



Comment on the integration of environmental concerns in Cambodia's NSDP 2006-2010¹

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1. Purpose, sources, key conclusions and implications for Sida

The purpose of this comment is to initiate a discussion on the integration of environmental concerns into the new Swedish Cooperation Strategy for Cambodia, by reviewing Cambodia's National Strategic Development Plan (NSDP) 2006-2010. The sources upon which the comment is based are the NSDP and country analytic reports (see references). The NSDP refers to a range of recent policy developments and proposals which are important for reaching its goals and targets. An assessment of these documents is however beyond the scope of this comment.

The key conclusions are:

- The NSDP fails to meet international good practice criteria for environmental integration
- There is a lack of environmental problem analysis which may set wrong strategic priorities
- The targets for ensuring environmental sustainability are incomplete as indicators on Cambodia's progress towards environmental sustainability
- Implementation of good governance reforms is of fundamental importance for sustainable natural resources use
- Environmental concerns need to be integrated in strategies for agricultural development
- Environmentally related causes to poor health are not sufficiently addressed in the NSDP
- Integrate environmental concerns in education

These conclusions are elaborated upon below. A summary of key environment and natural resources related challenges to growth and poverty reduction is included in an Appendix.

Implications for Sida: Given the weaknesses of the NSDP, Sida needs to consider how to strengthen sustainable natural resources management in Cambodia. Participating and supporting the Strategic Partnership Framework for Natural Resources Management² as well as other initiatives should be considered as part of the strategy process. Integrating environment into education or other sectors supported should also be considered.

2. The NSDP fails to meet good practice criteria regarding environmental integration

The poverty assessment recently undertaken by the World Bank, as well as numerous other country analytical reports, underlines the strong linkages between natural resources management, poverty reduction and long run economic development in Cambodia. However, improvements in natural resources management remain slow and insufficient to alter the trend of environmental degradation (World Bank 2006a)³.

¹ The comment was written at the request of Sida's Asia Department (att: Åsa Heden) by Jessica Andersson and Daniel Slunge at the Environmental Economics Unit (EEU), Department of Economics, Göteborg University. EEU assists Sida in integrating environmental concerns into its Cooperation Strategies, as part of Sida-EEU's institutional collaboration on environmental economics.

² World Bank, 2006b

³ While important measures have been undertaken to curb illegal logging and other cases of unsustainable resource use, many bad practices continues. One point in case is a report by Global Witness (2004) claiming that illegal logging with connections to the military is still a problem.

Against this background, one would expect that due consideration would be given to issues related to environmental sustainability in the NSDP. The general impression from our review is however that the NSDP does not live up to internationally established good practice in this respect⁴. The NSDP contains goals and targets as well as a range of measures aiming at improving natural resources management. Given the great challenges faced, the NSDP does however not provide a sufficient strategic framework for putting Cambodia on a path where growth, poverty reduction *and* environmental sustainability are pursued jointly.

3. Lack of environmental problem analysis

The inclusion of natural resources aspects in the analysis in Chapter 2, “*Progress so far and Current situation*”, mainly consists of brief descriptions of achievements in different sectors, such as forestry, fisheries and protected areas. There is a lack of a convincing general problem analysis which identifies key short- and long-term constraints to growth and poverty reduction caused by environmental degradation. This impedes identification and understanding of priority problems and interventions (see appendix for further details).

4. Multiple Priority Goals and Targets – will they be achieved?

The Cambodian Millennium Development Goals (CMDGs) are structured in accordance with the Millennium Development Goals of the United Nations. The *CMDG 7 Environmental Sustainability* reads “*Integrate the principles of sustainable development into country’s policies and programs and reverse the loss of environmental resources*”. However, the targets set for CMDG 7 do not reflect the many different areas in which progress would need to be made in order to move towards environmental sustainability. Extreme caution needs thus to be taken when using these targets as indicators on Cambodia’s progress towards environmental sustainability⁵.

Major efforts to improve the management of the environment and natural resources will be needed if the targets for *CMDG 7 Environmental Sustainability* are to be achieved. There is also a need to underline the crucial role of improved environmental management for reaching other goals and targets, especially those related to poverty, health and child mortality⁶.

