Stockholm School of Economics Department of Economics Master's Thesis in International Economics

From clothing to productive rice



-Do the migration and spending patterns of Cambodian garment workers show signs of a trickle-down effect?

Abstract: Cambodia suffers from a large rural-urban gap. Given agricultural underemployment a Lewisian perspective on economic growth can be applied, with the secondary sector being the garment industry in Phnom Penh. It provides employment and domestically high wages to a quarter of a million rural women who remit large shares to their families. The post-quota system era now poses a threat to the industry and any income linkage is at risk. This thesis, surveying garment workers and rural households, aims to answer whether there is a trickle-down effect from garment workers to other sectors, particularly to rural agriculture. Such knowledge would be valuable for assessments of the implications of an anticipated industry downturn in the years to come. Findings include that substantial investments are made into migration and that migrants cannot belong to the poorest households. It is difficult to identify significant urban consumption linkages. Remittances however seem to contribute to productivity raising investments, thereby showing potential for spurring the trickle-down necessary for poverty reduction in the rural areas. The findings suggest that an expansion of rural non-farm employment might be beneficial and it should be noted that a higher garment industry wage is likely to spur Lewisian savings and investments.

Author:Elisabet Dahlberg (19090)Tutor:Örjan SjöbergExaminer:Karolina EkholmPresentation:8 February 200610.15-12.00, Room 328

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Abbreviations and key concepts

	5	1	
ADB	Asian Development	Bank	
ATC	Agreement on Textiles and Clothing		
CCAWDU	Coalition of Cambodia Apparel Worker Democratic Union		
CDRI	Cambodia Development Resource Institute		
CIDS	Cambodian Institute	for Development Studies	
CRD	Cambodian Research	ners for Development	
CCC	Cooperation Commi	ttee for Cambodia	
EIC	Economic Institute of	of Cambodia	
GATT	General Agreement	on Tariffs and Trade	
GDP	Gross Domestic Pro	duct	
ILO	International Labour Organization		
IMF	International Monetary Fund		
LDC	Less Developed Country		
MFA	Multi-Fiber Agreement		
MOWA	Ministry of Women's Affairs		
NGO	Non Governmental Organization		
OPP	Outward Processing Program		
WAC	Womyn's Agenda for Change		
WB	World Bank		
WTO	World Trade Organi	zation	
• Inequali	ty:	An uneven distribution of incomes or wealth.	
• Infant in	ndustry protection:	The protection of a new industry through tariffs or	
		subsidies to allow it to become more profitable in the	
		short-run and prepare it for competition.	
• Labor si	nk:	A buffer or over-supply of labor.	
• Linkage:	Linkage: The link between sectors and industries to other sector		
and industries.			
Multiplie	Multiplier effect: The increased consumption in sectors with excess		
		capacity spurring additional demand creating jobs and	
		hence further spending and even further demand.	
Trickle-	down effect:	The process by which economic growth reaches the	
	lower ends of the economy.		

1. Introduction

Economic growth is considered an absolute prerequisite for development and ideally the benefits of growth reach all segments of a population through a trickle-down effect where growth in industries create employment and increasing incomes and consumption that eventually filters down through various linkages to other areas and sectors of the economy and come to benefit all. Some developing countries however experience difficulties in reaching a take off in development and welfare, despite steady growth rates. With growth rates of 7% annually but with a very low overall welfare of its people; Cambodia falls into this category of countries.¹ This is so since the foreign investments and economic development that has occurred after the economy opened up in the 1990's, has been highly concentrated to a few urban sectors, causing social and regional inequality to rise.² In 1993-1994 the average household expenditure in the rural areas was 33 % of that in Phnom Penh and in 2002 it was as low as 25 %.³ In particular rural agriculture seems to be loosing pace, leaving the subsistence farmers behind with their highly volatile incomes. The large majority of the Cambodian population makes a living out of agriculture where productivity remains far below potential, subsistence agriculture dominates and growth is very erratic. Rice dictates the production and crop yields, including rice, are the lowest in South-East Asia.⁴ This rural-urban gap has inevitably led to huge migration of young people and particularly of young women to the urban sectors.⁵ That both the primary and secondary sector must see an increase in productivity for national development and income increases to occur was noted already in the 1950's by Arthur Lewis and such a standpoint is also taken in some very recent research of the Cambodian economy.⁶

Development in Cambodia has in the last decade indeed enjoyed some progress. It has been estimated that poverty in Cambodia has fallen by 10-15 % between 1994 and 2004.⁷ The wet season rice yields per hectare have increased with 14% over the last 5 years and the growth of a textile- and garment industry in the capital Phnom Penh has provided Cambodians with a new source of employment and income.⁸ The industry provides jobs for as many as 250 000 people, (where of 90% are women) and it is hence the country's biggest industry, offering wages far above the domestic normality.⁹ Interestingly the garment industry workforce almost completely consists of rural women who have migrated from the provinces into Phnom Penh to look for employment in the industry and who support their rural families with the help of their wage. ¹⁰ Such an income linkage is indeed very encouraging for the primary sector to develop in tandem with the secondary sector.

Given its potential, Cambodia has come to depend a great deal on the garment industry as an engine for growth and development. Few economies are as dependent on this industry

¹ WB (forthcoming, p. 52)

² Sjöberg and Sjöholm (2005a, p. 5); Chea and Sok, (2003 p. 1); Sok and Acharaya (2002, p. 41);

Oum et al. (2005, p. 38); WB (forthcoming, p. 6).

³ IMF (2004, p. 5)

⁴ Cattaneo and Marniesse(2004, p. 45); WB(forthcoming, pp. 72, 74)

⁵ EIC (2004, p. 33)

⁶ See Lewis (1954); Sjöberg and Sjöholm (2005b)

⁷ WB (forthcoming, p. 17)

⁸ EIC (2004, p. 35); WB(forthcoming, p. 74)

⁹ Cattaneo and Marniesse (2004, pp. 10; 48; 50)

¹⁰ Acharaya (2003 p. 1)

and the export earnings it generates. In fact only Lesotho and Haiti are as dependent on it as is Cambodia, whose exports to 80% are made up of garments alone.¹¹ The country's garment industry in recent times stands out as vulnerable due to the abolition of an international quota system in trade with textile and garment where Cambodia has benefited from more efficient countries using up their quota allocations, and with the quota system gone it is likely that Cambodian producers will be driven out by more competitive ones in neighboring countries. ¹² The end of the quota system 1 January 2005 and the fear of its likely effect on the Cambodian economy has brought about a highlighting of the industry's actual backbone – the garment workers.

Despite the threat posed by the end of the quota system and the recent trend in developing economics to focus on remittances, there exists only one extensive study investigating Cambodian garment worker's consumption and spending patterns and the effect of remittances on rural livelihoods.¹³ This two-phase study undertaken by the Asian Development Bank (ADB) in 2003-2004 offers knowledge on how much money that is remitted and how often.¹⁴ However some additional knowledge might still be wished for and be of value for any assessment of the implications of an anticipated industry downturn for the country's continued path toward development. Within a broadly Lewisian perspective it would be interesting to try to answer whether the incomes enjoyed by the garment workers might come to benefit also other sectors of the economy. In relation to this the rural origin of the garment workers, migration motivations and wealth group belonging is also of relevance.

This thesis will try to shed some light on the above issues by studying the proposed income linkages generated by the industry. This is done through interviews with garment industry employees in Phnom Penh and follow-ups with 20% of the sample's families. In particular the scope for migrant garment workers to send money home and the use of such remittances will be in focus. Knowledge on this matter would be valuable for an assessment of whether the development of a secondary industry sector has had any qualitative impact on the redistribution of economic growth

The purpose of this thesis is therefore to analyze whether the migration and spending patterns of the labor employed in the garment industry in Phnom Penh contributes to a desired trickle-down effect, particularly to the rural areas, through consumption and remittances.

It is found that migrants invest substantial amounts into their migration implying that although poor they are not among the poorest. Any significant urban consumption linkage from the garment employees' wages to other sectors is difficult to identify. Remittances to the rural areas however are found have the potential of spurring the trickle-down necessary for poverty reduction as remittances are partly found to be invested into more productive agriculture and the hiring of labor.

¹¹ WB (2005, p. 124); Cattaneo and Marniesse (2003, p. 48)

¹² Sjöberg and Sjöholm (2005a, p. 21); Appelbaum (2005, p. 4); EIC(2004, p. 50);

Kingdom of Cambodia (2002, p.44)

¹³ See Kapur (2004) for a discussion of this area of research

¹⁴ See ADB (2004a, 2004b)

Organization of study

The organization of the thesis will be as follows: after this introduction the reader will be provided with a further insight into the topic by an overview of the Cambodian textile and garment industry and the phasing out of the quota system. Thereby an increased understanding for the consequences of the industry's fast growth and recent vulnerability should be achievable. Thereafter a conceptual framework introducing the Lewisian perspective on economic growth and development will follow so as to understand how the 250 000 people directly (or the estimated 1 million indirectly) depending on the garment industry relate to the country's overall strive towards development.¹⁵ With Lewisian theory as a comprehensive perspective, linkage and migration theory will be drawn upon to highlight single aspects of the situation at hand. This will be followed by a review of previous knowledge on the topic. This review will clarify how this thesis can contribute with new understanding and what questions that remain to be answered. Three specific research questions are presented and used to structure the subsequent thesis outline and carry out the analysis. Later the survey method, implementation and the sample characteristics are presented, followed by the survey findings. An analysis of the survey returns will show what new insights that have been gained to the existing picture. Since the data that can be obtained from a developing country and, not to speak of the data possible to extract during a field work, is very fragmented this thesis will use relevant theory and research to support the findings and fill in any blanks or uncertainties of the data. Finally, the author attempts to draw some conclusions regarding what implications this might have from a development perspective and possibly offer some suggestions for the future in terms of policy implications or further research on the topic.

2. The Cambodian garment industry & the post- ATC era

After the independence of Cambodia from the French colonial rule (1863-1953) some industrial production of textiles started in state-owned companies but this production came to an abrupt end with the genocidal regime of the Khmer Rouge.¹⁶ From 1997 and onwards however, a new garment factory opened every ten days.¹⁷ The new plants were almost all foreign owned. Today, less than 9% of the enterprises are Cambodian and more than 50% of the industries are financed by Chinese capital.¹⁸ It should be noted that Cambodia's economy is highly dollarized. When it comes to trade the extensive use of US dollars protects Cambodia from exchange rate risks and contributes to the economy's integration with the outside world.¹⁹ However, at the same time, it precludes any adjustments in the exchange rate to changes in relative cost levels.

Year	Garment Exports	Garments share of total	Employment	No. of
	(US\$m)	exports (%)	(000's)	factories
1996	80	11.2	24	24
1997	227	27.1	52	67
1998	359	45.2	79	129
1999	660	58.7	97	152
2000	986	70.8	123	190
2001	1,156	73.9	188	185
2002	1,337	76.8	210	187
2003	1,607	78.2	234	197
2004	1,9	>80	246	206

Table 1: The growth of the Cambodian garment sector

Source: Ministry of Commerce cited in Bargawi (2005). Figures for 2004 are approximate taken from www.betterfactories.org and Salinger et al (2005)

In the garment industry each activity in the supply chain is located where it contributes the most to the value of the end product.²⁰ Outward Processing Programs (OPP) involve temporary export of textiles or pre-cut fabrics from an initiator country to low-wage countries for final assembly. The finished articles are then re-imported. The OPP strengthens the competitiveness of the initiator by enabling it to locate labor-intensive sewing activities in low-wage countries. It is indeed the sewing stage of production that is most likely to be outsourced to low-wage countries since the assembly stage cannot be automated. OPP and similar systems allow immediate access to high quality inputs and foreign distribution networks and hence act as a booster for export-oriented strategies in developing countries.²¹

The garment industry of Cambodia has been the main source of growth in exports and employment and makes up 10% of the country's Gross Domestic Product (GDP), but it has

¹⁶ Bargawi (2005, p. 4)

¹⁷ Cattaneo and Marniesse (2003, p. 38)

¹⁸ Cattaneo and Marniesse (2004, p. 10) and Bargawi (2005, p. 6)

¹⁹ Sjöberg and Sjöholm (2005a, p. 11)

²⁰ Nordås (2004, p. 3)

²¹ Audet (2004, pp. 10; 13)

been estimated that only 15% of sales revenues actually remain in Cambodia.²² The low local extraction is partly due to the fact that Cambodia has to import virtually every fabric, raw material and accessories. Imported inputs make up for as much as 67% of total costs in the industry.²³ Some argue that the only good thing gained from initiatives like Export Promoting Zones (EPZs) is job creation, since the industry has not stimulated any backward integration into Cambodia's economy: "For 10 years there is no such thing as a yarn or button processing industry taking place here".²⁴

Rather the Cambodian garment industry has benefited from preferential quota allocations and international trade agreements.²⁵ The Multi-Fiber Arrangement (MFA) established in 1974 exempted textile and clothing from the basic principles of the General Agreement on Tariffs and Trade (GATT), by allowing signatory countries to place quotas on imports of various textile and clothing products on a country-by-country basis.²⁶ The MFA forced many efficient but quota-constrained suppliers to sub-contract their clothing assembly to the low-wage third countries. The MFA in this way allowed for infant industry protection to new entrant countries lacking both the skills and the industrial competence. The simple nature of the technology needed however allowed these entrants to reach acceptable levels of cost and quality relatively rapidly.²⁷ The MFA was followed by the Agreement on Textiles and Clothing (ATC) that came into force in 1995 with the establishment of the World Trade Organization (WTO), in which Cambodia has been a member since 13 October 2004 to protect its interests in the industry. The ATC was established as a transitory regime between the MFA and the complete integration of textiles and clothing into the multilateral trading system. Some countries such as Cambodia benefited from quota allocations after more efficient countries like China already had filled their allocated export quotas. Yet, the phasing out of the ATC on 1 January 2005 and the gradual integration of garments into GATT, may with time undo most of the gains.²⁸

Cambodia's employment generation relies heavily on the export-oriented garment industry and as an effect of the post-ATC trading system this employment generation is at risk. This is especially so since the Cambodian cost structure is 10-30% higher than more competitive countries.²⁹ Foreign investors in Cambodia are subject to a higher wage structure and stricter working conditions than elsewhere.³⁰ Another major cost in garment production important to note is "bureaucracy costs" or corruption.³¹ Corruption in the garment industry is estimated to amount to about half of the total labor cost. Reinvested more than 70 new factories could be built each year for the same amount, and redistributed to the workers wages could exceed \$100 per month.³² The International Monetary Fund (IMF) observes that Cambodia is not able to compete with Chinese exporters in markets where no quotas

²² Bargawi (2005, p. 9); EIC (2004, p. 38)

²³ EIC (2004, p. 38)

²⁴ The Cambodia Daily, (2005, March 3)

²⁵ Sjöberg and Sjöholm (2005a, p. 21)

²⁶ Cattaneo and Marniesse (2004, p. 16)

²⁷ Lall (2005, p. 1015)

²⁸ Nordås (2004, p. 13); Sjöberg and Sjöholm (2005a, p. 21); EIC (2004, p. 50); Audet (2004, p. 9)

²⁹ Bargawi (2005, p. 2); Cattaneo and Marniesse (2004, p. 10)

³⁰ IMF (2004, p. 11)

³¹ Oum et al. (2005, p. xi)

³² Sok et al. (2001, p. 54) Note that wages are given out and consequently reported in USD (\$).

exist.³³ Five months into the new regime Chinese garment exports did indeed jump. China's clothing export increased by 85.9% compared to the same period the year before. However, also some of the other Asian garment-makers enjoyed increased exports to the US. Cambodia's sales for example increased 16.8%. Seven months into the first post-MFA year exports registered an increase of about 10 % over 2004.³⁴ So far, the impact is hence more benign than originally feared. Positive as this somewhat unexpected development is, it should be said that it also represents a non-trivial slowing down in an industry accustomed to expanding at rates three times as high.

