



Indo-Myanmar
Conservation



The Asian Turtle Crisis/သာကာနဆွဲကောခါ

Asian Turtle Program (ATP) of Indo Myanmar Conservation (IMC)
ဒြစ်ကာနခံနသာကောခါ ယူလိုကော်ကာနခံနသာခုနီမှ

Globally threatened/ຖືກຂໍ້ມູນຊື່ໃນທົວໄວທາ

- Chelonians- turtles, tortoises and terrapins (freshwater turtles)
- Diverse group, 14 families with 91 genus



@ATP

- 360 species (8 already extinct), 122 sub-species 51.9% are threatened (CR, EN or VU) (Turtle Taxonomy Working Group 2018)/ມີ 360 ຂະນິດ (8 ຂະນິດໄດ້ສູນຜົນແວ່ວ), 122 ຂະນິດຍ່ອລ ກວມ 51.9% ຖືກໄພຂໍ້ມູນຊື່, ນອນຢູ່ໃນບັນຈີ (CR, EN ຫຼື VU) (Turtle Taxonomy Working Group 2018)





Global Diversity/ຄວາມຫາກຫຼາຍໃນທົ່ວໄວກ

The Asia Region is home to roughly 1/3 of the world's approximately 360 turtle species/ໃນພາກຜົ້ນອາຊີມືຕົ້າອາໄສຢູ່ປະມານ $\frac{1}{3}$ ຂອງຈຳນວນຕົ້າທັງໝົດໃນທົ່ວໄວກ
ປະມານ 360 ອະນິດ

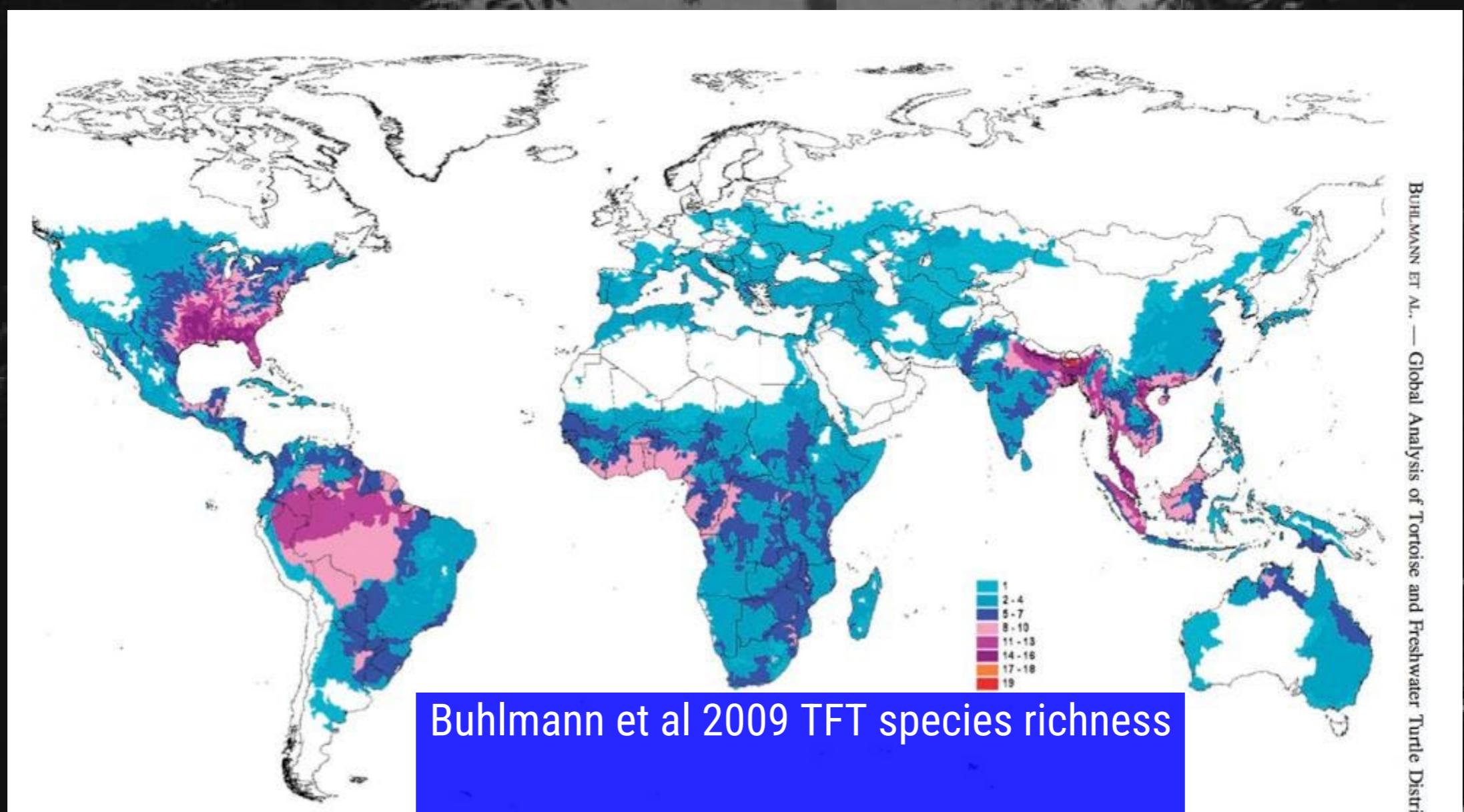


Figure 1. Global patterns of species richness based on projected ranges in hydrologic unit compartments of all 305 species of tortoises (45) and freshwater turtles (260) included in this analysis. Scale of color codes indicates number of species for each area.



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Regional Priorities/ပြည်ပါနီမာရီလိပ်စာရွက်မှုပေးပို့



The World's Top 25 Endangered Tortoises and Freshwater Turtles – 2011

Presented by the TURTLE CONSERVATION COALITION



- Turtle Conservation Coalition – top 25 most endangered turtle species in the world
- 17 are in Southeast Asia
- New species discoveries





Turtles of Laos/ຕො້າໃນປະເທດລາວ

19 species of turtles are native to Laos - 2019

2004 Stuart & Platt reported 13 species of TFT in Lao PDR/ຕො້າຜົ່ນມືອງໃນປະເທດລາວມີທັງ

ຫົນດ 19 ຊະນິດ - 2019

ໃນປີ 2004 Stuart & Platt ໄດ້ວ່າຍງານວ່າໃນປະເທດມີຕො້າບົກ ແລະ ນໍ້າຈົດທັງຫົນດ 13 ຊະນິດ

Cyclemys oldhamii - NE



Cuora bourreti - CR



Heosemys grandis - EN



Siebenrockiella crassicollis - VU



Amyda (cartilaginea) ornata - VU



Heosemys annandalii - EN



Palea steindachneri - EN



Platysternon megacephalum - EN



Cuora mouhotii - EN



Pelochelys cantorii - EN



Malayemys subtrijuga - VU



Sacalia quadriocellata - EN



Cuora cyclornata - CR CRR



Indotestudo elongata - EN



Manouria impressa - VU



Malayemys khoratensis - NE



Geoemyda spengleri - EN



Cuora galbinifrons - CR



Cuora amboinensis - VU

at least two species potentially occur in Laos, not confirmed yet.

