

# Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

## Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance (Ramsar Wise Use Handbook 14, 3rd edition)*. A 4<sup>th</sup> edition of the Handbook is in preparation and will be available in 2009.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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### 1. Name and address of the compiler of this form:

Department of Environment, Water Resources  
and Environment Administration (WREA),  
Vientiane, Lao PDR  
P.O. Box 7864

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

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### 2. Date this sheet was completed/updated:

December 2009

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### 3. Country:

Lao PDR

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### 4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Xe Champhone Wetlands

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## 5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site  or  
b) Updated information on an existing Ramsar site

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## 6. For RIS updates only, changes to the site since its designation or earlier update:

### a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

**If the site boundary has changed:**

- i) the boundary has been delineated more accurately ; or  
ii) the boundary has been extended ; or  
iii) the boundary has been restricted\*\*

and/or

**If the site area has changed:**

- i) the area has been measured more accurately ; or  
ii) the area has been extended ; or  
iii) the area has been reduced\*\*

\*\* **Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

**b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:**

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## 7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

- i) **a hard copy** (required for inclusion of site in the Ramsar List): ;  
ii) **an electronic format** (e.g. a JPEG or ArcView image) ;  
iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables**

**b) Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The location of Xe Champhone Wetlands, the main portion is just the south of Ban Kengkok between the road 9 and road 11 (Figure 1), and a small part of the wetlands extend to the north for some 5 km.

**8. Geographical coordinates** (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Center of site: 16°23'N and 105°13'E

The coordinates of boundaries of the Xe Champhone Wetlands Ramsar Site are shown as below:

No.	Y	X	Boundary
1	16°30'13" N	105°10'03" E	North-west
2	16°30'12" N	105°11'20" E	North-east
3	16°28'00" N	105°10'30" E	West
4	16°21'30" N	105°10'45" E	West
5	16°18'38" N	105°14'30" E	Southernmost
6	16°20'20" N	105°14'00" E	South-east
7	16°26'00" N	105°14'50" E	East
8	16°25'55" N	105°12'30" E	East
9	16°30'12" N	105°11'20" E	East

**9. General location:**

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

The Xe Champhone Wetlands lie within Savannakhet Province, in the southern part of Lao PDR (Figure 1). The site is approximately 3 km away from Ban Kengkok, the main town of Champhone District. The southern end of the site joins the border of Xonbuly district

**10. Elevation:** (in metres: average and/or maximum & minimum)

115 to 135 meters above sea level.

**11. Area:** (in hectares)

Total area: 12,400 ha

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Xe Champhone Wetlands is a large plain containing perennial and seasonal rivers as well as scattered lakes, ponds, fresh water marshes, and rice paddy fields (Claridge, 1996). The site is an outstanding example of a river characterised by many meanders (35), oxbows (50) and other water bodies (40). These wetlands become interconnected during the wet season. Both perennial and seasonal rivers and ponds form the wetlands complex extend to the south-western part – lying outside the designated Xe Champhone Wetlands Ramsar Site e.g Nong Luang, Kut Koung and Kut Koke.

Whilst the northern part of the site comprise mainly rice paddy and two large reservoirs, the southern part contains extensive semi-natural vegetation, typically low open woodland, both mixed semi-evergreen forest with some dipterocarps, *Lagerstroemia* sp., *Bauhinia* sp., bamboo, and an under storey of shrubs and grasses.

The Xe Champhone Wetlands is one of a few areas in the Lao PDR where critically endangered Siamese crocodiles (*Crocodylus siamensis*) have been recorded. Also found in the area are a number of waterbirds species particularly Lesser whistling duck (*Dendrocygna javanica*), a few species of kingfisher, White-breasted waterhen (*Amaurornis phoenicurus*), darter sp. and egrets, fish, livestock grazing areas, remote settlements and traditional rice cultivation.

### 13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1	2	3	4	5	6	7	8	9
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### 14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

#### Criterion 1:

The Xe Champhone Wetlands are special with many meanders and oxbows with deep pools, and open and closed water face. Mats of dense floating vegetation, floating hammock are found in the close water surface wetlands. Such riverine habitats are rare to find in the country. The meandering river links all the wetlands together, including ponds and streams (Figure 3). The Xe Champhone River is the main water body that maintains this ecosystem.

#### Criterion 2:

The Xe Champhone Wetlands is an important habitat for the largest population of the critically endangered Siamese crocodiles (*Crocodylus siamensis*) in Lao PDR and also protects other threatened species.

