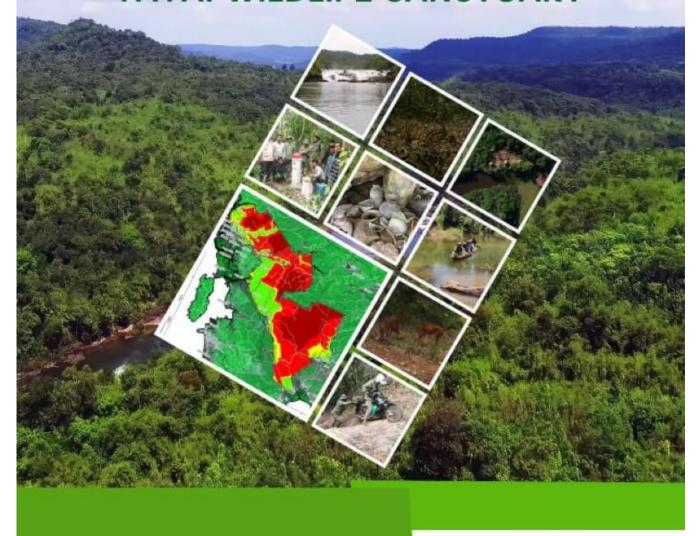
Kingdom of Cambodia Nation Religion King



# ZONING REPORT TATAI WILDLIFE SANCTUARY



2024

#### Acknowledgment

The Ministry of Environment would like to express its sincere thanks to the ministries/institutions at the national and sub-national levels, development partners, NGOs, private sector, and all relevant stakeholders for their valuable and useful inputs for the zoning and management plan for this Tatai WS under the facilitation and coordination of the chair of the task force whose compositions and roles and duties are as follows:

#### KINGDOM OF CAMBODIA NATION REGION KING

MINISTRY OF ENVIRONMENT

No. 003 S.S.Ro/MoE

## DECISION ON ESTABLISHMENT OF A WORKING GROUP FOR "ZONING AND MANAGEMENT PLANS" FOR TATAI WILDLIFE SANCTUARY IN THE GEOGRAPHIC AREAS OF KOH KONG PROVINCE

#### Under:

- The Constitution of the Kingdom of Cambodia;
- The Royal Decree No. NS/RKT/0918/925; dated 06 September 2018 on the Appointment of the Royal Government of Cambodia;
- The Royal Decree No. NS/RKT/0320/421; dated 30 March 2020 on the Appointment and Composition Adjustment of the Royal Government of Cambodia;
- The Royal Decree No. NS/RKT/0618/012; dated 28 June 2018; promulgating Organisation and Functioning of the Cabinet of the Council of Ministers;
- The Royal Decree; dated 1 November 1993 on Law on Protected Areas;
- The Royal Decree No. NS/RKT/0208/007; dated 15 February 2008; promulgating the Law on Protected Areas;
- The Royal Decree No. NS/RKT/0196/21; dated 24 January 1996; promulgating the Establishment of the Ministry of Environment;
- The Royal Decree No. NS/RKT/1296/36; dated 24 December 1996; promulgating the Law on Environment Protection and Natural Resource Management;
- The Royal Decree No. NS/RKT/0801/14; dated 30 August 2001; promulgating the Law on Land;
- The Royal Decree No. NS/RKT/0196/13; dated 24 January 1996; promulgating the Law on Organisation and Functioning of the Ministry of Agriculture, Forestry and Fisheries;
- The Royal Decree No. NS/RKT/0802/016; dated 31 August 2002; promulgating the Law on Forestry;

- The Royal Decree No. 135 OrNPro.BK; dated 05 July 2016 on Organisation and Functioning of the Ministry of Environment;
- The Sub-Decree No. 17 OrNkr/BK, dated 07 April 2000 on the Organisation and Functioning of the Ministry of Agriculture, Forestry and Fisheries;
- The Sub-Decree No. 118 OrNkr/BK, dated 07 October 2005 on Management of State Land;
- The Sub-Decree No. 080 OrNkr/BK, dated 09 May 2016 on Tatai Wildlife Sanctuary Establishment;
- The Sub-Decree No. 038 OrNkr/BK, dated 07 October 2016 on Transference of Rights to General Directorate of Administration of Nature Protection and Conservation to Decide the Proposal for Natural Resource Study in the Protected Areas;
- Prokas No. 556 BroK MoE; dated 29 December 2017 on Application of the Guideline on Zoning with the Protected Areas of the Ministry of Environment;
- Prokas No. 367 BroK MoE; dated 25 October 2018 on Application of the Technical Guideline on Management Plans within Protected Areas of the Ministry of Environment; and
- Necessity of the Ministry of Environment

#### **Decide**

#### **Article 1**

A Working Group on "Alienation, Zoning, and Management Plan Development" for Tatai Wildlife Sanctuary within the geographic provinces of Kampong Speu, Kampong Chhnang, and, Pursat with the following composition:

1.	H.E. KIM Nong	Director General of General Directorate of Natural	Chair
		Protected Areas (GDNPA)	
2	H.E. SOK Sothy	Deputy Governor of Koh Kong	Deputy chair
3	Mr. KONG	Department Director of Terrestrial Protected Areas	Chief of
	Kimsreng	Conservation of Northern Tonlesap/GDNPA	component 1.2
4.	Mr. EAR Sokha	Department Director of Inspection and Law	Member
		Enforcement	
5.	Mr. LENG Chivin	Department Director of Geographic Information	Member
		Services/GDEKI	
6.	Mrs. KEN	Director of Biodiversity Department of GSSD	Member
	Boprieng		
7.	Mr. ROS Chor	Department Director of Local Livelihoods/GDLC	Member

8.	Mr. MOM Phalla	Director of PDoE of Koh Kong	Member
9.	Mr. EANG	Director of Provincial Departement of Rural	Member
	Daravuth	Development of Koh Kong	
10.	Mr. ROS Daravuth	Provincial Department of Land Management,	Member
		Urbanization, Construction and Cadastre of Kampong	
		Speu	
11.	Mr. SENG Ratanak	Deputy Department Director of Terrestrial Protected	Member
		Areas Conservation of Southern Tonlesap/GDPA	
12	Mrs HOUR	Office chief of Department of Terrestrial Protected	Member
	Chakriya	Areas Conservation of Southern Tonlesap/GDPA	
13.	Mr. Hun Marady	Deputy Director of PDoE of Koh Kong	Member
14.	Miss MOM Sary	Deputy chief of Deputy Chief of Department of Local	Member
		Livelihood and Social Safeguard Focal Point	
15.	Mr. SOPHA	Official of Department of Natural Heritage and Focal	Member
	Sokhunarung	Point in charge of Indegenous People	
16.	Mr. ON Sothearith	Governor of Thmor Bang District, Koh Kong	Member
17.	Mr. PRAK Vichet	Governor of Mondulseima District, Koh Kong	Member
18.	Mr. HAK Leng	Governor of Botomsakor District, Koh Kong	Member
19.	Mr. CHEANG	Deputy Governor of Khemarak Phumin City, Koh	Member
	Sovanda	Kong	
20.	Mr. SOK Phearom	Deputy Governor of Koh Kong District, Koh Kong	Member
21.	Mr. HORL Run	Wildlife Sanctuary Office Chief, PDoE of Koh Kong	Member
22.	Mr. SY Sopheap	Chief of Tatai WS, PDoE of Koh Kong	Member
23.	Mr. EAV Kosal	Chief of Bak Klong Commune, Koh Kong	Member
24.	Mrs. KIM Sokhem	Chief of Toul Korki Commune, Koh Kong	Member
25.	Mr. TIN Sambath	Chief of Tatai Krom Commune, Koh Kong	Member
26.	Mr. NEAM Young	Chief of Smarch Mean Chey Commune, Koh Kong	Member
27.	Mrs. KORNG Lay	Chief of Trapeang Roung Commune, Koh Kong	Member
28.	Mr. Phnorng	Chief of Russey Chrum Commune, Koh Kong	Member
	Sophanna		
29.	Mr. KHEANG	Chief of Andoung Teuk Commune, Koh Kong	Member
	Ying		
30.	Mr. MEUNG	Chief of Chi Phat Commune, Koh Kong	Member
	Sophea		
31.	Mr. SEANG Thorn	Chief of Thmor Daung Paov Commune, Koh Kong	Member

32.	Representative	Wildlife Alliance	Member

#### **Article 2**

The duties and responsibilities of the Working Group are as follows:

- -Develop action plans and implementation schedules;
- -Collect existing data and conduct field serveys to collect data on plant species, wildlife species, ecosystems, socio-economic conditions, cultural resources, religions of indigenous people, land uses, and relevant documents;
- -Faciltate and conduct meetings, training sessions and consultation workshops at the national and sub-national levels;
- Widely raise and disseminate awareness and knowledge at the sub-national level to ensure that the relevant communities are sufficiently informed of preparation, zoning and management of the protected areas;
- -Provide technical and political aspects on the development, zoning and management plans based on the actual conditions and legal documents;
- Work with the national and sub-national technical institutions and relevant stakeholders to develop, zone and prepare plans as smoothly and effectively as possible;
- Develop reports on alienation, zoning and management plans based on criteria of guideline on zoning and management plans;
- Develop draft Sub-Decree on Zoning and Management Plans of Phnom Aural Wildlife
   Sanctuary to be submitted to the Ministry of Environment for review and approval from the Royal Government of Cambodia;
- -Develop Tatai Wildlife Sanctuary Management Plans and submit them to the Minister for Environment for review and approval;
- -The members of the working group shall attend any meetings as invited by the chair of the working group;
- The meetings can be attended by the stakeholders if required; and
- Develop reports to be submitted to leaders on progress and achievements of work of the working group.