Cambodia is believed to survive because Western suppliers still want to diversify their supply sources and due to the adoption of a labor program with foreign monitoring, which appeals to reputation conscious enterprises.³⁵ Recently a bilateral US-China trade agreement to limit Chinese exports provided an important advantage for Cambodia. The country has indirectly been given another three years, starting in 2006, to prepare for the increased competition from China. Industry representatives however warn that such an "extended lease on life" must be used to prepare for the hard years to come.³⁶ It is widely believed that the sector over the coming years no longer will act as an engine of growth.³⁷ It has been estimated that 30,000 workers will loose their jobs 2006-2007 as an effect of the end of the quota system and in 2010 another 50,000 jobs are estimated to be gone.³⁸ Whether an accurate estimation or not, an assessment of the post-ATC system's implications is a key question for anyone concerned about employment, economic growth and poverty reduction in Cambodia.³⁹

When it comes to the present wage conditions the minimum wage at foreign invested factories in Cambodia is \$45 per month; however wages are normally as high as \$55 to \$60 per month. Sometimes wages even reach \$100 per month or more.⁴⁰ Even at minimum wages the garment workers can earn substantially more than the domestic per capita annual income of \$350. The relatively high minimum wage to average wages has even been accused of reducing employment opportunities for the growing Cambodian labor force.⁴¹ The average Cambodian worker contributes \$570 per year to GDP. In the agricultural sector the average is \$300 per year. In the garment industry the average is as much as \$1330 per year.⁴² Labor productivity in agriculture is eight times lower than in industry, whereas wages are five times lower. Wages in the agricultural sector have even declined in recent years.⁴³ The importance of the Cambodian garment industry is hence crucial.

³³ IMF (2004, p. 13)

³⁴ Oum et al. (2005, p. 10)

³⁵ Hiebert and Barta (2005)

³⁶ McGarvey (2005, p. 7)

³⁷ See Sjöberg and Sjöholm (2005a); IMF (2004)

³⁸ CEA (2005, p. 82)

³⁹ Bargawi (2005, p. 2)

⁴⁰ Cattaneo and Marniesse (2004, p. 50)

⁴¹ IMF (2004, p. 5)

⁴² Cattaneo and Marniesse (2004, p. 48)

⁴³ Cattaneo and Marniesse, (2004, p. 55); WB (forthcoming, p. 6)

3. Conceptual framework on growth and development

Lewis in his days argued that greater productivity in industry is the key to an increased per capita income in developing countries. He believed that industrialization and rural development should develop co-jointly since a manufacturing industry can supply agriculture with inputs and once more efficient, agriculture might come to supply industry with raw materials. Lewis noted that many people in the rural areas of developing countries are underemployed or hold jobs that are not very productive so that labor is unlimited in supply and available at subsistence wages; especially in the greater part of Asia. Lewis identified the reallocation of this surplus labor to more productive uses as a major source of productivity gains and economic growth.⁴⁴ The urban industry is likely to be the principal employer of such surplus labor.⁴⁵ These ideas form the basis for Lewis' labor surplus model where the neoclassical assumption of fixed supply of labor is dropped. Lewis under such conditions predicted a transfer from agriculture to industry in terms of labor. The surplus labor in the agricultural sector ensures that wages in the industrial sector remain constant during an extended period since the supply of labor exceeds demand at the given wage. The surplus of output over wages is captured by the capitalists as profits.⁴⁶ In time those who control the capital will experience an income gain as well as those laborers that have moved from a subsistence wage to the higher industry-wage. This will inevitably cause inequality. Lewis considered such initial inequality a cause of growth rather than a problem, as the rise in income for some should spur savings and investment and thereby cause productivity and output in both sectors to grow.47 Lewis believed that productivity can increase sharply in peasant agriculture with modest expenditures if only credit, water supplies, fertilizers and so on are provided on an adequate basis. ⁴⁸ He even considered such expenditures the most productive investment that can be made in poor agricultural economies.⁴⁹

Translated to today's developing countries many of them undeniably suffer from high levels of unemployment or underemployment.⁵⁰ In many rice-producing economies it has been found that the yield per hectare is bigger for small-scale producers than for larger agricultural entities despite anticipated economies of scale for the latter.⁵¹ When labor is substituted for land in smaller farms both yield and energy efficiency rise. The productivity per hour in small scale farming is however lower. ⁵² This suggests that small scale peasant agriculture functions as a labor sink with a rapid or even negative marginal product. Any reallocation of one laborer can then be made without the unit experiencing any significant loss. If the remaining laborers can increase their productivity by letting the underemployed be productive elsewhere and contribute to investments in more efficient methods or more land it would mean a great deal for rural development. Growing incomes from the industry will also result in a higher demand for agricultural products and thereby allow for increased

⁴⁴ Lewis (1954, pp. 139; 173)

⁴⁵ Perkins et al. (2001, p. 673)

⁴⁶ Kirkpatrick and Barrientos (2004, p.4)

⁴⁷ Perkins et al. (2001, p. 139)

⁴⁸ Lewis (1954, p. 171)

⁴⁹ Lewis (1955, p. 187)

⁵⁰ Lawrence (2004, p. 9)

⁵¹ Ellis (1988, pp. 197-199); Bray (1986, p. 164)

⁵² McC. Netting (1993, p. 147)

specialization.⁵³ Indeed, it has been found that the Asian rural-urban gap can be narrowed through agricultural diversification and the expansion of industries.⁵⁴

The division of labor in farm family households is cross-culturally often gender specific due to norms rather than biological differences, where men work the fields while women engage in daily reproduction such as food processing at home. Historically it has not been uncommon for women to be removed out of agriculture into the cotton industry for more productive use of their time and an additional source of income for the household. Small-scale peasants are well aware that the non-farm income best is supplemented by their children and agricultural earnings are often invested in occupational diversification.⁵⁵ It has recently been debated whether support for small scale peasant agriculture can ease the poverty signaled by the rural underemployment, during a period of transition to capitalism as proposed by Lewis, and if so in which ways agriculture can be supported.⁵⁶

Turning to the situation of Cambodia the Lewisian model with joint expansion of agriculture and manufacturing has anew been proposed by researchers due to a rapidly growing labor force who will end up unemployed or underemployed.⁵⁷ 230 000 new entrants have in fact been estimated to enter the labor market yearly in between 2004-2008 and only an expansion in agriculture and other labor-intensive industries are believed to be able to absorb the oversupply of labor. Some estimates however suggest that poverty may be reduced indirectly by good performance in the garment sector.⁵⁸

The importance of off-farm income such as remittances has grown steadily. Small farms in Cambodia have higher outputs per hectare and higher crop income per hectare than larger farms.⁵⁹ Agriculture is being modernized in several rural areas and high yield variety seeds, fertilizers and controlled irrigation are increasingly being used. This development is mostly concentrated to areas with good quality soils and water resources. In such areas, farmers are experience rising incomes. It is not clear how strong the multiplier effect of this increased income is. It is also uncertain whether gains will be distributed to those who do not own resources, for example through employment.⁶⁰

Studying two of the topics of Lewis more in detail, linkages and labor reallocation might help answer if industrialization in the urban areas, if only through the labor it employs, can indeed lead to the trickling-down necessary for economic growth to benefit a developing country like Cambodia as a whole.

⁵³ Sjöberg and Sjöholm (2005a, p. 14)

⁵⁴ Bray (1986, pp. 143; 145)

⁵⁵ McC. Netting (1993, p. 325)

⁵⁶ Lawrence (2004, p. 10)

⁵⁷ Sjöberg and Sjöholm (2005b, p. 10)

⁵⁸ Oum et al. (2005, pp. 37-39); EIC (2004, p. 11)

⁵⁹ WB (forthcoming, pp. 73; 81)

⁶⁰ Sophal and Acharya (2002, p. 92)

Linkages

The idea behind linkages is that different sectors of the economy are related and interdependent. The notion of export-led growth for example implies that exports would lead to more broad economic growth through upstream or downstream linkages from the industry in question to the rest of the economy; a trickle- down of growth if you will.⁶¹ Such production related linkages are often associated with the work of Hirschman and backward and forward linkages, where the growth in one industry either stimulates domestic production of an input or stimulates growth of other industries by making inputs available at lower cost.⁶² Lall, whose work also is concerned with the notion of linkages, in his turn refers to linkages as the direct relationships established by firms in complementary activities.⁶³ Such relationships are believed to boost the development of linked activities and industrial diversification in Less Developed Countries (LDCs).

There are also linkages derived from external economies where the export industry indirectly creates positive externalities through its investment in production, such as infrastructure, fiscal and human capital linkages.⁶⁴ When analyzing the textile and garment industry in conjunction with linkage theory one will find that what is described in literature most often do not apply to the case of Cambodia where, as we have already seen, any backward or forward linkages is almost non-existent. The industry is furthermore widely known for its floating character, enabling production to move quickly to the most profitable destinations.⁶⁵ Corruption, being one of the biggest problems in Cambodia, is likely to limit any fiscal linkage effect.⁶⁶ Since only a few low-value added tasks are performed in Cambodia a human capital linkage is neither expected to be extensive.

One type of linkage mostly referred to as a consumption linkage might still be found to be of importance. This type of linkage involves the increased demand for consumption goods as an indirect effect of the higher income earned in the export sector. This process could therefore also be referred to as an income linkage. Such a linkage is most likely to occur if a large labor force is paid above previous levels and their increased demand focuses on mass-produced consumer goods, such as processed food, tools and radios.⁶⁷

Turning to empirics earlier studies on textile exporting countries have found that the entire amount of women's wages is an economic gain to the family that raises its income above the poverty line.⁶⁸ In the garment industry of Phnom Penh a large workforce is indeed paid higher wages than normal local standards and to study the spending patterns and possible income linkages from garment workers is therefore of interest. Since we have seen that most garment workers are rural-to-urban migrants it is also interesting to study these people's socio-economic background, their reasons for migration and not least their contribution to the family income.

⁶¹ Perkins et al. (2001, p. 629)

⁶² Hirschman (1958, Ch. 6); Perkins et al. (2001, p. 629)

⁶³ Lall (1980, p. 203)

⁶⁴ Lall (1980 p. 204); Perkins et al. (2001, pp. 153; 631)

⁶⁵ EIC (2004, p. 34)

⁶⁶ Oum et al. (2005, p. xi); Perkins et al. (2001, p. 162)

⁶⁷ Perkins et al. (2001, p. 631)

⁶⁸ Paul-Majumder and Zohir (1994, p. 181)

Labor migration

People migrate driven by a will to form a better life than their current situation. While some move in order to survive others migrate in the search of a higher quality of life.⁶⁹ The concept of push and pull factors is often used to understand different reasons for migration, where the former factors involve the compulsion for people to migrate out of their present predicament to escape poverty whereas the latter attract them to the new destination by promising opportunities.⁷⁰ Theories on migration most often focus on international migration where labor moves from one country to another. The concepts of these theories can however most often also be applied to internal migration and for the purpose of this thesis migration theory will be applied on internal migration solely. There is however no coherent theory of migration. Rather there is a set of theories founded on different levels of analysis. A couple of features of modern migration theories in particular appear as worthy of our attention.

Instead of the traditional neoclassical macro-level approach focusing on differences in wages between regions, migration can according to Larry Sjaastad be related to returns of an investment. Migration is then considered a form of investment in human capital where people choose to move to where they can be most productive given their skills and education. When migrating the individual needs to bear certain costs such as the cost of traveling, living expenses while looking for work and the effort of adapting to a new labor market.⁷¹ These costs can be considered an investment where migration is expected to yield more productive use of the migrant. One must also recognize the fact that rather than seeking a higher pay for one's occupation in another area, the more relevant choice for migrants might be between rather than within occupations. When market forces reduce relative wages in a particular sector, people within that sector will suffer a capital loss and be faced with the choice of either accepting the lower wage or invest in themselves to be able to increase their earnings in another market. Such additional investments will be more worthwhile for young persons since their investment into a specific occupation is likely to be small and their longer life expectancy will increase the returns to the investment.⁷² Since there is an interaction between the migrant and the sending destination migration can not be studied in isolation. In the case of rural-to-urban migration in LDCs, a stock of past migrants at a given destination, such as a village, come to represent evidence of success and this in turn will strengthen the belief that migration offers a good return on investment.⁷³ Early migrants might provide valuable information and assistance to other villagers and migration can be seen as a diffusion process where the level of migration is positively related to the occurrence of past migration by village members.⁷⁴

It has furthermore been hypothesized that rural-to-urban migration in LDCs mainly is undertaken to improve the comparative position of an individual or a household with respect to others' income in a relevant reference group, such as a village. Income comparisons are quite common within people's reference groups according to empirics and the propensity to migrate has been found to be directly related to the initial relative

⁶⁹ Acharaya, (2003 p. 1)

⁷⁰ Perkins et al. (2001, p. 298)

⁷¹ Massey et al. (1993, p. 434)

⁷² Sjaastad (1962, pp. 87-88)

⁷³ Sjaastad (1962, p. 92)

⁷⁴ Stark et al. (1986, p. 724)

deprivation of a migrant.⁷⁵ Since poverty is not only a matter of absolute income but also related to relative income the poor are those that feel deprived of the resources enjoyed by other members of the group they feel that they belong to.⁷⁶

To a certain extent all migrants are influenced by the situation of people around them. The approach often referred to as the New Economics of Migration, which is strongly associated with the work of Oded Stark; recognize that a migrant is not necessarily the decision maker when it comes to his or her migration. Rather, migration decisions are often made by the migrant and another group of non-migrants co-jointly.⁷⁷ Strong theoretical and empirical reasons suggest that the decision making entity is often the family of the migrant individual. Stark argues that the main driving force for migration is risk minimizing. A family member's migration will occur when it facilitates a reduction of the total familial risk through a diversification of income earning sources. The costs and the returns of investing in migration are shared by the group in an implicit contractual arrangement; either because the head of the family has perfect control over the migrant or because of a cooperative arrangement of coinsurance, risk diversification and methods to handle moral hazard problems and contract enforcement problems.⁷⁸