Vernacular name	Common name	Scientific name	IUCN	CMS	CITES
-	Siamese Crocodiles	<i>Crocodylus siamensis</i>	Critically Endangered	-	Appendix I
Tao phek	Elongated Tortoise	<i>Indotestudo elongata</i>	Endangered	-	-
Tao kwaii	Giant Asian Pond Turtle	<i>Heosemys grandis</i>	Vulnerable	-	Appendix II
Pafa ong	Asiatic soft-shell Turtle	<i>Amyda cartilaginea</i>	Vulnerable	-	Appendix II

**Criterion 4:**

Some of the lakes/ponds/marshes in which the Siamese crocodiles are found, are very deep and barely disturbed, and thus provides the ideal habitat for crocodiles and fish to remain all year round despite the drying conditions in other areas. Fish breed in area such as Kout Xelat, Kout Kean and Kout Markpeo, and also some areas outside the site, including Kout Louang, Kout Koke and Nong Luang (Cox and Phothitay, 2008).

**Criterion 8:**

The Xe Champhone Wetlands is an important area for fish spawning. Fish live in the deep lakes/pools/ponds of the wetlands during the dry season, and then travel to upstream tributaries to spawn during the wet season. Fish also migrate to ponds and paddy fields for breeding during the wet season. As mentioned earlier, Xe Champhone River, as well as two other rivers connected to this site (Xe Xang and Xe Noy on the south-west), are the main water bodies which provide habitat for fish during this critical stage of their life.

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**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation): Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:**

At the broadest Asia regional scale, Xe Champhone is included in the Central Indochina - tropical lowland plain

**b) biogeographic regionalisation scheme** (include reference citation):

MacKinnon and MacKinnon (1986)

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**16. Physical features of the site:**

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Xe Champhone Wetlands is located in the tropical region and partly a monsoonal zone. There are two distinct seasons (dry and wet seasons) with the dry season running from November to early May and the wet season from May to October. Temperatures can range from an approximate low of 13°C in January to about 39°C in April. Average annual rainfall at the site is around 1,800 mm.

Most the wetlands are open, although some are closed with thick bamboo forest, made up of some perennial rivers and lakes/ponds, and many seasonal lakes/ponds. Closed wetlands are found in some areas where they are considered sacred sites, such as Bung Sangha, Nong Maehang, including other three more located outside the proposed boundaries of Xe Champhone Wetlands Ramsar Site as Nong Luang, Kout Louang and Kout Koke (Cox and Phothitay, 2008). These sacred sites contain deep water levels and habitat of Siamese crocodiles.

During the wet season water levels go up and the whole territory is considered wetlands, but many wetlands/lakes and ponds remain scattered during the dry season. The wetland landscape is different between dry and wet season when the water dries out. Some shallow wetlands or ponds in paddy fields have poor water quality due to over-use by cattle, and the wetlands which

are surrounded by forests are particularly degraded. Soil types have not been studied in the area, however, based on observation it is likely sandy-gray.

Local farmers use chemical fertilizers for their paddies and also DDT for protecting their crops from insect damage (Claridge, 1996). In addition, the forests in the area (mainly the mixed semi-evergreen forest, dipterocarp forest and mixed bamboo) are not healthy and their functions for soil and water improvement are weak. Stunning trees are found around the wetlands which are considered to be sacred, these include Sangha wetlands and a few other adjacent areas: at Nong Luang and Kout Koke.

The site supports the largest population of the critically endangered Siamese crocodiles (*Crocodylus siamensis*) in Lao PDR. It is estimated 70 crocodiles in the area, with a diversity of waterbird as well as fish species. The wetland resources at the site are important for the livelihood of some 20,000 people from more than 40 villages who live in and adjacent to the wetland, especially during dry season many people rely on fishing in main water bodies.

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### **17. Physical features of the catchment area:**

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

All the areas are in a flat plain and the main watershed, or heads of water, is on north-eastern side which is far from the wetland. In reality, the Xe Champhone and Xe Xangxoy rivers flow from the Annamite Mountain Range. Within the area of the wetlands, some existing forest remains and is considered important to maintaining the ecosystem of the wetlands.

No data is available on the soil in the catchment area. As the catchment is part of the monsoon zone, the temperature averages are lower than those in the wetlands.

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### **18. Hydrological values:**

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Savannakhet Province is mainly considered dry land in the Lao PDR as major proportion of the land covers with dipterocarp forest and no clear land mark of watershed/catchment. During wet season, the province faces flood hazard because of flat land located at low altitude and fewer forest covers especially along Xe Champhone River which suffers the most. The main water bodies available in the Xe Champhone Wetlands are important for wild animals, domestic animals as well as people living in the surrounding area. People in rural areas rely on water from drilled wells.

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### **19. Wetland Types**

In accordance with Claridge (1996), the Xe Champhone Wetlands incorporate perennial river channel, seasonal river channel, permanent freshwater marsh, seasonal freshwater marsh, freshwater swamp forest, lake, pond, permanent reservoir, seasonal reservoir, seasonal flooded woodland, rain-fed rice paddy, and irrigated rice paddy.

