

# Turtles in Nepal - Can New School books and a Conservation Project Contribute in Conservation of Species and Environment?

## Open discussion and a brief Introduction

Seminar at NHM, April 2012  
by H.Hermann Schleich





**Colaboration since years: Khambu Rai, ARCO-Nepal's country representant and Hermann Schleich**

## Content of the presentation

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### Introduction:

- **Final sentence from a guest on the discussion of last seminar held 2 years ago**
- **and new media releases**

**Trials to bring alertness for the urgent need of turtle conservation !!**

**Presentation of Nepals turtle species and their distribution in Nepal**

**Nepals Turtle species on the global scenery and there evaluation for conservation needs**

**Presentation of the new “children books”**

**Presentation of the new exhibition posters**

**The conservation ideas:**

- **Education to public and at early school level**
- **Law enforcement as for all other CITES regulated species**
- **Turtle Conservation Centres for assurance colonies, training and education**
- **At the National Parks: KTWR, CNP, BNP, SWR**
- **Special protected zones like Ramsar sites: Godha godi Tal**
- **Under private communities eg: Budoholi TCC**
- **Release and restocking programs, eg. Rivers, lakes**



## Introduction

One major concern aroused during last times seminar:

“How can one expect that people who don't have enough to eat should protect animals they can feed on”

Possible answers for this valuable comment are listed below.

- Looking at the big variety of food sources, hunting turtles might be an easy option in the short run, but as this food resource is getting on the edge of extinction people must understand and strive for other possibilities. Farming animals has a list of several advantages over turtle hunting, such as being reliable and accesible all the time.
- Based on the big emphasis on protecting endangered animals such as elephants, rhinos tigers, gangetic dolphins, horn bills and other rarest and endangered animals on the CITES enlisted turtles should get the same portion of attention and dedication.
- Aren't we all only guests on this planet and isn't its nature with all the living creatures including the turtles just a gift, a heritage, that should not be wasted by only one shortsighted generation of this mankind ? Furthermore, as the most powerful species on earth shouldn't we have high responsibility of taking care of other species especially for the ones we put at danger or the edge of extinction?
- Is there any negative Impact of turtles in nature life cycle?

# Turtle trafficking on the rise in Nepal

| 28 February, 2012 10:03 / Timeslive

**Trafficking of turtles to China from Nepal is on the rise, media reports said Tuesday.**

**Smugglers have been trafficking turtles, many of them endangered, to the town of Zhangmu, just over the Chinese border north of Kathmandu, according to the Kantipur daily.**

**Trade in tortoises and turtles is prohibited in Nepal, where many species are facing possible extinction, including the red-crowned roof turtle, the three-striped roof turtle, elongated tortoise, and narrow-headed soft-shell turtle.**

**Traffickers are thought to catch the turtles in Nepal's plains, before taking them to Kathmandu, from where they are taken to Zhangmu for sale.**

**"We've been screening goods trucks passing into China more thoroughly to prevent the trafficking," district police chief Basanta Lama said.**

**Chinese buyers arrive at the border town two days a week to buy tortoises, which are sold for 15 000 rupees (\$194) each.**

**An estimated 50 to 60 animals are sold each week, a local trader was quoted by the report as saying.**

**Some turtles are valued in China as an aphrodisiac and luxury ingredient, and often served in soup, the report said.**

<http://www.timeslive.co.za/scitech/2012/02/28/turtle-trafficking-on-the-rise-in-nepal>

## **Trials to bring alertness for the urgent need of turtle conservation !!**

About 23 Years ago I/we started collaborating with Nepal's institutions and soon had a first listing of what was known to that date on the herpetology of this country. Approx. 120 species we could mention but many of them were doubtful, unproven, without any voucher specimens being preserved or photographed. With our book on "Amphibians and Reptiles of Nepal" published in 2002 we came already to 180 species of amphibians and reptiles.