Growing urban centers and industrialization have created more wage-earning jobs and employers ready to hire young women without previous experience. In the cities there is also a large gender segregation of jobs where women dominated jobs include work in manufacturing, such as the garment industry.⁷⁹ It is important to consider that in many cultures daughters are controlled by the parents to a larger degree than are the sons. The migratory behavior of women is therefore likely to be more influenced by the family than that of men.⁸⁰ Female gender might also increase the likelihood that the migrant will actually share the income with the family.⁸¹ For the Philippines it has been found that there is an increase in income for migrant women. This same observation was not found equally strong for men and an explanation could be that women are underemployed in rural communities and therefore enjoy a special advantage in migrating. In agriculture the work of sons on the farm may be valued higher than the work of daughters or agricultural work might be better suited for men. Lauby and Stark found that the average female rural migrant could expect to work 14 hours more per week than she did at home. Migration increases the hours a woman work and this is probably what increases her income.⁸²

⁷⁵ Stark and Taylor (1986, p. 1164)

⁷⁶ Perkins et al. (2001, p. 124)

⁷⁷ Stark and Bloom(1985, p. 174)

⁷⁸ Katz and Stark (1986, p. 136)

⁷⁹ Lauby and Stark (1988, p. 482)

⁸⁰ Lauby and Stark (1988, p. 473)

⁸¹ Lauby and Stark (1988, pp. 485-486)

⁸² Lauby and Stark (1988, pp. 483-484)

Remittances from labor migrants

Remittances sent home by a migrant constitute direct returns to the family. Both theory and empirical evidence suggest that the phenomenon of remittances is explained by an inter temporal contractual arrangement between the migrant and the family rather than by pure altruism.⁸³ Another possibility, not as thoroughly studied, is that remittances reflect an

implicit repayment of loan. For example the family might have invested in the migrant's education and their repayment comes in the form of remitted money.⁸⁴

An issue that has been raised in the literature is the effect of remittances on the distribution of incomes. When a large proportion of a country's population lives in rural areas, the rural income inequalities constitute a significant share of overall income inequality in the country.⁸⁵ Remittances must always be viewed in relation to other household income sources. If the remittances make up a very small part of the household income the distribution of income will only be altered slightly. If the remittances instead represent a major part of the household income the distribution of remittance are likely to explain the distribution of an entire village to a large extent.⁸⁶ The distribution also depends on whether it is the wealthier or the poorer families that receive most remittances. The rich possess a greater ability to gather the resources and contacts necessary for migration while the poor have lower income opportunities and might be more prone to move. The first households that will engage in migration will probably be those from the upper end of a village's income distribution. Over time, remittances' effect on inequalities will critically depend on whether the contacts, information and assistance is household specific or whether there is a tendency for these mechanisms to spread across household units. If the latter is the case migration and possible remittances may also occur among the lower-end households which would reverse any initial disfavorable effect of remittances on rural income inequality.⁸⁷

Some researchers believe that with equality-enhancing mechanisms such as risk diversification, easing of credit constraints and trickling down, remittances will lead to improvements in rural welfare.⁸⁸ The increased incomes for remittance-receiving households may indeed benefit also those who do not receive transfers if the money is spent so that it benefits others. This is referred to as a multiplier effect. If a few families increase their spending of services and goods this can create jobs for others who in their turn also increase spending. The multiplier effect has in several cases been found to be large.⁸⁹ It has been debated however whether remittances lead to increased investments. Most important to study in this context is savings as well as spending on education, housing, livestock, land etc. which in the LDC conditions represent investments.⁹⁰ Something rarely discussed in literature on remittances is the scope for the actual occurrence of such investment. To blend the perspectives and study living expenses in conjunction with remittances would therefore be desirable.

⁸³ Stark and Bloom (1985, p. 174)

⁸⁴ Lucas (2005, p.153)

⁸⁵ Stark et al. (1986, p. 722)

⁸⁶ Stark et al. (1986, p. 724)

⁸⁷ Stark et al. (1986, pp. 723-724)

⁸⁸ Stark et al. (1986, p. 722)

⁸⁹ Lucas (2005, p. 191)

⁹⁰ Lucas (2005, pp. 155-156)

4. Where do we stand?

Over the last years quite a few studies have been made focusing on the garment industry but for the most part they have focused on either working conditions, the industry as such or its macro-economic impact.⁹¹. Yet, an early survey conducted by the Cambodia Development Resource Institute (CDRI) in 2000 noted the rapid growth in garments and its importance not only to export earnings but also for incomes in Phnom Penh and beyond. Employment in the industry was even found to be attractive enough to make aspiring workers pay about a monthly wage for the privilege of being hired.⁹² The survey found that 74% of the 117 respondents sent money home to their families and that 90% surprisingly stated that they could save up to \$30 per month. It furthermore found garment workers' educational level to be very low. A social study by Maffii conducted in 2002 for a Non-Governmental Organization (NGO) called Womyn's Agenda of Change (WAC) found that the majority of garment workers previously worked in agriculture and bore significant costs before they found employment.⁹³ Recently, the effects of the removal of the MFA have also been monitored and in this research the garment workers have been given increased attention.

There is one main exception to the above identified relative lack of information on the income effects of this important industry; represented by the socio-economic survey of garment employees which was carried out by the Cambodian Researchers for Development (CRD) on behalf of the Asian Development Bank in 2003-2004.⁹⁴ Based on information collected from a total of 1,538 employees drawn from 10 representative garment factories, the survey had access to a representative sample of garment workers in Phnom Penh. As such it is something of a pioneer, the aim of which was to establish a profile of typical garment sector employees.⁹⁵ The survey used a combination of qualitative and quantitative methods of data collection, using structured interviews plus focus groups and a questionnaire survey, respectively.

Widely known as the SESGEC survey, findings include the observation that 90 % of the garment workers are females, most of who come from large households. Further, it was found that most came from rural areas; the top three migrant sending provinces were found to be Kampong Cham, Kandal, and Prey Veng. These are three of the most densely populated provinces situated within the Mekong River plain.

Over half the garment workers were found to have a partial elementary education, but many had not completed primary school or had no education at all; only a small percentage had been enrolled in secondary school or higher. As many as 74 % were found to be individuals below 25 years old, possessing initially low skill levels. Often the young men and women were found to migrate in groups and have acquaintances from the same village employed in garment factories. The reason to come to work in the garment factories seemed to be a lack of other economic or livelihood opportunities. For a majority of those surveyed, the garment industry was not the long-term choice as far as employment and income earning activities were concerned. More than 50% of the surveyed garment industry employees

⁹¹ See Chea and Sok (2003); Bargawi (2005)

⁹² Sok et al. (2001)

⁹³ Maffii (2002)

⁹⁴ ADB (2004a; 2005)

⁹⁵ It also covered the working environment in the factory but for the purposes of this study the findings related to working environment will for the most part not be used.

indicated that they wished to start their own business, and around one-third wished to return home.

The survey found that employees did not tend to talk in detail about their personal job searching experiences. Garment industry workers showed little job mobility and, once employed, on average they stayed in the same position and factory for several years. Only a small percentage had changed factories. Unlike the earlier survey carried out by CDRI, the SESGEC survey did not reveal any consistent evidence of payment to gain employment. As a rule of thumb, however, and in keeping with the earlier results, it was suggested that if it occurs the standard is that one monthly salary is paid to attain employment. Furthermore, employees at several factories stated that men usually have to pay higher commission fees than women to secure employment.

Focus groups identified medicine costs as a major item of expenditure for many employees. Other significant outlays included basic living expenses and sending money home to their parents. Monthly income, including overtime pay, ranged from \$50 to \$75 for most respondents. The cost for basic living was usually found to be in between \$20 and \$40. Major expenses were (1) food, (2) housing, (3) clothing, (4) medicine, (5) transportation, (6) utilities, if not included in housing, and (7) recreation. Almost 90 % of the respondents remitted money to their families. Remittance obligations were found to be strong and the amounts remitted were a significant part of workers' income. Garment workers' stated amounts remitted to the family ranged between \$10 and \$30 per month or around \$20 to \$40 (depending on which section one refers to). Employees seemed to pay as little as possible on supporting themselves to be able to remit more to their families.

An estimate by ADF (Agence Française de Développement) is that the active population in the textile industry on average earns \$55 per month and send in between half to two thirds of this sum to the countryside. Hence about 200 000 people would send about \$32 per month to the rural world or equivalently about 6 million dollars per month, which modestly counted is one fourth of the total salary in the countryside.⁹⁶

A WAC study in 2004 found the average monthly wage of 307 surveyed workers to be only \$56 including overtime and incentive pay. Workers were found to spend money on rent, food (90% of the respondents cooked their food at home), utilities, medical care, personal use items, clothing and transportation. The average sum remitted home was \$23.5 a month.⁹⁷ A coming study by the Sociology Department at the Royal University of Phnom Penh, surveying 147 garment workers found that 89% of them remit money home. Their medium monthly income was \$55 where of \$5 -10 was spent on housing and 2000-3000 riels on food each day; equaling about \$19 per month.⁹⁸ Another NGO study conducted by the Cooperation Committee for Cambodia (CCC) in 2005 on 116 garment workers in Phnom Penh originating from Prey Veng province found the average monthly income to be \$62. Male respondents' wages were found to be in a higher range. This survey was more specific on the monthly expenditures. Respondents on average paid about \$19 for food, \$8 for housing and utilities, \$8 for repaying loans, \$5.5 for transportation, \$5 for clothes, \$4 for personal items, \$4 for health, \$4 for entertainment and \$3 for education. The total of over

⁹⁶ Cattaneo and Marniesse (2004, p. 51)

⁹⁷ Sim (2004)

⁹⁸ Naroeun (forthcoming)

0 is probably overestimated but the survey did find that many had to borrow to pay for the remittances, which averaged 17.99

	ADB	ADF	WAC	Royal	CCC
				University	
Wage	\$50-75	\$55	\$56	\$55	\$62
Remittances	\$10-40	\$32	\$23.5		\$17
Expenses	Food, housing, clothing, medicine, transport, recreation		Rent, food, utilities, medical care, personal use items, clothing. transport	Housing, food etc.	Food, housing, loan repayments, transport, clothes, personal items, health, entertainment, education

Table 2: Overview over some previous findings on wage levels and spending

The second stage of the ADB study, conducted at the household level and known as Phase-II, was carried out in Kampong Cham and Prey Veng with a total of 192 households surveyed and 77 participants in focus groups.¹⁰⁰ The study assumes that it is safe to say that families on average received \$20 - 40 per month from each garment worker as was found in the phase I report. The majority of the households answered that the remittance money was brought to them by someone trustworthy. This was explained by the fact that so many of the girls had gone to work in the garment factories, so that in any given month, at least one relative would travel to Phnom Penh and coordinate remittances. Although impacting urgent needs, remittances were not found to significantly improve the standard of living of the households. The top four uses of remittance money was found to be (1) buying food, (2) repaying debt, (3) covering medical expenses and (4) purchasing seed and fertilizers. Money was also used for sibling's schooling, house improvements, savings and consumer goods. The most significant impact of remittances was found to be the amount and quality of food consumed and to pay off debt. A negative effect was the loss of farm labor, but the remittance typically more than compensated the cost of hired help.

The CCC study in Prey Veng province, interviewing 218 households, found that an average of \$16 was remitted, which is about equivalent to what workers reported. Remittances were used to support subsistence living. After buying food the most common use was reported to be for health expenses, agricultural production and to pay off debt.

A forthcoming study in the Mesang district in Prey Veng conducted by the Economic Institute of Cambodia (EIC) on behalf of the World Bank (WB) in 2005 found that the boom of the garment industry in Phnom Penh had brought about a new source of income for the rural households.¹⁰¹ For families with daughters in the garment industry income had drastically increased and a majority of the people had become better off. That increase however did not necessarily mean that food consumption had increased equally, because while incomes from the garment sector and livestock have increased, the incomes from rice farming have declined due to the recent years' severe droughts impacting rice production and income and due to an increase in the prices of fertilizers and fuel. In 1993 the main sources of income was rice cultivation and livestock came in a distant second place. Starting

⁹⁹ CCC (2005)

¹⁰⁰ ADB (2005)

¹⁰¹ EIC (forthcoming)

from 2001 people started sending their daughters to work in the garment factories in Phnom Penh and consequently the sources of income were diversified and garment factory work and livestock closed in on rice farming as the main source of income. Around 2003 it was found that people started to raise more pigs and cows. There are however still many families who would like to raise pigs but lack enough money to do so and many farmers that are forced to buy fertilizers on credit. The migration from the province to Phnom Penh has according to the EIC study evidently contributed to poverty reduction through remittances improving rural livelihood. According to villagers the factory employees can send their families \$30 per month and the remittance-receiving households thus can dig wells, buy motorbikes and send their younger children to school.

Thesis's Contribution

We may at this stage conclude that we have a fairly good knowledge of the socio-economic profile of garment workers and how much money they earn and remit to the provinces. None of the previous studies however make use of theory to explain the observed patterns and this is something this survey can contribute with. A small survey of this type, drawing on a theoretical framework, may also help in providing some additional pointers for a deeper understanding of the significance of remittances. Previous survey's completely leaves out questions on investments into migration as such. Had that been included, it could have provided additional insights into the reasons and prerequisites for migration. More over no true mirror study has been performed so there is no link at the individual level between garment industry workers surveyed and the households and participants in focus groups covered. This is a concern not only because it makes it difficult to analyze the ends to which money remitted home are used, but also because it is an opportunity foregone as far as cross-checking of survey returns are concerned. In order to answer whether remittances contribute to a trickle-down effect three main research questions will be dealt with:

Research questions

- a) Who is leaving for a job in town: what type(s) or segment of households have the incentives to send members to the garment industry and who are able to do so and how?
- b) How large are the incomes and what scope is left for remittances after the expenses in Phnom Penh have been covered? How much is spent on different expenses?
- c) Is there any difference in views between garment workers and remittance-receiving households regarding amounts, motives and usage of remittances? Are there any indications that money sent home is used for investments into agriculture?

In order to address the above raised issues this survey has focused on adding some deeper insights to previous studies and in particular the two-phase study conducted by ADB through posing questions on migration, incomes, expenses, ability to remit and usage of remittances to garment workers and remittance-receiving households. The intention is neither to replace nor to verify previous research but rather to capture dimensions not previously touched upon even by the largest of the previous surveys.

5. The survey methods and sample characteristics

The method used is a field study with both qualitative and quantitative features. Five weeks were spent by the author in Phnom Penh interviewing garment workers and remittance receiving households to gain a deeper understanding of the underlying mechanisms and to cross-validate findings. The survey considered a sample of 40 garment industry employees.¹⁰² Interviews with workers employed in the textile and clothing industry have been based on a convenience sample where all respondents that could be accessed by the author were selected.¹⁰³ To schedule interviews turned out to be a complicated matter due to the workers' long and intense working hours.

Visiting interviews were undertaken where respondents, after having been asked for a time of their convenience, were approached in their home environment together with a Khmer translator with previous experience of interviewing garment workers. Respondents were asked questions following a structured questionnaire. The questionnaire made it easier to pose open questions while ensuring that comparisons could be made.¹⁰⁴ The open-question questionnaire really adds to the strength of this research as a complement to the previous ADB research which was based on a questionnaire with a set of given answers. By posing open questions the answers reflect what the respondents considered to be important and it is their answers, rather than the author's questions that have shaped the different categories that will be displayed. In between 30-45 minutes were spent on each interview. More extensive and probing interviews were undertaken with some of the respondents whose stories raised additional questions.