#### Article 3

Chief of the Minister Cabinet, Secretary General of Geneal secretariate of the National Council for Sustainable Development, all General Directorates of the Ministry of Environment, Inspector of Inspectorate, Administration Halls of Koh Kong province, relevant stakeholders and respective individuals as stated in Article 1 shall carry out this Sub-Decree effectively based on their duties from the date of its signature onward.

#### Phnom Penh, 03 September 2020

#### Minister

#### **SAY Samal**

#### CC:

- Office of the Council of Minister;
- Ministry of Interior;
- Ministry of Economy and Finance;
- Ministry of Land Management, Urbanization and Construction;
- Ministry of Public Functions;
- Provincial Administration Halls of Koh Kong province 'for information';
- As stated in Article 3 'for implementation' and
- Documentation-chronicles

#### **Abbreviation**

CBET Community Based Ecotourism

CPA Community Protected Areas

GDLC General Directorate of Local Community

GDNPA General Directorate of Nature Protected Areas

ha Hectare

IP Indigenous People

MEF Ministry of Economy and Finance

MoE Ministry of Environment

MoU Memorandum of Understanding

NGO Non-Governmental Organization

NPASMP National Protected Area Strategic Management Plan

NTFPs Non-Timber Forest Products

PA Protected Area

PDoE Provincial Department of Environment

RGC Royal Government of Cambodia

TTWS Tatai WS

USD US Dollars

### Contents

Acknowledgment	ii
Abbreviation	vii
1. Introduction	1
2. Description of TTWS	1
2.1 Geographical Area	1
2.2 Population distribution and socio-economics	3
2.2.1 Population distribution	3
2.2.2 Socio-economic status	3
2.3 Land Use	5
2.4 Values of Natural Resources	6
2.4.1 Wildlife species	6
2.4.2 Plant species	8
2.5 Values of Cultural Resources	9
2.6 Ecosystem services and ecotourism	10
2.6.1 Ecotourism and Recreation	10
3. Management problems and challenges	10
3.1 Land Encroachment	
3.2 Hunting and trapping	10
3.3 Forest Fire	10
4. Management Zone	11
4.1 Objective and Criteria for Management Zone Development	
4.2. Methodology	11
4.3. Management Zone Development	12
4.3.1. Secondary Data	
4.3.2.Data Analysis	
4.3.3.Consultations with local authorities	
4.3.4.Group Discussion	13
4.3.5. Semi-structured interviews	
4.3.6. Participatory mapping	
4.3.6.Seasonal calendar	
4.3.7.Consultation workshop	
4.3.5.Decription of Management Zones	14

4.4.1 Core Zone	14
4.4.2. Conservation Zone	17
4.4.3 Sustainable Use Zone	17
4.4.4 Community Zone	19
5. Reference	20
6. Appendix	21
Appendix 1. Final Draft Zoning Map of Tatai WS	21
Appendix 2. Summary of Allowable Activities and Facilities for Each Zoning	22
Appendix 3. Brief provincial and national consultation meeting reports	23
Appendix 3.1. 1st provincial consultation meeting reports	23
Appendix 3.2. 2 <sup>nd</sup> provincial consultation meeting reports	26
Appendix 4.3. Technical consultation meeting zoning report	29
Figure 1. Map of Tatai Wildlife Sanctuary, Koh Kong Province	2
Figure 2. Map of Biodiversity distribution in TTWS	16
Figure 3. Map of Forest and NTFP Uses in Tatai WS	18
Table 1. Population Statistics around and within TTWS	3
Table 2. Indigenous people living in and near TTWS	3
Table 3. Key Incomes of the local communities in TTWS	4
Table 4. Main occupations of people living in communes in Tatai WS	4
Table 5. Secondary occupations of people living in communes in Tatai WS	5
Table 6. Land Use Data near and in TTWS	5
Table 7. Wildlife species recorded at Tatai Wildlife Sanctuary	6
Table 8. Forest cover change from 2010 to 2015 of TTWS	9

#### 1. Introduction

Tatai Wildlife Sanctuary was created by the Sub-Decree dated 09 May 2016 over an area of 144,275 hectares in Koh Kong province, and then, the new Sub-Decree was established on 17 July 2023 to expand the total area of 144,539 hectares. This Wildlife Sanctuary is high attractive tourist destinations because of its beautiful landscape diversity of biodiversity, and plenty of waterfalls. The forest habitats in this sanctuary include evergreen forests, semi-evergreen forests, and dry deciduous forests mixe with bamboo, and grassland, which are very good habitats for wildlife species of universal conservation value and Cambodia. Based on previous and present assessments of habitat situations and forest resources, Tatai Wildlife Sanctuary is still an important area with more than 50 species of Endangered, Threatened, and Near-Threatened listed on the Red List of the International Union for Conservation of Nature (IUCN); including Asian Elephant, Asiatic black bears, Sun Bears, Pileated Gibbon, Slow Loris, Sunda Pangolin, Great Hornbill, and other turtles, birds, and reptile species.

The management plan was developed by the Tatai Wildlife Sanctuary Working Group on "Zoning and Management Plan Development," which was formally established on September 3, 2020, with the Director General of the General Directorate of Natural Protected Areas (GDNPA) being the chair. There are 53 members of the inter-ministerial working group; including representatives of relevant ministries and institutions of the Royal Government of Cambodia, international organizations, local authorities, and indigenous peoples. The Working Group for Zoning and Management Plan for Tatai WS is formed to mainly do the zoning and develop the management plan for natural resource management and biodiversity conservation while expanding the livelihoods of the local and indigenous communities within this PA.

After the TTWS working group was formed and approved, two provincial consultative meetings and an inter-ministerial meeting were held to jointly review and recommend (1) the Second draft of the zoning map, (2) Draft contents of the report on the zoning and management plan, and (3) Vision, Mission, Objectives, Programs, Sub-Programs and Priority Activities of Tatai WS Management Plan. In addition, the working group organized a consultation meeting on the collection of biodiversity and socio-economic data at the village, commune, and district levels, and deployed 35 camera traps for two and a half months to confirm the presence and absence of rare, threatened, and endangered species.

After the results of biodiversity and social-economic data from field data collection were analyzed and approved, the first provincial consultation meeting was held to review and comment on the initial zoning map and outline management plan development for Phnom Aural Wildlife Sanctuary on July 26, 2021. The second provincial consultation/inter-ministerial consultation meeting was held on July 26, 2021, to review and comment on the second draft zoning map. The total size of the sanctuary was expanded on 17 July 2023 then the final national consultation meeting was carried out and chaired by H.E **Chea Samang**, Secretary of State of the Ministry of Environment on 9 April 2024.

#### 2. Description of TTWS

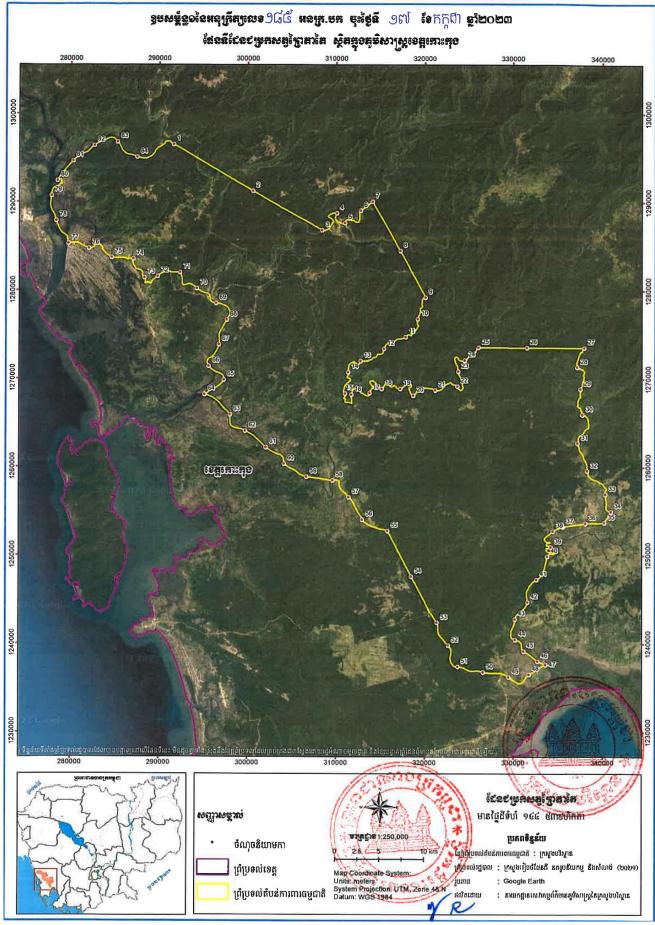
#### 2.1 Geographical area

Tatai Wildlife Sanctuary (TTWS) was designated by the Sub-Decree dated July 17, 2023. It covers an area of 144,539 hectares in Koh Kong province, bordered on the north by Cardamon National Park, on the east by the Chi Phat River, on the south by Botom Sakor National Park, and the west by the Koh Por River (Figure 1).