Given the multiple priority goals and targets, as well as “Key Strategies and Actions”, included in the NSDP, a key concern is if the stated goals and targets will guide actions undertaken in practice? There are simply too many priority goals and key strategies. What is really prioritized is likely to show up in the government budget and investment plans, which needs to be monitored accordingly.

5. Implementation of governance reforms is a key challenge for sustainable natural resources use

The NSDP puts governance issues at the center of its strategic framework. This is encouraging since corruption, patronage, rent-seeking and other forms of bad governance are strongly linked to unsustainable natural resource use in Cambodia (World Bank, 2006b and ADB, 2004). Reforms, that promote more transparent and accountable decision making, as

⁴ For good practice criteria, see PRSP Source Book, chapter on Environment (World Bank, 2002) and World Bank reviews of environmental integration in PRSPs (World Bank 2004a)

⁵ As an example, even if the ambitious target of keeping a 60% of total land area covered with forests would be achieved, degradation of the inundated forests in Tonle Sap could be destroyed, which would have vast implications for ecosystem productivity and poverty reduction. The *quality* of forest resources is hence not captured by the present indicator.

⁶ CMDG 1. Eradicate Poverty and Hunger, and CMDG 4, Reduce Child Mortality

well as a sound legislative framework for environmental management, are of fundamental importance. If this is not achieved, the impacts of the many reforms outlined in the NSDP, risk being severely diminished.

Governance related challenges for environmental management in Cambodia include (i) overlapping mandates and poor coordination between different ministries, (ii) fragmented legal framework, (iii) limited or unreliable data, (iv) limited human resources capacity, and (v) shortage of financial resources (ADB, 2004). These challenges are not explicitly dealt with in the NSDP.

The decentralization and deconcentration process provides and opportunity to address the strong centralization and concentration of the institutional responsibilities for natural resources management in Cambodia. However, the formal mandates for environmental management at province and commune level need to be institutionalized and investments in capacity development are urgently required (World Bank, 2006b).

6. Need to integrate environmental concerns in agricultural development

Enhancement of the agricultural sector is a key component of the NSDP. To make agricultural development pro-poor, there is a convincing argument for a strong focus on enhancing the productivity of small farms (rather than large)⁷ and to improving the access of poor households to aquatic, forestry and other natural resources (World Bank, 2006a)⁸. Land distribution and titling to assure secure tenure for poor households are key components in such a development. Such measures are likely to have positive environmental effects as well.

Key environmental concerns related to agricultural development:

- (i) Controlling deforestation due to agricultural expansion⁹.
- (ii) Preserving diversity and local varieties of rice and other crops. A too strong focus on a few high yielding varieties can increase vulnerability to pests¹⁰.
- (iii) Managing agro-chemical use. An increase in the, largely uncontrolled, use of pesticides risks leading to severe health effects and may also have negative economic effects on the tourism industry, the quality of fish and other export products¹¹.
- (iv) Managing trade-offs between irrigation and competing water uses, such as fisheries and energy developments). (ADB, 2004)

These environmental concerns are not sufficiently addressed in the NSDP, and there is a risk that agricultural intensification will be carried out at great environmental costs.

⁷ This argument is however not convincingly made in the NSDP (Sida, 2006).

⁸ The rice field fisheries provide just but one illustrative example of how agricultural production is linked to a much broader use of resources. Studies have shown that the market value of fish and other aquatic animals (snails, frogs, crabs) from rice fields may be as high as 40-80% of the rice value, and the annual catch can range between 100 and 680 kg per household (RGC, 2005b).

⁹ There is a possible trade-off between the NSDP target 7.1. of maintaining 60% forest cover and agricultural expansion.

¹⁰ This concern also relates to the NSDP proposal of “one village-one product” which can increase vulnerability.

¹¹ The majority of the chemicals reaching Cambodia’s fields are highly toxic, banned and illegally imported from Thailand and Vietnam. As few as 2% of the pesticide products are labeled in Khmer language. It is estimated that in recent years, 10 tons of dangerous chemicals (including DDT and other persistent compounds) have entered the Tonle Sap as run-off from crops (ADB, 2004).

