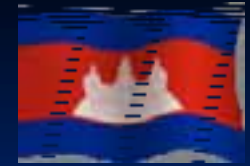




KINGDOM OF CAMBODIA
Ministry of Agriculture, Forestry and Fisheries



Sustainable Agriculture Development in Cambodia

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Presented by:

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1. Overview;
2. Current Issues;
3. Plan of Action;
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1. Overview

- 1.1. Geography;
- 1.2. Demography;
- 1.3. Health;
- 1.4. Economy;
- 1.5. Agriculture;
- 1.6. Market; and
- 1.7. Employment.





1.1. Geography

Description	
Total geographic area	181.035 km ²
No. of Provinces	24
No. of Urban areas	162
No. of Districts	185
No. of Communes	1,621
No. of Villages	13,890
Fiscal Year	January - December
Currency	Cambodian Riel (KHR)



Source: Ministry of Planning, National Institute of Statistics (NIS).



1.2. Demography

Description	2000	2006	Remarks
Population, millions	11.437	14.08	↑
Annual growth rate, %	2.5	1.81	↓
Male, %	48.2	48.6	↑
Female, %	51.8	51.4	↓
Age 0 - 15, %	42.8	37.3	↓
Age 15-59, %	51.8	57.2	↑
Age 60 and above, %	5.3	5.5	↑
Urban, %	15.61	15.0	↓
Rural, %	84.39	85.0	↑
Total Fertility rate, %	4.0	3.4	↓
Life Expectancy , yrs, M/F	54.4/60.6	57.87/64.14	↑
Population Density, per sq. km	64	79	↑

Source: Ministry of Planning, National Institute of Statistics (NIS).



1.3. Health

Description	2000	2005	Remarks
Infant mortality rate, per 1,000 live births	95	66	↓
Under 5 mortality rate, per 1,000 live births	124	83	↓
Maternal mortality ratio, 100,000 live births	437	472	↑
Malaria cases, per 1,000	11.40	7.30	↓
Prevalence of smear positive TB, per 100,000	428	269	↓
HIV/AIDS: Adult prevalence rate, % 15-49 yrs	3.0	1.9	↓
Referral Hospitals, Nos	65	69	↑
Health Centers, Nos	942	972	↑
Drinking water access (urban), %	60	75.8	↑
Access to sanitation (urban), %	49	55.0	↑

Source: Ministry of Health, CDHS 2000-2005, MOP/NIS, NSDP



1.4. Economy

Description	2000	2006	Remarks
GDP (billion UD\$)	3.7	7.3	↑
GDP Share:			
- Agriculture, (%)	35.9	29.6	↓
- Services, (%)	37.1	40.2	↑
- Industry , (%)	21.8	30.2	↑
- Taxes, (%)	6.2	6.0	→
Growth rate:			
- GDP, (%)	9.2	10.8	↑
- Agriculture, (%)	-1.2	5.5	↑
- Services, (%)	8.9	10.3	↑
- Industry , (%)	31.2	18.3	↓
- Taxes, (%)	4.5	7.6	↑
GDP per capita, (US\$)	288	513	↑



1.4. Economy con't

Description	2000		2006		Remarks
	GDP	Sector	GDP	Sector	
Share, (%)	35.9	100	29.6	100	↓
Crops, (%)	16.5	46	15.81	50.8	↑
- Paddy crop, (%)		25.0		27.7	↑
- Other crops, (%)		21.0		23.1	↑
Livestock and poultry, (%)	5.4	14.9	4.46	15.8	↑
Fisheries, (%)	10.8	29.9	7.35	25.9	↓
Forestry and logging, (%)	3.3	9.2	2.09	7.5	↓

Source: Ministry of Planning, National Institute of Statistics (NIS)



1.5. Agriculture (Crops)

Description	2000, ('000 tons)	2006, ('000 tons)	Remarks
Rice (Paddy)	4,026	6,264	↑
Maize	157	365	↑
Cassava	148	2,200	↑
Sweet potato	28	47	↑
Vegetable	196	228	↑
Mung bean	15	61	↑
Soya bean	28	100	↑
Sesame	10	35	↑
Sugar cane	164	177	↑
Rubber	42	20	↓

Source: Ministry of Agriculture, Forestry and Fisheries.



1.5. Agriculture (Livestock & Fisheries)

Description	2000, ('000)	2006, ('000)	Remarks
Livestock:			
- Cows, (Heads)	3,490	3,345	↓
- Buffalos, (Heads)	694	724	↑
- Pigs, (Heads)	1,838	2,760	↑
- Poultry, (Heads)	15,250	15,694	↑
Fisheries:			
- Fresh fish and shrimp, (Tons)	296	456	↑
- Crocodiles, (Heads)	26	138	↑

Source: Ministry of Agriculture, Forestry and Fisheries.