The sanctuary is considered of high biodiversity and cultural conservation value. It is covered by a wide range of evergreen forests, semi-evergreen forests, dry deciduous forests, lowlands, grasslands, uplands, and waterways, as well as slopes, valleys, streams, and waterfalls, and many wildlife species are present.

Figure 1. Map of Tatai Wildlife Sanctuary, Koh Kong Province

(Sub-decree Map, dated, 17 July 2023, 144.539 hectars)



#### 2.2 Population distribution and socio-economics

#### 2.2.1 Population distribution

According to the 2021 commune data, there are 13 villages within and nearby the Tatai Wildlife Sanctuary, of which 2 villages are located in the commune of Smach Mean Chey, Khemerak Phumin City, 1 village is located in Bak Klong commune, Mondulseima district, 4 villages are located in Trapeang Roung commune, and 2 villages are located in Tatai Krom, Koh Kong district, 2 villages in Andoung Teuk commune, Botomsakor district, 1 village in Russey Chhrum commune, and another on in Chiphat commune, Thmor Bang commune, Koh Kong province. There are currently 4,368 families living in and near the sanctuary or 18,495 people (Table 1).

Table 1. Population Statistics around and within TTWS

			Tatai Wild	llife Santuary	Whole Commune		
Province	District	Commune	# Total Families	<b>#Total Population</b>	# Total Families	#Total Population	#Females
	Botum Sakor	Andoung Tuek	742	1,852	1,427	6,466	3,295
W 1 W	Vaal Vana	Trapeang Rung	302	529	302	1,093	529
	Kaoh Kong	Ta Tai Kraom	601	1,242	601	2,501	1,242
Koh Kong	Khemara Phoumin	Smach Mean Chey	634	1,291	2,914	12,998	6,571
	Mondol Seima	Pak Khlang	118	218	2,830	12,674	6,273
	Thurs Dans	Ruessei Chrum	220	564	425	1,873	936
	Thma Bang	Chi Phat	203	453	626	2,627	1,337
	Total		2,820	6,149	9,125	40,232	20,183

Source: Commune/Sangkat Data, 2021

Based on the 2020 data from the Ministry of Rural Development, no indigenous people were living in this protected area, but the Chorng IP group is living near the sanctuary with 61 families or 238 population (120 females), Koh Por, and Prek Svay village, Thmor Daun Pao commune, Thmor Bang district, Koh Kong province (Table 2).

Table 2. Indigenous people living in and near TTWS

Province	District	Commune	Village	IP	Number of HHs	<b>Total Population</b>	#Females
Koh Kong Thma Bang		Thma Doun Pouv	Koh	Chong	25	111	57
			Prek Svay	Chong	36	127	63
		Total	61	238	120		

Source: 2020 Indigenous Peoples data from the Ministry of Rural Development

#### 2.2.2 Socio-economic status

Some people have been living in Tatai WS for a long period and they strongly depend on natural resources in this protected area. For livelihoods, most of them are engaged in traditional agriculture, especially rice cultivation, family-scale businesses, animal husbandry and harvesting of forest for construction materials, and non-timber forest products (Table 3). The 10 main types of non-timber forest products that have been harvested and used for livelihoods and trade in wildlife sanctuaries include fishing, bamboo sprouts, rattan, Rong resin, mushrooms, Ku fruit, other fruit tree, and medicinal plants.

Table 3. Key Incomes of the local communities in TTWS

N.T.	NUMBER	Zoning				
No.	NTFP	Sustainable Use	Conservation			
1	Fish	V				
2	Bamboo	V	V			
3	Rattan	V	V			
4	Rong Resin	V	V			
5	Mushroom	V	V			
6	Ku Fruit	V	V			
7	Semorn	V	V			
8	Semorn	V	V			
9	Fruit (Scaphium affine)	V	V			
10	Meditional Plan	V	V			

Source: Survey data 2023

Currently, the population trend to move permanently or not depends on their rights of land management, occupation, long-term, or short-term agricultural practice as well as other secondary jobs. Other key local livelihood enhancements are including ecotourism services 42%, agriculture approximately 13%, and fishing about 6% (Table 4). Raising animals and forest products and Non-Timber forest products are their secondary job, which accounts for about 3%.

Table 4. Main occupations of people living in communes in Tatai WS

Province	District	Commune	Main Occupation				
Frovince	District	Commune	Farming	Fishing	Livestock	NTFP	Service
	Botum Sakor	Andoung Tuek	23%	7%	0%	2%	16%
	Kaoh Kong	Trapeang Rung	15%	8%	6%	4%	32%
	Kaon Kong	Ta Tai Kraom	39%	5%	1%	11%	16%
Koh Kong	Khemara Phoumin	Smach Mean Chey	6%	2%	2%	0%	60%
	Mondol Seima	Pak Khlang	6%	9%	1%	0%	46%
	Thurs Done	Ruessei Chrum	75%	0%	6%	2%	8%
	Thma Bang	Chi Phat	41%	4%	1%	1%	18%
	Total			6%	2%	1%	40%

Source: Commune/Sangkat Data, 2021

Table 5 below shows the secondary occupation of the local community, strongly dependent on forest products, and non-timber forest products in Tatai WS and animal raising.

Table 5. Secondary occupations of people living in communes in Tatai WS

Province	District	Commune	Secondary Occupation				
Province	District	Commune	Farming	Fishing	Livestock	NTFP	Service
	Botum Sakor	Andoung Tuek	11%	4%	8%	2%	4%
	Kaoh Kong	Trapeang Rung	6%	8%	2%	4%	17%
	Kaon Kong	Ta Tai Kraom	0%	0%	0%	0%	0%
Koh Kong	Khemara Phoumin	Smach Mean Chey	4%	1%	8%	0%	9%
	Mondol Seima	Pak Khlang	3%	3%	1%	0%	4%
	Thma Dana	Ruessei Chrum	39%	0%	7%	2%	4%
	Thma Bang	Chi Phat	32%	8%	9%	4%	20%
	Total		8%	3%	5%	1%	7%

Source: 2021 Commune/Sangkat Data

#### 2.3 Land Use

For Land Use in Tatai Wildlife Sanctuary, 13 villages, and 5 districts of Koh Kong province are located within and nearby this PA the Tatai Wildlife Sanctuary has a total of 4,368 families (18,495 people), and they strongly depend on land and natural resources uses in this sanctuary.

According to the 2021 Commune/Sangkat data, the land use in the 7 communes of 5 districts of Koh Kong provinces covers a total area of 357,244 hectares, including 11,888 residential land, 2,438 hectares of rice farmland, and 9,004 hectares of upper farmland (Table 6).

Table 6. Land Use Data near and in TTWS

Province	District	Commune	2007-TOT_Area_Com	2008-Area_Reside	2009-Area_Rice	2010-Area_Chamkar	2013-Area_Other
	Botum Sakor	Andoung Tuek	40,794	345	833	1,050	38,566
	Vh V	Ta Tai Kraom	49,478	250	600	0	48,628
	Kaoh Kong	Trapeang Rung	90,603	198	199	857	89,350
	Khemara Phoumin	Smach Mean Chey	5,748	3,989	13	13	1,733
Koh Kong	Mondol Seima	Pak Khlang	46,620	4,662	20	4,662	37,276
		Tol KorKi	8,000	1,448	250	260	6,043
		Ruessei Chrum	63,000	250	219	1,200	61,331
	Thma Bang	Chi Phat	53,000	746	304	962	50,987
	Total		357,244	11,888	2,438	9,004	333,914

Source: Commune/Sangkat Data, 2021

After analyzing the findings of the consultation meetings on the collection of biodiversity and socio-economic data at the village, commune, and district levels and the data from the camera traps, the Working Group developed the final zoning map and zoning and management plan reports with the geographical areas as follows:

- The core zone covers a total area of 42,872 hectares, equivalent to 30% of the total land area.
- Conservation zone covers a total area of 54,045 hectares, equivalent to 37% of the total land area around the core zone.
- Sustainable use zone covers a total area of 18,558 hectares, equivalent to 13% are the following land uses:
  - o 3 small-scale ecotourism concessions for 50 years
  - o 230 KW power line with a total of 155,1 hectares
  - o 150MW electric power with a total of 1,721.13 hectares by the China National Heavy Machinery Corporation.
  - 156 km of 48 national road construction across Tatai WS, Botomsakor NP, and Dang Peng Multiple Use Areas.
- Community zone covers a total area of 29,064 hectares, equivalent to 20%, which includes 14,393.12 hectares as community REDD-plus.