Eight households from three different villages in the two provinces of Kampong Cham and Prey Veng were also studied.¹⁰⁵ Since the two provinces are major migrant senders into the garment industry at the same time as their natural conditions differ substantially these provinces were chosen to gain some insights into different reasons for migration and use of remittance money. The remittance-receiving households were found by traveling to the chosen provinces together with previously interviewed garment workers that led the way to their families. This type of mirror data has to the author's knowledge not been undertaken before. It allows for control of responses and provides additional insights into the mechanisms at work. A structured questionnaire was used also for the household interviews. A parent or guardian was the one answering the questions and the garment worker was asked not to be present. To gain a deeper understanding of the issues raised an additional 10 interviews were conducted with relevant organizations, researchers and industry representatives.

The author cannot escape from a possible interviewer bias, meanings foregone in translation as well as cultural diversities affecting the questions and their responses. The author's presence and the use of a translator was however part of the given outset and

¹⁰² All together 42 interviews were conducted but one respondent was interviewed on her day of migration and answers from another respondent were incomplete and therefore these respondents have been left out of the presentation.

¹⁰³ Trost (2001, pp. 30; 35)

¹⁰⁴ See appendix A for questionnaire

¹⁰⁵ Four households were located in one village in Prey Veng and the remaining four in two different villages in Kampong Cham.

necessary for the realization of the study. ¹⁰⁶ Some very basic knowledge in Khmer enabled the author to verify responses and the author felt very confident in the translator's interviewing skills and understanding of the survey purpose. Interviews being held in the respondents home and the absence of any organizational influence could be regarded a strength of this survey vis-à-vis other studies. It should be fully recognized that the sample is small and not statistically representative of garment factory employees in Phnom Penh. Interviews and discussions with various experts and organization have however led the author to feel confident in the soundness of the analysis and survey returns and many were the ones to express the need for insights from small scale research as a complement to the larger studies previously conducted and for directions on any future research.

The sample

In the sample of garment workers all but 4 respondents were females; i.e. 90 % were females. This outcome is similar to the overall distribution since 90% of the garment workers in Phnom Penh are considered to be women. A number of different possible reasons for this feminization of the workforce came up during the field work. The traditional role of women in Cambodia (cleaning, preparing, caring etc) is believed to correspond to the jobs available in the city.¹⁰⁷ Another stated reason was that men don't like to do a female job like sewing.¹⁰⁸ According to specialists at the International Labour Organization (ILO) the gender segregation is due to the fact that women typically sew and might possess earlier skills. This is a type of indirect discrimination where females are regarded as better suited for the job. There is also a direct discrimination of men because of employers' fear that men will join the unions and cause disputes.¹⁰⁹ Another reason is believed to be that the girls often work to support their brothers' schooling.¹¹⁰ According to the Ministry of Women's Affairs (MOWA) young women are more likely to find a job due to the mere existence of the garment sector so therefore families prefer to send their daughters to Phnom Penh, enforcing the feminized labor structure.¹¹¹

Respondents' age ranged from a girl who "just turned 18" to a woman of 37 years. The average age of the sample was 24 years which reflects the fact that most garment workers are young. The large majority of the respondents, or 66%, were under 25 years old.

7 of the respondents were married and 3 were either divorced or widowed. The other respondents were single. 8 of the married or divorced respondents had children. On average each of these garment workers had 2 children. In all but two cases the children did not live with the garment worker, instead they lived together with the grandparents or the garment worker's husband in the province.

¹⁰⁶ Ryen (2004, pp. 64; 83)

¹⁰⁷ Interview Sok Chan Chhorvy, MOWA

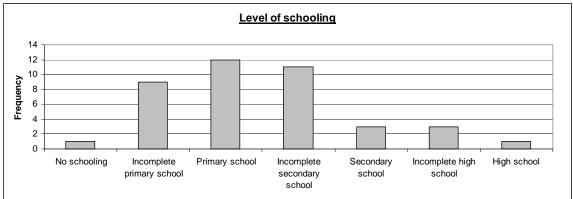
¹⁰⁸ Interview New Orient (Cambodia) Garment Co., Ltd

¹⁰⁹ Interview Ros Harvey, ILO

¹¹⁰ Interview Rosanna Barroso, WAC

¹¹¹ Interview Sok Chan Chhorvy, MOWA

Figure 1: Sample's level of schooling



Most respondents had a low level of education. Only 17.5 % of the sample had completed secondary school and more. One girl who quit school after having finished primary school said she was too lazy to continue to study. Another girl with an incomplete primary school education said she had to quit school because the family was too poor to provide her with the books, clothing and material needed. Girls are easily exploited due to their low levels of education according to MOWA.¹¹² The majority of the respondents should yet be literate given their educational background.

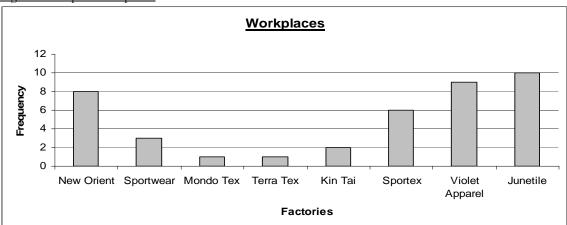


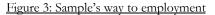
Figure 2: Sample's workplaces

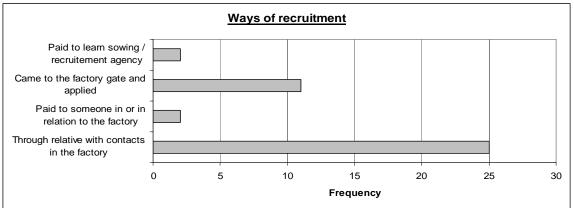
The survey sample represents a total of eight garment factories, whereof the author visited two factories for an understanding of working conditions and interviews with management. The factories are located in three different areas of Phnom Penh; New Orient in one location, Violet Apparel and Junetile in another and the remaining in yet a third location. Mondo Tex and Terra Tex should probably be classified as textile rather than garment factories. The average respondent had worked in their current factory for more than 2 years and 8 months, with actual levels ranging from 2 weeks to 8 years. 76% of the respondents had no previous work experience in the industry from before. The remaining respondents

¹¹² Ibid.

had worked for shorter periods in another garment industry; ranging from 1 month to 6 years. The average over the group was 1 year and 2 months in another factory before the current employment.

Whether or not previous experience from the garment industry is a benefit or not when looking for new employment is debatable. The sample however did not mention previous merits as a way to recruitment and it seems as if employment is open for the young, unskilled and inexperienced.





As many as 63% of the respondents stated they got their job through a relative. The relative was often a cousin, a sister or a neighbor from back home that worked in the factory or knew someone in the factory. Worth to mention is that the ones that were employed by going to the gate in most cases came together with someone; a friend, a cousin or another acquaintance. The young women are believed to be more dynamic and willing to migrate if they have a network or social contacts in Phnom Penh: "As groups, girls all want to leave their village".¹¹³ It was commented that a woman without a network is seen as an easy prey and women tend to have closer relationships to family than men and therefore to a larger degree rely on social networks.¹¹⁴ Most households interviewed said that they had some kind of contacts in the garment industry or at least in Phnom Penh before the migration. It is common that workers introduce relatives that also start working in the factory according to the Director of one factory.¹¹⁵ In the other factory the workers could also ask their relatives to come and work if the company only needed a few workers, but normally the factory put a poster on the gate. According to an administrator it happens that some workers make a business by accepting money from job seekers in exchange for introducing them to the employer.¹¹⁶ If this type of recruitment process is somewhat similar to other factories it explains the high frequency of people being employed by coming to the gate or through a relative. In the sample as many as 93% were permanent worker while the others worked as non-contract or probation workers.

Visits in two of the garment factories identified a number of different positions or work tasks, including cutting, sewing, trimming, washing, ironing and packaging. Other tasks

¹¹³ Interview Kang Chandararot, Cambodian Institute of Development Study (CIDS)

¹¹⁴ Interview Bruno Maltoni, Royal University of Phnom Penh

¹¹⁵ Interview New Orient (Cambodia) Garment Co., Ltd

¹¹⁶ Interview Kin Tai Garment Co., Ltd

mentioned were stock work and de-winding of cloth. Each worker only performed one single step of the production process and thereby no greater skills are likely to be acquired.

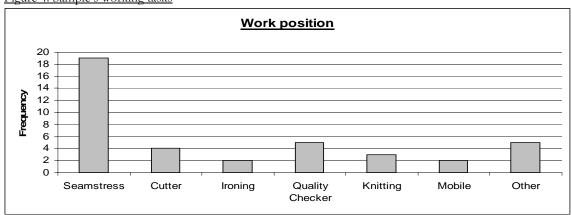


Figure 4: Sample's working tasks

Almost 50% of the survey respondents worked as seamstresses which is not surprising given that this is the procedure most likely to be located in LDCs. It is however interesting to find that some more high-skilled procedures also are performed in Phnom Penh, such as cutting. The mobile workers switch in between positions to sections where the need of labor is the highest for the moment. Other positions held in the sample were trimming, folding, material control, packaging and pattern drawing.

The sample came from a total of 10 different provinces out of a total of 23. Only one of the respondents originated from Phnom Penh, otherwise all the others were internal migrants into the capital. The large majority of the respondents originated from neighboring provinces in the south close to Phnom Penh. The largest frequency of respondents came from Prey Veng, Kampong Cham, Takeo and Kandal, all provinces situated around Phnom Penh in the Mekong Plain region.

Table 3: Sample's origin

Province	Frequency	Percent
Bateau Meanchey	1	2.5 %
Battambang	1	2.5 %
Kampong Thom	2	5 %
Kampong Cham	9	22.5 %
Kampong Speu	1	2.5 %
Prey Veng	11	27.5 %
Takeo	8	20 %
Phnom Penh	1	2.5 %
Kandal	5	12.5 %
Kampot	1	2.5 %
Total	40	100 %

6. Field study findings

The following section presents descriptive statistics from the author's interviews with garment workers. Where appropriate, insights from interviews with households, researchers, organizations and factories are added. The numbers and percentages reported are in most cases rounded to the nearest whole number for simplicity. Cost calculations that have been made were made using the exchange rate of 1 US dollar () = 4000 Cambodian riel. This exchange rate was chosen as it is the one used in the streets of Phnom Penh as well as by the garment workers when they added up their expenses.

a) Migration and migrant wealth belonging

Since most garment workers are internal migrants who have migrated from their province of origin to Phnom Penh it is interesting to look into their reasons for migration more in detail. Not many women come from the provinces so seek work in Phnom Penh elsewhere than in the garment industry according to the MOWA.¹¹⁷ The garment factories can even be considered to be "the only pull factor for migration into Phnom Penh".¹¹⁸ According to sociologists migration offers an opportunity for women to fulfill the Cambodian ideals of a dutiful daughter. It is however also noted that Cambodian women's motivations for migration can be related to individual desires of economic gain and that the success stories of other women may serve as an influence.¹¹⁹ The survey revealed a number of different reasons for migrating to seek job in the garment industry. Some can be found to be push factors, such as bad harvests and land that cannot support for the whole family, business failures and lack of job opportunities while others can be identified as pull factors, such as the prospect of a higher salary in Phnom Penh than what can be offered in the rural areas. Many respondents gave several different reasons to why they had migrated to work in the garment industry in Phnom Penh so their answers were sometimes categorized into several different reasons and the total frequency therefore adds up to more than the sample size.¹²⁰

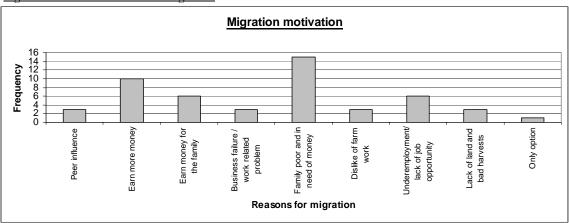


Figure 5: Different reasons for migration

¹¹⁷ Interview Sok Chan Chhorvy, MOWA

¹¹⁸ Interview Bruno Maltoni, Royal University of Phnom Penh

¹¹⁹ Derks (2005, pp. 76-78)

¹²⁰ See appendix B for quotes from the interviews

Most respondents stated that the main reason was that they saw that their family was poor and needed the money. Others had migrated to earn more money for their own future. The two categories "Earn money for the family" and "Family poor and in need of money" might seem very analogous and probably are, but while most respondents explicitly stated that the family was poor others just said that they wanted to help the family to earn more money without mentioning any specific need. Many respondents also seemed to have migrated due to underemployment in the rural areas and some because they did not like the hard work in the fields growing rice. "Business failure" refers to respondents who used to have a small business in the province that failed since their customers bought on credit without paying them back. One respondent had worked for a ministry in the province and migrated after a work-related problem she did not wish to tell about. In deeper conversations some girls also confided problems of domestic violence, abuse and alcoholism. These are possible push factors not likely to come up directly when workers are asked about their different motives. "Peer influence" refers to women who said that they decided to go because they saw other people go. This can be supported by the belief that young people migrate to find out if the information they get about the migration destination is true.¹²¹ Another belief is that young women often migrate due to pressure from the family and also due to pressure from peers, since migration has steadily increased and together with it the living standard of those that have migrated.¹²²

A WAC study found that most workers claimed to have taken the decision to go on their own and took pride in that decision.¹²³ More than three out of four respondents to the present survey stated that it was their own decision to come to Phnom Penh's garment industry. Only three respondents said that it was their family that asked them to go or who came up with the idea. However, the own decision making was almost always mentioned in close conjunction with statements like "I decided to go ... because I saw that my family was poor and needed the money". This could either be interpreted as altruistic behavior on the part of these young women or one might suspect that there is some kind of other mechanism at hand, such as pressure or expectations from the family.

Interestingly the mirror data revealed that there was controversy regarding the decision making in between the garment workers and their families. The grandmother to one of the worker's said that she decided that the granddaughter should move even though the worker said it was her own decision. The grandmother however added that she took this decision because the granddaughter wanted to go to help her grandmother. Others said that the daughter was the one who wanted to go but that they gave the permission or decided to let the daughter go. Such discrepancies might be due to garment workers' and families' pride. The reasons for migration stated by the rural households were that work in the factory seemed easier than working in the farm, that the daughter could earn more money for the family and that other people's daughters moved away.

WAC estimate that a minority of households force their daughters to go to Phnom Penh to work in the factories, rather a majority of the girls choose or volunteer to go to earn money for themselves and their families since it lies in the Cambodian culture and notion of womanhood that the women are caretakers and providers of the family.¹²⁴ One factory

¹²¹ Interview Kang Chandararot, CIDS

¹²² Interview Sok Chan Chhorvy, MOWA

¹²³ Maffii (2002, p. 50)

¹²⁴ Interview Rosanna Barroso, WAC

believed it is the workers' own decision to come to the factory but that they migrate because it will give their family a better living standard.¹²⁵ To go to the factory is believed to be seen as a "mission" where you for a limited period can help your family.¹²⁶ It could also be described "an offer you can't refuse" where the woman decides that she wants to go but really has no other choice.¹²⁷ Many of the reasons given imply that migration often is somewhat of a household decision where the economic and agricultural situation of the family necessitates migration of one or several family members, even though this seldom is stated explicitly.