7. Address environmentally related causes to poor health

The NSDP identify acute respiratory infection and diarrhea as the major causes of child mortality. While the NSDP includes important measures to improve access to safe water and improved sanitation¹², measures to address air pollution are lacking. While outdoor air pollution is still not a critical problem, in-door air pollution is a neglected problem of potentially great importance to health in Cambodia¹³ (World Bank, 2003a). Investments in treatment of (public and industrial) waste water and solid waste are necessary to mitigate negative health effects from increasing urbanization and industrialization (ADB, 2004).

8. Integrate environmental concerns in education

The Inter-Ministerial Steering Committee for Environmental Education (IMSCEE) has coordinated programs for environmental education (World Bank, 2003b). The NSDP does not refer to this program or other initiatives, nor does it discuss the role of education in raising environmental awareness among the population.

Appendix: Key environment and natural resources related challenges to growth and poverty reduction¹⁴

Key environmental problems:

- (i) Deforestation: forest cover is high compared to neighbouring countries but declining, due to illegal logging, large scale concessions and fuelwood extraction.
- (ii) Overfishing: in both freshwater and marine systems¹⁵.
- (iii) Degradation of critical ecosystems: such as forests around the Tonle Sap and mangroves. There is also poor enforcement of protected areas.
- (iv) Declining water quality: due to poor waste water and solid waste management caused by increasing urbanization and industrialization.
- (v) Changes in water flows: Cambodia is especially vulnerable to possible reductions in water flows due to upstream developments in the Mekong, including the Lancang Cascade in Yunnan.

Linkages to poverty reduction and growth:

- (i) Poor households are heavily dependant on agriculture and common property resources (such as fisheries, waters, forests, wetlands) as a source of subsistence and income in normal years, and as safety net in years of poor harvests¹⁶. Poor people are most vulnerable to limitations in access to natural resources as well as environmental degradation.

¹² Access to safe water sources has increased in both rural and urban areas and access to improved sanitation increased well ahead of the CMDG target in rural areas while it was shortly below the target in urban areas. The 2015 targets of 50% access to safe drinking water and 30% access to improved sanitation in rural areas seem rather modest, given the importance these issues have for health and poverty reduction.

¹³ The NSDP states that around 84% of the population relies on fuel wood as a major energy source.

¹⁴ This summary largely builds on: RGC (2005a), ADB (2004) and World Bank (2003b) and is not intended to be exhaustive.

¹⁵ Information on catches is uncertain due to underreporting, illegal fishing, smuggling, the fishing efforts of foreign vessels etc. While catches remain stable in freshwater fisheries, there are less big and medium size fish harvested, indicating a too high exploitation rate.

¹⁶ As much as 25% of the income of poor rural households is estimated to be derived from common property resources. 80% of animal protein intake comes from aquatic resources (World Bank, 2006).

- (ii) Conflicts have increased around access and use of natural resources, as an effect of growing pressure on the natural resource base and can have significant impact on livelihoods investments and growth (World Bank, 2006b)¹⁷.
- (iii) Cambodia is richly endowed with forestry, fishery and a range of other natural resources. If this natural capital is wisely managed, it can serve as a base for growth and employment in sectors such as agriculture, forestry, fisheries and tourism.

Driving forces:

- (i) Rampant mismanagement: corruption, patronage, rent-seeking and other forms of bad governance are strongly linked to unsustainable natural resource use in Cambodia (World Bank, 2006b and ADB, 2004).
- (ii) Poor policies for natural resources management: have created incentive structures which encourage rapid exploitation rather than sustainable resource use¹⁸.
- (iii) Rapid population growth and persistent poverty: create pressure for agricultural expansion and unsustainable use of local resources when alternative income opportunities are few.
- (iv) Increased demand for Cambodia's natural resources during the coming years is likely, due to the WTO-agreement and the proximity to China and other rapidly growing economies in the region. With weak property rights and institutions, there is a risk that this demand causes unsustainable exploitation of natural resources.

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¹⁷ A substantial number (500 000-2 million) rural Cambodians have been directly involved in conflicts around natural resources (World Bank, 2006b).

¹⁸ One example is the fishing lot system where concessions have to be renewed after two years, creating incentives to maximize yields during the two year concession period.