By doing all these works and studies during the many last years we already early, in **1998**, almost 15 years ago, tried to bring the critical situation of turtles in Nepal to awareness. Many other publications followed:

Veröffentlichungen aus dem Fuhlrott-Museum, 1998, Bd. 4: 281-290 281

### **Necessity for a Turtle Conservation in Nepal**

H.Hermann Schleich\* & Tirtha M. Maskey\*\*

#### **Contents**

Introduction

Status quo

Action plan

Threats to the survival of turtles

Records of turtles from Nepal being proved during last year's field activities

Necessity for a turtle conservation in Nepal

Natural history of turtles in Nepal and adjacent areas

Turtle distribution and habitats in Nepal

Own activities

Master Plan

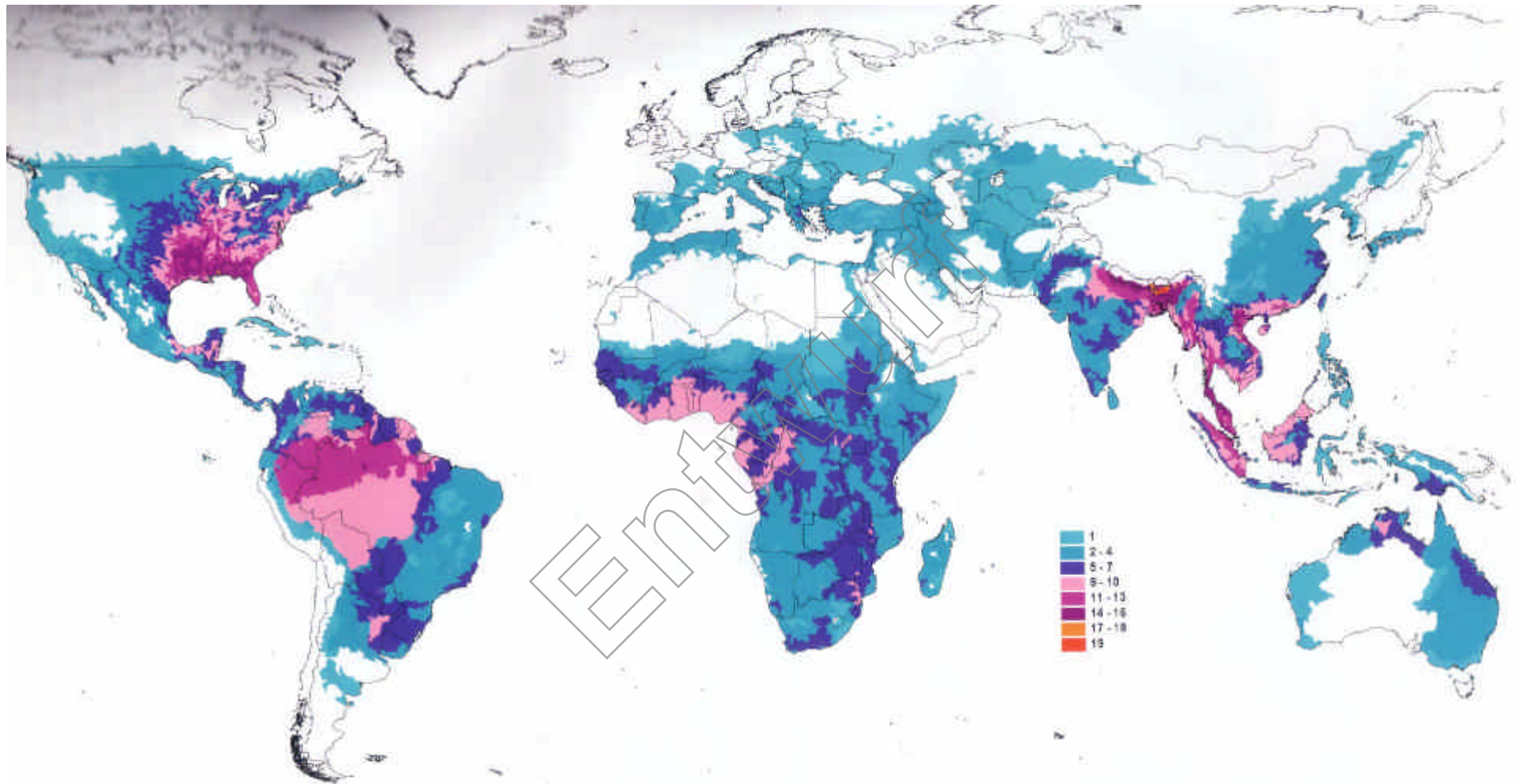
Brief account of the Master Plan

Management Plan

In 2001 (11.07-2001) already arrived publications on the dramatic situation for turtles in asian countries, mainly China:

[The following text is heavily blurred and illegible, appearing to be a list of references or a table of contents. A large watermark "Entwurf" is overlaid diagonally across the page.]

