reduction institutions, collaborating in research aimed at providing further strategies and plans for poverty reduction, and exchange programmes for government officials, policy makers and researchers of both countries to mutually learn and share knowledge. The current expenditure of Chinese ODA on transportation and infrastructure should be continued and Chinese investors should expand their interests in agro-business. China should also consider transferring technological and managerial know-how to Cambodian counterparts through appointing Cambodians to high and mid-level positions rather than just employing rank and file workers. This is because, as observed, most employees of public and private investment projects funded by Chinese government or companies are of Chinese origin and production and construction materials are usually imported from China.

REFERENCES

- Acemoglu, Daron (2005), “Politics and Economics in Weak and Strong States”, *Journal of Monetary Economics*, 52 (7), pp. 1199-1226
- Asian Development Bank (2010), Key Indicators (Manila: ADB)
- Asian Development Bank (2011), “Asian Development Outlook: South-South Economic Links” (Manila: ADB)
- Bajona, Claustre & Tianshu Chu (2010), “Reforming State Owned Enterprises in China: Effects of WTO Accession,” *Review of Economic Dynamics*, 13(4), pp. 800–23
- Benjamin, Dwayne, Loren Brandt & John Giles (2005), “The Evolution of Income Inequality in Rural China”, *Economic Development and Cultural Change*, Vol. 53, No. 4, pp. 769-824
- Besley, Timothy & Torsten Persson (2010), “State Capacity, Conflict, and Development”, *Econometrica*, 78(1), pp. 1-34
- Bigsten, Arne (2007), “Can China Learn from Sweden?” *World Economics*, Vol. 8, No. 2, pp. 17-40
- Bosworth, Barry & Susan M. Collins (2008), “Accounting for Growth: Comparing China and India,” *Journal of Economic Perspectives*, 22(1), pp. 45–66
- Cambodia Development Resource Institute (2011), “*Poverty Dynamics Study: Evidence from Nine Villages in Cambodia*”, mimeo (Phnom Penh: CDRI)
- Cambodian Rehabilitation and Development Board (2010), *The Cambodia Aid Effectiveness Report*, (Phnom Penh: CRDB/CDC)
- China’s National Bureau of Statistics (1996), Statistical Yearbook (China: Beijing)
- China’s National Bureau of Statistics (2010), Statistical Yearbook (China: Beijing)
- Chinese Government’s Official Web Portal (2006), “*The Development-oriented Poverty Reduction Program for Rural China 2001*” (Beijing: Government)
- Council for the Development of Cambodia (2010), “*Aid Effectiveness Report and Database*”, (Phnom Penh: CDC)
- Dethier, Jean-Jacques & Alexandra Effenberger (2011), *Agriculture and Development: A Brief Review of the Literature*, World Bank Policy Research Working Paper No. 5553
- Dollar, David & Aart Kraay (2002), “Growth is Good for the Poor”, *Development Research Group* (Washington, DC: World Bank)
- Dollar, David (2007), *Poverty, Inequality, and Social Disparities during China’s Economic Reform*, World Bank Policy Research Working Paper No. 4253
- Dollar, David (2008), *Lessons from China for Africa*, World Bank Policy Research Working Paper No. 4531
- Eckaus, R. (1997), “Going Global: China”, in Padma Desai (ed.), *Going global: Transition from Plan to Market in the World Economy*, pp. 415-37 (Cambridge; London: MIT Press)
- Evans, Peter B. (2010), “Constructing the 21st Century Developmental State: Potentialities and Pitfalls”, in Omano Edigheji (ed.), *Constructing a Democratic Developmental State in Africa: Potentials and Challenges* (Cape Town: HSRC Press)
- Fields, Gary S. (2001), *Distribution and Development* (New York: Russell Sage Foundation)
- Gregory C. Chow & Kui Wai Li (2002), “China’s Economic Growth: 1952–2010.” *Economic Development and Cultural Change*, Vol. 51, No. 1, pp. 247-256
- Guimbert, Stephane (2010), *Cambodia 1998-2008: An Episode of Rapid Growth*, World Bank