1.6. Market

Description	10/2000, US\$/Kg	7/2008, US\$/Kg	Remarks
Rice	0.25	0.56	↑
Cucumber	0.20	0.23	↑
Tomato	0.45	0.57	↑
Pork	2.50	4.15	↑
Beef	2.50	6.59	↑
Chicken	1.75	4.39	↑
Duck	1.30	2.93	↑
Snakehead fish	1.58	3.90	↑

Source: Ministry of Agriculture, Forestry and Fisheries.



1.7. Employment

Description	2000		2006		Remarks
	000 person	%	000 person	%	
Total	5,275	100	8,051	100	↑
Agriculture	3,889	73.7	4,619	57.4	↑ ↓
Services	942	17.9	2,264	28.1	↑ ↑
Industry	444	8.4	1,168	14.5	↑ ↑
Crops and livestock	3,688	69.9	4,183	52.0	↑ ↓
Fisheries	147	2.8	376	4.7	↑ ↑
Forestry	54	1.0	60	0.7	↑ ↓

Source: Ministry of Planning, National Institute of Statistics (NIS).

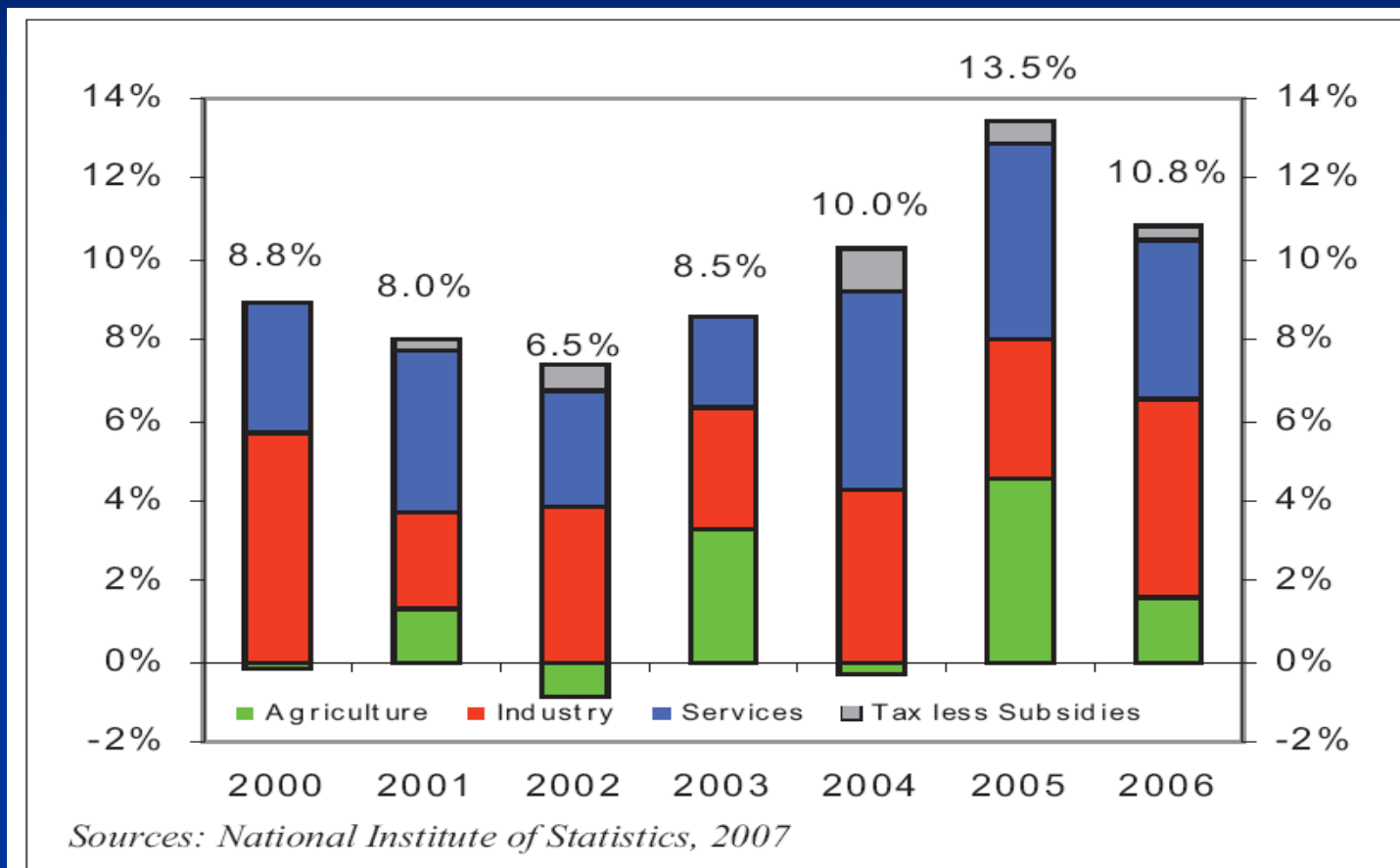


2. Current Issues

- 2.1. Growth of GDP;
- 2.2. Growth of Agriculture;
- 2.3. Rice Cultivation;
- 2.4. Land Cover and Use.