A major problem with previous surveys on workers origin is that respondents are asked where they come from, but not for how long they have been in the city looking for a job.¹²⁸ Identifying the fact that migration requires some kind of resources and that workers have to spend some time before finding a job the respondents were asked whether they or their family had made any investment into their migration. To the author's knowledge this is an aspect that has not been surveyed before in any large scale although it offers important insights into the mechanisms of migration. More than 90% of this survey's respondents stated that some kind of financial investment had been made into their migration.

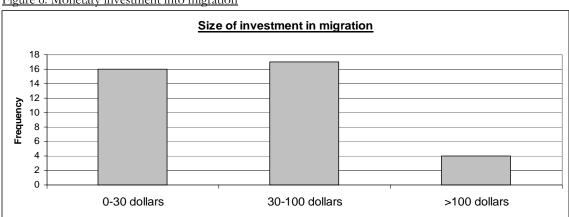


Figure 6: Monetary investment into migration

The average sum invested for the sample was \$125 which is about equivalent to two monthly garment worker salaries. The investments however ranged from \$10 to \$600 (during one worker's first two years) and the median of those investments is \$50. The highest investments were made by the male respondents. One man said it took a long time for him to find a job because the employers did not want to hire a man. Another young man told that he got \$200 from his family, who before the parents got sick could earn good money, and that he had to spend a lot of time looking for a job because of his "aggressive behavior". Most sample respondents stated investments ranging from \$30-100 but many also invested smaller sums of money. The time it took for workers to find a job ranged from 1 day to 7 months. No matter how long time it took it was apparent that at least some financial investment into the migration was necessary.

¹²⁵ Interview Kin Tai Garment Co., Ltd

¹²⁶ Interview Kang Chandararot, CIDS

¹²⁷ Interview Jan Ovesen, Uppsala University

¹²⁸ Interview Ros Harvey, ILO

The most common way for families and workers to finance the investment was through a loan from either another family member or someone in the village but a substantial share of the respondent's families had raised the money on their own. Regardless of whether a rural family borrows or raises \$100 to invest in a daughter's migration this implies that there is both a willingness to take risk but also a great belief that an investment will become profitable in the long-run. One respondent whose parents raised \$25 on their own said that now she gives back to the family through her remittances. One mother who invested \$100 into her daughter's migration said she was confident that the daughter would be able to find a job and that it was worth while to do this investment. She also added that she had no choice but to pay for her daughter to get a job. Another indication of these results is that among the migrant-sending households there is a widespread access to micro-credit as well as family resources. Without such access migration is not likely to take place.

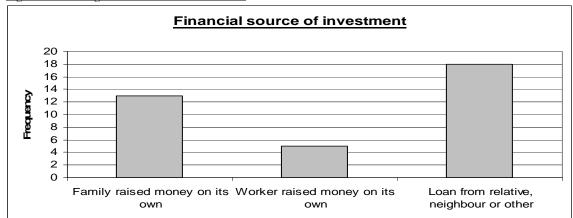


Figure 7: Sourcing of resources for investment

The investments made in migration are however underestimated as many workers could not remember exactly how much they spent or received from their families their first time looking for a job and since the calculation does not include the interest rate paid by some of the families who borrowed money. The most common stated level of interest rate was 10% per month but most did not have to pay interest as they borrowed from other family members. Only one respondent said that the family was still in debt after borrowing money for the migration. This family initially borrowed \$10 a year ago and later more, to support their daughter during the 3 months she looked for a job. Others did not know whether or not the family was currently in debt or how long it took the family to repay the loan.

It is interesting to note that the garment workers when asked about the investment into migration only reported about the sum of money their families gave them, the amount of money they spent on food or how long they looked for employment while some of the provincial households interviewed were more specific about what type of costs the money had to cover. The families told how money was needed to make blood tests, an ID-card and other documents needed such as a family book to get an employment in a garment factory. The WAC study by Maffii found such documents to amount to about \$6 but inflation should imply higher costs today.¹²⁹ Only one garment identified the documents and test she needed to pay for. Probably partly for this reason there were some discrepancies between the garment workers' answers and the families. One garment workers said her family supported

¹²⁹ Maffii (2002, p. 53)

her with \$15 while the father said he invested \$30. Another girl said she got \$25 from her mother that the mother had borrowed from the grandmother while the parents claimed to have invested \$50. Her father said that both his daughters got \$50 each to go to the garment factories and more than this he could not afford and he had to work hard to earn that money. Yet another girl said she got \$50 from her mother while the mother claimed to have raised \$100 for her daughter. The mirror data thus revealed that the overall investments might even be double as high if the garment workers in general do not include all the costs of their job migration.

In addition to being asked how they acquired their employment all workers were asked whether they paid any commission to someone for their job. Interestingly the frequency of people that paid for the job was then significantly increased. The majority had not paid for their job however.

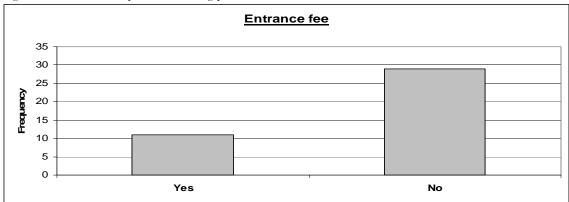


Figure 8: Number of respondents having paid a commission

The sum of money that was paid ranged from \$10 to \$130. The average sum paid for the sample amounted to \$62.5. This is significantly higher than the average of \$38 found in a CDRI study that on the other hand found 50% of the garment workers to have paid for their job.¹³⁰ Their study is also referred to by the ADB.¹³¹ The present survey's respondents reported paying to tailors for sewing training, to people in the factory administration, to supervisors, friends, team leaders and recruiters. In one interview a garment worker with a friend working in the HR department in a factory told how the decision makers in the factories are the team leaders, so when HR tell them that they should hire people they in their turn tell their friends from their home village that they need people and then girls go to this team leader and sometimes they pay.

The "entrance fee" as many workers call it is part of the investment made into migration and the interviews with the households and the workers revealed that some families forehand knew about this entrance fee and therefore early on borrowed money to pay for it. This can also be contrasted to the CDRI survey that found that 57% of the workers took out a loan to pay for the "fee".¹³² Many workers pay to corrupt people within factories' administration or Human Resources department in order to get a job and they pay as much as \$150-200 according to the garment worker's union CCAWDU. Women typically pay \$50-100 while men pay \$100-200. Men have to pay more because the employers do not

¹³⁰ Sok et al. (2001, p. 52)

¹³¹ ADB and Ministry of Commerce (2004b, p. 61)

¹³² Sok et al. (2001, p. 52)

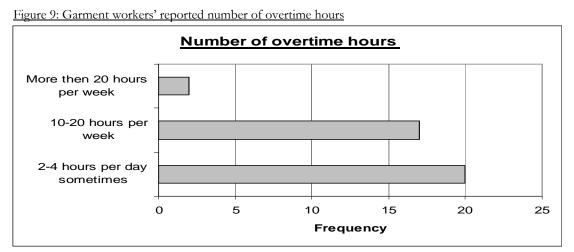
want to employ them because of fear that they will start strikes and protest against working conditions.¹³³ All told, many garment workers invest substantial amounts of money into their migration and/or to acquire employment in the garment industry.

b) Income linkage and scope for remittances

When speaking of migration and contributions to the family income it is interesting to look at what scope there is for garment workers for contributing and how contributions are used.

Wage level

The wage levels must be considered with respect to the overtime worked. Two hours of overtime per day is the legal limit and the absolute standard according to the ILO, believing that 75% of garment workers in Phnom Penh are doing 2 hours overtime per day. According to the ILO two thirds do excessive overtime; that is more than 2 hours per day. This is seen as a big problem. One third of the workers are considered to be forced by their employer while two thirds work voluntarily because they need the money. The ILO even believe that some factories that do not offer a lot of overtime work risk loosing their labor because workers want to go to factories where they can work more overtime and hence earn more money.¹³⁴



All survey respondents to the present survey reported to work 8 hours a day 6 days a week. Common working hours were 8 am - 4 pm. Only 1 of the respondents never worked overtime while the others all worked overtime sometimes, ranging from 1.5 hours per day to 8 hours per day, somewhat in contrast to the ILO belief. Many respondents could not say exactly how much overtime they worked since it depends on their factory's needs. The majority therefore answered that they worked 2-4 hours "sometimes" or in "busy periods". Someone who reported to work 2 hours of overtime sometimes estimated this to occur 2-3 days a week. The girls who reported to work more than 20 hours per week had normal working hours in between 2 pm - 10 pm and if asked to work overtime they would either

¹³³ Interview Ath Thorn and Chon Sokha, CCAWDU

¹³⁴ Interview Ros Harvey, ILO

stay to work 8 hours in between 10 pm - 6 am or 6 am - 2 pm the following day until the beginning of their new shift. The garment workers work overtime to earn more money.¹³⁵

The industry is furthermore heavily piece rate dominated and the piece rates are different for different positions. The piece rate must however always be brought up to the minimum wage, regardless of the position.¹³⁶ The legal minimum wage is \$45 per month and the average workers' salary is \$72 per month according to the ILO.¹³⁷ The average monthly salary of the present survey sample amounts to \$63, with actual wages ranging from \$40 - 120. Many respondents answered in intervals since the salary often is based on piece rates and thereby varies with their productivity, as well as with the number of overtime hours worked. The mean of the interval was used to calculate an average for the sample.

The ILO has no position on what is a reasonable level of salary needed for an adequate standard of living, but one study made by a garment workers' union federation claim that workers would need about \$85 per month in order for them to lead a decent life.¹³⁸ Another inter union study of 7 union federations written in Khmer in 2002 found the necessary wage to be \$82.¹³⁹

Most workers had no personal comment to give about their salary. 40% of the respondents however wished for a higher salary; to be able to send home more, to be able to save or just to cover their normal living expenses. Other comments touched upon how illness "eats up" the whole salary and that the workers want more buyers to contract their factory so that they can earn more money.

Spending patterns

When workers were asked about their salary and spending their reported expenditures often exceeded their income but since their salary varies in between months their answers have been left intact. Adjustments have been made only where the income exceeds the spending and the respondent has stated some type of expense without being able to estimate a value. The graph below shows the frequency of respondents that reported to spend money on each expenditure post, and the total amount of money spent divided by that frequency.¹⁴⁰

¹³⁵ Interview Sok Chan Chhorvy, MOWA

¹³⁶ International Labour Office (2005, p. 11)

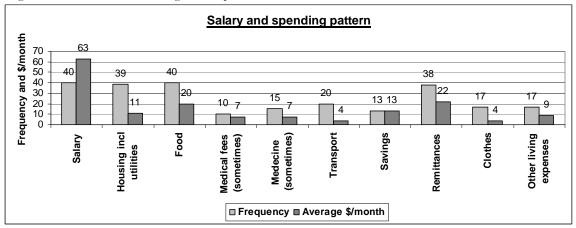
¹³⁷ Interview Ros Harvey, ILO

¹³⁸ Interview Ros Harvey, ILO and Kimsong (2000)

¹³⁹ Interview Ath Thorn and Chon Sokha, CCAWDU

¹⁴⁰ See appendix B for quotes from the interviews

Figure 10: Garment worker's wage and expenditures



Naturally all the respondents had expenses for housing and food except for one respondent who lived for free with relatives. The average cost for housing of \$11 includes electricity and water. All respondents, but the one who lived with relatives, lived in a rented room fairly close to their factory. Most of them paid a monthly rate that included water and electricity while some paid for this separately but in their case their costs for lodging have been added up. The expenditures for housing are slightly overstated as 3 respondents paid a larger sum, up to \$30, and also received 2 - 3 meals of food per day. To the same degree the expenditures for food are therefore slightly understated. Important to note is that the cost for housing is the cost for one person who most often shared its room with 3 - 7 others who all paid the same rent each. One of the largest expenditures for the workers was food. The average worker paid \$20 per month for food. Often workers cooked themselves or they bought food at the food stalls close to the factory.

As for the medical fees and medicine these expenditures should not be regarded as monthly costs since many reported single-time fees or money they had to spend sometimes on their health. The average cost was \$7 for both medical fees and medicine. To spend money (monthly) on medicine seemed more common than doing so on medical fees and doctor's appointments. Medicines included both "normal medicine" and traditional Khmer medicine. The expenditures for medical fees and medicines in this case consider costs for the garment workers themselves although some later said that some of the money sent home was used for the family's health.

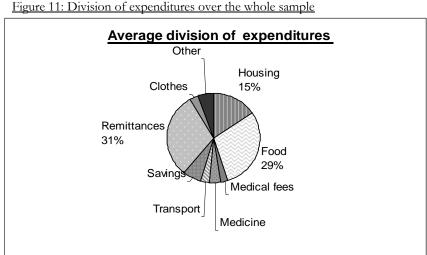
The average monthly cost for transport was \$4. In most cases this was money spent to go home to the province with remittance money and/or to visit. Trips back home were made in between 1 - 2 times per month to 1 - 2 times per year or occasionally in the case of a family member's illness. For three respondents (all male) money was spent monthly on gasoline for their motorbike. The cost for transport would probably be higher for another sample given that all respondents lived very close to the factory.

Only 27% of the respondents saved any money. Savings ranged from \$5 a month to \$40, with an average of \$13. Three of the respondents saved money through participating in the interest-game Ton-Tin.¹⁴¹ A common answer to the question of savings was "No, I send everything home". Some said that their families saved some of the money they sent home.

¹⁴¹ "Ton-Tin" is an interest game or investment game where participants all put money into a pot and bid for the right to use the money by promising the highest interest rate to the other participants

Others answered that they could not save because their health was bad. It became apparent that illness in many cases completely ruined the financial situation for the garment workers.

A rather low frequency of respondents spent money on anything else but for basic living. An explanation might be that most Cambodian women's attitude to money is that it is something you try to gather, not something to spend on luxury.¹⁴² An average of \$4 was spent per month on clothing and \$9 on other living expenses. These included wedding gifts, "girl's stuff", things to parents when visiting, study fees, entertainment, powder milk for worker's babies and various living expenses.¹⁴³ One couple jointly paid \$40 for their son's powder milk.¹⁴⁴ Entertainment for one of the respondents meant taking a walk once a month and buying a snack.



The graph shows the total expenditures divided by the total sample. It is clear that the large share of worker's salary is split in between remittances and food, followed by housing. When all the costs are divided like this in between all the workers regardless of individual spending patterns, savings make up for a smaller share of the average worker's salary. It is even more apparent that the main share of the salary covers basic living needs and remittances.

Remittances

The highest expenditure for the sample was indeed remittances or money sent home. 95% of the respondents remitted money home. The best paid workers did often remit more in absolute terms (\$5-10 more) than the less well-paid, but not necessarily. The more well-paid respondents often spent more money on savings instead. The average worker monthly sent \$21 of its salary back home to the parents or the own family; that is 33% of the average salary. Looking at the households however one family said it received slightly more than what the daughter stated, another considerably less while some data corresponded with each other. One mother claimed to receive \$5-10 per month while the daughter said she sent \$10-20 per month. Another mother said she got \$10 monthly while the daughter claimed to send

¹⁴³ It should be pointed out that the field work was carried out during a major wedding season.