- Policy Research Working Paper No. 5271, (Washington DC: World Bank)
- Harrold, Peter (1992), "China's Reform experience to date," *World Bank Discussion Papers: China and Mongolia Department*, No. 180
- Hu, Zulu F. & Mohsin S. Khan (1997), "Why Is China Growing So Fast?" *Staff Papers –International Monetary Fund*, 44(1), pp. 103–31
- International Labour Organisation (Sep 2010), "*Labour and Social Trends in Cambodia 2010*" (Phnom Penh: ILO)
- International Monetary Fund (2011), "*World Economic Outlook: Tensions from the Two-Speed Recovery*" (Washington, DC: IMF)
- International Poverty Reduction Centre in China (2010), "*Development Partnerships for Growth and Poverty Reduction*", Working Paper Series No 07 (Beijing: IPRCC)
- Jalilian, Hossein, Lun Pide & Glenda Reyes (forthcoming), "*The Food and Economic Crises: Implications for Food Security and Agriculture in Cambodia*", FAO
- Johnson, D. Gale (1990), "The People's Republic of China: 1978-1990", *International Centre for Economic Growth* (San Francisco, California: ICP Press)
- Kakwani, Nanak, Shahid Khandker & Hyun H. Son (2004), "Pro-poor Growth: Concepts and Measurement with Country Case Studies", Working Paper No 1, *International Poverty Centre*, United Nations Development Programme
- Kobayashi, Shintaro, Katsuhiko Saito, Hajime Tanji, Wenfeng Huang & Minoru Tada (2008), "Economic Structure of Cambodia and Strategies for Pro-Poor Growth: Results from a Computable General Equilibrium Analysis", *Studies in Regional Science*, 38(1), pp. 137-154
- Kraay, Aart (2006), "When is growth pro-poor? Evidence from a panel of countries", *Journal of Development Economics*, 80, pp. 198-227
- Lin, Justin Yifu (1994), *China's Economic Reform: Pointers for other Economies in Transition?* World Bank Policy Research Working Paper No. 1310 (Washington, DC: World Bank)
- Lindbeck, A. (Nov 2006), An Essay on Economic Reform and Social Changes in China, World Bank Policy Research Working Paper No. 4057 (Washington, DC: World Bank)
- Maddison, Angus (2010), "Historical Statistics of the World Economy: 1–2008 AD" (Excel file), http://www.ggdc.net/MADDISON/Historical_Statistics/horizontalfile_02-2010.xls (accessed 28 October 2010)
- Mauro, Paolo (1995), "Growth and Corruption", *Quarterly Journal of Economics*, 110(3), pp.681-712
- Middleton, Carl & Sam Chanthy (2008), "*Cambodia's Hydropower Development and China's Involvement*" (Phnom Penh: RCC)
- Ministry of Commerce of People's Republic of China (2010a), "China's Import of Trade in Services by Categories of Service: 1997-2009", <http://english.mofcom.gov.cn/aarticle/statistic/ieindicators/201102/20110207396937.html> (accessed June 2011)
- Ministry of Commerce of People's Republic of China (2010b), "China's Export of Trade in Services by Categories of Service: 1997-2009", <http://english.mofcom.gov.cn/aarticle/statistic/ieindicators/201102/20110207402414.html> (accessed June 2011)
- Ministry of Planning (2010), *Achieving Cambodia's Millennium Development Goals* (Phnom Penh: MOP)
- Montalvo, Jose, G. & Martin Ravallion (2010), "The pattern of growth and poverty reduction in China", *Journal of Comparative Economics*, 38, pp. 2-16
- Motonishi, Taizo (2006), "Why has income inequality in Thailand increased? An analysis using surveys from 1975 to 1998", *Japan and the World Economy*, 18, pp. 464-487
- National Institute of Statistics (2008), *Statistical Yearbook 2008* (Phnom Penh: MOP)

