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CAMBODIA'S EXPORT DIVERSIFICATION AND VALUE ADDITION

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(UNDP - RCC)**



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1. Introduction



Introduction

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■ Context

- Narrow base of export, with more than 75% of exports are garments.
- Need to diversify the economy as well as exports.
- How can Cambodia engage more effectively in international trade?

■ Study's Main objectives:

- To assess the possibilities for Cambodia's export diversification.
- To identify the export-oriented sectors with a high potential for employment generation.
- To identify opportunities and constraints of the selected sectors linked to export diversification.
- To develop a modality to make diversification into identified sectors feasible.

Study Methodology

■ Methodology

- Reviews of existing, related documents.
- Qualitative interviews.
- Feedbacks and comments from the project's National Reference Group.

■ Limitations

- Reliable data and research on some sectors is not publicly available.
- A large-scale survey could not be conducted, given the time and resource constraints.



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2. Opportunities for Export Diversification



Cambodia's Export Performance

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Cambodia's Exports in 2005 (million US\$)

	Amount	%	Main Markets
Garment Products	2,291	79%	US, EU
Agricultural Produces (Formal)	74	3%	Malaysia, Hong Kong
Agricultural Produces (Informal)	390	13%	Vietnam, Thailand
Re-exports	145	5%	Vietnam, Thailand
Total Export	2,900	100%	

Source: Compiled from National Bank of Cambodia.

- Beside Garment exports, informal exports of agricultural produce represent a significant amount.



Diversification within Garment Sector

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■ Product Diversification

- 95% of garment exports are in knitted category (61).
- 70% of garment exports concentrates on three categories:
 - Sweaters, pullovers, vests (6110),
 - Women's or girls' suits, ensembles (6104),
 - Men's or boys' suits, ensembles (6103),
- There has been drop in cotton-based items.
- Increase in productivity could allow factories to produce higher-priced garments with more design and labor content (USAID 2005).

■ Market Diversification

- EU market: There is still room for Cambodia.
- Canadian market: High potential but lack of business network.
- Japanese market: Difficult to face into direct competition with China.
- Cambodia's advantage lies in working with ASEAN neighbors.



Diversification in Goods (Agriculture and Manufactured)

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■ Product Diversification

- High potential for crop diversification.
- Potential for diversification in other labor-intensive industry such as footwear, light manufacturing etc.
- Recent discovery of oil and gas etc. is another hope for Cambodia's diversification.

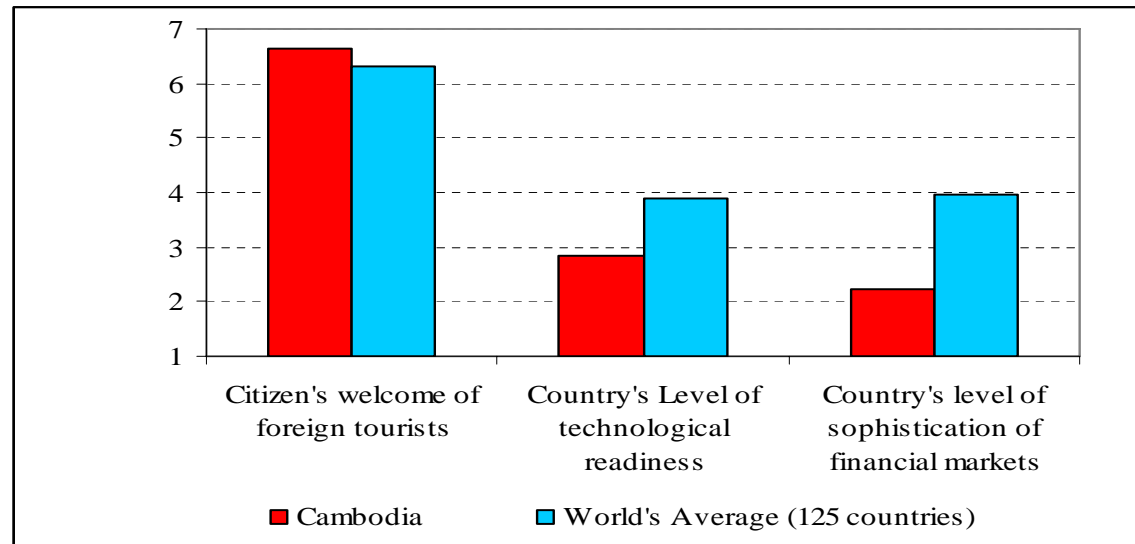
■ Market Diversification

- Access to preferential markets could be a key for Cambodia's diversification.
- ASEAN is negotiating FTA with a number of countries including Japan, Australia, New Zealand, India, Republic of Korea, China and EU.