¹⁴² Interview Jan Ovesen, Uppsala University

¹⁴⁴ The main areas of non-compliance with the labor law in garment factories according to Ros Harvey, ILO concern nursing centers, child care centers and breast feeding breaks.

\$10-20. In another case the garment workers said she sent \$10 monthly while the father said that she sent \$5, \$10 or \$15 depending on how much she spent in Phnom Penh.

It is interesting to note that those surveyed who did not send money home were almost all male. Two male respondents said that they never send home money but sometimes ask their family for more money when their own salary is not enough. The third said that he only sends money home for very special occasions like the Khmer New Year. This finding was reinforced when looking at the households where migrated male siblings did not support the family other than for special occasions. It is expected of daughters to take care of their family and women think more about their family than men do according to WAC.¹⁴⁵

When the women marry remittances often come to a halt because then they are to provide for their own family. A former garment worker at WAC told about a friend who was about to get married when the father asked her if she would then stop sending them money. The girl faced with this dilemma chose to call off the wedding to keep on providing for her parents. Many women however keep on caring even after marrying while men only care for their new family according to WAC. Two men with their own family in the sample did not remit any money to their parents or, in one case, to the own child.

c) Use of remittances and mirror data

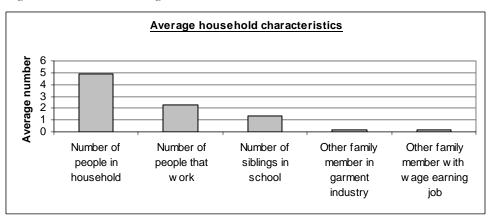
To understand the significance of the remittances sent home by the garment workers they were also asked about the remittance receiving household's characteristics. When asked about the number of members in their original household the large majority spontaneously included themselves, implying that they still regard themselves as part of the original family. It is believed that even though the garment workers momentarily are in Phnom Penh their identity remains a country-side girl.¹⁴⁶ According to the administrator in Kin Tai factory one worker can help feed and support 2-3 people in the countryside.¹⁴⁷ Looking at the characteristics of the remittance-receiving households the average household size was 5 people excluding the garment worker, with actual household sizes ranging from 1 to 12 members. Of those 5 people only 2 people engaged in some kind of work; in most cases the parents. If one assume that those that work only produce enough to support for their own living this calculation might confirm the factory's estimation. About one sibling is in school on average. In many families siblings both work and go to school. It was not very common in the sample that the family has yet another migrated family member remitting money from the garment industry or any other wage earning job.

¹⁴⁵ Interview Socheata Sim, Phearak Ly and Sophea Chrek, WAC

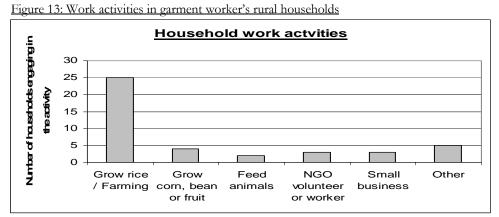
¹⁴⁶ Interview Jan Ovesen, Uppsala University

¹⁴⁷ Interview Kin Tai Garment Co., Ltd

Figure 12: Characteristics of garment workers' rural households



The graph below displays the types of work activities engaged in by the family members still living in the province and/or receiving money from the garment worker. Previous research has not specifically asked about work activities. Rather it seems to have been assumed that rice farming is the main or only activity as questions have focused solely on rice farming. Different activities are however likely to yield different usage of remittance money. Some have considered it incorrect to say that rural Cambodians do little other than growing rice. Rice cultivation and general crop activity have been shown to engage villagers for no more than an average four or five months. The remaining time they forage, fish and gather a range of food and non-food items. In addition, they are undertaking small business activity and wage labor. Larger surveys often miss to recognize this.¹⁴⁸



As can be seen in the above graph most families indeed engage in farming and grow rice for a living. Some however also grew other crops such as corn or bean or fruits. To feed the family's pig and cow was also reported a work activity and often it seemed as if one person was responsible for this. Other activities included growing fruit, fishing, producing rice wine, NGO work, making scarves, chicken breeding and driving a moto taxi (in Phnom Penh). It has been found that food processing, weaving and other crafts are important to rural women. These activities account for a relatively small proportion of primary employment

¹⁴⁸ Sophal and Acharya (2002, p. 91)

outside of agriculture, but they are generally recognized as important sources of secondary income for women, particularly in rural areas and should therefore not be neglected.¹⁴⁹

Most respondents could not tell how much the family earned in either money or products; either because they did not know or because they found it difficult to estimate. 26% of the respondents answered that the family earned rice to eat, sometimes enough to support their living and sometimes less than enough. Of the respondents 20% estimated the family rice harvest to be in between 1-3 tons of rice per year. Only 1 respondent said that the family harvest was above this level. Three respondents estimated a monetary value for the family income; \$50, \$250 and \$500 respectively per year. Others referred to the income derived from cows and pigs. The average farm size among the rural poor in Cambodia is 1.5 hectares that can meet one and a half of the per capita milled rice requirements of 165 kg/year, but many also live off less than 0.5 hectares.¹⁵⁰ This implies that parts of the sample had substantial harvests but it is probably fair to assume that for many remittances constitute the only monetary income.

Cash is increasingly needed in rice cultivation to purchase the inputs. In areas where the number of harvests per year increases the labor input will also change and the hiring of labor might become necessary.¹⁵¹ Surveys have found that irrigation remains the major constraint to intensifying the production and accomplish several harvests per year of rice paddy and other crops.¹⁵²

To the author's knowledge the use of remittances in the receiving households has not been asked before directly to the garment workers. It is however interesting first as an indication of the worker's knowledge over the use of their salary but also as a complement to the closed tick-questions that in previous research have been posed to households.

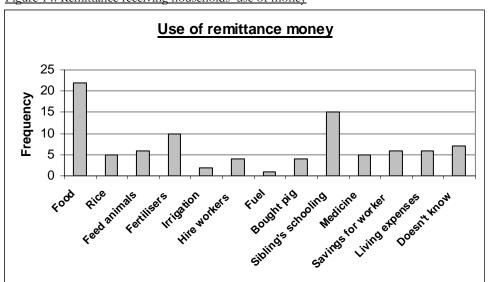


Figure 14: Remittance receiving households' use of money

¹⁵¹ Bray (1986, p. 162)

¹⁴⁹ CGA (2004, p. 42)

¹⁵⁰ WB (forthcoming, p. 76)

¹⁵² WB (forthcoming, p. 74)

The highest use frequency for the sample is for food. Over 50% of the respondents said that the money they sent home was used to buy food. Rice could be seen as equivalent to food but respondents often separated these two, probably because some of the rice bought was intended as seeds for the fields. Positively many also spent money on the rice fields in the form of fertilizers, irrigation, fuel and hired workers to help out with the harvest. The average remittance amount of \$21 could buy one third of the fertilizers needed for 1 hectare of rice cultivation or pay for almost half of the total labor cost for 1 hectare of rice or it could buy seed enough for 3 hectares of rice cultivation.¹⁵³

To buy a pig for the money and to feed the pigs and cows seemed to be regarded as an important investment. The second most frequently mentioned use was to pay for siblings' schooling. Both sisters and brothers seemed to be sent to school. Some workers said or believed that their family saved some of the money for them. It is likely that it is seen as more safe to keep the money in the province than in the city. Money was also used to pay for medicine, often to sick and old parents. Surprisingly many respondents did not really know what their money was used for.

Looking at the mirror data there were some important differences in between the use the garment workers reported and what the family claimed to use the money for. One girl said that her family used the money for her sister's schooling, everyday expenses and food while the father said that he hired people to grow the rice. Sometimes he hired 10 people who all got \$1.75 per day but he said that his daughter's money was not enough so he also borrowed \$150 per year from other families. He however said that the most important use of the money was fertilizers and living expenses. Another girl thought her parents spent the money on feeding the pig and her sisters schooling while the parents only said that they spent money on rice. Another girl knew that her mother hired people to work in the farm and she thought the mother hired about 2 - 3 people. The mother told that she hired about 5 people during the two and half months of harvest, for \$80. Two more girls did not know that their family hired 1 - 3 people to work in the field for the money they sent home; they thought it was used for rice and food. Another garment workers said that her family spent money on food, "just for living", for siblings' schooling and that when they could they saved for her. The family only reported to spend the money on food and medicine. Yet another girl thought her family saved some for her but this was not mentioned by the family.

The mirror data showed that often the girls remittances was even more significant for the family's situation than the garment workers seemed to be aware of but also that the remittances in some cases only was for the livelihood of the family since none of it was saved or invested. WAC argued that most remittances to families are used to pay off family debt and that many workers feel that the remittances have no long-term effects, rather they just function as a way to survive for the day.¹⁵⁴

To sum up the average worker's salary seemed to be split in between expenses for supporting basic living needs and money sent home and surprisingly little seem to be spent on consumer goods. Therefore it is interesting to look at how the garment workers would use any extra money.

¹⁵³ See appendix C for table on the costs of rice cultivation

¹⁵⁴ Interview Socheata Sim, Phearak Ly and Sophea, Chrek, WAC

Promising investment prospects

To find out about areas that the garment workers would wish to spend money if they had the resources they were asked what they would do if they were given \$5 more than normal in salary one month. Such hypothetical questions do not appear to have been asked before although providing some interesting insights. Some respondents gave several answers why the frequency is higher than the total sample.

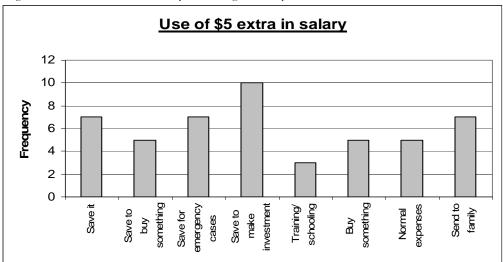
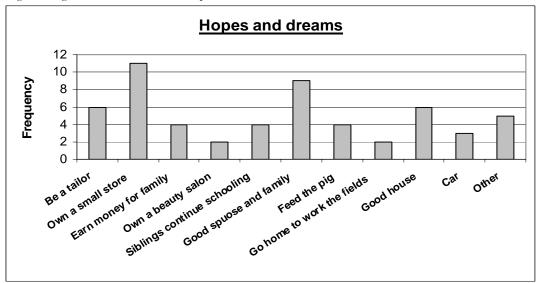


Figure 15: Garment workers' likely use of higher salary

More than 85% of the respondents answered that they would save the money for various reasons. It is interesting to compare this result with the actual savings level which is not very high. There seems to be a great willingness to save money but a lack of resources to do so. This is also reflected in the fact that many respondents would spend the money on their normal living expenses or save it for emergency cases such as health problems. Most of them however would like to invest in some kind of business activity, either to make their money grow (by lending them to a friend with interest rate) or to be able to open up their own business. Three respondents would like to invest in their human capital and do some training or study. Even though some respondents would buy something such as shoes or jewelry (which is a form of savings) for themselves a higher number of respondents would send home also the extra money; "so that the family could get 25 instead of 20 one month".

Many respondent's could at first not answer the questions of their hopes and dreams for the future and said that they had no hopes or dreams but when given time most came up with something. Some respondents even gave several answers why the total frequency below is higher than the number of respondents.

Figure 16: garment workers' future aspirations



There was a strong desire by many to engage in small business. Most of the garment workers dreamt about opening up a small store back home. Some also wanted to become tailors or designers; either in the province or in Phnom Penh. According to MOWA however sewing is mostly seen as a temporary work and the skills in the factory are different from the skills needed to be a tailor.¹⁵⁵ That most girls had no plan of continuing a sewing career and that the girls that wanted to said they needed money to do some training to be a tailor confirmed this. Other business ideas included opening up a beauty salon. Others just wished they could earn more money for their families and that their siblings would get a higher level of schooling than them. Some dreamed about going home to the province and work in the fields or feed and fattening the pig that their families often had bought with their garment salary. Many dreamed about having a good and nice husband that could support the family. Some implied that being a garment worker made this difficult and one girl said that "no one looks at you if you are poor". Others hoped for a big house or a car. Not categorized answers in the graph include a business idea of leasing karaoke equipment in the countryside, having an animal, travel by airplane and respondents unable to give an answer.

Also the households had a difficulty stating what hopes they had regarding their daughters' futures. Five out of eight households answered that they had no hopes, were not sure or did not think about it. Three expressed that they wanted the girls to stay in the garment industry. One father said that is would be impossible for the daughter to come back because the rice harvests have been bad for several years. The daughters that belonged to these households were among the respondents that had no hopes or dreams or expressed that working in the garment industry was their only choice. The mirror data points to the migration being a household decision taken out of necessity. Most people prefer to have their own business in the province but when they have no choice they migrate for a while according to MOWA. Parents are not happy about sending their daughters away but have no choice.¹⁵⁶

¹⁵⁵ Interview Sok Chan Chhorvy, MOWA

¹⁵⁶ Ibid.

Additional insights from the remittance-receiving households

Most garment workers come from either Kampong Cham or Prey Veng province according to many experts. The migration history of Kampong Cham and Prey Veng goes back to 1997 and 2001 respectively when labor first seriously started to migrate to Phnom Penh's garment industry.¹⁵⁷ These two provinces are neighboring provinces situated close to Phnom Penh but they have very different natural and agricultural conditions.¹⁵⁸ The Kampong Cham province constitutes a very good and fruitful agricultural environment. The soil allows for a variety of agricultural products being grown (which makes it an exception compared to other provinces) and as a consequence many trading activities occur.¹⁵⁹ Most people live above the subsistence level and the living standard is higher than in many other provinces. Saving rates are consequently also higher than elsewhere. Furthermore the geographic and natural conditions allow people to change location more easily since infrastructure is better. Remittance money sent to this province is therefore believed to mostly be used for productivity-raising investments such as buying fertilizers, seeds, plants etc. Some money is probably also used for consumption and savings, because money is considered more secure in the province than in Phnom Penh.

On the border to Vietnam in Prey Veng on the other hand most families suffer under national conditions. Flooding areas are very common and the drought season is longer than in Kampong Cham. Infrastructure is poor as the flooding hinders the construction of roads. As a result people are very poor. Even if they experience a good season the money they earn can barely pay back their loans. People therefore send their daughters to the garment factories in Phnom Penh. Some of the money sent home to Prey Veng is probably used for consumption but all surpluses are believed to go to "financing the past".¹⁶⁰ The CCC study conducted in Prey Veng found that after buying food a common use of remittance money was indeed to pay off debt.

In Kampong Cham the share of rice in total agricultural revenue is only 45.5% while it in Prey Veng constitutes 94.5%.¹⁶¹ The table below demonstrates that the conditions in Kampong Cham for diversified farming are more fruitful than those in Prey Veng. Kampong Cham even outperforms the expected potential for one of the crops while Prey Veng is never close to reaching the planned numbers of cultivated hectares.