- National People's Congress of the People's Republic of China (2011), "*Resolution of the Standing Committee of the National People's Congress on Approving the Regulations on Special Economic Zones in Guangdong Province*", http://www.npc.gov.cn/englishnpc/Law/2007-12/13/content_1384060.htm (accessed June 2011)
- Natsuda, Kaoru, Kenta Goto & John Thoburn (2009), "*Challenges to the Cambodian Garment Industry in the Global Garment Value Chain*", Working Paper, No. 09-3, Ritsumeikan Center for Asia Pacific Studies (RCAPS), Ritsumeikan Asia Pacific University, Japan
- Ouch, Chandarany, Saing Chan Hang & Phan Dalis (2010), "Assessing China's Impact on Poverty Reduction in the Greater Mekong Sub-region: The Case of Cambodia", *Annual Development Review 2010-11* (Phnom Penh: CDRI)
- Perkins, Heald Dwight (1988), "Reforming China's Economic System", *Journal of Economic Literature*, Vol. XXVI, pp. 601-645
- Qian, Yingyi (2000), "The Process of China's Market Transition (1978-1998): The Evolutionary, Historical, and Comparative Perspectives." *Journal of Institutional and Theoretical Economics*, Vol. 156, Issue 1, pp. 151-171
- Qian, Yingyi & Wu Jinglian (2000), "China's Transition to a Market Economy: How Far across the River?" Conference Paper on Policy Reform in China, revised, the Centre for Research on Economic Development and Policy Reform, Stanford University, November 18-20, 1999
- Ravallion, Martin (2009), "Are There Lessons for Africa from China's Success Against Poverty?" *World Development*, 37(2), pp. 303-313
- Ravallion, Martin & Chen Shaohua (1997), "What can new survey data tell us about recent changes in distribution and poverty?" *World Bank Economic Review*, 11, pp. 357-382
- Ravallion, Martin & Chen Shaohua (2007), "China's (uneven) progress against poverty", *Journal of Development Economics*, 82, pp. 1-42
- Rawski, Thomas G. (1994), "Chinese Industrial Reform: Accomplishments, Prospects, and Implications," *The American Economic Review*, 84(2), pp. 271-275
- Rawski, Thomas G. (1999), "Reforming China's Economy: What Have We Learned?" *the China Journal*, No. 41, pp.139-156
- RGC (1997), "First Five Year Socio-economic Development Plan 1996–2000" (Phnom Penh: RGC)
- RGC (2002a), "Second Five Year Socio-economic Development Plan 2001–2005" (Phnom Penh: RGC)
- RGC (2002b), "National Poverty Reduction Strategy 2003-2005", (Phnom Penh: RGC)
- RGC (2003), "The Cambodia Millennium Development Goals" (Phnom Penh: RGC)
- RGC (2004), "Rectangular Strategy for Growth, Employment, Equity and Efficiency" (Phnom Penh: RGC)
- RGC (2005), "National Strategic Development Plan 2006–2010" (Phnom Penh: RGC)
- RGC (2008), "Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase II" (Phnom Penh: RGC)
- RGC (2009), "National Strategic Development Plan Update 2009–2013" (Phnom Penh: RGC)
- RGC (2011), "National Social Protection Strategy 2011-2015", draft (Phnom Penh: RGC)
- Rosario, Cruz-del Teresita (2011), "China's aid comes with strings", *Phnom Penh Post*, August 17, p.16
- Rutherford J., Kate Lazarus & Shawn Kelley (2008), "*Rethinking Investment in Natural Resources: China's Emerging Role in the Mekong Region*", Heinrich Boll Stiftung, WWF and International Institute for Sustainable Development

