

Conservation of Inundated Grasslands in the Tonle Sap Floodplain, Cambodia

Briefing document, November 2009

Participating organisations:

Wildlife Protection Office, Forestry Administration
Wildlife Conservation Society
Centre d'Etude et de Développement Agricole Cambodgien

Fisheries Administration
Sam Veasna Centre
BirdLife International in Indochina

Summary

The grasslands of the Tonle Sap floodplain are critically important for biodiversity and livelihoods. Intensive traditional human use helps to maintain the habitat. Recent development by outside investors is causing rapid loss of grasslands, threatening both biodiversity and local livelihoods. The Cambodian government has established more than 380 km² of protected grassland within six Integrated Farming and Biodiversity Areas (IFBAs). This is a valuable step towards ensuring the survival of a part of these grasslands, to the benefit of both wildlife and local communities, whilst leaving room for intensive development activities elsewhere.

A partnership of NGOs and government agencies is working to set up management systems for these IFBAs. Elected community management committees have been set up at two of the IFBAs. These committees represent the interests of communities who depend on these reserves for their livelihoods and participate in management and livelihood development activities. All sites are patrolled by joint teams of government officers and selected members of the community. Local and national government agencies are involved in project activities, law enforcement and decision making. The status of the flagship species for the IFBAs, the Bengal Florican, is monitored annually and research on this species has been ongoing since 2002.

Narrative

The Tonle Sap Great Lake floodplain once supported several thousand square kilometres of seasonally inundated grassland. The remnants support more than half of the world population of a Critically Endangered bird, the Bengal Florican. There are also many other threatened or important species including Sarus Crane, White-shouldered Ibis, Greater Adjutant, rare turtle species and a high diversity of fish.

The grasslands are also important for the livelihoods of people in hundreds of villages, who have long used them for grazing, fishing, family-scale farming and the collection of plant products. These human uses help to maintain biodiversity and habitat condition. Irregular cycles of ploughing and fallowing prevent scrub invasion but allow grasslands to persist, and the patchwork of active fields and grassland is attractive to floricans and other species. Grazing and burning also help to prevent scrub invasion. Recent fieldwork by researchers from the University of East Anglia, in collaboration with the Wildlife Protection Office and others, has been crucial to the understanding of these processes.

Both WCS Cambodia and BirdLife in Indochina have been working in collaboration with the Wildlife Protection Office for several years to conserve these sites. At first hunting was the key threat, but this has rapidly changed since 2004 and the grasslands themselves are now declining very rapidly. In the ten main grassland blocks, 28% of the grasslands were lost in 30 months from 2005 to 2007, and losses have continued at a high rate since then. Most of the loss is due to a recent wave of agricultural conversion by companies and businessmen. Earth dams of 100-1000 ha are built to capture the floodwaters in the rainy season and then irrigate surrounding rice fields in the dry season. This is quite different from the small-scale dry season rice farming ('recession rice') practised by local communities. Local community members are mostly excluded from the new, large-scale schemes and often report that they suffer because they are dispossessed without compensation of the lands they formerly used. There have been widespread protests and complaints. There are also concerns about intensive pesticide use.

From 2005 onwards the Wildlife Protection Office worked with NGO partners to develop proposals for a solution in the form of a new land-use designation - Integrated Farming and Biodiversity Areas (IFBAs). These protect existing grassland management systems. New large-scale earth dam projects are not

permitted, but existing projects are allowed to continue operating. Uses by existing communities are encouraged to continue under co-management frameworks. This will benefit both threatened wildlife and local communities, and it is also expected to bring wider benefits by maintaining land-use diversity in these districts, leading to better ecological and economic stability. Some of the sites also overlap with, and improve the protection of, Fishing Lots.

There are currently six IFBAs declared by Provincial Deika covering 38,755 ha (388 km²) in Kampong Thom and Siem Reap provinces (See Annex and Map for details). The Ministry of Agriculture, Fisheries and Forestry has now endorsed a proposal to issue a Ministerial Prakas covering all six IFBAs, strengthening their level of protection, and this legal document is now being developed. In the future there is also potential to expand the approach to manage other important grasslands (e.g. in Kampong Chhnang and Banteay Meanchey Provinces).