National Laws and Protection/ကိစ္စသာများ နှင့် ရာထုပြန်လည်ဖော်ဆောင်ရွက်ခြင်း

Wildlife and Aquatic Law 2007/ကိစ္စသာများ၊ ရာထုပြန်လည်ဖော်ဆောင်ရွက်ခြင်း

- Ministry of Agriculture and Forestry/ကဗျားရာထုပြန်လည်ဖော်ဆောင်ရွက်ခြင်း
- Department of Forest Inspection (DOFI)/ကိမ်ကວດရာထုပြန်လည်ဖော်ဆောင်ရွက်ခြင်း



Law on fisheries - Decree 81/2008/
ကိစ္စသာများ၊ ရာထုပြန်လည်ဖော်ဆောင်ရွက်ခြင်း - ငါး၁၇
81/2008

3 species/ရုပ်ပိုင် - Appendix/ပုံစံ၍ I
8 species/ရုပ်ပိုင် - Appendix/ပုံစံ၍ II
0 species/ရုပ်ပိုင် - Appendix/ပုံစံ၍ III





Convention on International Trade in Endangered Species (CITES)

ສົນທິສັນລານາກົນວ່າດ້ວຍການຄ້າຂາຍຂະນິດຜົນຮັດປ່າ ແລະ ຜິດປ່າທີ່ໃກ້ລະສູນຜົນວະຫວ່າງຊາດ (CITES)



2014 Lao PDR joined CITES.

1 species on Appendix I, 17 species on Appendix II/ບີ 2014 ລຸບ
ບ ລາວ ໄດ້ຂຶ້າຮ່ວມວົງນາມ CITES. ມີ 1 ຂະນິດ ນອນໃນບັນຈີ I, 17
ຂະນິດນອນໃນບັນຈີ II



Conservation Status

ສະຖານະຜາບການອະນຸວັກ



IUCN Red List 2019/ບັນລີໄດ້ຂອງອົງການIUCN
(4 critically endangered)/4 ຊະນິດ ບັນລີໃກ້ສູນຜັນຂຶ້ນ
ຮຸນແຮງ

(6 endangered)/ 6 ຊະນິດ ບັນລີໃກ້ສູນຜັນ
(6 vulnerable)/ 6 ຊະນິດ ບັນລີມີຄວາມສ່ຽງ

84.2 % of Lao PDR tortoise and freshwater turtle
species are threatened!/84.2% ຕົ້າບົກ ແລະ ຕົ້ານໍ້າຈີດ
ໃນ ລາວ ມີຄວາມສ່ຽງ



Illegal Hunting & Trade

ການວັກວອບລ່າສັດ-ຄ້າຂາຍລ້າສັດແບບຜິດກິດໝາຍ

Habitat loss
ການສູນເລີຍຖືນທີ່ຢູ່ອາໄສ





Habitat loss on a global scale

ການສູນເສຍທີ່ຢູ່ອາໄສໃນຂອບຂະດທີ່ວົວກາ

Habitat loss remains a serious long term concern – Forest loss
ການສູນເສຍທີ່ນີ້ທີ່ຢູ່ອາໄສຢັງເປັນບັນຫາຮ້າມແຮງທີ່ຕ້ອງກັງວົນໃນໄລຍະ
ລາວ-ການສູນເສຍປ່າໄມ້

Only 31% of historic forest cover remains globally
ໃນທີ່ວົວກາຢັງເຫຼືອຜູ້ງານຕ່າງໆຕ່າງໆ 31% ຂອງນີ້ທີ່ປ່າໄມ້

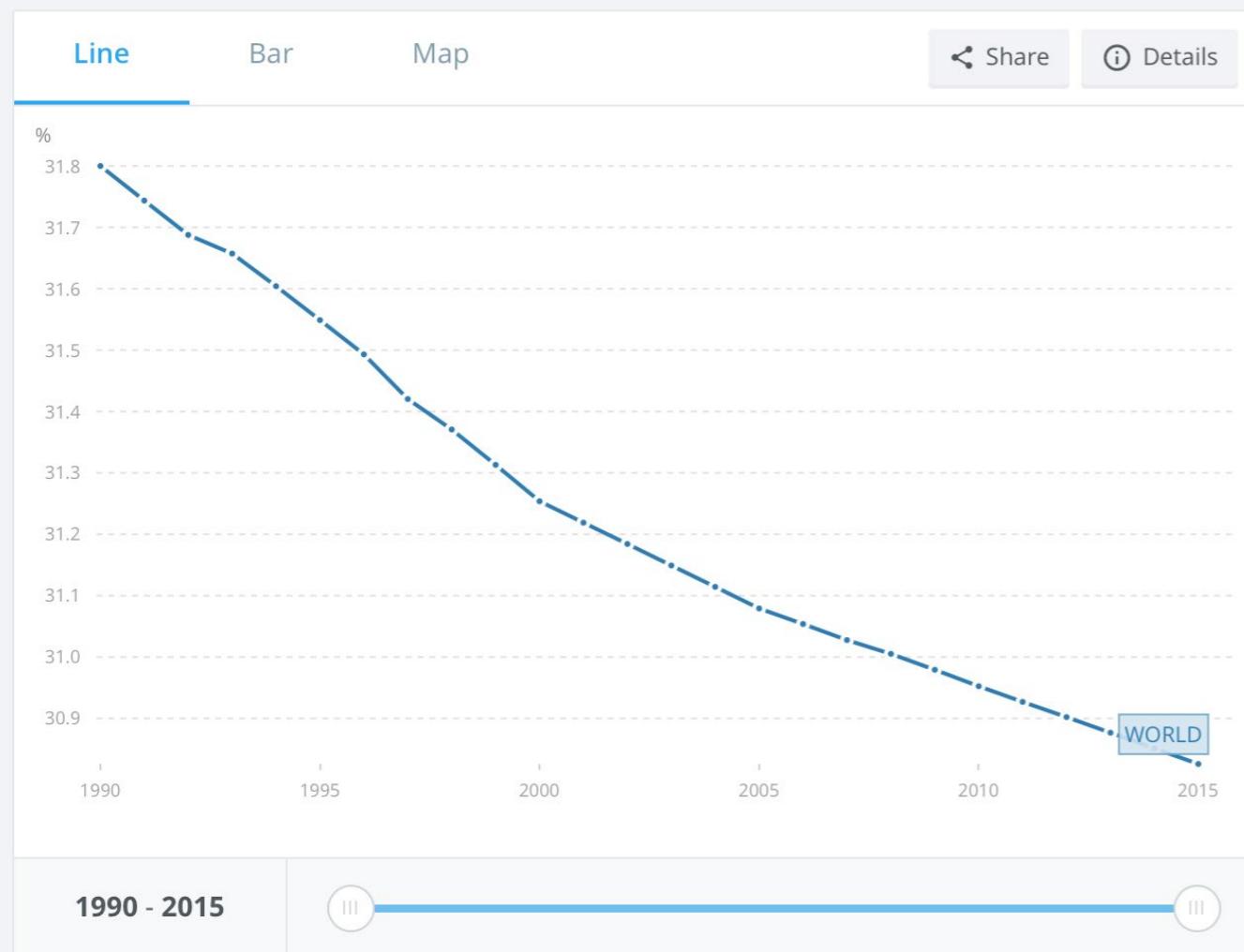
Fragmentation of habitats, forest islands...