Diversification in Service Sector

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Relative Competitiveness of Selected service Sectors



Source: Compiled from WEF's Dataset 2006-2007.

- Cambodia has great potential in tourism industry, with its historical heritages, culture, tradition and natural resorts.
- Cambodia is unlikely to be competitive enough in other sophisticated service sectors including ICT and Finance/Banking.



The Selection of Five Sectors for the Study

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Assessment of the Selected Sectors

	Organic Rice	Cashew Nuts	Rubber	Silk	Tourism
Priority Sectors of the NES 07/10	H	L	L	H	H
Revealed Comparative Advantage	M	M	H	M	H
Potential for export earnings	H	H	H	M	H
Employment opportunities	M	H	M	H	H
Use of domestic inputs	H	M	H	M	M
Sustainability of possible exports	M	H	H	M	H
Suggestions from Members of NRG	H	H	H	H	H

Note: H=high/yes, M=medium, L=low/no



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3. Sectoral Case Studies

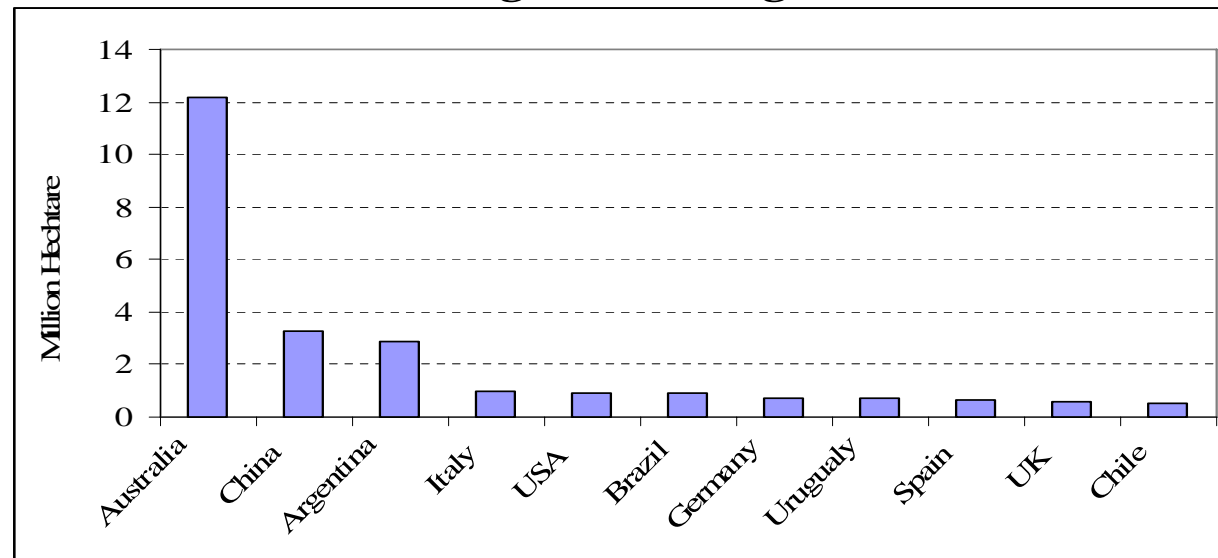


Global Market for Organic Products

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- More people, especially those in developed countries, tend to focus on organic products for reasons of health and environment.
- Consumers are willing to pay up to 15-20% more for organic products.

Ten countries with largest area under organic management



Source: FiBL-Survey 2005-2006.