- Infrastructure: 3 types of main infrastructure development in this wildlife sanctuary: type 1. Width >8m, type 2. Width from 5m to 8m, type 3. Width <5m. All roads in conservation or sustainable use zones remain in the same zone.
- Forest Products and Non-Timber Forest Products:
  - o Traditional collecting for their livelihood of bamboo, resin, medicinal plants, and other NTFPs can be accessed in sustainable, and conservation zones.
  - o Collecting NTFPs in conservation zones should be closely monitored by rangers, and if possible these collectors should be employed as community patrolling teams.

#### 2.4 Values of Natural Resources

#### 2.4.1 Wildlife species

Tatai Wildlife Sanctuary is rich in wildlife species and home to more than 950 species. These species include 158 species of birds 30 species of mammals, and 308 other wildlife species (Daltry & Momberg, 2000; Daltry et, al., 2002) have been recorded in this sanctuary. Using Camera Traps by MoE and Wildlife Alliance about 37 species of wildlife have been recorded from 2019 to 2021.

Table 7. Wildlife species recorded at Tatai Wildlife Sanctuary

and wildlife species listed as endangered and listed as critically endangered, threatened, or vulnerable species in the International Union for Conservation of Nature (IUCN) Red List

N	English Name	<b>IUCN Status</b>	Cambodia Status
1. Ma	ammal		
1	Asian Elephant	EN	Endangered
2	Asiatic Golden Cat	NT	Rare
3	Marble Cat	NT	Rare
4	Clouded leopard	VU	Endangered
5	Sun Bear	VU	Rare
6	Asiatic Black Bear	VU	Endangered
7	Indochinese Serow	NT	Rare
8	Hog Badger	VU	Rare
9	Dhole	EN	Rare
10	Black Giant Squirrel	NT	Rare
11	Silvered Langure	EN	Common
12	Pileated Gibbon	EN	Rare
13	Sunda Pangolin	EN	Rare
2. Re	ptile and Bird		
14	Siames Crocodile	CR	Rare
15	Green Peafowl	EN	Rare
16	Black-necked Stork	VU	Rare
17	Red-breasted parakeet	NT	Rare
CR: C	Critical Endangered; NT: Near	Threatened; EN: 1	Endangered; VU:
Viiner	able: LC: Least Concern: Rar	·e·	

Vunerable; LC: Least Concern; Rare:

There are three species of monkeys permanently found in the wildlife sanctuary: Yellow-checked Crested Gibbon, Northern Pig-tailed Macaque, and Crab-eating Macaque. In addition, many key wildlife species have been observed and trapped by the camera such as Asian Elephant, Gaur, Sambar, Mainland Serow, Malayan Sun Bear, Asiatic Black Bear, Golden Cat, Clouded Leopard, Marbled Cat, Dhole, Binturong, and Hog Badger. In addition, there are many bird species within the protected area like Green Peafowl, Siamese Fireback, and so on.



Pig-tailed Macaque (left) Asian Elephant (right)



Asiatic Sun Bear (left) and Gaur (right)



Samba Deer (left) and Mainland Serow (right)



Golden Cat (left) and Clouded Leopard (right)



Dhole (left) and Leopard Cat (right)



Marble Cat (left) and Red Manjec (right)

All the above photos are from the camera traps of the Ministry of Environment and Wildlife Alliance in 2019, and 2021.

#### 2.4.2 Plant species

The elevation and climate of the Tatai Wildlife Sanctuary landscape are considered to be home to a wide range of plant species and still have a high-quality habitat. The TTWS is mainly covered by evergreen and semi-evergreen forests (84.28%), grassland (2.71%), shrubs (2.67%), and mangroves (2.17%) as indicated in Table 8 below.

Tatai Wildlife Sanctuary did not conduct detailed surveys on plants, but some globally important, economically valuable, and ecologically representative species were recorded. 296 species of plants have been recorded in Tatai WS since 2002 (Daltry et al. 2002).

Table 8. Forest cover change from 2010 to 2015 of TTWS

No.	Forest Type	2010	2015	Change	2015 (%)
1	Crop	2,306	3,909	(1,603)	2.70
2	Rice Field	359	345	14	0.24
3	Agriculture Land	2,261	1,142	1,119	0.79
4	Grassland	3,680	3,915	(235)	2.71
5	Shrub	5,239	3,857	1,382	2.67
6	Urban	585	844	(259)	0.58
7	Bare Soil	3	62	(59)	0.04
8	Industrial Plantation	8	1,068	(1,060)	0.74
9	Evergreen Forest	123,198	121,815	1,383	84.28
10	Bamboo Forest	156	153	3	0.11
11	Mangrove Forest	3,834	3,139	695	2.17
12	Swamp Forest	71	480	(409)	0.33
13	Aquaculture	53	50	3	0.03
14	Water Body	2,786	3,760	(974)	2.60
Total		144,539	144,539	(0)	

#### 2.5 Values of Cultural Resources

According to 2020 Indigenous peoples data from the Ministry of Rural Development, at Tatai Wildlife Sanctuary, 61 Chorng families were living near this sanctuary, equal to 238 people, of whom 120 women in Koh, and Prek Svay village, Thmor Daunpao commune, Koh Kong province. The Chhorng indigenous peoples still believe in the mountainous spirits and souls generated by their ancestors. Therefore, it is essential to identify natural heritage sites and strengthen conservation values in each community to promote the values of cultural resources and eco-tourism using the cooperation between the Ministry of Environment and relevant stakeholders, especially indigenous people to identify these sites appropriately.

#### 2.6 Ecosystem services and ecotourism

#### 2.6.1 Ecotourism and Recreation

There are three small-scale ecotourism projects with a total area of 30 hectares, and with a wide range of natural landscapes and natural tourism sites that have the potential to develop national eco-tourisms due to the waterfalls, streams, mountains, slopes, valleys, mountain caves, forests, and many natural landscapes. Besides the small ecotourism investment, based on the results from the consultation meeting found that in Tatai WS still has a high potential for other ecotourism investments, especially in the Tatai waterfall, and along the Tatai River.

#### 3. Management problems and challenges

Tatai Wildlife Sanctuary faces several threats, such as land encroachment for their property rights, wildlife trapping, hunting, and forest fire. The perpetrators are highly skilled wildlife trappers and can pose a danger to the rangers and members of local communities. In addition, the management of this wildlife sanctuary has faced some challenges, such as the limited number of rangers, malaria-affected rangers, and limited knowledge of their roles, and responsibilities of the CPA committee.

#### 3.1 Land Encroachment

Forest encroachment, and plantation and rice farming expansions occur not only in this TTWS, but also in many other protected areas in the Kingdom of Cambodia, and these activities are largely carried out by outsiders from other provinces, especially along the Thai border. The forest clearing in this wildlife sanctuary is the most threatening activity compared to others and is carried out in the forms of forest burning, logging, and plantations, its purpose is to expand agricultural land and to own the land, and there are many other purposes. Failures to demarcate and install border poles and clear zoning lead to difficulties in law enforcement.

#### 3.2 Hunting and trapping

Hunting and poaching remain a threat to biodiversity resources in the Tatai Wildlife Sanctuary, especially mammals, and trapping is still a challenge for biodiversity conservation in this PA. Key actions to prevent illegal activities include increased patrolling with participation from the local community for releasing traps and continuing public awareness on the value of natural resources especially the Environment and Natural Resource Code.

#### 3.3 Forest Fire

Forest fires have occurred in dry deciduous forests in Tatai WS, and some factors are contributing to forest fires such as set fire intension, through cigarettes in the forest, and the fire is not extinguished when cooking food, and the main causes of these are from immigrant people. Forest fires cause a lot of damage to biodiversity, their habitat, and in danger to their lives, and property of the local community.

#### 4. Management Zone

#### 4.1 Objective and Criteria for Management Zone Development

The main objective of the zoning is to ensure the effectiveness and efficiency of conservation and protection of the wildlife sanctuary, where high environment, culture, and social-economic conservation values particularly the exclusion rights for local communities for natural resource uses accordingly to the current laws and legislations. The zoning development in the Phnom Aural Wildlife Sanctuary is based on Article 11 of the Protected Area Law, 2008, Article 364 of the Environmental and Natural Resource Code, 2023, and the urgent need for biodiversity conservation in TTWS. Based on PA law, 2008, and the Environmental and Natural Resource Code, 2023, the criteria for the development of Phnom Penh management zones are the following:

- Objective of the management zones;
- Values and potential of natural resources and biodiversity in each zone;
- Social-economic and cultural impacts in each zone;
- Potential of natural resource support for each zone;
- The geographical in each zone; and
- Social-economic and local community livelihood factor aspects.