ການຕົກລາຍກອກເປັນທຶນຢູ່ອາໄສແບບນ້ອນງາ, ເປັນເກະເປັນດອນປ່າ...

Forest area (% of land area)

Food and Agriculture Organization, electronic files and web site.

License: [Open](#)



Habitat Loss in Lao PDR

ການສູນເລັກຖິ່ນທີ່ຢູ່ອາໄລ ໃນ ລປປ ລາວ

Laos forest loss ການສູນເລັກຜົ້ນທີ່ປ່າໄມ້ໃນລາວ

Shrinking Habitat/ການຫຼຸດວົງຂອງຖິ່ນທີ່ຢູ່ອາໄລ
Laos forest cover/ປ່າໄມ້ບໍ່ກຳຄົມປະເທດລາວ ປີ
1982 - 50% > 2010 - 40% (Phompila et al
2017)

Growing human population
ການຂະໜາຍຕົວຂອງປະຊາກອນ
1960 - 2.1 million
2017 - 6.9 million
(World Bank data)

Rapidly Developing economy
ການຝັດທະນາເສດຖະກິດຢ່າງໄວ່
Increases in cover in recent years attributed to
plantation forest
ການຂະໜາຍຕົວຂອງຜົ້ນທີ່ປ່າໄມ້ໃນຊຸມບຶນໆງມານີ້
ຢູ່ອນການປູກຕົ້ນໄມ້

Fragmentation of habitats, forest islands...
ການແຕງແຍກອອກເປັນຖິ່ນຢູ່ອາໄລແບບນ້ອນງ,
ເປັນຕາຈະ ເປັນດອນປ່າ...