Organic Rice

Organic Rice Sector in Cambodia

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- Introduced in 2003 in 4 provinces (Kampong Thom, Kampot, Battambang, and Pursat) with support from various NGO.
- **Production**
 - Organic rice production is extremely minimal.
(881 tons compared to about 6 million tons of rice production in 2005).
 - Organic farming is more labor intensive.
 - It takes 3 years to convert from conventional to organic farming.
- **Demands**
 - The current production cannot even satisfy local demand.
 - Only people with high incomes can afford to buy organic rice.



Organic Rice

Cost Profile for Paddy Production (US\$/ha)

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	Conventional		Organic		Diff.
	US\$/ha	% of Sales	US\$/ha	% of Sales	
Material/inputs	99	34%	59	17%	(40)
Labor (reported)	42	15%	59	17%	17
Total Cost	141	49%	118	34%	(23)
Total man-days required	42 days		52 days		
Yield* (ton/ha)	2		2		-
Sale (US\$/ton)	144		173		29
Gross Income	288	100%	345	100%	57
Net Income	147	51%	228	66%	81

Source: Interviews with the Private Sector for organic paddy and Cambodian Agrarian Structure Study for conventional paddy.



Organic Rice

Constraints facing the Organic Rice Sector

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- Many farmers do not recognize the long-term benefit of organic farming due to the long conversion period.
- Inadequate farming experiences.
- Poor infrastructure and lack of market information.
- Lack of modernized irrigation systems.
- Inadequate and expensive credit facilities.
- No FDI lead investors in the organic agro-business.



Organic Rice

Impact on Employment and Farmer's Incomes

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- There were only 1,271 farmers involved in organic farming in 2005.
- Organic farming is more labor-intensive, which may probably be translated into new employment.
- More jobs could be created along the value chain, especially at the processing and packaging stage.
- Farmers could increase their income by more than 50%, by converting from conventional to organic farming.



The Global Cashew Market

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■ Raw Cashew Nuts in 2004 (000 tons)

N°	Producers	Quantity	Exporters	Quantity	Importers	Quantity
1	Viet Nam	826	Côte d'Ivoire	116	India	468
2	India	460	Tanzania	82	Brazil	-
3	Nigeria	213	Guinea-Bissau	81	Ghana	5
4	Brazil	182	Indonesia	56	UAE	2
5	Indonesia	120	Benin	48	France	1
	World	2,267		492		481

Source: Compiled from FAOSTAT, 2006.

■ Cashew without Shells in 2004 (000 tons)

N°	Countries	Production	Import	Export	Consumption
1	USA	0.05	131	2	129
2	India	186	0.9	110	77
3	Vietnam	165	-	105	60
4	Canada	0.12	12	0.2	12
5	Australia	-	12	0.2	12
	World	453	270	299	424

Source: Compiled from FAOSTAT, 2006.



Cashew Sector in Cambodia

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■ Raw Cashew Nuts

- Expansion in cultivated areas.
(from 52,809 ha in 2004 to 60,874 ha in 2005).
- Production between 30,000-50,000 tons or 1.3% of the world's production.
- 95 % of raw cashew nuts are exported to Vietnam.

■ Cashew without Shells

- There is only one cashew processing company.
- In 2005, the company produced about 190 tons of cashew without shells, of which 80% were exported to the US.



Cashew Nuts

Value Chain Analysis

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- **Chain 1:** Farmers → Collectors → Local/Regional Brokers → Vietnamese Brokers → Vietnamese Processors.
- **Chain 2:** Farmers → Collectors → Processing Company

Cost Profile for Cashew Plantation During the Maximum Yield Time

Description	Smallholders	
	US\$/ha	% of Sales
Material/Input	18	3%
Labor	85	14%
Total Cost	103	17%
Yield (ton/ha)	0.7	0%
Sale (US\$/ton)	600	100%
Gross Income	420	70%
Net Income	317	53%

Source: Compiled from Cambodian Agrarian Structure Study.

Processing Cost of Cashew

Description	Cost (US\$/ton)	% of Sales
Raw cashew nuts	3,000	60%
Other input cost	425	9%
Labor cost	425	9%
Total cost	3,850	77%
Sale	5,000	100%
Net Income	1,150	23%

Source: Interviews with the Private Sector.