#### 4.2. Methodology

The main priority activities for the management zoning development of the sanctuary focus on the conservation of tree seed, wildlife, and their habitats. Participation approaches have been used in the processes of zoning development by collecting and evaluating the primary data on the potential sites for social-economic, cultural, and biodiversity resources through focal group discussion, camera-trap, and interview survey to ensure accurate data and encourage community participation in natural resource uses and biodiversity distribution mapping in Tatai WS. The key activities for zoning development in TTWS are the following:

- Establish a working group for biodiversity and social-economic data collection;
- Identify and select target villages for biodiversity and social-economic data collection;
- Prepare questionnaires for biodiversity and social-economic data collection and participation in resource mapping with relevant stakeholders;
- Decide the keymaps for use during data collection such as satellite images, and topographical maps;
- Develop roles and responsibilities for group members for data collection;
- During the research and interview survey for biodiversity and social-economic data collection in 13 target villages (habitat, biodiversity species, ecosystem services, and social-economic status);
- Conduct village consultation meetings, interviews, and participation resource mapping with the participants from the village chief, the deputy village chief, former hunters or NTFP collectors, women, the head of CPA, and local communities who are living nearby;
- Conduct commune and district consultation meetings to review and comment on the zoning results
- Conduct zoning results in dissemination meetings to other stakeholders
- Conduct technical consultation meetings to review and comment on the results of management zones;
- Carry out provincial consultation meetings to review and comment on the first draft management zone maps, wildlife distribution maps forest and non-timber forest product maps, and

- Conduct a national consultation meeting to review the second draft management zone maps, wildlife distribution maps forest and non-timber forest product maps, and
- Develop the final draft management zone, report, and sub-decree.

#### **4.3.** Management Zone Development

The field survey and evaluation were conducted in the local community to identify important biodiversity conservation areas and learn more about the level of natural resource uses and their needs in the wildlife sanctuary. The processes of the field survey also evaluated the status of biodiversity, natural resource uses, ecosystem services, social economics, and cultural and traditional practices through participatory resource mapping. The results of biodiversity and social-economic data were used to develop core and conservation management zones for biodiversity conservation while sustainable and community zones to enhance local people's livelihood and participation in conservation. The key activities for development management zones are the following:

#### 4.3.1. Secondary Data

The relevant literature, media, books, journals, documents, and other related publications were used for the development of the zoning and management plan of PA.

#### 4.3.2. Data Analysis

Each management zone will need to first be separated into an individual feature layer by entering a presence/absence (1/0) layer into Zonation. In this case, a separate condition layer is usually developed and linked to probably several presence-absence layers to model the fact that have been influenced by human impacts. This approach is that condition layers are easily modified to account for expected changes in land use: modifying a single layer is much easier than developing an entire new data set for each scenario.

The individual feature layers are based on PA Law, 2008 and Environment and Natural Resource Code, 2023 of each management zone namely: Core zone: management of high conservation values containing (rare, critically endangered, endangered and near threaten species) and fragile ecosystems (mountains, ponds, saltlicks); Conservation zone: management area of high conservation values containing natural resources (rare, critically endangered, endangered and near threaten species), ecosystems (mountains, ponds, saltlicks), watershed areas (mountains) and natural landscape (grasslands, mountains) located adjacent to the core zone; Sustainable use zone: management areas of high economic values for national development and management, and conservation of the protected area (ELCs, SELCs, CPAs, <10ha Ecotourism, restorations, recreation, botanical garden, irrigations, water storage, electricity station); and Community zone: management areas for sustainable development of the local communities and indigenous ethnic minorities and may contain existing (residential lands, paddy field, and other agricultural land).

GIS layers need to be collect or created to use for developing model inputs, such as social and biodiversity data, forest cover 2020, land cover map 2015, satellite imagery high resolution, roads, hydrology, topography, land tittle (001), economic land concessions, social economic land concession, land tenure and administrative data. If needed, then camera traps and drones will be used for final verification.

Camera-traps were set at a density of one station per 4 km<sup>2</sup> depending on the number of cameras available of which is one station is at every 2 squares. However, the sample or survey site were adjusted depend on the number of camera available as well as the interested site resulted from previous study area, hotspot area including saltlick sites, wallows and known hotspots to capture most animals in short period of time if present. It is suggested that the camera is at least kept from 2-3 cameras for replacement.

#### **4.3.3.** Consultations with local authorities

Provincial, district, and commune consultation meetings and discussions were held with experts and all levels of local authorities such as working group members, the provincial governor, the director of the provincial department of environment, the district governor, the director of TTWS, the commune leader, the village chief, rangers, and the local community in order to provide them with the concept and goal of participatory zoning in the sanctuary. In order to manage these PAs in the sustainable way, TTWS was divided into four zones and developed each zone management according to the Protected Areas Law, 2008, and Environmental and Natural Resource Code, 2023.

#### **4.3.4.** Group Discussion

Group discussions were conducted in each target village. These discussions principally focused on key informants: commune chief, village chief, village team leaders, Indigenous Group leaders or representative, and Community Protected Areas (CPA) committee and members, women, teachers, elder villagers, and farmers, and other stakeholders. This focus group was believed to be more aware of the village situation than others. The topic of the discussion aimed at recording existence of key wildlife species and forest/habitat types known by participants and identifying significant areas for globally endangered species of wild animals and different habitat types within the sanctuary. Initially, survey teams explained to participants about participatory zoning and management plan development in PAs and how it is critically important for sustainable conservation of biodiversity such as protecting key wildlife species and habitats, minimizing conflict between PA authorities and local communities, and improving local livelihoods.

All participants were asked to provide the names of any wildlife species and special habitats that they know exist in the sanctuary. Every species is written down on flip chart paper. The teams did not classically divide species into mammals, birds, amphibians and reptiles during the dialogue. In doing so, it would allow audiences to come up with other species more promptly. A guide to the mammals of Cambodia, a field guide to the birds of Cambodia, and a field guide to the reptiles of Cambodia. A 1:50 000 scale topographic and satellite maps were used to allow participants and other stakeholders to point out the specific location of all the species they listed, principally the critically endangered, endangered, and near threatened species.

**Historical trends, the local status of each species**, and reasons for changes were also discussed by all attendants of the group discussion. The survey teams also identified timelines including particular periods of memorable change of wildlife habitats through discussion with all participants. Participants were also asked to rank the relative abundance of each species on a scale from 5 to 1 (very abundant, abundant, common, rare, and very rare). The reasons of population decline of each species were also written down in detail on the flip charts.

Free listing of forest habitat and historical trends: This activity was conducted in the same was as for wildlife species and trends, i.e. the team allowed participants to list all existing habitat types of the sanctuary. The periods of historical change of habitat were identified from the knowledge of all participants. However, these particular periods were always alike between species and habitats in each studied village. The causes of habitat change over decades were further discussed to clarify from participants' experience in TTWS. A member of the survey team always recorded all of the reasons for each habitat trend provided by villagers in the group discussion.

**Identifying zones and their management:** The topographic and satellite maps with the areas of existence are, critically endangered, endangered, and near threatened species and key habitats identified by communities marked on the maps. The survey team asked them to give comments on classifying which areas should be kept for core and conservation zones, which areas should be reserved for sustainable use, and which areas should constitute the

community zone. The discussion also focused on overlapping areas to find the consensus to divide the area into both biological conservation zones and sustainable use zones for the future local communities use these zones.

#### 4.3.5. Semi-structured interviews

A total of 13 Village consultation meetings were held involving 352 participants (113 females). During this period, a total of 230 household questionnaires were distributed and collected from 13 villages in TTWS. Results from the field data collections were shared with the TTWS Working Group and used to develop draft zoning maps.

Questionnaire interview: The activity is mainly conducted at each household of selected informants. The target group includes the commune chief, village chief, village team leaders, and Community Protected Areas (CPA) committee and members, teachers, elder villagers, active fishermen and farmers, and other stakeholders who have known the village situation.

#### 4.3.6. Participatory mapping

We selected outstanding residents from the group discussion part, in particular the experienced individuals who have a good knowledge of the villages, daily activities, and the areas throughout the sanctuary. The teams allowed them to draw the village map and use topography and satirize maps to identify, the areas where the top 10 endangered species are, local people go for fishing, farming, and NTFP collection. Their access routes to travel in the sanctuary and additionally the forest around their village areas will also be put on the map.

#### 4.3.6. Seasonal calendar

This mainly focused on the activities of the local community: agricultural activities, FPs and NTFPs collection, and others. The team wrote down all the local activities pointed out by participants and listed all calendar months from January to December on flip charts.

#### **4.3.7.** Consultation workshop

Formal and unofficial consultation meetings will be conducted through the working group to revise the draft and finalize the zoning maps and management plan. Some provincial consultation workshops will also be carried out to review and revise the zoning maps and management plan.

#### **4.3.5.** Description of Management Zones

Annex 2 provides an overview map of the four management zones for TTWS. Below is a detailed description of the location and extent of each zone:

#### **4.4.1 Core Zone**

As can be seen in Annex 2, there are four distinct Core Zones for TTWS totaling 42,872 ha (or 29.66% of the TTWS). These areas are considered high value for conservation, protection, maintenance, and expand genetic of rare, Endangered, and Threatened species of plants and wildlife. The Core Zone includes vital parts of the International Bird Area (IBA) identified by Birdlife International.