	Corn		Vegetable		Soy bean		Peanut	
No. Hectares	Planned	Cultivated	Planned	Cultivated	Planned	Cultivated	Planned	Cultivated
Kampong Cham	12,500	7,000	3,150	3,853	12,700	10,581	4,688	4,440
Prey Veng	3,000	500	1,000	538	400	111	200	22

Table 4: Planned and actual cultivated area for selection of crops, wet season April-October 2005

Source: Statistics Office, Ministry of Agriculture (2005)

¹⁵⁷ Interview Bruno Maltoni, Royal University of Phnom Penh; EIC (forthcoming, p. 4)

¹⁵⁸ Interview Men Sothy, Ministry of Agriculture

¹⁵⁹ Interview Kang Chandararot, CIDS ; WB (forthcoming, p. 75)

¹⁶⁰ Interview Kang Chandararot, CIDS

¹⁶¹ WB (forthcoming, p. 76)

(In constant prices. Riel, 2004 Phnom Penh prices=100) 4000 Riel~\$1	Mean	Lower limit of 95% confidence interval	Upper limit of 95% confidence interval
Phnom Penh zone	8.120	7.442	8.798
Kampong Cham	3.469	3.147	3.790
Prey Veng	3.140	2.965	3.315

Table 5: Daily per capita household consumption

Source: 2004 Cambodia Socio-Economic Survey taken from Knowles (forthcoming)

Table 4 presents estimates of the mean level of per capita daily consumption in 2004 Phnom Penh prices and we can be 95% confident that the true level of per capita consumption falls within the estimated confidence interval. It is clear that Phnom Penh consumption is significantly different from the consumption in Prey Veng and Kampong Cham but since the confidence intervals for the provinces slightly overlap we cannot say for sure that the difference between Kampong Cham and Prey Veng is significant but we can conclude that the mean per capita consumption seems to be somewhat higher for Kampong Cham.

The girls whose families were visited in Kampong Cham stated that their reasons for migration was that they had nothing to do but to work in the fields and that they wanted to go like other girls to earn money for themselves or for the family, "so my mother could hire people to work in the fields". When asked about feelings of relative deprivation before the migration of their daughter three out of four households from Kampong Cham said that their economic situation before was the same as others around them, or only slightly worse or better. When asked about their relative feelings after the migration three households answered that now their situation was the same as others, but that the family was better off than before. One family said that they now had a better situation than others.

The garment workers whose families were visited in Prey Veng stated that they migrated because of bad harvests, lack of job opportunities and a poor family. Two households said that life was really hard before their daughter's migration and that their situation compared to others was worse. A third household also said that it was really hard before but since they could not get good rice harvests, not because of the daughter not being in the garment industry. The fourth single-headed household said that before the daughter's migration he had someone to help him do farming and the economic situation was the same as for others in the neighborhood. The feeling after the migration for all the households was that life now was better and when it came to relative standing one household said that it was still worse off compared to the others while the remaining now considered that they had the same situation as others.

The EIC study from the Mesang district in Prey Veng categorized villagers into the rich, the better off and the poor. The rich were those with capital to provide credits. Two types of better off households were found; those with daughters in the garment industry and those with both land and capital to cultivate rice and raise animals. The poor were the ones with neither capital nor land. It was however found that also some of the poor had moved into the better-off group by sending their daughters to the garment factories. The study concluded that livelihoods of the rich and better-off have improved, noted by an increase in their assets, while most poor still are trapped in extreme poverty.¹⁶²

¹⁶² WB (forthcoming, p. 5)

Per capita	Poorest	Next poorest	Middle	Next Richest	Richest
consumption quintile:		1			
Received domestic remittances during past 12 months (%)	11.4	11.4	12.8	11.5	10.9
Value of domestic remittances during past 12 months Riel (approximate in \$)	36,896 (9.22)	37,796 (9.45)	35,593 (8.89)	40,667 (10.17)	92,280 (23.07)

Table 6: Households' remittances by per capita consumption quintiles

Source: 2004 Cambodia Socio-Economic Survey taken from Knowles (forthcoming). Dollar calculations made using the exchange rate 4000 Riel = \$1.

Looking at the household per capita remittances for different consumption quintiles for the whole of Cambodia it is clear that domestic remittances reach both poor and rich households, with the highest concentration for middle consumption households. Even though the rich receive more in monetary terms remittances are still important also for the poorer households when it comes to buffering against crop failures and other events that might cause short-term fluctuations in rural incomes.¹⁶³

The average investment into migration of the households was about double as high for the Prey Veng households. This could be an effect of infrastructure being worse in Prey Veng or a lack of social network and therefore a need to pay commission (all migrants from these households paid in order to be employed while none of the Kampong Cham migrants paid). While two of the households in Kampong Cham raised the money on their own all the Prey Veng households borrowed the money. Only one family in each province was currently in debt. In Kampong Cham this was because the rice had not yet been harvested while the family in Prey Veng said that since the rice some years does not grow very well, they have to borrow money.

When it came to work activities the hypothesis that agriculture would be more diversified in Kampong Cham was not confirmed by the small-scale sample. All but one family in Kampong Cham grew rice as their main activity while one family produced rice wine. In Prey Veng all households grew rice but one family also reported growing corn and bean and two families made scarves. Looking at earnings, the rice-growing families in Kampong Cham produced in between 2.5 and 6 tons of rice per year which must be regarded as very good harvests. The rice wine producers said that they had no profit. They used the money to buy more rice and to feed their pigs. In Prey Veng however three households said that they only earned enough for themselves to eat and some years less than enough. One father said that he earned "just enough but not more". A fourth family earned \$50 during 6-7 months, which is not a considerable income.

All household but one in Kampong Cham used the remittance money for making investments into their farming. They hired people to help them grow the rice and bought fertilizers. One family also paid for the son's schooling and used to pay off debt after investing in migration but now the debt was repaid. If they could receive more one month three of the households in Kampong Cham would save the money for the family or the

¹⁶³ Knowles (forthcoming)

daughter. One household would use it for food and other expenses. In Prey Veng remittance money was used to pay for food and medicine in three of the households. It was also used for irrigation and sibling's schooling, to buy crops and for hiring help for the farming in two of the households. The most important use of the money was however said to be food and medicine in all households but the single-headed one where hiring labor was seen as the most important use. If the households in Prey Veng could get more remittance money they said that they would spend it on food "because now the food is not enough", and/or on normal expenses because "there would still not be enough to save". The single father said that he would save the money for him and his daughter to have for emergencies and special occasions.

Observation on the spot further suggests that all the rural households visited owned either some livestock such as a cow, pig or chickens and/or a radio, TV and a car battery and a variety of other mass-produced goods such as sewing machines, watches, clocks and hammocks.

Personal comments from the Kampong Cham households were that things are getting better for the family thanks to the remittances; that the remittances are good so that there is money when needed and that with the daughter's salary the family is better off; they have rice and some extra money for living expenses. In Prey Veng some comments were that life is very meager despite the money from the garment worker, that the salary from the garment workers is not enough to support the family and that the family lacks people to help out at home.

Although the households only can be regarded indicative examples it is still interesting to see how the different natural conditions tend to affect both migration decisions and use of remittance money. In the case-study of Kampong Cham migration seems to be a way to raise the standard of living and remittance money is used to invest in the agricultural activities while migration from Prey Veng seems to be a necessity due to bad harvests and remittance money is mainly used to feed the family and for health care. It would therefore be interesting to divide the ADB raw data from these two provinces on the provincial level to test if there is any substance to this insight. The author has attempted and been given the consent from the study's team leader but finally raw data was never provided.

7. Analysis of survey returns and new learning

To start with it should be emphasized that the survey returns cannot be regarded as anything else but indicative examples. The research of ADB is contrarily large-scale and extensive and results are based on a representative sample. It might however be useful to complement such a broad study with some insights from small-scale research and given the opportunities a large representative study presents some additional areas of research could be wished for. The present survey in particular wished to focuses on migration- and spending patterns, both of workers and remittance receiving households to answer whether remittances from the garment industry trickles-down and contributes to a more productive primary sector. The findings will now be contrasted to previous findings and analyzed on the basis of the theoretical framework outlined in the beginning.

a) Migration and migrant wealth group

While many of this survey's findings on the reasons for migration are similar to the ADB in that many migrate because of push factors such as economic need of the family and underemployment in the province the ADB study does not at all consider possible pull factors. A rather high frequency of the present survey's respondents stated that they migrated to earn more money and the garment sector has been called the only pull factor for migration into Phnom Penh. Migration hence seems to be "garment specific" and young women are not only motivated by family obligations. Furthermore the open-end question posed to the respondents on reasons for migration did not reveal any motives related to, the by Stark proposed driving force, risk minimizing. Spontaneously workers did hence not regard risk minimizing an important motivation for migration. This does however not mean that risk minimizing has no implicit or indirect role to play.

Most garment workers had a very low educational level and some said that working in the factory was their only choice. Sjaastad's theory on migration as an investment in human capital predicts that people will move to where they can be most productive given their skills. The garment industry with its relatively high wages offers also those without any education very high productivity opportunities. It is therefore not surprising that it is mainly rural low-educated girls that migrate to the industry since their earning opportunities there are much higher than in agriculture. They hence make a choice between rather than within occupations as Sjaastad predicts.

Although recognizing that some type of social contacts is important for migration and that some workers pay to be employed, the ADB survey completely disregard that economical resources also are needed and that financial investments are likely to be made into migration, also by those that do not pay commissions, since most have to spend at least some time looking for a job. By surveying this aspect several important insights into the migration patterns of garment worker have been obtained. The rate of commissions confirms the ADB findings but the levels paid were found to be considerably higher than what previous research has found. The high share of workers that had invested financially in their migration and the large amounts invested (2 monthly salaries) offers an explanation to the observation that most garment workers are of very young age. As Sjaastad suggests, any investment in migration will be more worthwhile for young persons. It was also found that many families borrowed in order to pay for a commission or investment in migration. The ADB study found that remittance money often is used to pay back debt but neglects that this debt may have come up due to investments into the actual migration. An insight gained is thus that remittances may partly occur so as to repay the family's investment into the garment worker as similarly suggested by theory. Garment workers' investment in migration is an important aspect that should be investigated further but the mirror data shows that this aspect might even be more important to study at the household level as families often were more specific on what investments were necessary and reported higher amounts of investments.

Interestingly, households seemed to feel that investing into migration was worthwhile. Remittances, according to theory, represent a direct return of migration for the household. The survey found that women's remittance obligations were higher than men's and this was confirmed by different organizations. It also tallies with the literature hypothesizing that gender might influence whether a migrant will share the income. Surprisingly many respondents had no knowledge of what their remitted salary was used for back home which could indicate that the remittance obligation is very strong and seldom questioned. More than three out of four respondents however stated that it was their own decision to come to Phnom Penh's garment industry. Yet, the decision was almost always paired with an observed need for money in the household.

Migration and the remittances are not likely to stem from altruistic behavior on the part of these young women but are rather due to pressure or expectations from the family. This is confirmed by the mirror data that revealed that there was controversy regarding the decision making in between the garment workers and their families. Theory predicts that gender segregation of jobs in the city will be large which was certainly found to be the case for the garment industry. The experts on the area strongly supported migration being a household decision; but rather than being forced to migrate they believed that garment workers regarded working in the industry a mission where they for some time could contribute to the family income. The strong devotion to the family is likely to have its root in gender traditions and culture. Some insights gained from the survey in this matter hence include that the Cambodian notion of womanhood makes women volunteer to serve the family's need so migration to Phnom Penh is somewhat of an indirect household decision where the daughters are sent due to higher probabilities of employment and remittances.

Theory often argues over whether those that migrate belong to the well-endowed or the worse off in a given migrant-sending area. The ADB study does not address this issue in any detail other than concluding that most garment workers migrate from poor rural areas, but the findings from this survey offers some new insights. The high share of workers that declared to have made a financial investment into migration, the high amount of money invested and the fact that many families raised the money on their own suggest that migrant sending families, even though poor, cannot be among the poorest in their communities. That the investment to a larger degree was financed through loans from relatives and neighbors shows that there is access to credit among migrant sending households. It also shows that migration is not only available to the top-end households in the villages; information and resources seem to reach also less well-off households. This is supported by the finding that a majority of workers relied upon social networks for migration and employment. Such a diffusion process has in the literature been identified as a critical factor to whether remittances create inequalities or not in a village. It is likely that migration will be less frequent for those without access to social networks or money that can be invested into the migration.

The migration history of two of the current top migrant-sending provinces Kampong Cham and Prey Veng started early and a long-come diffusion process might explain their high concentration of migrants today. In the same line of thought the longer migration history of Kampong Cham might in parts explain its relative more prosperous situation.

Despite apparent resources most garment workers revealed that their reason for migration was that the family was poor. It has been hypothesized that rural-to-urban migration occurs since individuals or households attempt to improve their comparative position with respect to other people in their village. Insights from the household data on relative feelings implied that the migrant sending households tend to feel slightly worse off or in equal situation as those surrounding them. Remittances from the migrant often contributed to households feeling better off in absolute terms, less relatively deprived and more on equal terms with their neighbors.

To sum up it seems as if migration is an indirect household decision related to gender roles where the wealth situation decides the intention to migrate while financial constraints decide whether it is possible or not. It is probably fair to assume that those migrating to the garment industry in Phnom Penh belong to the lower-income groups in their community but the survey has demonstrated that they cannot be completely out of resources or credit possibilities since substantial investments into the migration have been made. The tendency to rely on social networks and the access to credit markets also imply that remittances' effect on income inequalities in a migrant-sending destination is not likely to be severe.

b) Income linkage and scope for remittances

The industrially isolated character of the garment industry in Phnom Penh implied that the only prospect for any linkages to the local economy would be for linkages originating from labor, which was found to be paid relatively well, especially compared to the agricultural sector. The average monthly salary over the sample amounted to \$63, with actual wages ranging from \$40 - 120. This more or less corresponds to previous findings and can be regarded an accurate estimation and starting point for analysis. Theory suggests that the relatively high wage paid to the garment workers should be able to create some increased demand for mass-produced consumer goods. With more than a third of the salary being sent home however little was left for consumer goods. Workers largest expenditure apart from remittances was for food but since most workers did not buy processed food but rather cooked themselves this is not likely to create any significant linkages. Food stalls outside the factories certainly benefit from the worker's wages but this business is likely to be just as floating in character as is the garment industry and if anything, this linkage only points to more people standing to loose from an anticipated downturn in the industry and closures of factories.

Workers on average paid around \$11 for their housing including utilities. Since most people share a room and each pay the same sum the garment workers ought to constitute an important source of income for landlords. For some of the workers interviewed the industrial park where their factory was located was the owner of the housing and that rent money is hence likely to leave the country to the same degree as export incomes do. This was however normally not the case. Medicine was found by ADB to be another major expenditure for employees and although the present survey acknowledges that illness and health problems often ruined the financial situation of workers, medical costs were found to be more of one-off events than regular monthly costs. This suggests the possibility that the ADB survey does not capture differences between monthly and isolated expenditures due to the closed structure of the questionnaire. Medicine bought by the sample included both normal medicine and traditional Khmer medicine, implying that some of the money should reach the traditional medicine makers in the rural areas and not only the urban clinics.

