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# Trade in Natural Resources in Attapeu Province, Lao PDR: An assessment of the wildlife trade



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# TRADE IN NATURAL RESOURCES IN ATTAPEU PROVINCE:

An assessment of wildlife trade in the Lao PDR demonstration site of the Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme (MWBP)

Prepared by TRAFFIC Southeast Asia - Greater Mekong Programme for the Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme (MWBP)

Sarinda Singh, Ramesh Boonratana, Mark Bezuijen and Aloun Phonvisay August 2006

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#### ABBREVIATIONS AND ACRONYMS

Cl Conservation International

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CPTC Provincial Communication, Post, Transportation and Construction

DAFO District Agricultural and Forestry Office

DC District Capital

DFID Department for International Development

DFO District Finance Office

DoF Department of Forestry

GAPE Global Association for People and the Environment

GoL Government of Lao PDR

IUCN The World Conservation Union

LAK Kip - Lao Currency (USD1 = LAK10,100, May 2006)

LARReC Living Aquatic Resources Research Center

Lao PDR Lao People's Democratic Republic

LWU Lao Women's Union

MAF Ministry of Agriculture and Forestry

MoF Ministry of Finance

MRC Mekong River Commission

MWBP Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme

NGO Non-governmental organization

NPA National Protected Area

NTFP Non-timber forest product

PAFES Provincial Agriculture and Forestry Extension Service

PAFO Provincial Agricultural and Forestry Office

PC Provincial Capital (e.g. Attapeu PC)

PFO Provincial Finance Office

PLF Provincial Livestock and Fisheries (in PAFO)

PPA Participatory Poverty Assessment

TSEA TRAFFIC Southeast Asia - Greater Mekong Programme

UNDP United Nations Development Programme

USD US Dollars

WWF World Wide Fund for Nature



## **EXECUTIVE SUMMARY**

As a contribution to the Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme (MWBP), field studies were conducted in the MWBP demonstration sites of Lao PDR and Cambodia to investigate trade in natural resources. This report summarises findings from the Lao demonstration site in Attapeu Province.

The aim of the field study was to provide an overview of natural resource trade, including fish, wildlife (terrestrial and aquatic vertebrates aside from fish) and non-timber forest products (NTFPs). The MWBP is founded on an integrated approach to natural resource management, as it seeks to incorporate needs for biodiversity conservation with the promotion of sustainable use that supports local livelihoods. Thus, the study sought to highlight the varied economic, ecological and social factors that influence trade dynamics in the MWBP demonstration site.

Participatory methods were used to collect information from four villages and 20 camps in the demonstration site, as well as from local urban markets, in order to identify the types of natural resources being traded, trade routes and trends in trade over time. In addition, information on regulations and current management practices was collected from government offices in the provincial capital in Attapeu.

The results demonstrate the critical importance of trade in natural resources for rural livelihoods, as both a source of regular income and a coping strategy during rice shortages. Reliability in supply and market demand, along with flexibility in use, were key characteristics of natural resources that were preferred trade items. While trade in NTFPs is most significant at a provincial level, fish trade was considered more important by villagers in the demonstration site, thus indicating the significance of wetlands and river systems in the site. Trade in NTFPs and wildlife is, however, often conducted in conjunction with fishing activities. This trend was particularly apparent in temporary and semi-permanent camps established along the Xe Kong and Xe Pian Rivers, where fishing was interspersed with the collection of forest resources for trade. Local trade patterns for common wildlife match many of the trade routes for fish, due to limited transportation options, overlap in market demand and the fact that wildlife and fish are often traded by the same trader. Many of the natural resources currently traded in the demonstration site are also used for local subsistence. Given the impacts of trade on consumption patterns, it is not surprising then that while trade in natural resources is incredibly important for local livelihoods, unregulated trade is also regarded as an issue of concern by villagers.

In Attapeu, 14 globally threatened (IUCN Red List) wildlife species and 23 CITES-listed species were observed in trade during the field studies. Estimates of trade volumes reveal that official perceptions of wildlife trade vastly underestimate its actual extent and hence its significance for both villagers' livelihoods and biodiversity conservation. As market demand and market access are key determinants of trade patterns, it is apparent that ongoing road improvements in Attapeu Province are having effects on trade in natural resources in the demonstration site. The prices, volumes and diversity of natural resources being sourced from the demonstration site for trade purposes have all increased in recent years. As construction of major roads in Attapeu has only just been completed, it can be expected that the trade-driven pressures on natural resources in the demonstration site will continue to intensify.

Provincial authorities are making clear efforts to regulate trade in natural resources, such as by establishing checkpoints to regulate natural resources trade at domestic and international borders. However, uncertainties and contradictions persist in implementation and enforcement, as they do in policy. Interventions must ensure that local communities with limited alternative economic opportunities are able to secure their natural resources for long-term benefits. Village-level interventions are appropriate for some trade issues, but there must also be corresponding action to control the activities of outsiders, as well as interventions targeting local, domestic and international markets in order to ensure the effectiveness of management and the sustainability of trade in natural resources.