Analysis of camera trap results confirmed the presence in the proposed Core Zones of several of the key wildlife species, including Asian Elephant, Mainland Serow, Asiatic Black Bear, Sun Bear, Clouded Leopard, Asian Golden Cat, Mable Cat, Black Giant Squirrel, Hog Badger, Pileated Gibbon, Crab-eating Macaque, Leopard Cat, and Asian Porcupine (Map 2). Some grade 1, and grade 2 species in the national list were also found, including Pterocarpus pedatus, Pierre, Dalbergia oliveri Gamble and Prain, Shora obtuse, Woll, Dipterocapus obtusifolius, Teysm, Shorea obtusa, Woll, and Dipterocarpus tuberculatu Roxb (MAFF, 2005). In addition, the following mammal species at risk were documented in the camera traps placed in the Core Zones:

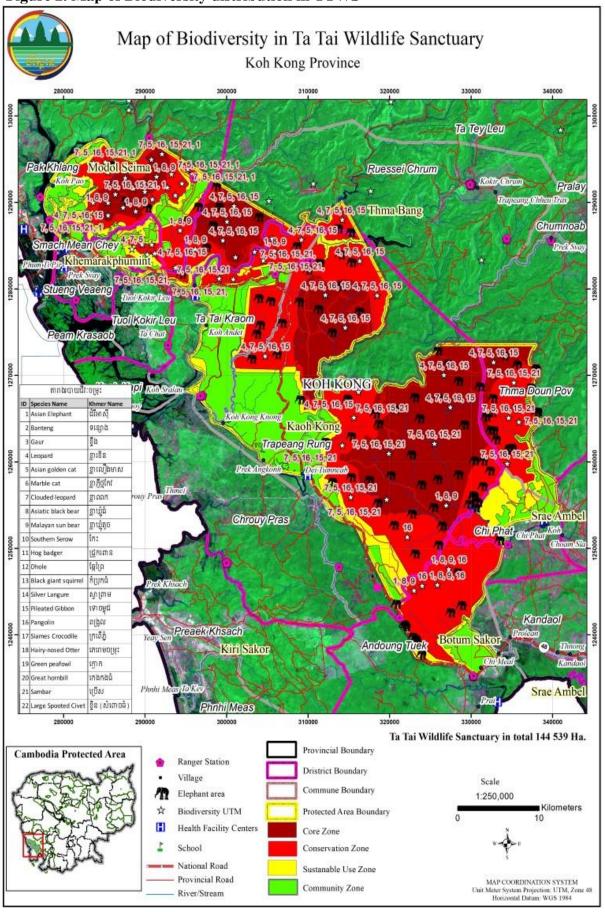
- ➤ Dhole (*Cuon alpinus*) Endangered
- Sambar (*Rusa unicolor*) Vulnerable

- ➤ Binturong (*Arctictis binturong*) Vulnerable
- ➤ Long-tailed macaque (*Macaca fascicularis*) Vulnerable

Most human activities are prohibited in the Core Zone (Annex 3). Only regular patrolling by Rangers, research (under MoE permit), and low-impact ecotourism by foot (guided by Rangers) are normally allowed in the Core Zone. In addition, access by Security and Defence Forces is allowed provided MoE has received prior notice and natural resources are not impacted.

For TTWS, special provisions will need to be made to enable visitors (hikers/trekkers) to access the trail leading up to the TTWS as this remains one of the main ecotourism attractions of TTWS.

Figure 2. Map of Biodiversity distribution in TTWS



#### 4.4.2. Conservation Zone

The Conservation Zone acts as a "buffer" around the Core Zone to provide additional protection for important natural values in TTWS. In total, the Conservation Zone covers 55,221 ha, or 38.20%, of the Wildlife Sanctuary. This zone is the home of rare, endangered, and threatened species feeding, and breeding, and high value of ecosystem services, protected watersheds, and landscapes. The results confirmed the presence in the proposed Conservation Zones of several of the key rare, endangered, and threatened wildlife species, including Asian Elephant, Asiatic Black Bear, Sun Bear, Pileated Gibbon, Long-tailed macaque, Green Peafowl, and Siamese fireback (Picture 3). Some grade 1, and grade 2 species in the national list were also found, including Pterocarpus pedatus, Pierre, Dalbergia oliveri Gamble and Prain, Shora obtuse, Woll, Dipterocapus obtusifolius, Teysm, Shorea obtusa, Woll, and Dipterocarpus tuberculatu Roxb (MAFF, 2005). In Pursat province, the key sites in the conservation zone are Chrab Damnak Khtom, Brambot Sroung, Neakta Salang, Toneab O-Lhong, Veal Smach, Prey Lbos Chang Eur Khting, and Kbal Stung Pursat, in Kampong Chhnang province were found in Chrak Toul Kdey and O-Bak Kagn Cheur, Russey Pbey Khum, and Bos Kagn Cheur are in Kampong Speu.

In addition to the restricted activities allowed in the Core Zone, ecotourism investments (including permanent campsites), NTFP collections, and ecosystem restoration activities (such as forest restoration) are permitted in the Conservation Zone (Annex 3).

#### 4.4.3 Sustainable Use Zone

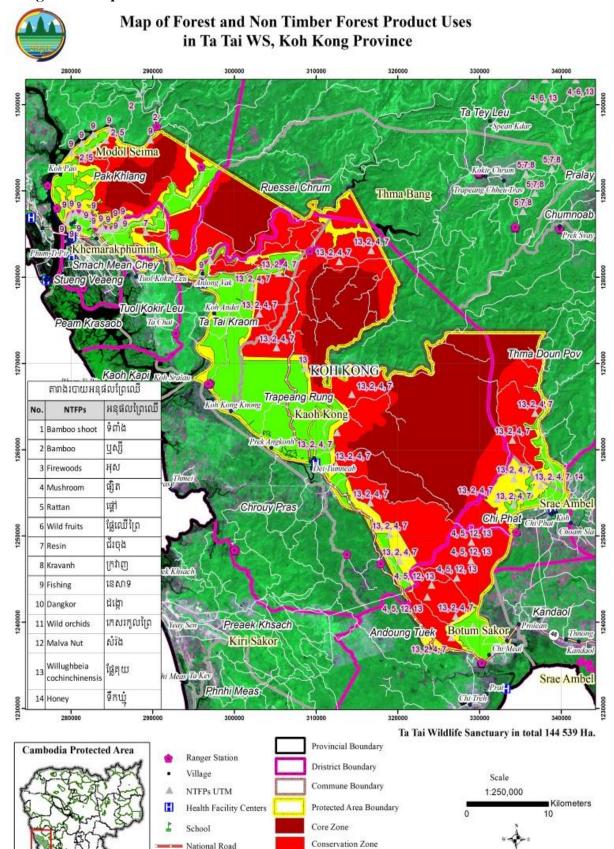
In Tatai WS, the Sustainable Use Zone covers 17,382 ha (or, 12.02%). The Sustainable Use Zone includes areas of high economic value where activities such as CPAs, and ecotourism concessions can be developed. This zone also includes agricultural lands, existing ELCs, recreation, a botanical garden, irrigation, water storage, an electricity station, maintained roads, and other service facilities.

The key sites found in the sustainable use zone are the following:

- 3 land concessionaires for ecotourism <10 ha with a length of 50 years lease
- 230 KW power line with a total of 155,1 ha.
- 150 MW of Steung Tatai electric power covering an area of 1,721.13 hectares run by China National Heavy Machinery Corporation.
- Improve national road number 48 in Tatai WS, Dang Peng Multiple Use Area, and Botomsakor National Park with a total length of 156 km by the Ministry of Public, and Transportation.

In addition to the restricted activities allowed in the Sustainable Use Zone, ecotourism investments, NTFP collections, infrastructure development, and other service facilities are permitted in the Sustainable Use Zone (Annex 3). Currently, the local community collects forest products and non-timber forest products such as bamboo, mushroom, wild fruit, resin, and medicinal plants (Picture 3) for their livelihood improvement.

Figure 3. Map of Forest and NTFP Uses in Tatai WS



Sustanable Use Zone

Community Zone

Provincial Road

River/Stream

MAP COORDINATION SYSTEM Unit Meter System Projection: UTM, Zone 48 Horizontal Datum: WGS 1984

#### **4.4.4 Community Zone**

In Tatai WS, the Community Zone covers a total of 29,064 ha (or, 20.11% of the total area). The Community Zone includes residential lands, paddy fields, and other agricultural lands, usually concentrated along the existing transportation network. The management areas for the socio-economic development of the local communities and indigenous ethnic minorities may contain existing residential lands, paddy fields, and other agricultural land.

The key sites found in the community zone are the following:

- 14, 393 ha of community REDD+ based on the Southern REDD+ agreement between the Ministry of Environment, and Koh Kong Administration, Dated 10 November 2021;
- 29,064 ha community zone based on sub-decree number 245, dated 30 November 2022.

According to the Land Law 2001, and Sub-Decree No. 83 on the Procedures for Land Registration of Indigenous Communities, there are five types of land registration, namely: residential land, traditional agricultural land, forest land, forest land, burial land, and the land of spirit forest. And reserve land necessary for the cultivation of crops (public land of the state). A total of 13 villages are located in the TTWS with a total of 9,125 families with 20,183 people living inside and near the wildlife sanctuary.