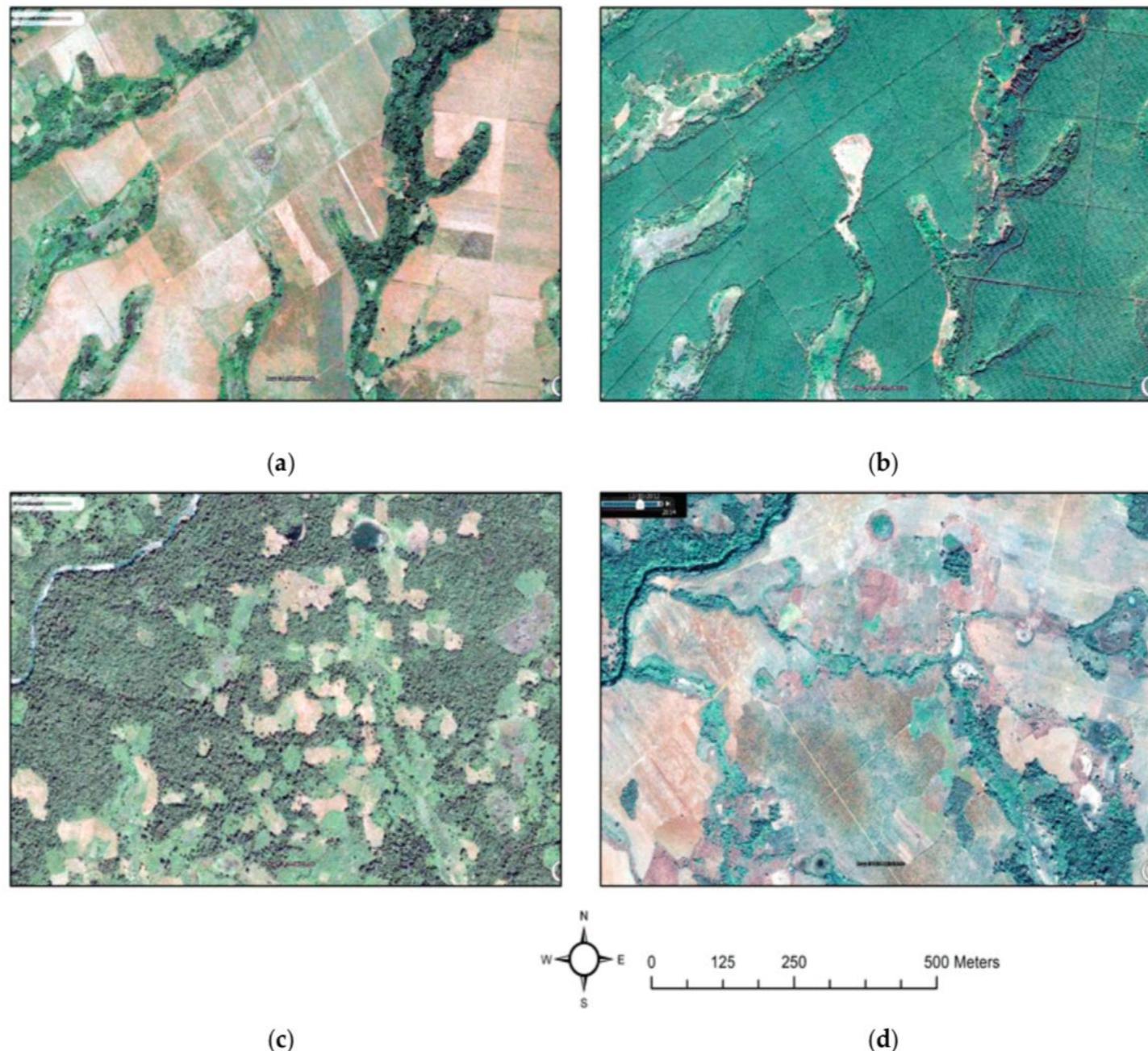
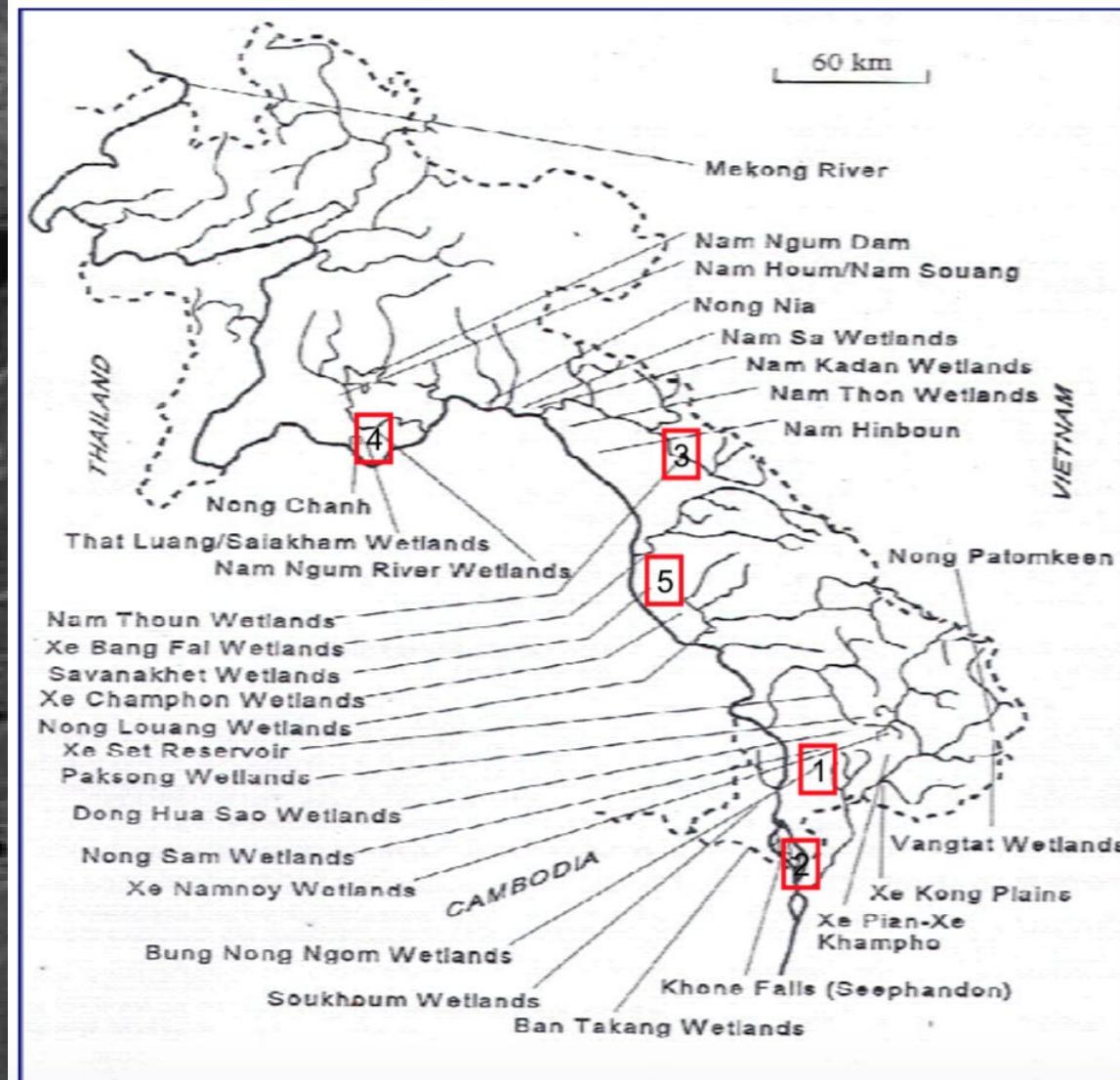


Figure 3. Google™ Images showing forest cover changes from 2006 to 2012 in two locations: (a) land preparation in 2006; (b) full canopy of rubber plantations in 2012; (c) forest and shifting cultivation areas in 2006; (d) massive forest and land clearances apparent in 2012.

Messerli et al., 2009



Significant wetlands in Laos ໜອງ, ບຶກທີ່ສໍາຄັນໃນລາວ



1 mill Ha at 30 wetland sites, along Mekong and boarder Thailand areas (Claridge 1996)/ ໃນຈຳນວນ 30 ບຶກທີ່ໜອງ ກວມເອົາ 1 ວັນຮັກຕ່າງໆ ຢູ່ວຽບຕາມແມ່ນ້ຳຂອງ ແລະ ຕາມຊາຍແດນລາວ-ໄກ

Ramsar Sites - Beung Kiat Ngong wetlands -
Ramsar site/ບຶກຂະໜາດ
Xe Champhone wetlands - crocodile site/
ບຶກຜູ້ຈຳກອນ
Nam Theun wetlands - upland wetland/ບຶກ
ນໍາເຕິນ





Habitat loss ການສୁନ୍ଦେତ ທີ່ນທີ່ຢູ່ອາໄລ



Forest clearance
ການຖາງປ່າ



Wetland Conversion to agriculture/aquaculture
ການຫັນປ່ຽນຜົນທີ່ບໍ່ອງ, ບຶງ ມາເປັນຜົນທີ່ກະວິກຳ/ການລົງ
ວິດນໍ້າ



Historic pet trade to western nations, Europe, the USA and Japan/ຄේඩ් ගිග් පෙන් ගාນ තා ස්දවුරු පිප් යුතු බ්‍රාස් දා පැහැද මි ගාව් ම් ගි ගා ඇශ්‍රු: උම්බ, තාම්විගා ගෛව: යුතු ප්‍රූන්