#### **a) presence:**

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

**Marine/coastal:**

A	B	C	D	E	F	G	H	I	J	K	Zk(a)
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**Inland:**

L	M	N	O	P	Q	R	Sp	Ss	Tp	Ts	U	Va	Vt	W	Xf	Xp	Y	Zg	Zk(b)
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**Human-made:**

1	2	3	4	5	6	7	8	9	Zk(c)
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**b) dominance:**

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

M & N – The Mekong River, braided and main channels, deep pools, rapids and waterfalls

4 & 3 – Rice fields (rain-fed & irrigated)

W & Xf – Emergent and flooded scrub (shrubs); riparian, seasonally flooded forest

Tp & Ts – Marshes with small pools (*nong*), reduced significantly in area in dry season

2 & 4 - Farm ponds.

**20. General ecological features:**

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The ecosystem of Xe Champhone River is considered important, not only to support the population of Siamese crocodiles, but also to support villagers' livelihoods, for wild animals and a variety of fish species. The rivers, tributaries, lakes and ponds are connected during the wet season, allowing fishes to migrate from perennial rivers and lakes to breed in small ponds and paddy fields during this period. Also, the wetlands provide a feeding site for many waterbirds in the wet season.

Habitat types of the wetlands are perennial river channel lakes/ponds and marshes with some decayed flooding mats located in the plain area of the Xe Champhone River. Apart from main rivers, both perennial and seasonal ponds/lakes are found in scattered in the areas, with freshwater swamp forest, and some ponds and reservoirs that retain water during the dry season. There are also number of small ponds and rice paddy fields located in this area.

Although, most part of the province is dipterocarp forest, mixed semi-evergreen forest is also found in the area.

The site is used for fishing, livestock grazing areas. The site is also used for settlements and traditional rice cultivation.

**21. Noteworthy flora:**

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

So far, there is a lack of study undertaken in the area. However, with reference to Claridge (1996) the major flora of the wetlands is dipterocarp forest, mixed semi-evergreen forest and open woodland, *Lagerstroemia* sp., and others in scattered bamboo and an understorey of shrubs and grasses. The bamboo is dominant in some areas and can impede access or disturb the wetlands. Tall weeds, Pheu (*Cyperus*), Choknoy (*Pista*) and (*Chokbai Salvinid*) are found in many lakes. The wetlands are largely encroached by agricultural development and some invasive species have been reported in the area such as *Mimosa pigra*.

**22. Noteworthy fauna:**

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The Xe Champhone Wetlands is one of a few places in Laos where the critically endangered Siamese crocodile have been found. The population of about 75 crocodiles recorded in the wetlands would be the largest population of this species in Laos. Purple herons (*Ardea purpurea*), a few species of kingfishers, Starlings, White-breasted waterhens (*Amaurornis phoenicurus*), Common Moorhen (*Gallinula chloropus*), and number of egrets are also found

**23. Social and cultural values:**

**a)** Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

A number of marshes in the area are considered sacred and are traditionally conserved, such as Bung Sangha, Nong Dongmuang, including a few other areas located outside the proposed boundaries as Kout Koke, Kout Louang, Kout Chiak and Don Deng (for turtles) are strongly sacred. The Bung Sangha is located at Ban Ponmuang with an area of around 30 hectares, most of which is swamp forest dominated by a species of *Ficus* tree, some bamboo and tall weeds. Water hyacinth e.g. *Eichhornia crassipes* and *Mimosa pigra* are also found in the wetlands. Some wetland areas are surrounded by forest, especially the sacred ones. Monks are involved in the protection of some of these wetlands. The use of these wetlands is possible but should follow the local taboo. For example, villagers are allowed to go fishing in certain areas from only February-April.

The Nong Dongmuang is another sacred wetland, which is primary forest about 60 ha. It is a freshwater swamp woodland with stunted trees and floating vegetation mats located on the edge of Ban Dongmuang. This area was established many generations ago under the protection of the



Buddhist monastery which borders the wetland. The only use that is made of the wetland is as a source of water for the village. No trees may be cut in the wetland or the forest.

Kout Luang and Kout Xelat are important habitats of the Siamese crocodile in the area, and the area is well preserved by local customary regulation. Where there are reports of crocodiles, the areas are better protected from human disturbance because villagers are afraid of crocodiles.

Other wetlands within the Xe Champhone area, which lack reports of crocodiles, have been highly disturbed and converted to agriculture. Therefore, crocodiles play important role in the protection of some wetlands in the area.

Number of fish species found in the wetlands including Padouk (*Clarias batrachus*) Pakho (*Channa striata*), Patongnoy (*Notopterus notopterus*), Pado (*Channa sp*) Pakheng (*Cirrhinus sp.*), Pakha yang (*Cirrhinus sp.*).