Since the Land Law of 2001 provides special protection measures for Indigenous community collective lands (public lands of the state of the Community Zone), any disputes over these types of plots must be reported by the concerned community and supported by rangers or by filing a complaint to the court.

#### 5. Reference

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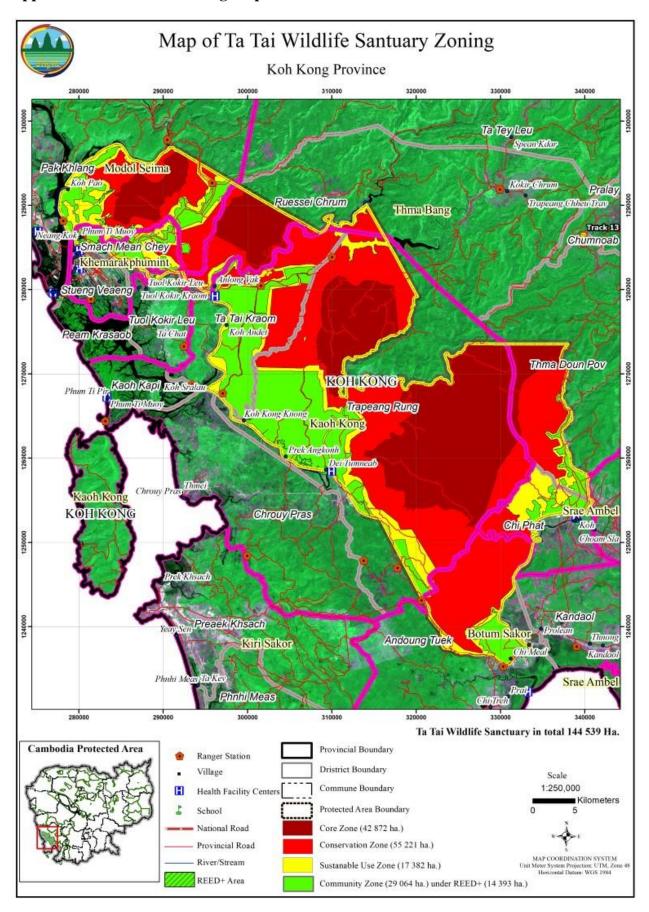
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#### 6. Appendix

#### Appendix 1. Final Draft Zoning Map of Tatai WS



Appendix 2. Summary of Allowable Activities and Facilities for Each Zoning

Permitted activities	Core Zone	Conservation Zone	Sustainable Use Zone	Community Zone
1. Ranger Patrolling	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$
2. Access by Security and Defence Forces	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$
3. Trails	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$
4. Research and Monitoring	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$
5. Road maintenance	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$
6. Forest trekking with minor impact (lead by ranger	V	$\sqrt{}$	V	$\sqrt{}$
7. Permanance camping		<b>V</b>	2/	J
8. NTFP collection			<b>√</b>	<b>√</b>
9. Forest restoration		$\sqrt{}$	√	$\sqrt{}$
10. CPA			$\sqrt{}$	$\sqrt{}$
11. Hydro dams			$\sqrt{}$	$\checkmark$
12. Mining			$\sqrt{}$	$\checkmark$
13. Land Economic concession			$\sqrt{}$	$\checkmark$
14. Rice fields				√
15. Agricultural farming and animal husbandry				V
16. Settlements				V

## **Appendix 3. Brief provincial and national consultation meeting reports Appendix 3.1. 1**<sup>st</sup> provincial consultation meeting reports



## GENERAL DIRECTORATE OF NATURAL PROTECTED AREAS

No: .....160... GDNPA/MoE

#### To MOE Minister

**Through:** - H.E **Kim Nong** General Directorate of GDNPA and the chair of the working

group

- H.E Chay Samith, MOE Under Secretary of State

**Subject:** 1<sup>st</sup> provincial consultation report on zoning and management plan development of

Tatai WS, Koh Kong Provinces.

**Reference:** Working group decision, number 070, dated 03 September 2020 on zoning and

management plan development of Tatai WS, Koh Kong Provinces

According to the above subject and reference, I would like to inform His Excellency that from February 8, 2019, the Department of Southern Tonle Sap Terrestrial Protected Area Conservation under CSLEP-WB conducted the second provincial consultation meeting on zoning development of Tatai WS, Koh Kong Provinces led by **H.E Chay Samith**, MOE Under Secretary of State, **H.E Mithona Puthong**, Provincial Governor of Koh Kong province, and **Miss. Sowanna Gauntlett** CEO of WA with the participation from representative of Koh Kong province, local authorities (village, commune, district), CPA committee and IP representative of the working group.

#### 1. Objective of the consultation meeting

- Review and comments on the draft of the TTWS zoning map;
- Disseminate the draft zoning proceeding of TTWS;
- Receive more comments, and recommendation for effectiveness development of TTWS zoning.

#### 2. Process of the consultation meeting

At first, **Miss. Sowanna Gauntlett,** CEO of WA gave welcome remarks by mentioning the main activities that WA has been worked in Cardamom particularly in Tatai WS. She mentioned the clear demarcation, and zoning will help partners to more effective management of this wildlife sanctuary, contribute to promote ecotourism, and to protect water sources suppying in Koh Kong province. Next, **H.E Mithona Puthong**, Provincial Governor of Koh Kong province gave a remark by raising the management of Koh Kong province, and pay more attention on natural conservation in Koh Kong province for ecotourism development, and the zoning will be help to conserve natural resources. He added that the Koh Kong administration recently take the measure action for prevention and biodiversity conservation to contribute to the enhancement of local community livelihoods.

Then, **H.E Chay Smith**, MOE Secretary of State gave welcome and opening remarks. He raised 1) the history of protected management in Cambodia; 2) the laws and legislations for protected area management, and 3) the importance of zoning in Protected Areas.

Next, **Mr. Mom Phalla**, Director of PDOE of Koh Kong province gave a presentation on the situation of natural resource management and problems faced by the management of Tatai Wildlife Sanctuary. In addition, he raised the importance of zoning, and management plans in the effective management of the Wildlife Sanctuary.

Then, **Mr. Kong Kim Sreng**, Director of Southern Tonle Sap Terrestrial Protected Area Conservation Department presented the update of 1) the criteria for zoning development, 2) the management of each zone, and 3) the first draft of zoning maps.

After the presentation, the discussion on 1) the first draft of zoning maps, 2) the zoning, and management plan report outlines, 3) the vision, mission, and objective of the management plan, 4) the program, sub-program, and priority activities of the management plan, and plan for state land registration in the core, and conservation zones, and establish provincial state land registration working.

#### 3. Results of the consultation meeting

The results of the consultation meeting, the participants agreed on the following:

- 1) MOE will revise the management zones, and share with the commune chief for final review, and comments;
- 2) Give two more weeks for reviewing after MOE has been reviewed, and revised the management zones;
- 3) Provide information on land titles, economic land, and other land uses related to MOE for updating the management zones.

#### 4. Conclusions and Wayforward

The Tatai WS zoning and management plan consultation meeting was conducted smoothly with expected results and the next plan in the following:

- 1) MOE will revise the management zones, and share them with other stakeholders to review, and comment;
- 2) Share the zoning maps with the commune chief for further comments, and review and share with MOE within two weeks;
- 3) Agreed on data sharing on land titles, economic land, and other land uses;
- 4) Conduct further consultation meetings to review the management zones and the key importance of each management zone.

#### 5. Requests

For the effectiveness and success of the TTWS zoning, management plan, and state land registration, the working group requested the following:

- 1. Conduct a second consultation meeting to final the zoning maps;
- 2. Prepare relevant documents to the Ministry of Land Management Urban, and Planning for state land registration;
- 3. Conduct pole demarcation, and pole installation in Tatai WS, Koh Kong province.

As said above I am pleased to ask His Excellency Minister to consider for reviewing and comment.

Please accept, Excellencies, the expression of my highest consideration.

Phnom Penh date: 6 March 2018

Seng Rattanak

Have seen and submitted to the Secretary of State,
Please kindly review
Phnom Penh date: 10 March 2019
DG of GDNPA

Kim Nong

Have seen and submitted to H.E Minister
Ministry of Environment
Please kindly review for approval
Phnom Penh date: 13 March 2019
Secretary of State

**Srun Darith** 

Agreed

MOE Minister 14 March 2019

#### Appendix 3.2. 2<sup>nd</sup> provincial consultation meeting reports





## GENERAL DIRECTORATE OF NATURAL PROTECTED AREAS

No: .....042... GDNPA/MoE

#### To MOE Minister

**Through:** - H.E **Kim Nong** General Directorate of GDNPA and the chair of the working

group

- H.E Srun Darith, MOE Secretary of State

- H.E Sao Sopheap Secretary of State and EA of CSLEP.

**Subject:** 2<sup>nd</sup> provincial consultation report on zoning and management plan development

of Tatai WS, Koh Kong Provinces.