Setting up IFBA management began in late 2006. This has been partly achieved but there are serious ongoing threats which are not yet fully controlled. Key achievements are listed below:

- IFBA Provincial Commissions, chaired by the respective Provincial Governors, have been formed in each province and met to make key decisions about IFBA management. Several major, destructive proposed developments have been turned down.
- one IFBA (Stoung) has been fully demarcated and markers have been placed and maintained at all the main entrance points to another (Chikraeng IFBA)
- the IFBAs are being patrolled regularly by joint government/community law enforcement teams, leading to many detections of illegal land claims and hunting
- two cycles of community extension and awareness raising have been conducted, one at commune level, one at village level, and levels of awareness and community support have increased
- a monitoring system for breeding floricans, non-breeding floricans and non-breeding Sarus Cranes has been put in place and is being progressively improved. A baseline of the number of territorial (breeding) male birds conducted in March 2009 estimated around 23% of the national population within the IFBAs.
- a survey of livelihood activities in and around one of the IFBAs has been conducted by CEDAC
- CEDAC has conducted 3 years of livelihood development activities in seven villages that use IFBAs, focusing on intensifying rice cultivation, vegetable production and chicken production outside the IFBAs, as well as home gardening only in a further five and chicken raising only in a further eight villages. In all of the villages, savings groups have been established to enable farmers to obtain low interest loans within their community.
- community volunteers have been identified in 71 IFBA user villages, trained to act as preliminary community representatives and are participating in extension work and monitoring of threats
- four community consultation committees have been formed in two IFBAs (Stoung and Chikreng) with a mandate that involves site management and livelihood development
- at least 100 specialist bird tourists visit the sites each breeding season through Sam Veasna Centre; they pay a conservation levy that is fed back into a florican nest protection incentive scheme

Future priorities

- assist MAFF to issue a **prakas** to strengthen protection of the sites
- demarcate all IFBAs on the ground
- continue to strengthen the work of the **Provincial Commissions and joint patrol teams** to ensure the control of major land threats
- **expand the community committees to all sites** and increase the ability of these communities to protect and manage the grasslands they use
- **implement livelihood development activities** linked to better management of the grasslands – agricultural extension, savings groups, marketing of ‘wildlife friendly products’ and increased community involvement in ecotourism
- study of the floricans’ ecological requirements to provide **management guidelines for the grasslands**
- identify ways to **increase the populations of floricans in the agricultural landscape outside IFBAs**
- develop a sustainable **financing system** for the IFBAs

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Key references (Please contact the project for a full bibliography and copies of relevant reports)