- So, Sovannarith, Lim Sovannara & Nou Keosothea (2007), “Labour Migration in Rural Livelihoods: Challenges and Opportunities”, *Annual Development Review 2006-07* (Phnom Penh: CDRI)
- Tiffin, Richard & Xavier Irz (2006), “Is agriculture the engine for growth?” *Agricultural Economics*, 35, pp. 79-89
- Tong Kimsun (2010), “A Review of Cambodian Industrial Policy”, *Annual Development Review 2010-11* (Phnom Penh: CDRI)
- Tong Kimsun & Hem Socheth (2010), “*Chinese Investment in Cambodia*”, *Annual Development Review* (Phnom Penh: CDRI)
- United Nations Development Programme (2006), “*SWOT Analysis of the Cambodian Economy*”, UNDP Discussion Paper No. 1 (Phnom Penh: UNDP)
- United Nations Development Programme (2010a), “The Real Wealth of Nations: Pathways to Human Development”, Human Development Report (New York: UNDP)
- United Nations Development Programme (2010b), “*Concept Note for Trilateral Cooperation between Cambodia, China and UNDP*”, 1st draft (Phnom Penh: UNDP)
- Wan, Guanghua & Zhou Zhangyue (2005), “Income Inequality in Rural China: Regression-based Decomposition Using Household Data”, *Review of Development Economics*, 9(1), pp. 107-120
- Wan, Guanghua & Zhang Xiaobo (2006), “Rising inequality in China”, *Journal of Comparative Economics*, 34, pp. 651-653
- Wang, Yan, & Yao Yudong (2003), “Sources of China’s Economic Growth 1952-1999: Incorporating Human Capital Accumulation”, *China Economic Review*, Vol. 14, No. 1, pp. 32-52
- Winter, L. Alan, Neil McCulloch & Andrew McKay (2004), “Trade Liberalization and Poverty: The Evidence so Far”, *Journal of Economic Literature*, vol. 42, no. 1, pp. 72-115
- Wong, John (2007), “China’s Economy in 2006/2007: Managing High Growth for Faster Structural Adjustment”, *China and World Economy*, Vol. 15, No. 2, pp. 1-15
- Woo, Thye Wing (1999), “The Real Reasons for China’s Growth”, *The China Journal*, No. 41, pp. 115-137
- World Bank (1990), *World Development Report: Poverty* (New York: Oxford University Press)
- World Bank (2000), *World Development Report: Attacking Poverty* (New York: Oxford University Press)
- World Bank (2006), “*Halving Poverty by 2015? Cambodia Poverty Assessment 2006*”, Report 35213-KH (Phnom Penh: World Bank)
- World Bank (2007), World Bank Enterprises Survey, <https://www.enterprisesurveys.org/Portal/elibrary.aspx?libid=14> (accessed May 2011)
- World Bank (2009), “*Poverty Profile and Trend in Cambodia: Findings from the 2007 CSES*” (Phnom Penh: World Bank)
- World Bank (2010a), “Doing Business 2011: Making a difference for entrepreneurs”, <http://www.doingbusiness.org/reports/global-reports/doing-business-2011> (accessed May 2011)
- World Bank (2010b), “Worldwide Governance Indicators”, <http://info.worldbank.org/governance/wgi/index.asp> (accessed June 2011)
- World Bank (2011a), World Bank Open Data, http://databank.worldbank.org/ddp/home.do?Step=2&id=4&DisplayAggregation=N&Sdmx+supported=Y&CNO=2&SET_BRANDING=YES (accessed May 2011)
- World Bank (2011b), World Development Indicators (Washington, DC: World Bank)

- Wu, Zhong & Cheng Enjiang (2010), “Poverty Alleviation in the People’s Republic of China: The Implications for Sino—African Cooperation in Poverty Reduction”, *African Development Review*, Vol. 22, No. S1, pp. 629-643
- Yang, Alwyn (2003), “Gold into Base Metals: Productivity Growth in the People’s Republic of China during the Reform Period.” *Journal of Political Economy*, vol. 111, no. 6, pp. 1220-1261
- Yao, Shujie (2000), “Economic Development and Poverty Reduction in China over 20 Years of Reforms”, *Economic Development and Cultural Change*, 48(3), pp. 447-474
- Yingfeng, Xu (1994), “Trade liberalization in China: A CGE model with Lewis’ rural surplus labor”, *China Economic Review*, Vol. 5, Issue 2, pp. 205-219
- Yusuf, Shahid, Kaoru Nabeshima & Dwight H. Perkins (2006), “*Under New Ownership: Privatizing China’s State-Owned Enterprises*” (World Bank, Stanford University Press)
- Zheng, Jinghai, Arne Bigsten & Angang Hu (2009), “Can China’s growth be sustained: A productivity perspective?” *World Development*, Vol. 37, No. 4, pp. 874-888