1960s 300,000 Greek Tortoises (*Testudo graeca*) reported exported annually to the UK alone from Morocco (Turkozan et al 2008)/ໃນປີ 1960 ມີລາຍງານວ່າແຕ່ລະບົມການສົ່ງອອກ ໄຕ້າບິກ (*Testudo graeca*) ຈຳນວນ 300,000 ໂຕລາກMoroccoໄປຫຼັງUK

Between 1989-1997 the USA imported 5.7 million TFT of 142 species. Many species listed CITES appendix II in 2000./ລະຫວ່າງປີ 1989-1997 ອາມວິກາດີນຳເຂົ້າຕົ້າປົກ-ຕົ້ານຳ ລືດ 5.7 ວັນ ໂຕໃນ 142 ອະນິດ. ມີຫຼາຍອະນິດນອນຍູ້ໃນບັນຊີ II ຂອງ CITES ໃນປີ 2000

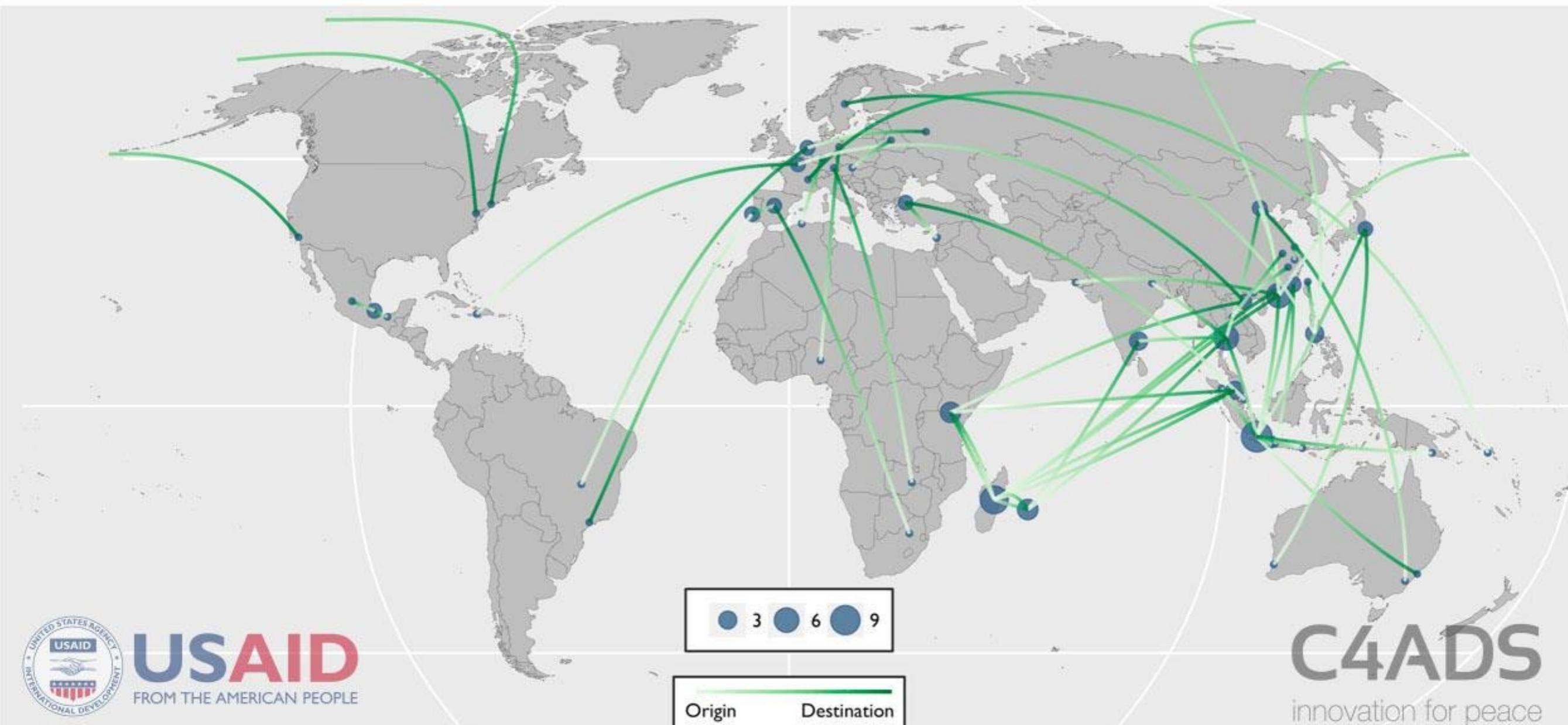




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Reptile Trafficking Routes



USAID
FROM THE AMERICAN PEOPLE

C4ADS
innovation for peace

- USAID Routes



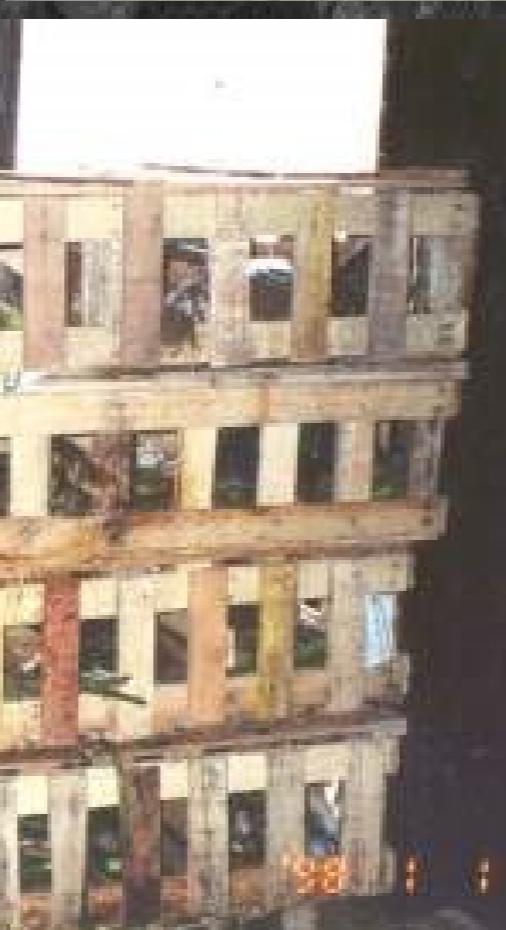
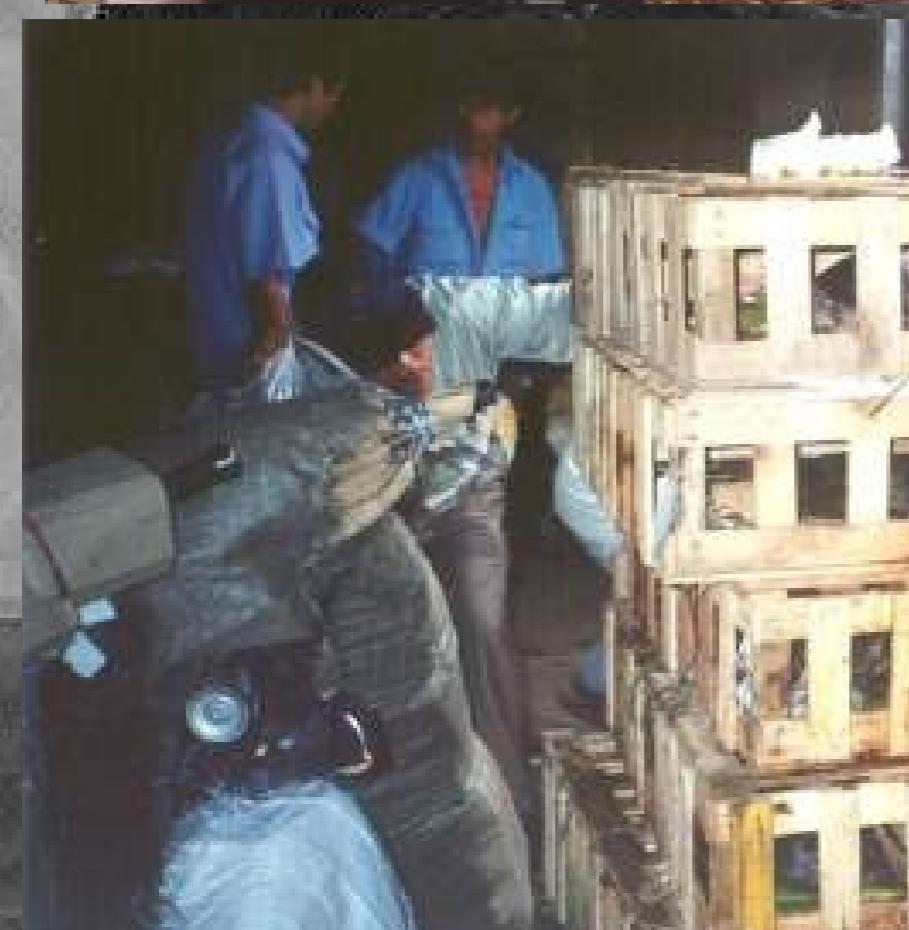
The Turtle Trade

ການຄ້າຕົ່ງ



Feeding the insatiable demand from Chinese markets/ລະບົບອງຕາມຄວາມຕ້ອງການທີ່ບໍ່ຜົງຝຶ່ງ
ຂອງຕະຫຼາດຈິນ

1990's - the most valuable wildlife products traded in Lao were turtles and tigers, mostly traded to China (Duckworth et al 1999)/ໃນປີ 1990 ສິນຄ້າສັດປ່າທີ່ມີມູນຄ່າຫຼາຍທີ່ສຸດທີ່ຈີ-ຂາຍໃນລາວຄື: ຕົ່ງ ແລະ