Constraints Facing the Cashew Sector

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Farmers	Processors	Packagers
<ul style="list-style-type: none">- Price fluctuation and high dependence on Vietnamese traders..- Lack of good seeds.- Lack of good production practices and modern technology.- Lack of market access.	<ul style="list-style-type: none">- High production cost, especially oil.- High transportation cost.- Lack of capital and high interest rate.- Lack of market information.- High regulatory costs and unpredictable unofficial costs.	<ul style="list-style-type: none">- High production cost due to imported materials.- Low quality of packaging.- Competition with imported products.

Source: EIC, Compiled from various sources.



Impact on Employments

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- About 12,000 people are currently employed in the sector.
- An additional 10,000 direct jobs would be created if the entire raw cashew nuts are processed and packaged domestically.

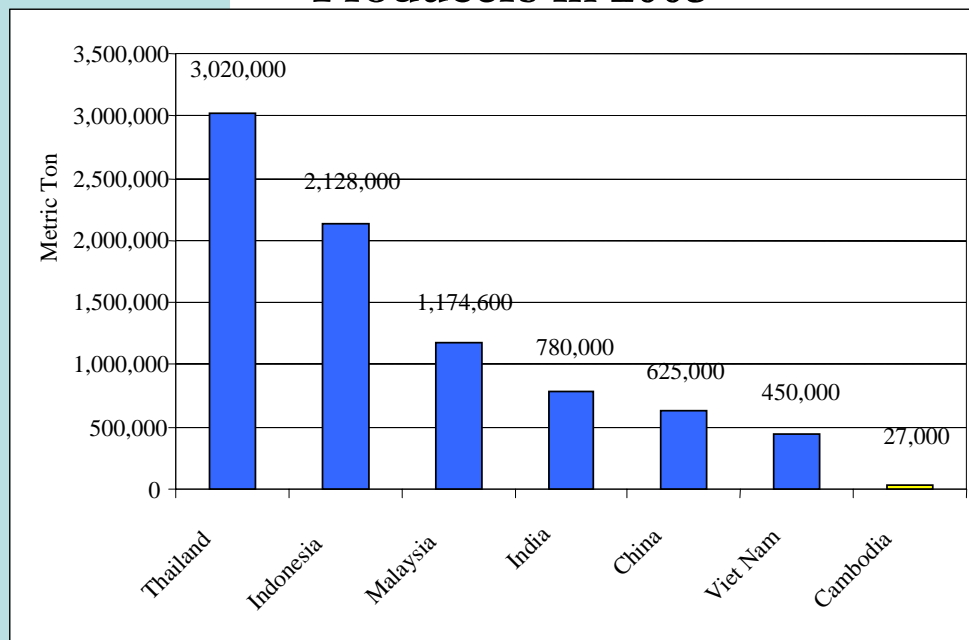


World Rubber Market

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■ Triple potential of rubber plantation: latex, rubber wood, and CO2 uptake.

■ Top Natural Rubber Producers in 2005



Source: EIC, Compiled from FAOSTAT, 2006

Dissemination Workshop

■ World Natural Rubber Consumption (000 tons)

Consumption	2005	%
Africa	120	1.3%
Asia/Oceania	5,471	60.8%
EU	1,334	14.8%
Other Europe	227	2.5%
North America	1,316	14.6%
Latin America	532	5.9%
TOTAL	9000	100%

Source: EIC, Compiled from International Rubber Study Group, Rubber Statistical Bulletin, Nov-Dec, 2006 edition.



Rubber

Cambodian Rubber Industry

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Statistics of Rubber Plantations in Cambodia, 2005

Rubber Plantation	Mature (ha)	Immature (ha)	Total (ha)	%
State Plantations (7)	21,230	17,998	39,228	64%
Private Plantations (3)	3,978	667	4,644	8%
Smallholder Plantations	5,381	11,643	17,024	28%
Total	30,589	30,308	60,896	100%

Source: Department of Rubber Development, GDRP 2005.

- Cambodian natural rubber depends on Vietnamese market for export.
- Price of natural rubber increased sharply in the last 5 years. (from US\$497/ton in 2001 to US\$1,270/ton in 2005).
- Initial investment = about US\$1,600/ha for the first 5 years.
- Average income = US\$958/ha per annum, from the sixth year onwards.
- Processing costs = US\$74-S\$120/ton in Cambodia, US\$70 in Vietnam and US\$60 in Indonesia.