CDRI WORKING PAPER SERIES

- 1) Kannan, K.P. (November 1995), *Construction of a Consumer Price Index for Cambodia: A Review of Current Practices and Suggestions for Improvement*.
- 2) McAndrew, John P. (January 1996), *Aid Infusions, Aid Illusions: Bilateral and Multilateral Emergency and Development Assistance in Cambodia*. 1992-1995.
- 3) Kannan, K.P. (January 1997), *Economic Reform, Structural Adjustment and Development in Cambodia*.
- 4) Chim Charya, Srun Pithou, So Sovannarith, John McAndrew, Nguon Sokunthea, Pon Dorina & Robin Biddulph (June 1998), *Learning from Rural Development Programmes in Cambodia*.
- 5) Kato, Toshiyasu, Chan Sophal & Long Vou Piseth (September 1998), *Regional Economic Integration for Sustainable Development in Cambodia*.
- 6) Murshid, K.A.S. (December 1998), *Food Security in an Asian Transitional Economy: The Cambodian Experience*.
- 7) McAndrew, John P. (December 1998), *Interdependence in Household Livelihood Strategies in Two Cambodian Villages*.
- 8) Chan Sophal, Martin Godfrey, Toshiyasu Kato, Long Vou Piseth, Nina Orlova, Per Ronnås & Tia Savora (January 1999), *Cambodia: The Challenge of Productive Employment Creation*.
- 9) Teng You Ky, Pon Dorina, So Sovannarith & John McAndrew (April 1999), *The UNICEF/Community Action for Social Development Experience—Learning from Rural Development Programmes in Cambodia*.
- 10) Gorman, Siobhan, with Pon Dorina & Sok Kheng (June 1999), *Gender and Development in Cambodia: An Overview*.
- 11) Chan Sophal & So Sovannarith (June 1999), *Cambodian Labour Migration to Thailand: A Preliminary Assessment*.
- 12) Chan Sophal, Toshiyasu Kato, Long Vou Piseth, So Sovannarith, Tia Savora, Hang Chuon Naron, Kao Kim Hourn & Chea Vuthna (September 1999), *Impact of the Asian Financial Crisis on the SEATEs: The Cambodian Perspective*.
- 13) Ung Bunleng, (January 2000), *Seasonality in the Cambodian Consumer Price Index*.
- 14) Toshiyasu Kato, Jeffrey A. Kaplan, Chan Sophal & Real Sopheap (May 2000), *Enhancing Governance for Sustainable Development*.
- 15) Godfrey, Martin, Chan Sophal, Toshiyasu Kato, Long Vou Piseth, Pon Dorina, Tep Saravy, Tia Savara & So Sovannarith (August 2000), *Technical Assistance and Capacity Development in an Aid-dependent Economy: the Experience of Cambodia*.
- 16) Sik Boreak, (September 2000), *Land Ownership, Sales and Concentration in Cambodia*.
- 17) Chan Sophal, & So Sovannarith, with Pon Dorina (December 2000), *Technical Assistance and Capacity Development at the School of Agriculture Prek Leap*.
- 18) Godfrey, Martin, So Sovannarith, Tep Saravy, Pon Dorina, Claude Katz, Sarthi Acharya, Sisowath D. Chanto & Hing Thoraxy (August 2001), *A Study of the Cambodian Labour Market: Reference to Poverty Reduction, Growth and Adjustment to Crisis*.
- 19) Chan Sophal, Tep Saravy & Sarthi Acharya (October 2001), *Land Tenure in Cambodia: a Data Update*.
- 20) So Sovannarith, Real Sopheap, Uch Utey, Sy Rathmony, Brett Ballard & Sarthi Acharya (November 2001), *Social Assessment of Land in Cambodia: A Field Study*.
- 21) Bhargavi Ramamurthy, Sik Boreak, Per Ronnås and Sok Hach (December 2001), *Cambodia 1999-2000: Land, Labour and Rural Livelihood in Focus*.
- 22) Chan Sophal & Sarthi Acharya (July 2002), *Land Transactions in Cambodia: An Analysis of Transfers and Transaction Records*.