ເສື້ອໂຄ້ງ ເຊິ່ງສ່ວນຫຼາຍແມ່ນຈີ-ຂາຍໄປໝັງປະເທດຈິນ



Chinese native TFT populations declined, turned to neighbours for supply

ပုံချိန်တော်ပါက ၁၉၈၇ ခုနှစ်မှ ၁၉၉၅ ခုနှစ်အထိ မြန်မာရီးယားပြည်တွင် လျှပ်စီးများ ပေါ်လေ့ရှိခဲ့ပါသည်။ မြန်မာရီးယားပြည်တွင် လျှပ်စီးများ ပေါ်လေ့ရှိခဲ့ပါသည်။



Volume of Trade လုပ်သည့်နည်းများ

10,000 tons/ခြား





Values Associated with Turtles

ဓុនតោបីកំរែវខ័ំទៅកាបពជោា



(Food)
ឪហាន



(Medicine)
យាយិនមិន



(Pet trade)
វិណវិញ



(Religious)
ពាក្យសាមិនបាន



(Other values)
ឪនតោទំនួរ



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Trends in Trade ဧည့်ဝန်ဆောင်ရေး



Subsistence to Source State
စား ထွေခွဲခြင်းနှင့်ချိုင်ပြပါန်း

Values Associated with Turtles

ရုပ်ရာဘိုးကျော်စွာကပတော်



- Illegal hunting and trade is the most significant threat for many species.
- Protected areas exist within which many species occur
- But hunting persists within these sites