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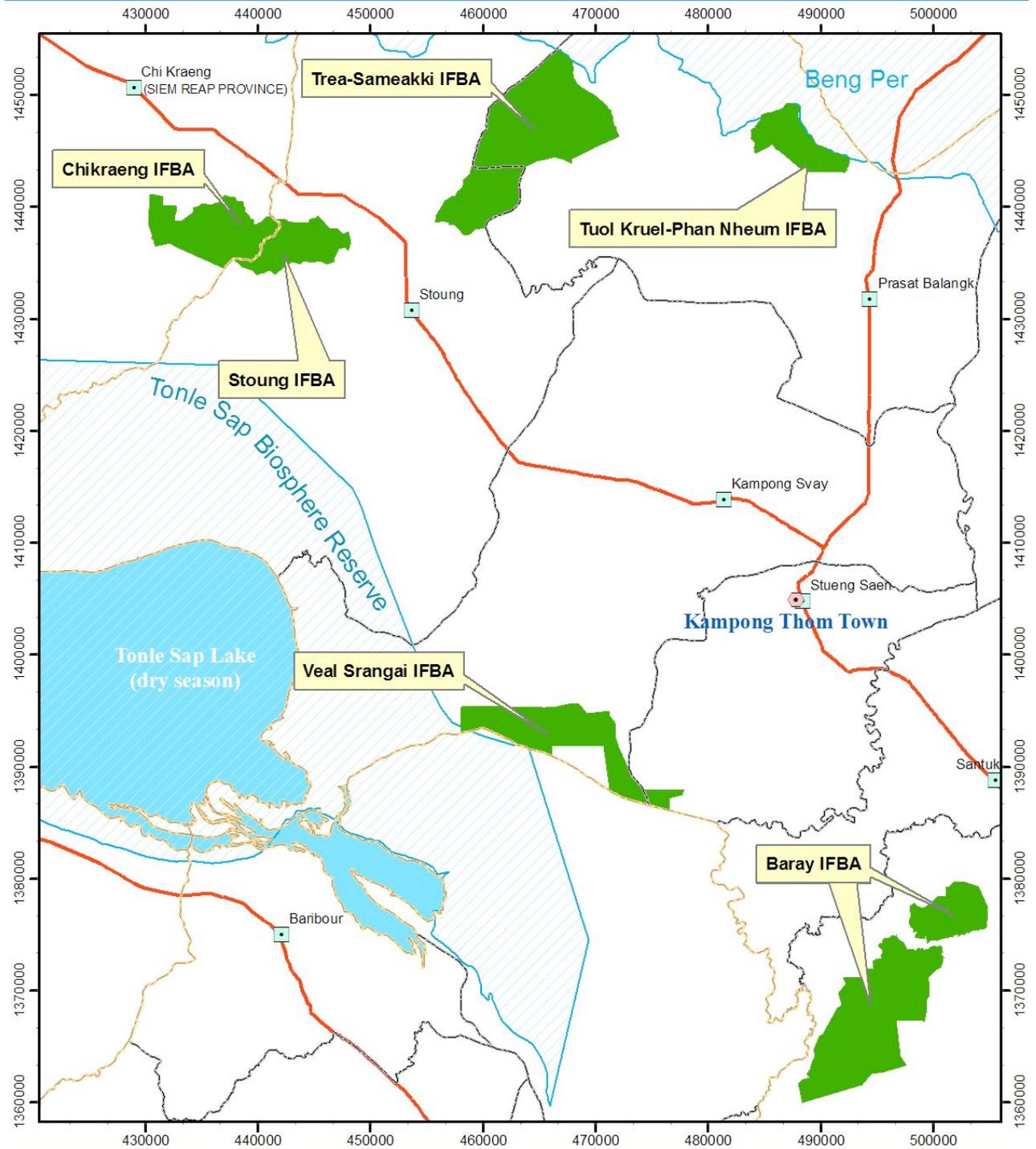
Annex

In August 2006 the Provincial Governor of Kampong Thom announced four IFBAs totalling 30,864 ha by official declaration (in Khmer, *deika*). In January 2007 the Siem Reap Provincial Governor declared another IFBA covering 4636 ha in Chikreng District. In September 2008 the Kampong Thom *deika* was revised, cancelling one IFBA and creating two more (giving a total of five), increasing the total area to 34,119 ha. The relevant communes are shown in the table below and the IFBAs are shown on the map.

Target Districts and communes

Province	District	Communes
Kampong Thom	Stoung	Prolay, Trea, Kampong Chen Cheung (marginal)
	Kampong Svay	Kampong Kou
	Stung Sen	Srayov
	Baray	Tnaot Chum, Chong Doung, Baray, Treall, Sralao
	Prasat Ballangk	Sammeakki, Kraya, Phan Nheum, Toul Kreul, Sala Visai
Siem Reap	Chikraeng	Lveang Russei, Spean Tnaot

Integrated Farming and Biodiversity Areas Kampong Thom and Siem Reap Provinces



	LEGEND <ul style="list-style-type: none"> ● Provincial Center ■ District Center — Provincial Boundary — District Boundary — National Roads ■ Integrated Farming and Biodiversity Areas ■ Ministry of Environment Protected Areas 	<p>Prepared by WCS, December 2008</p>	