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box  and describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

Some deep-water pools in the area and where Siamese crocodiles reported have recently been protected by villagers and Buddhism. The Wildlife Conservation Society began work on Siamese crocodile conservation in 2009. The Crocodile population in the area is estimated 75 and about 3 main areas where were recorded of the species breeding sites, such as Kout Xelat, Mark Peo, Kout Kouang and Kout Koke (Cox and Phothitay, 2008)

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

Bung Sangha and Nong Dongmuang are sacred sites and strongly linked with the maintenance of the wetland ecosystem in the area, in which monks/Buddhism are involved.

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#### **24. Land tenure/ownership:**

a) within the Ramsar site:

Within the site boundaries there is both common land that belong to the government but local villagers have right to use. Individually owned property includes house settlement areas, paddies and gardens. Common property land includes deep-water pools, forest areas and river channel

areas outside of those with fishing agreements. The inland fisheries are generally managed as a common resource.

b) in the surrounding area:

N/A

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**25. Current land (including water) use:**

a) within the Ramsar site:

The Land and Forest Allocation Program has been developed in the area, allocating land to each household (e.g. paddy land, gardens and common properties of communities such as wetland protected areas and forests). Usually, a single crop of rain-fed rice can be cultivated based on irrigated water. Community fishing and livestock production (cattle, water buffalo) are carried out around the wetland, as the wetlands are a very important water source for livestock during the dry season.

b) in the surroundings/catchment:

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**26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:**

a) within the Ramsar site:

- Conversion of the wetlands by removing forests surrounding the areas or draining the wetlands for agriculture and gardening purposes (except for the sacred wetlands).
- Using chemical fertilizers and pesticides for agriculture is wide spread around the wetlands.
- The Siamese crocodile, a key species, has become more threatened, as hatching areas on the shores have been disturbed and collection of crocodile eggs has been reported.
- Some parts of the wetlands are flooded due to the construction of weirs, such as Phai Cheo, which also destroys a hatching area.
- Increased numbers of cattle, particularly buffalo, may generate more pressure on the capacity of wetlands.
- Insufficient human and financial resources to implement management of the wetlands, apart from the well protected sacred wetlands.

b) in the surrounding area:

The situation relating to natural resources is similar to the above; population growth, cattle increase and forest destruction in surrounding wetlands may be major factors affecting the wetlands in the future.

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**27. Conservation measures taken:**

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

N/A

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV

c) Does an officially approved management plan exist; and is it being implemented?  
No.

d) Describe any other current management practices:

Village regulations were created after the completion of land use planning, but these are not well implemented. Only local taboos and protection of certain sacred wetlands are well followed. The Siamese Crocodile Conservation Project, implemented by WCS with funding support from the compensation of the Sepon gold and copper mine, began in 2009. It is believed that the regulation for the species conservation created under this project would benefit other aquatic resources as well. Various zones for the crocodiles, as well as for other aquatic resources conservation, would be identified.

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**28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The Siamese Crocodile Conservation Project started in 2009 and field surveys were conducted in 2003 and 2006. Site-based management for Siamese crocodile conservation will be developed.

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**29. Current scientific research and facilities:**

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Only the above-mentioned surveys on Siamese crocodile have been conducted in the wetlands.

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**30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

No education or awareness-raising activities on the importance of biodiversity and wise-use have been conducted.

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**31. Current recreation and tourism:**

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Up-to-now, only Don Deng (the sacred wetlands for turtle protection in an area of 0.75 hectares) has become a regional tourist attraction, where the visitors can spot living soft-shell turtles (*Amyda cartilagina*) or freshwater turtles. However, there is no data for the number of visitors per year.

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**32. Jurisdiction:**

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

District Agriculture and Forestry Office (DAFO) of Champhone District; and Provincial Agriculture and Forestry Office (PAFO) of Savannakhet Province.

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### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Province Agriculture and Forestry Offices (PAFO) of Savannakhet province; and

Mr. Vilaysouk Khennavong, Director, PWREA

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Water Resources and Environment Administration (WREA) office of Savannakhet Province.

Mr. Sinouan Sihalath, Director, PWREA

Tel: +856 41 252273

Fax: +856 41 252273

Email: n/a

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### 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Claridge, G.F (ed). 1996. *An Inventory of Wetlands in the Lao PDR*. Vientiane, IUCN.

Cox, Jr. J. H. and Phothitay, C. 2008. Surveys of the Siamese Crocodile *Crocodylus siamensis* in Savannakhet Province, Lao PDR. OZ Minerals Ltd. & Wildlife Conservation Society.

MacKinnon, J. and MacKinnon, K. 1986. Review of the Protected Areas of the Indo-Malayan Realm. IUCN, Gland, Switzerland.

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Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**

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