- 23) McKenney, Bruce & Prom Tola. (July 2002), *Natural Resources and Rural Livelihoods in Cambodia*.
- 24) Kim Sedara, Chan Sophal & Sarthi Acharya (July 2002), *Land, Rural Livelihoods and Food Security in Cambodia*.
- 25) Chan Sophal & Sarthi Acharya (December 2002), *Facing the Challenge of Rural Livelihoods: A Perspective from Nine Villages in Cambodia*.
- 26) Sarthi Acharya, Kim Sedara, Chap Sotharith & Meach Yady (February 2003), *Off-farm and Non-farm Employment: A Perspective on Job Creation in Cambodia*.
- 27) Yim Chea & Bruce McKenney (October 2003), *Fish Exports from the Great Lake to Thailand: An Analysis of Trade Constraints, Governance, and the Climate for Growth*.
- 28) Prom Tola & Bruce McKenney (November 2003), *Trading Forest Products in Cambodia: Challenges, Threats, and Opportunities for Resin*.
- 29) Yim Chea & Bruce McKenney (November 2003), *Domestic Fish Trade: A Case Study of Fish Marketing from the Great Lake to Phnom Penh*.
- 30) Hughes, Caroline & Kim Sedara with the assistance of Ann Sovatha (February 2004), *The Evolution of Democratic Process and Conflict Management in Cambodia: A Comparative Study of Three Cambodian Elections*.
- 31) Oberndorf, Robert B. (May 2004), *Law Harmonisation in Relation to the Decentralisation Process in Cambodia*.
- 32) Murshid, K.A.S. & Tuot Sokphally (April 2005), *The Cross Border Economy of Cambodia: An Exploratory Study*.
- 33) Hansen, Kasper K. & Neth Top (December 2006), *Natural Forest Benefits and Economic Analysis of Natural Forest Conversion in Cambodia*.
- 34) Pak Kimchoeun, Horng Vuthy, Eng Netra, Ann Sovatha, Kim Sedara, Jenny Knowles & David Craig (March 2007), *Accountability and Neo-patrimonialism in Cambodia: A Critical Literature Review*.
- 35) Kim Sedara & Joakim Öjendal with the assistance of Ann Sovatha (May 2007), *Where Decentralisation Meets Democracy: Civil Society, Local Government, and Accountability in Cambodia*.
- 36) Lim Sovannara (November 2007), *Youth Migration and Urbanisation in Cambodia*.
- 37) Chem Phalla et al. (May 2008), *Framing Research on Water Resources Management and Governance in Cambodia: A Literature Review*.
- 38) Pak Kimchoeun and David Craig (July 2008), *Accountability and Public Expenditure Management in Decentralised Cambodia*.
- 39) Horng Vuthy and David Craig (July 2008), *Accountability and Planning in Decentralised Cambodia*.
- 40) Eng Netra and David Craig (March 2009), *Accountability and Human Resource Management in Decentralised Cambodia*.
- 41) Hing Vutha and Hossein Jalilian (April 2009), *The Environmental Impacts of the ASEAN-China Free Trade Agreement for Countries in the Greater Mekong Sub-region*.
- 42) Thon Vimealea, Ou Sivhuoch, Eng Netra and Ly Tem (October 2009), *Leadership in Local Politics of Cambodia: A Study of Leaders in Three Communes of Three Provinces*.
- 43) Hing Vutha and Thun Vathana (December 2009), *Agricultural Trade in the Greater Mekong Sub-region: The Case of Cassava and Rubber in Cambodia*.
- 44) Chan Sophal (December 2009), *Costs and Benefits of Cross-border Labour Migration in the GMS: Cambodia Country Study*.
- 45) CDRI Publication (December 2009), *Costs and Benefits of Cross-country Labour Migration in the GMS: Synthesis of the Case Studies in Thailand, Cambodia, Laos and Vietnam*.
- 46) CDRI Publication (December 2009), *Agricultural Trade in the Greater Mekong Sub-region: Synthesis of the Case Studies on Cassava and Rubber Production and Trade in GMS Countries*.