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No Turtle is Safe

ပံ့မီကြားစောင့်ပစ္စလို





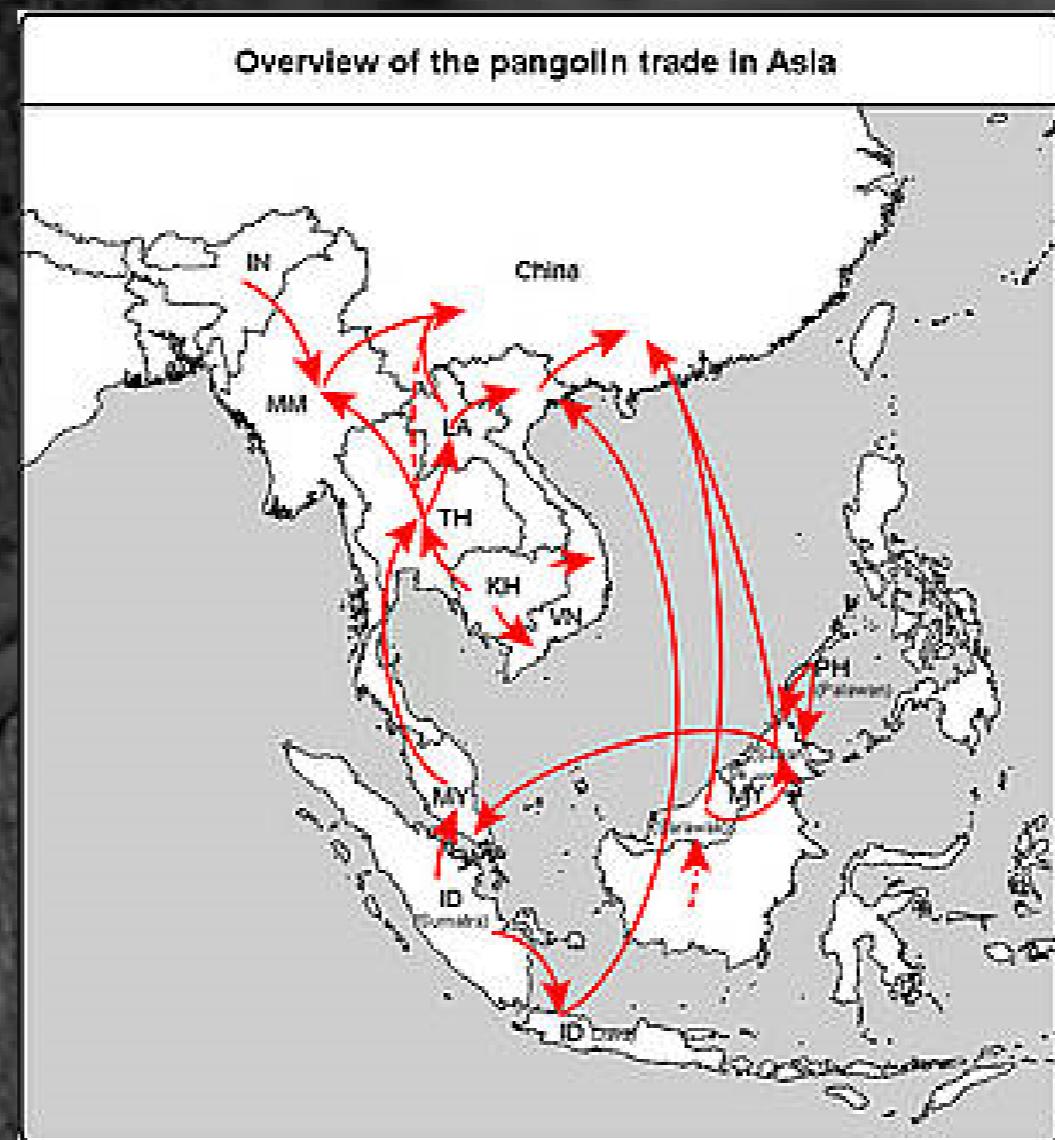
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Trends in Trade: A Transit State/ចេនវិប័ណ្ណ ឱការគ្នា: បចេកពីខុសត្រូវរៀង



Trends in Trade: Regional Role in Trade

ແຕລວໂນມໃນການຄ້າ: ບົດບາດວະດັບພາກຜົ່ນໃນການຄ້າ



8th March 2003, Singapore airlines flight from Malaysia stopped in Hanoi, Vietnam 5 tons of illegal wildlife confiscated/ວັນທີ 8/3/2003 ລາຍການບິນສົງກະໂປລາກມາເວເຊຍໄປຢູ່ດັ່ງກູ່ທີ່ນະຄອນຮ່າໃນໜີ ບະເທດຫວຽດນາມ ກົງເຈົ້າໝໍາທີ່ລິດໄດ້ສັດປ່າທີ່ຜິດກິດໝາຍລໍານວນ 5 ໂຕນ

-Nghe An Province, April 2011/ငောက်များ ပီ ၂၀၁၁ ဦးဆွဲသွားလွှာ

On the 20th April 2011 1,490kg of turtles confiscated in Nghe An province. The shipment most likely originated in Thailand or Malaysia/သော ၂၀ ဧပြီ ၂၀၁၁ ငါးဟန်ဘိုးဆွဲသွားလွှာ ပို့ယူလိုက်တော်းခဲ့ ၁,၄၉၀kg. ကားခိုးသွေး၏ အရာရှင်မှ အကာအကွယ် ဖော်ပို့ဆောင်ရည်



An Asian Brown Tortoise (*Manouria emys*)
seen in the shipment/ကားခိုးသွေး၏ အရာရှင်မှ ဖို့ယူလိုက်
ထောင်းမြောင်း ငါးဟန်



Indo-Myanmar
Conservation

Trends in Trade – 2015

ແຫວ່ານົມໃນການຄ້າ - ປີ 2015



Over 4,400 turtles confiscated in the Philippines, 16th June 2015
Included 3,907 Palawan Forest Turtles (*Siebenrockiella leytensis*).

Images from Mongabay/ວັນທີ 16 ມີຖຸນາ
2015 ເລື້ອງຫຼັກທີ່ໃນຜູ້ເວົ້າມີຕະຫຼາດໄດ້ຕົ້ນຫຼັງ
ກວ່າ 4,400 ໂຕ ໃນນັ້ນວ່າມີຕົ້ນປ່າວວັນ
3,907 ໂຕ. ຮູບພາບຈາກ Mongabay



Trends in Trade – 2016

ទំនាក់ទំនងក្នុងការបរាប់ - ឆ្នាំ 2016

11th January 2016 4,000 Flap Shelled Turtles (*Lissemys punctata*) confiscated in Dumka, India.

Released into nearby lake

15th January 2016, 800 already found dead around the lake./ວັນທີ 11 ມັງກອນ 2016 ເລື້ອມນ້ຳທີ່ລືດໄດ້ຕົ້ນ Flap Shelled Turtles ລ້ານວນ 4,000 ໂຕ ໃນ Dumka, ບະເທດອິນດେଲ ແລະ ໄດ້ປ່ອຍສູ່ທະວະນາບທີ່ຢູ່ໃກ້ຄູງ

ຕໍ່ມາວັນທີ 15 ມັງກອນ 2016 ຜົບເຫັນ 800 ໂຕແນລໃຈວິດຍູ້ອ້ອມແອັມບໍລິໂວນທະເວສາບ





5th March 2019

Manila, Philippines, 1,527 TFT confiscated
Indian Star Tortoise *Geochelone elegans*
discovered alongside several other species.
ວັນທີ 5 ມິນາ 2019 ໃນມະນີວາ, ບະເທດຜິວປະເຈົ້າຫຼັກທີ່ໄດ້ຕັ້ງບົກ ແລະ ຕັ້ງນຳຈິດຈໍາ 1,527 ໂຕ ໃນນັ້ນລວມມີຕັ້ງດາວອິນເຮຍ ດັ່ງນີ້:



Madagascar case – Asia & the global turtle crisis ກໍລະນີໃນ Madagascar - ວິກິດຕົ່າໃນອາຊີ ແລະ ທົ່ວໂລກ

10,976 Critically endangered Radiated Tortoises
(*Astrochelys radiata*) – Madagascar, April
2018

7,347 more Radiated tortoises in October 2018
ມັນຫາ ປີ 2018 ໃນ Madagascar ໩ີດໄດ້ຕົ່າທີ່ໄກ້ຈະສູນ
ຜັນຂັ້ນຮຸນແຮງ Radiated Tortoises ຈຳນວນ 10,976
ໂຕ

ຕໍ່ມາ ຕຸລາ ປີ 2018 ໩ີດໄດ້ຕົ່ມ 7,347 ໂຕ





Trends in Trade – Online Trade updates

PHOTOS

A collage of nine photographs showing various views of a large, heavily textured turtle shell, likely a leatherback or similar large sea turtle. The shell is dark brown with distinct yellowish-brown scutes. A person's hand is visible in several frames, pointing to specific features like the plastron or the rear edge of the carapace. The shells are shown both individually and stacked together.