Rubber

Constraints facing the Rubber Industry

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Planters	Processors	Exporters
<ul style="list-style-type: none">- Lack of plant materials.- Security of land tenure.- Lack of technical support.- High and long term investment.- Low productivity.	<ul style="list-style-type: none">- High cost of fuel.- Insufficient supply of rubber, which leads to low processing capacities.	<ul style="list-style-type: none">- Rubber discount price: 20% discount price compared with global price.- Low level of rubber production.

Source: EIC, Compiled from various sources.



Rubber

Employment Opportunities

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- Direct employments in the rubber sector is estimated at about 27,000 of which 66% are rubber tapers, 12% factory workers.
- The number of people employed is probably close to 40,000 if subcontracting companies and seasonal work are included.



Global Silk Market

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■ Raw Silk Production (000 tons)

Country	1994	2004
China	84	95
India	14	18
Viet Nam	1	12
Thailand	1	2
Turkmenistan	4	5

Source: Compile from FAO.

■ Importers of Silk Products (US\$ million)

Importers	Silk ¹	Fabric ²	Blouses ³
US	258	252	353
Italy	215	93	22
Japan	171	65	28
Hong Kong	170	134	68
Korea	132	86	2
France	109	71	24
Germany	94	58	20
Singapore	32	28	3.5

Source: Cambodia and WTO: A Guide to Business, 2005.

1: Raw silk, silk waste, silk yarn and woven silk fabric.

2: Woven silk fabric (including *noil* silk and >85% silk blends).

3: Women's and girls blouses and shirts.



Cambodian Silk Sector

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■ Production:

- Family based handicraft.
- Raw silk production = 7-8 tons/year or 2% of domestic demand.
- 98% of raw silks used by Cambodian weavers are imported from Vietnam.
- Cambodian silk products are exported indirectly through tourists and expatriates.

■ Comparative Advantages:

- High quality of golden colored silk yarn.
- High potential market access.



Silk

Cost Profile of Silk Production

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■ Raw Silk Producers

Items	Cost
Initial Investment (US\$/ha)	500
Input (US\$/ha/year)	5
Production (kg/ha/year)	40
Price (US\$/kg)	24
Gross Income (US\$/ha/year)	960

Source: Calculation based on interviews with Khmer Silk Villages.

■ Cambodian Weavers (Hol and Phamuong)

Hol	Cost per month	Phamuong	Cost per month
Production (kben)	2	Production (kben)	10
Price (US\$/kben)	65	Price (US\$/kben)	10
Gross Income (US\$)	130	Gross Income (US\$)	100
Input (US\$/kben)	52	Input (US\$/kben)	40
Labor (US\$/kben)	28	Labor (US\$/kben)	30
Total Cost (US\$)	80	Total Cost (US\$)	70
Value Addition	78	Value Addition	60
Net income (US\$)	50	Net income (US\$)	30

Dissemination Workshop

Source: Calculations based on interviews with Middlemen.



Challenges facing Silk Sector

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- Lack of irrigation in mulberry plantation areas.
- The use of pesticide on rice fields affects silk worm feeding.
- Lack of silk industry leads to minimal production, which cannot meet demand.
- Lack of technical know-how and standards.
- Limited access to finance for expanding their activities.



Silk

Impact on Employment and Incomes

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- Currently, only 700 people are estimated to work in raw silk production.
- In addition, there are probably 20,000 silk weavers of which the majority are women in rural areas.
- An additional of 30,000 jobs is estimated, if raw silk could be totally produced within the country.
- Silk weavers tend to earn a comparable income to garment workers but their expenses are less.