- 47) Chea Chou (August 2010), *The Local Governance of Common Pool Resources: The Case of Irrigation Water in Cambodia*.
- 48) CDRI Publication (August 2010), *Empirical Evidence of Irrigation Management in the Tonle Sap Basin: Issues and Challenges*.
- 49) Chem Phalla and Someth Paradis (March 2011), *Use of Hydrological Knowledge and Community Participation for Improving Decision-making on Irrigation Water Allocation*.
- 50) Pak Kimchoeun (May 2011), *Fiscal Decentralisation in Cambodia: A Review of Progress and Challenges*.
- 51) Christopher Wokker, Paulo Santos, Ros Bansok and Kate Griffiths (June 2011), *Irrigation Water Productivity in Cambodian Rice System*.
- 52) Ouch Chandarany, Saing Chanhang and Phann Dalis (June 2011), *Assessing China's Impact on Poverty Reduction In the Greater Mekong Sub-region: The Case of Cambodia*.
- 53) Chann Sopheak, Nathan Wales and Tim Frewer (August 2011), *An Investigation of Land Cover and Land Use Change in Stung Chrey Bak Catchment, Cambodia*.
- 54) Nang Phirun, Khiev Daravy, Philip Hirsch and Isabelle Whitehead (June), *Improving the Governance of Water Resources in Cambodia: A Stakeholder Analysis*.
- 55) Kem Sothorn, Chhim Chhun, Theng Vuthy and So Sovannarith (July 2011), *Policy Coherence in Agricultural and Rural Development: Cambodia*.
- 56) Tong Kimsun, Hem Sochet and Paulos Santos (July 2011), *What Limits Agricultural Intensification in Cambodia? The role of emigration, agricultural extension services and credit constraints*.
- 57) Tong Kimsun, Hem Sochet and Paulos Santos (August 2011), *The Impact of Irrigation on Household Assets*.
- 58) Hing Vutha, Lun Pide and Phann Dalis (August 2011), *Irregular Migration from Cambodia: Characteristics, Challenges and Regulatory Approach*.
- 59) Chem Phalla, Philip Hirsch and Someth Paradis (September 2011), *Hydrological Analysis in Support of Irrigation Management: A Case Study of Stung Chrey Bak Catchment, Cambodia*.
- 60) Saing Chan Hang, Hem Sochet and Ouch Chandarany with Phann Dalis and Pon Dorina (November 2011), *Foreign Investment in Agriculture in Cambodia*.
- 61) Ros Bandeth, Ly Tem and Anna Thompson (September 2011), *Catchment Governance and Cooperation Dilemmas: A Case Study from Cambodia*.
- 62) Chea Chou, Nang Phirun, Isabelle Whitehead, Phillip Hirsch and Anna Thompson (October 2011), *Decentralised Governance of Irrigation Water in Cambodia: Matching Principles to Local Realities*.
- 63) Heng Seiha, Kim Sedara and So Sokbunthoeun (October 2011), *Decentralised Governance in Hybrid Polity: Localisation of Decentralisation Reform in Cambodia*.
- 64) Tong Kimsun and Sry Bopharath (November 2011), *Poverty and Environment Links: The Case of Rural Cambodia*.
- 65) Ros Bansok, Nang Phirun and Chhim Chhun (December 2011), *Agricultural Development and Climate Change: The Case of Cambodia*.
- 66) Tong Kimsun (February 2012), *Analysing Chronic Poverty in Rural Cambodia Evidence from Panel Data*.
- 67) Keith Carpenter with Assistance from Pon Dorina (March 2012), *A Basic Consumer Price Index for Cambodia 1993–2009*.

**CDRI - Cambodia's leading
independent development policy research institute**

📍 56 Street 315, Tuol Kork

✉ PO Box 622, Phnom Penh, Cambodia

☎ (855-23) 881-384/881-701/881-916/883-603

📠 (855-23) 880-734

E-mail: cdri@cdri.org.kh

Website: <http://www.cdri.org.kh>

Price: USD 2.50