POSTS TO PAGE

Growing competition against the market

Increasingly affluent population in southeast Asian countries appears to be seeing growing demand for exotic pets/ ករណីខ្លះមាតុលាទីប្រទេសថ្មីនឹងមានការបើកបន្ថែមខ្លួន ដែលមានការចូលរួមជាបន្ទីរ និងបានការប្រើប្រាស់ពីភាពជាអំពីរបស់វា ដូចជាអំពីរបស់តាមីនី ឬអំពីរបស់សាច់សាច់ និងបានការចូលរួមជាបន្ទីរ និងបានការប្រើប្រាស់ពីភាពជាអំពីរបស់វា ដូចជាអំពីរបស់តាមីនី ឬអំពីរបស់សាច់សាច់

+ Rùa sa nhân size 7-11cm giá từ 380-450k (có giám già cho ... See More



Online trade
Facebook and forums used for trade
– difficult to enforce

Protected and highly threatened/ການ ຮັດຕະບອບຂອງ

ຄ້າທາງອອນໄລນ໌

ဖော်ပုဂ ၁၈။ နူပပြပကာလိုင်းမှာ အခြေခံ
ဖော်ပုဂ ၁၉။ လျှောက်ပါရီ ၁၉၂၀ ခုနှစ်၊ မြန်မာနိုင်
လျှောက်ပါရီ ၁၉၂၀ ခုနှစ်၊ မြန်မာနိုင်





Farmed Turtles

ການຮັດຍາມຕົ້ນ



MÔI TRƯỜNG RỪNG	
1. NAI - HOÀNG LÃU LĂN	15.000/ĐÁM NHỎ
2. NAI - HOÀNG LÃU SÀ ỐT	35.000/ĐÁM TO
3. NAI - HOÀNG LÃU CẨM TỐI	35.000/ĐÁM NHỎ
4. NAI - HOÀNG RUỘNG LÀ LỚN	35.000/ĐÁM NHỎ
- DỪNG HÀM 1,95 m/đàn - DỪNG HÀM 2,15 m/đàn - HƠI SƠN	35.000/ĐÁM TO
MÔI TRƯỜNG ĐẤT	
1. ĐẬU NGUYỄN CON	15.000/CON
MÔI TRƯỜNG SÀ	
1. SÀ SÀ NGUYỄN CON	60.000/ĐÁM NHỎ
- GIẢM NGÝ Chứa 80.000 ĐẤM THỦY SINH	



Testing Your Understanding of Turtles

ທີ່ດັວອບຄວາມເຂົ້າໃຈຂອງທ່ານກ່ຽວກັບຕົ້ນ

Why can't turtles sustain even moderate levels of exploitation? ເບັນຫຍຸງຈຶ່ງບໍ່ສາມາດນໍາເອົາຕົ້ນໃນຈຳນວນປານກາງນາໃຊ້ຫາຜົນປະໂຫຍດ?



250 Million Years of Success ၂၅၀ ခုနှစ် အသေချွေ ၂၅၀ သာန ပြီ

(Slow growth to maturity/ ကာလု
လျင်တိပါတ္ထာ)

(A long life/ မီခိုခိုင်လာဝမာန)

Small clutch size (for most
species/ လုပ်သည့် ဖို့ မြတ်ဆေးရသော အမျိုးအစား
များ မြတ်ဆေးရသော “ကိုယ်ပုံ” ပါ၏ “ကိုယ်ပုံ”)

(Naturally low rate of survivorship
of eggs and young/ အပေါ်တာရာနေဂါန သတ်မှတ်
ခြင်း မြတ်ဆေးရသော အမျိုးအစား မြတ်ဆေးရသော အမျိုးအစား
မြတ်ဆေးရသော “ကိုယ်ပုံ” ပါ၏ “ကိုယ်ပုံ”)



Wildlife Farms... ຝາມສັດປ່າ

Commercial 'farming' of many TFT species is being detrimental
 Large scale, poor husbandry means hybridisation and loss of genetic fitness through inbreeding
 Complicates legal basis for protection, identification of illegal animals
 Offers a conduit for laundering of illegally caught wildlife/'ການຮັດຜາມ' ເຕົ້າບີກ ແລະ ເຕົ້ານຳຈິດTFT ຫຼາຍຂະນິດແມ່ນເປັນອັນຕະວາຍ.
 ການນັງຂະໜາດໃຫຍ່ທີ່ບໍ່ດີໜາຍເຖິງການປະສົມຜັນສອດ ແລະ ສູນເສຍຄວາມສົມບຸນທາງດ້ານກໍາມະຜັນໂດຍຜ່ານການປະສົມຜັນ.
 ສັບສົນທານດ້ານກົດໜາຍໃນການບຶກບ້ອງ ແລະ ຈໍາເນັກສັດທິ່ນເຜີດກົດໜາຍ.
 ວະເບີນເນັ້ນທາງໆສໍາວັບການຝອກສັດປ່າທີ່ຈັບໂດຍຜິດ



High economic incentive means commercial farming is happening worldwide/ຄຣາງລູງໃລ້ທາງດ້ານເສດຖະກົດສູງໜາຍເຖິງການຮັດຜາມແບບການຄ້າກໍາວັງເກີດຂຶ້ນໃນທົ່ວໄວກ
 Some places on a large scale/ບາງບ່ອນມືຂະໜາດໃຫຍ່



A Super-Predator

နှစ်လိုင်ရေသာဘေးမြို့ခါ



For more information on our projects please contact
ສໍາວັບຂໍ້ມູນແຜ່ນຕົມກ່ຽວກັບໂຄງການຂອງ ພວກເຮົາ, ກະລຸນາ
ຕິດຕໍ່

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