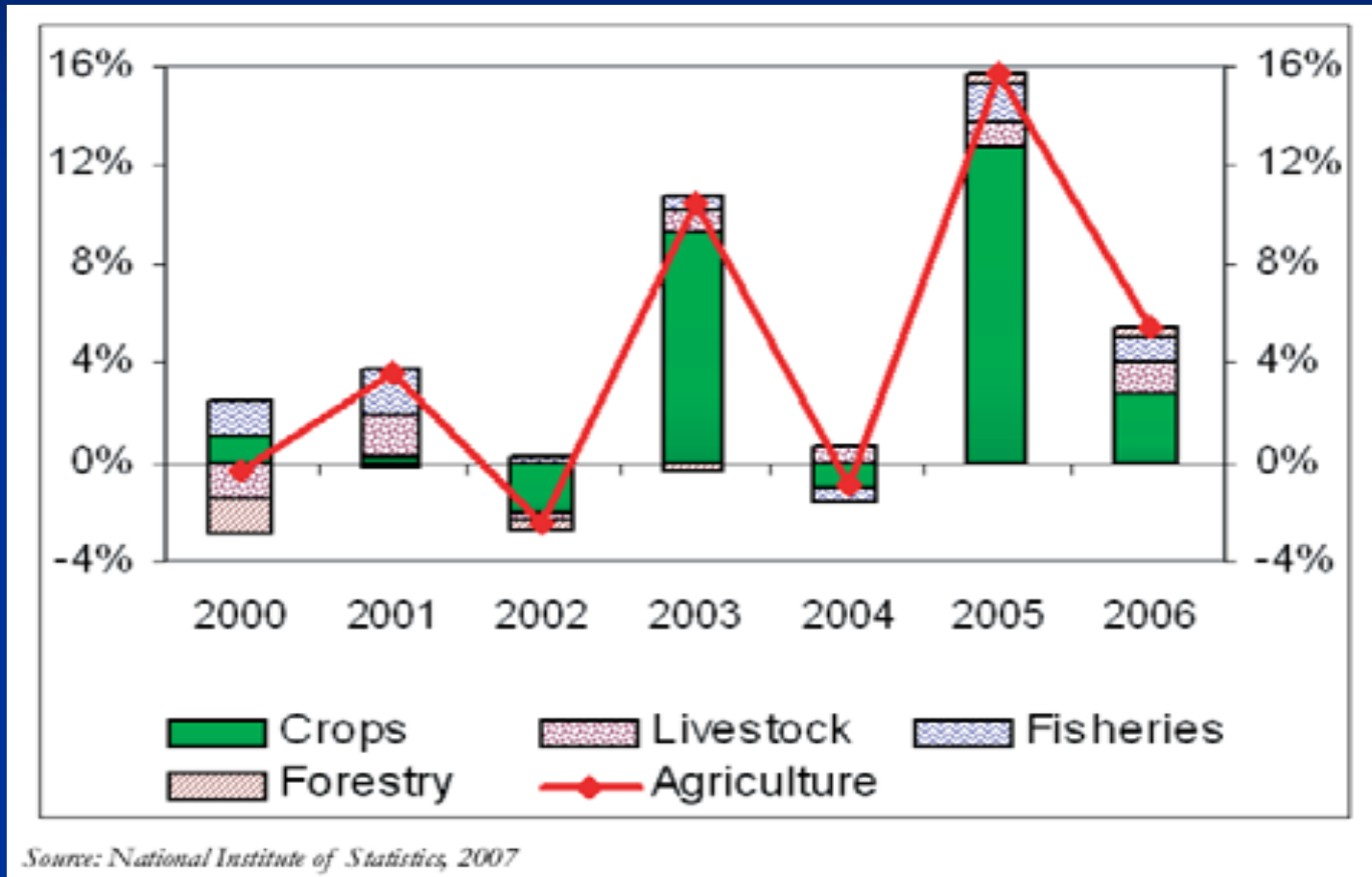


2.1. Growth of GDP





2.2. Growth of Agriculture





2.3. Rice Cultivation

Description	2000	2001	2002	2003	2004	2005	2006
Planted area, m Ha	2.32	2.24	2.14	2.31	2.37	2.44	2.54
Harvested area, m Ha	1.90	1.98	1.99	2.24	2.11	2.41	2.52
Yield, T/Ha	2.11	2.07	1.92	2.10	1.98	2.48	2.50
Production, m T	4.03	4.10	3.82	4.71	4.17	5.99	6.26
Local consumption, m T	1.98	1.92	1.97	1.94	1.91	2.01	2.05
Surplus, m T	0.14	0.57	0.24	1.07	0.65	2.06	2.24

Source: Ministry of Agriculture, Forestry and Fisheries.



2.4. Forest Cover and Land Use

Description	2006	%	Remarks
Evergreen forest, m Ha	3.66	20.2	To be protected
Semi-evergreen forest, m Ha	1.36	7.5	To be protected
Deciduous forest, m Ha	4.69	25.8	Suitable for agriculture expansion
Wood shrubland dry, m Ha	0.04	0.2	Suitable for agriculture expansion
Wood shrubland evergreen, m Ha	0.10	0.5	Suitable for agriculture expansion
Bamboo, m Ha	0.04	0.2	Suitable for agriculture expansion
Other forest, m Ha	0.97	5.3	Suitable for agriculture expansion
Total Forest	10.86	59.8	
Non Forest	7.30	40.2	
Total Land	18.16	100	

Source: Ministry of Agriculture, Forestry and Fisheries



3. Plan of Action for Further Development

3.1. Projection for Rice Cultivation in 2015

3.2. Key Issues to be addressed





3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	2.59	
Harvested area, m Ha	2.57	2.57	
Yield, T/Ha	2.62	2.62	
Production, m T	6.73	6.73	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (13%)	0.88	0.88	
Surplus, m T	2.87	2.53	



3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	2.59	
Harvested area, m Ha	2.57	1.80	Flooded condition
Yield, T/Ha	2.62	2.62	
Production, m T	6.73	4.72	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (13%)	0.88	0.61	
Surplus, m T	2.87	0.77	



3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	2.59	
Harvested area, m Ha	2.57	1.80	Draught and disease condition
Yield, T/Ha	2.62	1.90	
Production, m T	6.73	3.42	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (13%)	0.88	0.44	
Surplus, m T	2.87	- 0.35	