Tourism

Global Tourism Industry

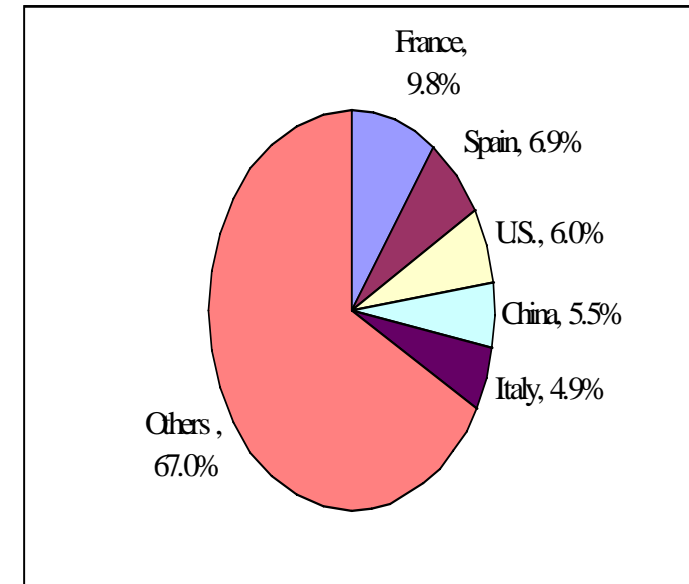
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■ Top Tourism Earners and Expenditures

No.	Countries	2003	2004	2005
Top Earners (US\$ billion)				
1	U.S.	64.3	74.5	n/a
2	Spain	39.6	45.2	n/a
3	France	36.6	40.8	n/a
4	Italy	31.2	35.7	n/a
5	Germany	23.1	27.7	n/a
Top Expenditures (US\$ billion)				
1	Germany	64.7	71.0	72.7
2	United States	57.4	65.8	69.2
3	United Kingdom	47.9	56.5	59.6
4	Japan	28.8	38.2	37.5
5	France	23.4	28.6	31.2

Source: World Tourism Organization.

■ Top Tourist Destination in 2004



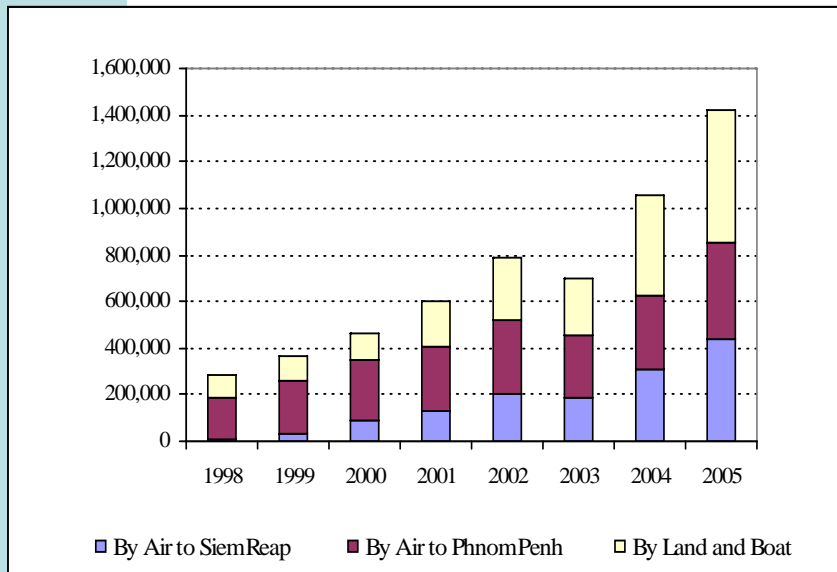
Source: World Tourism Organization



Cambodian Tourism Industry

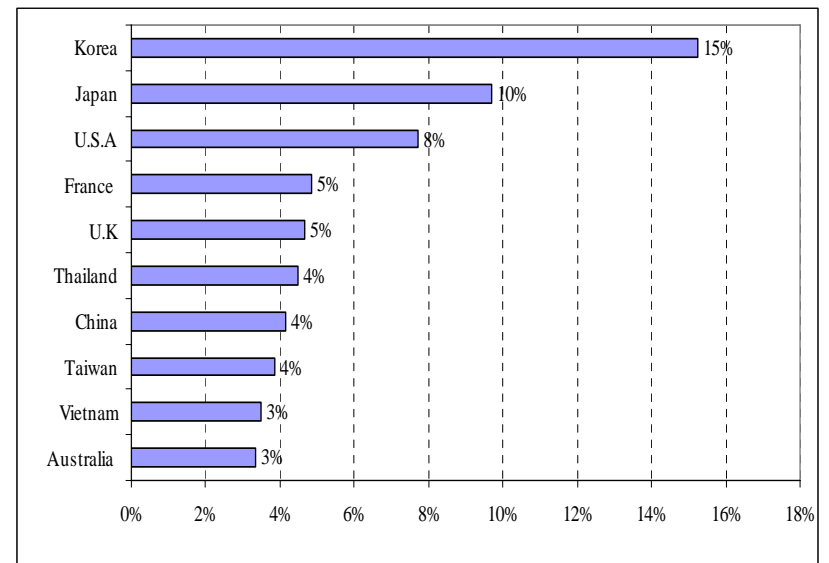
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- Average tourist expenditure = US\$87/day.
- Length of stay = 6.3 days.
- Number of Tourist Arrivals to Cambodia