Not even a third of the respondents saved any money. The survey however showed that there is a great willingness to save money among garment workers but a present inability to do so. If given a slightly higher wage 85% of the garment workers would save the money for different purposes. From a linkage and Lewisian perspective this is very promising as increased savings are likely to spur investments. Some would save it to buy consumer goods, some would send more to the family or use it for education but most would indeed use it for investments into small business in the rural areas. Not much of the average worker's salary was spent on clothing, furniture or recreation either. On the whole expenses were similar when comparing the findings of this study to the previous findings but this survey particularly stress that income seemed to split in between food and remittances and that a very small share of the respondents spent money on consumer goods. By asking for actual expenditure and overtime levels, this survey provides insight into the struggle with garment workers to make ends meet. Looking solely on income levels the garment workers seem to be relatively well-paid. A closer look at the living costs in Phnom Penh and the amount of money spent on basic living costs and remittances reveal that the life of the average garment worker often is a constant struggle of overtime and piece rates. This would however not be the case to the same degree if workers did not remit over a third of their salary. The wage (supplemented by overtime pay) is hence large enough to leave scope for remittances despite high living costs in Phnom Penh. With a substantial part of the salary being remitted home to the rural areas one has to turn to focus on the remittance-receiving households to detect if such an income linkage yields productive uses in the rural areas.

To sum up, the survey did not find any significant consumption linkages for Phnom Penh. No important human capital linkages were found but the survey pointed to large prospects for both more consumption and human capital linkages if wages could be only slightly higher. Previous research has shown that workers salaries might be significantly increased if corruption in the industry is redistributed to the workers. Insights gained here indicate that such redistribution ought to create important linkages that would benefit more people than only the workforce employed in the industry.

c) Use of remittances and mirror data

Although found a principal activity, the survey showed that households not only engage in rice growing and it should be recognized that different activities will yield different use of the money. The households spent most of the remittance money on food. Households however also spent money on sibling's education, seeds, fertilizers, hiring labor, animals, and other expenditures that according to theory ought to be considered investments in a LDC context. Many households seemed to hire labor with help of the remittance money and mirror data showed that households often hired people to a much higher degree than daughters reported. This together with increased consumption presents an important linkage where the remittances from the garment industry do indeed bring about what theory refers to as a multiplier effect. Although not explicitly stated as an important use of remittance money all the rural households visited owned mass-produced goods. Mirror data also showed that remittances often were more significant for the family budget than garment workers seemed

to be aware of at the same time as remittances in some cases only served to sustain the subsistence livelihood of the family. The survey thus found that remittances indeed can spur productivity-raising investments in the rural areas and that the migration into the garment industry and the occurrence of remittances is likely to be a benefit for the whole community or village; as was found by EIC in forthcoming research.

Through its mirror data this survey has furthermore shown that there are systematically large discrepancies in between quantitative and qualitative answers from garment workers and their households. Survey answers will probably be under- or overestimated in case we do not have contrasting data as a comparison. The mirror data also suggests that it might even be risky to trust the reported levels of remittances. It is possible that such data is overestimated due to the heavy expectations placed upon these young women.

The study has also pointed to the possibility of differences in migration mechanisms and use of remittance money for different provinces. The ADB study has extensive data from both the provinces investigated in the present survey but unfortunately any similar insights cannot be made based on the ADB study as the data from the two provinces has been pooled. Such a procedure might even be considered methodologically wrong should the hypothesis and insights brought forward in this survey be true also for larger samples.¹⁶⁴

Implications for economic growth and rural development

Most of the above can be summarized and put into a growth and development perspective using the Lewis model of surplus labor. Previous research has found that females enjoy an increase in income due to migration to a larger extent than males and this is thought to be due to women being underemployed in rural areas to a greater extent than men because the agricultural work suits men better. Several of the present survey findings point to young women being underemployed in their home provinces or not apt for the agricultural work, even though the data suggested an involvement in agricultural work. Families stated that factory work was easier for their girls than farming (without any actual knowledge of the nature of garment work) and respondents stated that they disliked farm work or underemployment in the rural area as reasons for migration. Similar reasons were found by the ADB.

The present survey, although gaining insights into the young women's previous rural life, could have provided more knowledge on their absence's impact on production volumes had respondents been asked specifically of their previous working tasks in the household. That it was common to hire labor for the remittance money however implies that the daughter's absence from farm work is compensated by temporary hiring of labor. It is more productive for the small farmers to hire well-suited labor when needed rather than keeping an underemployed daughter at home. This finding shows that even when no investments are made there may be an increase in productivity. This goes in line with the original Lewisian idea of a gain in rural productivity, where less labor does not result in less absolute production. Single-headed households were most often the ones to mention the loss of labor as a negative effect of migration. Other families although not producing impressive yields said life was better with the daughter in the garment industry. There was indeed an appreciation of the non-farm activity of the daughter as theory predicted. That few

¹⁶⁴ Interview Kang Chandararot, CIDS

respondents wished to go home to work the fields indicate that they probably feel more productive elsewhere.

This survey also found that wages were high since workers worked a lot of overtime and it is possible that migration has increased the numbers of hours worked and thereby income. As Lewis predicted the garment workers' wage was higher than what could be earned in the province and there was probably an increase in the number of hours worked, contributing to the higher wage. Remittances were to a large degree used for irrigation, fertilizers, hiring labor and other activities likely to increase productivity and spur a multiplier effect. The casestudy of Kampong Cham however showed that where conditions are better, incomes and investments are consequently higher. That investments into migration were considered worthwhile indicated that remittance money may contribute to poverty alleviation. Since money and contacts seemed to reach different wealth groups of households, the Lewisian investments by the "capitalists" might however reach the lower -end eventually.

Many researchers agree that agriculture needs to be developed in tandem with the manufacturing industry, in a Lewisian spirit. This thesis has underlined that the labor absorbed by the garment industry in Phnom Penh often is underemployed reallocated labor from the rural areas. It has furthermore demonstrated that this workforce significantly contribute to productivity-raising activities being undertaken in the provinces.

8. Conclusion

This thesis aiming to put remittances into perspective has shown that migrant sending households are not among the poorest households although poor. The study has also shown that though garment workers' salaries at first appear relatively high their living expenses and remittance obligations leave them with nothing but a subsistence living. It is difficult to identify any significant group benefiting from consumption linkages in Phnom Penh.

If, as was found in this survey, 95% of the 250 000 employees earn \$63 per month and remit 33% of it, the rural areas would receive almost 5 million dollars each month from garment workers; an important income linkage indeed. At the household end remittances encouragingly seemed to be used not only for food but also for productivity-raising investments into agriculture and education. This can be underlined by very recent findings of decreased poverty in Cambodia. Food poverty in rural areas has decreased and an increased real per capita household consumption has resulted in increased spending on non-food items; for all segments of the population distribution.¹⁶⁵ For the poorest Cambodians the most important source of income in 2004 came from hiring out their labor.¹⁶⁶ To hire labor for the remittance money was also found to be common across the present survey sample, which implies some multiplier effect on the village level.

The income of migrated garment workers definitely seems to have the potential of spurring a trickle-down effect, across income groups, so that the economic growth enjoyed in the garment industry also comes to benefit the needy rural areas in terms of more productive agriculture, increased diversification of small family agriculture and larger

¹⁶⁵ WB (forthcoming p. 21-23)

¹⁶⁶ WB (forthcoming, pp. 31-32; 52)

potential for frequency of harvests per year; all necessary for poverty reduction in Cambodia.¹⁶⁷

Third world governments are often negative toward urbanization and migration due to the associated societal costs. ¹⁶⁸ In a Lewisian spirit however urbanization and migration is not necessarily a bad thing in a transition towards increased welfare since the underemployed raise their productivity by migrating and also help in raising agricultural productivity by remitting money.

Employment in the garment industry might however come to a halt due to the end of the quota system. The small scale survey presented in thesis suggests that such a downturn is likely to affect not only the employees in question but even more so their families and the agricultural activities these engage in. To prepare for the hard years to come it might, according to this survey's results, be advisable to put efforts into creating local non-farm employment in rural areas for further diversification of income sources and given that those garment workers that were interviewed dream about returning home to open up small businesses, expanded credit opportunities for women in rural areas might come to yield positive returns. As long as employment does remain, it should be recognized that an increased salary for the garment workers seems to have the potential to spur savings and investments and, it should be added, putting a stop to corruption would provide additional scope for a beneficial effect of such a wage increase.

The findings call for research on investments into garment workers' migration. This is an aspect previously disregarded and consequently underlying mechanisms influencing migration- and remittance behavior have also been neglected. Further study of different provinces' migration history might help understand diffusion processes and migratory behavior. Additionally, future consideration of the fact that migratory behavior and remittance use is likely to be very different across migrant-sending provinces would be desirable. Further insight into migrated garment worker's previous involvement in agricultural work would help evaluating a Lewisian productivity gain. Finally, one must be cautious in trusting one-sided data as mirror data in this thesis showed that there are large discrepancies in quantitative and qualitative answers in between garment workers and remittance-receiving households.

¹⁶⁷ WB (forthcoming, p. 72)

¹⁶⁸ Perkins et al. (2001, p. 296)

Appendix A: Questionnaire

Questionnaire to garment workers

Demographics

Gender, Age, Origin, Live place, Marital status, Children, Education

Work Characteristics

- Work position/ Task, Employment status, Years in factory, Previous experience from industry
- How did you get your job?
- Did you pay to get this job? How much?
- About how many hours do you work in the factory per day?
- How many hours of overtime per day?
- How many days do you work each week? Income and Spending
- About how much do you earn each month?
- What is the cost per month of your housing including utilities?
- What do you buy for your salary?

More specifically;

- How much do you spend on food and other expenses each month? Cook or buy?
- How much do you spend on doctor's consultation fee and medical fees each month?
- How much do you spend on medicine each month?
- How much do you pay on transport each month?
- Do you save money? How much each month?
- Do you send money to your family and relatives? How much per month?
- If you one time got 5 dollars more in salary, what would you do with them if it was only up to you how to spend it?

Household characteristics

- Where does your family live?
- How many people are there in their household?
- How many people in your family work?
- What do the people in your family work with?
- How much does your family earn per month from their work? If not money what type of products?
- What does your family buy for the money you send home?

Migration

- Why do you work in the textile industry?
- Did you or your family invest any money in your move to cover your costs before you found a job? How much? Was this money borrowed or not?

Personal

- What are your hopes and dreams for the future?
- Is there anything else you would like to add about your salary from the textile and clothing industry and how it affects you and your family's lives?

Questionnaire to provincial households Demographics

- How many members of your household/ family are working in the textile and garment factories in Phnom Penh?
- How many members are there in your household, excluding the people that have moved? (How many live in your home and eat together)
- How many people in your household work?
- What do you work with?

Income and spending

- How much do you earn, in money or products?
- Does your relative send you money? How much per month?
- Do you receive money from any other source than the factory employee? How much?
- How do you use the money your relative sends home?
- What is the most important use of this money?
- If you one month received 5 dollars more in
- remittances, how would you use that extra money? Migration
- Before your relative went to the factory, did you feel that your wealth status compared to other households in your village was poorer, the same or better?
- Who decided that the relative(s) should move?
- Did you know anyone else working in the factories in Phnom Penh before your relative moved? Did this person help you in any way?
- Did you support your relative with any money when it moved? How much?
- Did you have to borrow this money? From whom? How much did you pay in interest?
- Is your family in debt now?
- How long do you hope your relative will stay in the factory?
- If you would compare your wealth status now with other households in your village, would you say that it is poorer, the same or better?

Personal

- What do you hope/ want for the future of your relative that works in the factory?
- Is there anything else you would like to add about how your relative's salary from the textile and clothing industry affects your family's situation?

THANK YOU!

Appendix B: Voices from the garment workers

Interview with a young girl on her day of migration, 27th of November 2005, Prey Veng

Vanny is 16 years old and comes from the village Lové in Prey Veng where she lives with her mother who is growing rice. She has 5 siblings who all have migrated. 4 of them are working in the garment industry in Phnom Penh and one brother is a mechanic in Koh Kong province. The siblings left 3-4 years ago because the family was poor. The parents are divorced and the mother had to look after the children on her own and the siblings saw that the family could not support their living by only growing rice, so they left for the garment industry. Today Vanny will leave her village to go to Phnom Penh to find a job in a garment factory. She leaves today because she has no job to do and no money for her expenses. Her brother and sister will help her find a job in their factory. When she starts looking for a job she will say that she is 18.She is not sure whether or not she will have to pay for the job but she will be willing to pay \$50. She has no money with her today however. Her siblings will support her and she will live with them when looking for a job. Vanny has been in Phnom Penh before but has no idea what living there will be like and she is a bit afraid. She's heard people say that factory work is difficult while others say that it is easy. She is not sure but wants to try for her self to see what it's like. She does not know how much she could earn but she is planning to send money home when she gets her salary.

Reasons for migration- voices from the garment workers

" I thought that I could earn more money in the garment industry than at home and decided on my own to go"

"Before I used to sell fish in my village but there were a lot of people that bought on credit and never paid me back so I went to Phnom Penh instead."

"My family could not get the well-growing rice and could not support for the family's living and had no money to buy things, so I decided to go"

"I decided to stop school and start working because my family was poor and needed the money"

"I had nothing to do at home but to work in the fields so I asked for my parents' permission to go to the factory"

"I went to earn money for my siblings' schooling" "This is the only thing I can do because I have so low education"

"I discussed it with my parents and then I said that I wanted to go and my family agreed but warned me that I should go home directly after working hours. I was not scared of coming to Phnom Penh but I miss my home and I am only tik-tik (a bit) happy about being here"

Spending patterns- voices from the garment workers

"I spend \$6 per month for my room but this will probably increase because of the rising electricity costs and I pay \$1,25 per month for water. The rest of my money I send home and spend on food"

"Sometimes I spend \$10 for going to the doctor but I don't like to spend money on medicine or borrow money for my health"

"I spend \$40 each month on food but sometimes my own salary is not enough so then I ask my family for more money"

"I don't save any money since I send all extra money to my mother"

"If I earn \$80 I send home \$50 and if I earn \$50 I send home \$30 to my parents"

"I only spend \$5 on food because my parents provide me with rice"

"I spend \$5 each month on traditional Cambodian medicine. The ingredients are Khmer wine and fruits to support health and strength and prevent sickness"



Appendix C: Map and rice cultivation

Source: WB (forthcoming, p.16)

Table 7: Input Cost per 1 ha of Rice Cultivation (with little rain as this year)

Item	Volume	Unit Price (Riel)	Total Price	
Basic Costs			682,000 riel	
Diesel (for pump)	180 liters	2,300 riel / liter	414,000 Riel	
Fertilizer	3 sacks	80,000 riel / sack	240,000 Riel	
Pesticide	1 bottle	4,000 riel / bottle	4,000 Riel	
Seed			24,000 Riel	
Labor Costs			180,000 riel	
Transplant	10 days * 3 persons	4,000 riel / person / day	120,000 Riel	
Harvest	5 days * 3 persons	4,000 riel / person / day	60,000 Riel	
Total Costs			862,000 riel	
Gross Income	2,000 kg	500 riel / kg	1,000,000 riel	

Source: Taken from EIC (forthcoming), based on focus group discussion. 4000 riel is approximately equal to 1 US dollar.

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