3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	2.59	
Harvested area, m Ha	2.57	2.57	
Yield, T/Ha	2.62	3.00	Increase yield
Production, m T	6.73	7.71	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (8%)	0.88	0.62	Reduce seed and losses
Surplus, m T	2.87	3.76	



3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	2.59	
Harvested area, m Ha	2.57	2.57	
Yield, T/Ha	2.62	3.50	Increase yield
Production, m T	6.73	9.00	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (8%)	0.88	0.62	Reduce seed and losses
Surplus, m T	2.87	4.95	



3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	5.18	Planting 2 times/y or expan area 2 times
Harvested area, m Ha	2.57	5.14	
Yield, T/Ha	2.62	2.62	
Production, m T	6.73	13.47	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (8%)	0.88	1.08	
Surplus, m T	2.87	9.06	



3.1. Projection for Rice Cultivation in 2015

Description	2007	2015	Remarks
Planted area, m Ha	2.59	5.18	Planting 2 times/y or expan area 2 times
Harvested area, m Ha	2.57	5.14	
Yield, T/Ha	2.62	3.00	Increase yield
Production, m T	6.73	15.42	
Local consumption, m T	2.99	3.33	
Seed and post harvest losses, m T (8%)	0.88	1.23	
Surplus, m T	2.87	10.86	



3.2. Key Issues to be addressed

- How to control disaster (flood, drought, disease, insect)?
 - Build capacity to the technical staff, Can help?
 - Technical assistance, Can help?
 - Introduce new technology, Can help?
- How to increase yield and reduce seed, post harvest losses?
 - Introduce new technology
 - Build capacity to the technical staff
 - Train farmers
- How to increase cultivation more than one time or expand cultivation area?
 - Construct irrigation infrastructure
 - Improve cultivation technique



4. Recommendation

National Level:

Build Capacity to the
National Staff

Provide both Technical
and Financial Support

Establish National
Technical Working Group

Regional Level:

Establish Regional
Technical Working Group

Conduct Training Courses

Regular Meeting for
Exchange Experiences





Thanks for your Attention



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