Source: MoT, Annual Report on Tourism Statistics, 2005.

■ Cambodia's Top Ten Tourism Market, 2005



Source: MoT, Annual Report on Tourism Statistics, 2005.



Tourism

Potential Areas for Tourism Diversification

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- **Main Tourist Attractions:** Siem Reap, Sihanouk Ville, Mondolkiri.
- **Potential Area for Tourism Diversification:**
 - Silk Production Areas
 - Buddhism and Religious Tourism.
 - Khmer Rouge Historical and Commemoration Sites.
 - Eco-Tourism Attractions.
 - Mekong Dolphin Watching.



Issues and Challenges in Cambodian Tourism

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■ Economic Leakage

- Most of the food to support the sector is imported from Vietnam and Thailand.
- Cambodia lost about US\$370 million in 2004 by importing products from neighboring countries, according to a study by MoC.

Leakage Multiplier in Tourism in 2004,

Countries	Leakage Multiplier
Cambodia	0.400
Laos PRD	0.400
Myanmar	0.400
Thailand	0.035
Vietnam	0.350

Source: MoC, NES 2007-2010, Final Draft.

■ Poor Infrastructure

- Lack of road maintenance.
- Inaccessible to some tourist attractions.

■ Environmental Issues

- Most of hotels and restaurants have no waste water systems.

■ Benefit distribution is uneven and skewed to the non-poor.



Tourism

Employments in Tourism Industry

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■ Employment in Tourism Industry, 2003

Countries	Direct	Indirect	Total
Cambodia	32,500	67,500	100,000
Lao PDR	17,000	5,000	22,000
Vietnam	220,000	450,000	670,000
Thailand	1,411,000	439,000	1,850,000

Source: MoC, Cambodian National Export Strategy 2007-2010, Final Draft.

- The poor who are usually part of the tourism related jobs benefit less from tourism and are therefore likely to remain poor.



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4. Recommendations & Concluding Remarks



Lessons Learned from the Five Sectors

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- Each of the five sectors seem to have their own potential for export earnings.
- Nonetheless, there seems to be structural constraints which create a bottleneck for Cambodia to explore diversification potentials. These common problems include:
 - Lack of domestic investments along the value chain, mainly in agro-industry for agricultural products.
 - Strong dependency on neighboring countries, especially Vietnam and Thailand, for exports.
 - No international standard recognition.
 - Low skill and lack of know-how of the Cambodian labor force.
 - High transportation and export costs.
 - Limited access to finance, especially in rural areas
 - Poor enforcement of rules and regulations to protect business.

Recommendations

- **Based on the study's findings, a number of recommendations are suggested as follows:**
 - Promoting investment in the agro-industry.
 - Supporting the development of market information.
 - Supporting the creation of a standard accreditation agency that is internationally recognized.
 - Marketing the good image of Cambodia as well as its products on the global stage.
 - Providing skill development and technical support to Cambodian producers.
 - Continuing the support of trade facilitation.
 - Improving access to finance.
 - Ensuring the enforcement of the rule of law and regulations.
 - Developing a more favorable trade and industrial policy to promote export-oriented sectors.



Concluding Remarks

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- Cambodia has a high opportunity for diversifying its exports, ranging from agricultural to labor-intensive manufactured goods, oil & gas and tourism.
- Due to its WTO membership and LCD status, Cambodia has a high potential to access international markets.
- Removing overall structural constraints will help Cambodia to a much larger extent in exploring its own path towards diversification, which will in turn contribute to the better livelihoods of many Cambodians.