**Reference:** Working group decision, number 070, dated 03 September 2020 on zoning and

management plan development of Tatai WS, Koh Kong Provinces

According to the above subject and reference, I would like to inform His Excellency that from August 31, 2021, the Department of Southern Tonle Sap Terrestrial Protected Area Conservation under CSLEP-WB conducted the second provincial consultation meeting through Zoom on zoning and management plan development of Tatai WS, Koh Kong Provinces led by **H.E Kim Nong**, Director of GDNPA, DG of GDNPA, **H.E Sok Sothy**, Deputy Provincial Governor of Koh Kong province with the participation from the representative of Koh Kong province, local authorities (village, commune, district), CPA committee and IP representative of the working group.

#### 1. Objective of the consultation meeting

- Review and comments on the second draft of the TTWS zoning map;
- Discuss the outline of zoning and 10 years management plan reports;
- Revise the proposed vision, mission, objective, program, sub-program, and main activities of TTWS 10-year management plan;
- Review planning for pole demarcation, and installation in core, and conservation for state land registration;
- Provide comments and recommendations on the proposed zoning and management plan development.

#### 2. Process of the consultation meeting

At first, **H.E. Sok Sothy,** Deputy Provincial Governor of Koh Kong province and deputy of the working group, gave welcome remarks. He mentioned the proposed size of core, conservation, sustainable use, and community during the first consultation meeting on February 8, 2021. He added that recently the government issued land allocation for local community uses in Koh Kong province with the total of 120,000 hectares, and Koh Kong administration starts

systematic, and patchtial registration for local communities, infrastructure, and other development.

Then, **H.E Kim Nong**, Director of GDNPA and the chair of the working group, gave welcome and opening remarks. He raised that 1) we should pay more attention on long term natural resource management for the benefit of our young generation; 2) the key function of natural resources in core and conservation zones are wildlife habitats, and water source protection, for sustainable use, and community zones are for national and local community economic development, 3) the today discussion is for long term benefits of local and national people, and 4) other lands from Sub-decree 30, he suggested all relevant stakeholders have to work with Koh Kong administration to allocate these areas as core, conservation, and sustainable use zones, and 5) speed up the state land registration in core and conservation zones are the priority after management zones developed align with the recommendations by the Ministry of Environment.

Next, Mr. Seng Rattanak, Deputy Director of Southern Tonle Sap Terrestrial Protected Area Conservation Department presented the update of 1) the process of zoning, and management plan development, 2) the first draft of zoning maps, 3) the zoning and management plan report outlines, and 4) the activity plan for pole installation for state land registration in Protected Areas.

After the presentation, the discussion on 1) the first draft of zoning maps, 2) the zoning, and management plan report outlines, 3) the vision, mission, and objective of the management plan, 4) the program, sub-program, and priority activities of the management plan, and plan for state land registration in the core, and conservation zones, and establish provincial state land registration working.

Before ending, **Dr. Leung Kesoror**, Deputy Director of DGNPA delivered a wrap-up and welcome remarks. Then, **H.E Sok Sothy**, gave closing remarks by raising recommendations for the effectiveness of the implementation:

- Shore shapefile to PDoE of Koh Kong province to verifier the management zones;
- Provide additional inputs from consultants and Wildlife Alliance;
- Provide more additional inputs from working group members both official or unofficial to PDoE or Koh Kong administration.

#### 3. Results of the consultation meeting

The results of the consultation meeting, the participants agreed on the following:

- 1) Revised the draft zoning maps of Phnom Aural Wildlife Sanctuary:
  - i. MOE shares shapefile to PDoE, and Koh Kong Administration to verify the size of each management zone.
  - ii. Koh Kong administration will provide inputs to the draft zoning by September 15, 2021.
- 2) Develop provincial conservation areas to support REDD+: Koh Kong administration will discuss with the Ministry of Environment, and WA to clearly demarcate for conservation areas to support REDD+;
- 3) The outline of TTWS zoning and management plan reports should add the description of social-economic analysis, and other problems faced;
  - 4) No additional comments on the vision, mission, and objective;
- 5) Request to add more key activities for in, and ex-statute forest genetic conservation;
- 6) Prepare a plan for state land registration in the core, and conservation zones, and establish a provincial state land registration working group:
  - a. Koh Kong administration supports the initiative of state land registration in the core, and conservation zones, and finds the

- additional budget to conduct state land registration in sustainable use zones:
- b. Koh Kong administration agreed on the establishment of a provincial state land registration working group to coordinate and lead the state land registration in Tatai WS.

#### 4. Conclusions and Wayforward

The Tatai WS zoning and management plan consultation meeting was conducted smoothly with expected results and the next plan in the following:

- 1) Continue monitoring, and verifying each management zone particularly the sustainable zone compare with the community zone, and conservation compare with the community zone;
- 2) Conduct a final consultation meeting to review, and revise the management plan;
- 3) Prepare provincial state land registration working group in Tatai WS, Koh Kong province;
- 4) Conduct pole demarcation and installation subject to state land registration in the core and conservation zones.

#### 5. Requests

For the effectiveness and success of the TTWS zoning, management plan, and state land registration, the working group requested the following:

- 1. Conduct pole demarcation and installation in the core, and conservation zones subject to state land registration using the approved pole designed by the Ministry of Environment on June 27, 2019, with 1.5m height;
- 2. Prepare relevant documents to the Ministry of Land Management Urban, and Planning for state land registration in core and conservation zones;
- 3. Revise the working group on the provincial state land registration working group to coordinate and lead the state land registration in Tatai WS, Koh Kong province.

As said above I am pleased to ask His Excellency Minister to consider for reviewing and comment.

Please accept, Excellencies, the expression of my highest consideration.

Phnom Penh date: 13 September 2021

#### Seng Rattanak

Have seen and submitted to the Secretary of State,
Please kindly review

Phom Penh date: 15 September 2021
DG of GDNPA

#### Kim Nong

Have seen and submitted to H.E Minister
Ministry of Environment
Please kindly review for approval
Phnom Penh date: 21 September 2021
Secretary of State and Head of MOE CSLEP
EA

Have seen and submitted to H.E Minister
Ministry of Environment
Please kindly review for approval
Phnom Penh date: 20 September 2021
Secretary of State

#### **Srun Darith**

Agreed

**MOE Minister** 28 September 2021

#### Appendix 4.3. Technical consultation meeting zoning report



### MINISTRY OF ENVIRONMENT IMPLEMENTATION AGENCY

#### CAMBODIA SUSTAINABLE LANDSCAPE AND ECOTOURISM PROJECT

No: .....024... Nor Tor Tor Kor

## To H.E Srey Sunleang DG of GDNPA and CSLEP Project Director

**Subject:** Report on zoning and management plan development of Phnom Aural WS,

Phnom Samkus WS, and Tatai WS.

According to the above subject and reference, I would like to inform **His Excellency** that on April 9, 2024, the Department of Southern Tonle Sap Terrestrial Protected Area Conservation under CSLEP-WB conducted the final consultation meeting at Prach Sun Meeting Hall on zoning development of Phnom Aural WS, Phnom Samkus WS, and Tatai WS led by **H.E Chea Samang**, Secretary of State with the participation from undersecretary of state, representative of DG of Natural Protected Areas, Administration and Finance, Environmental Agency, Local Community, Policy and Strategy, Knowledge and Environmental Information, EIA department, and other relevant departments with the total of 34 people (5 female).

#### 1. Objective of the consultation meeting

- Review the zoning maps of PAWS, PSWS, and TTWS;
- Provide inputs on PAWS, PSWS, and TTWS reports.

#### 2. Process of the consultation meeting

At first, H.E Chea Samang, Secretary of State, gave welcome and opening remarks by encouraging all participants to provide more comments and inputs on the final draft zoning maps in PAWS, PSWS, and TTWS. He also mentioned that the zoning development should based on the roles of each management zone.

Then, **Mr. Hong Daravuth**, Director Department of Southern Tonle Sap Terrestrial Protected Area Conservation gave a presentation on 1) the process of zoning development, and 2) the methodologies for zoning development for three protected areas.

Next, other participants provided their views, and inputs on the final draft zoning map, and reports for three protected areas.

#### 3. Results of the consultation meeting

The results of the consultation meeting, the participants agreed on the

#### following:

- 1) Review and revise the draft zoning maps and reports for three PAs;
- 2) Add more roles of core, and conservation zones in each PA;
- 3) Update the zoning data in each PA;
- 4) Some roads, and power lines still keep in core and conservation zones.

As said above I am pleased to ask His Excellency to consider for reviewing and comment.

Please accept, Excellencies, the expression of my highest consideration.

Phnom Penh date: 05 June 2024 Technical Officer

#### **Hour Charya**

Have seen and submitted to the Project Manager,
Please kindly review
Phnom Penh date: 05 June 2024
Head of Component 1

**Kong Kim Sreng** 

Have seen and submitted to the Project Director Please kindly review for approval Phnom Penh date: 05 June 2024 Project Manager

**Khin Meng Kheang** 

Agreed

**Project Director** 05 June 2024









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