#### 1. INTRODUCTION

The Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme (MWBP) of the United Nations Development Programme (UNDP), IUCN - The World Conservation Union and the Mekong River Commission (MRC) seeks to promote the conservation and sustainable use of wetland biodiversity. There is wide recognition that a challenge for such integration is trade in natural resources. Trade in aquatic and terrestrial animals and plants is an important component of rural livelihoods in the demonstration sites where MWBP is working, yet unregulated and unsustainable trade has also been identified as a major threat to biodiversity in the Greater Mekong Region (Nooren & Claridge 2001; WCS 2004; World Bank 2005; see also Robinson & Bennett 2000).

Socio-economic development in China, Thailand and Viet Nam has seen increasing affluence resulting in increased demand and ability to purchase natural resources (World

Figure 1: Map of MWBP demonstration ites.



Source: MWBP (http://www.mekongwetlands.org/)

Bank 2005). As natural resources in consumer countries have declined over recent decades, valued products have been increasingly sourced from neighbouring countries, including Lao PDR and Cambodia. Plans for socio-economic development often envisage an increase in regional trade as a means to achieve poverty alleviation goals. Thus, it is likely that such trade in natural resources will continue to expand.

These issues are particularly critical in MWBP demonstration sites in Attapeu Province in Lao PDR and Stung Treng Province in Cambodia. Both demonstration sites are characterised as less-developed but resource-rich areas within their respective countries. Attapeu and Stung Treng are also becoming increasingly connected with regional trade through improved transport networks. Hence there is a need for a greater understanding of the dynamics of trade in order to develop appropriate interventions that allow management actions to contribute to the integration of sustainable resource use and biodiversity conservation.

In Lao PDR, various studies have demonstrated the importance of diverse natural resources for rural livelihoods (e.g. Foppes & Ketphanh 1997, 2004; Clendon 2001; Vantomme et al. 2002; Mollot et al. 2003; Johnson et al. 2004a). Given that rural households comprise approximately 80% of the total population of Lao PDR and that the majority of poor households reside in rural areas (GoL 2003), the importance of natural resources translates into a priority for national development as well as poverty alleviation. The rural economy in Lao PDR is highly reliant on forest as well as wetland resources, which complement outputs from agricultural production. In addition, since capture fisheries and wildlife (rather than domestic animals) often contribute the majority of animal protein to rural people's diet, managing natural resources for the long term also represents an important concern for nutrition and health security (Meusch et al. 2003; Krahn 2005). Yet many types of natural resources are in decline, precipitated by over-harvesting as well as habitat loss and environmental degradation (IUCN & Action Aid 2003). Eventually the decline of these natural resources will negatively impact local livelihoods as well as the national economy.

<sup>&</sup>lt;sup>1</sup> The most significant in the region is ADB's Greater Mekong Subregion (GMS) program (http://www.adb.org/gms/)

The MWBP demonstration site in Attapeu Province is located in Sanamxay District around the southern portion of the Xe Kong and Xe Pian Rivers near the Lao-Cambodian border (Figure 1). The demonstration site is rich in diverse habitats including seasonally-flooded forests and plains and seasonal wetlands with significant biodiversity values (MWBP 2006). Recent studies in Attapeu demonstrate how rural communities have adapted their livelihood strategies to capture seasonally-variable resources with their livelihood security strengthened through the use of diverse habitats and biological diversity (Mollot *et al.* 2003). A Participatory Poverty Assessment (PPA) carried out in Attapeu province in 2003 by IUCN and Action Aid indicated the importance of natural resources for exchange and income generation, particularly for poorer households that regularly face rice shortages. The PPA also identified local concerns regarding declines in natural resources, as access to the province has improved and as many have become commercialised. This field study was developed to further explore the importance of natural resources for local livelihoods and trade in Attapeu.

#### 2. OBJECTIVES

The objective of this field study was to provide an overview of trade in natural resources in the MWBP demonstration sites in Lao PDR and Cambodia.<sup>2</sup> In the context of this study, 'natural resources' refers to fish, wildlife (terrestrial and aquatic vertebrates aside from fish) and NTFPs (non-timber forest products). This overview explores the patterns of resource extraction and trade in wild animals and plants used for exchange and income-generation, while also recognizing their importance for meeting subsistence needs. The aim of this report is to provide an overview of trade in natural resources in the Attapeu demonstration site summarising findings



Camp on the Xe Kong River

from both surveys. Additional detailed information on natural resources observed or reported in trade with local as well as scientific names, uses of natural resources and derivatives, prices in different locations, trade destinations, harvesting methods, products observed in markets and restaurants and other information is provided in the appendices as well as in separate reports arising from the first survey (Boonratana *et al.* 2005; Bezuijen *et al.* 2005).



Bengal Monitor and hardshell turtles at Ban Phonseath on the Xe Pian River



Camp on the Xe Pian River

<sup>&</sup>lt;sup>2</sup> The results for Cambodia are presented in a separate report (Singh *et al.* 2006).