# Nepals Turtle species on the global scenery and there evaluation for conservation needs



**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.



## List of turtle species in Nepal, all critically endangered or vulnerable

Systematics by Schleich & Kästle	occurrence proved	occurrence possible but unproved	CITES status	en NEPAL ????
<b>Softshells – Trionychidae</b>	<b>4</b>			
<i>Chitra indica</i>	x		II	food
<i>Aspideretes gangeticus</i>	x		I	food
<i>Aspideretes hurum</i>	x		I	food
<i>Lissemys punctata</i>	x		II	food
<b>Terrapins – Bataguridae</b>		<b>4</b>		
<i>Cyclemys oldhamii</i>	x		-	food, vive en 1 solo valley, muy rara
<i>Geoclemys hamiltonii</i>		x	I	no documentada
<i>Hardella thurjii</i>	x		-	no data
<i>Kachuga kachuga</i>		x	II	no documentada
<i>Melanochelys tricarinata</i>	x		I	mascaras para turistas
<i>Melanochelys trijuga</i>	x		-	mascaras para turistas
<i>Morenia petersi</i>	x		-	jamás visto vivo, solo huesos
<i>Pangshura flaviventer</i>	x		II	food, sopa
<i>Pangshura smithii pallidipes</i>	x		II	food, sopa, rara
<i>Pangshura smithii smithii</i>	x		I	food, sopa
<i>Pangshura tectum</i>	x		I	food, sopa, extremadamente rara
<i>Pangshura tentoria circumdata</i>	x		I	food, sopa, muy rara
<b>Tortoises – Testudinidae</b>	<b>1</b>			
<i>Indotestudo elongata</i>	x		II	food, templos, mascotas, mascaras
<b>Total of species/subspecies</b>	<b>13/17</b>	<b>4</b>		<b>7 x I, 5 x II</b>

## Education and Culture

There exists almost no knowledge about turtles, their natural history, eg. systematics, distribution, biology.

Turtles play an important role in the Hinduistic religion and are venerated in many places eg. Temples

To all schools ARCO will offer the children books on Amphibians and Reptiles of Nepal (4 volumes)

and give training for National Parks' people, also lectures at the universities will be continued.

## International Trade

It's a many years existing practice that Indians pass the open border at the Koshi Barriage and buy –as bigger as better- almost all types of live turtles.

There exists a big demand on live turtles and in case poachers or fishermen get hold on big specimen the Indian trades men are informed to fetch the catch.

Also Trucks loaden with live turtles on the way to China (Tibet) have already been confiscated on the roads

ARCO can contribute by publicity and awareness campaigns, posters and sign boards on the main highways

## Local use

Turtles are caught in the most places by indigenous people as food. Reports about a softshell, weighing approx. 90 kg and having been that big that only 2 men could turn it round were found in the swamps of Suklaphantah Wildlife Reserve and being taken for food market to India.

The biggest turtle harvesting area is around Koshi Tappu National Park where thousands of turtles appeared on the markets in all conditions all year round.

Turtle breeding can be learned at the Turtle Conservation Centre and local turtle farming concepts should be taught to stakeholders in various parts of the country. Escape rate and dissemination of local turtles should help to restore and improve the survival rate in wilderness.





## Tourist articles

Masks made out of turtle shells from endangered species are offered in a huge rate mainly at the tourist markets in Kathmandu and also Lhasa.

ARCO can restart with poster campaigns at hotels and airports not to buy turtle masks and to inform international airports and custom authorities.







## Turtles killed as pests

In fishery farms turtles are generally killed as predators of the fishes

ARCO will country wide offer its service as Animal Rescue Centre and send information material to all fishery farms in the lowlands.







**All turtles kept at temples in KTM are inadequately kept regarding their biological needs**

**The Budo Holi Turtle Conservation Centre shall receive a feeding, worshipping and observation place for the veneration of turtles.**

**Donations can be made and patronages will be offered.**

**An information centre shall be implemented, too.**



Superstition and paramedicin are also factors for the turtle kill. In many wells of local houses turtles are kept as it is believed that as long as they stay the water will remain too. Pieces of Shells are ground as “medicin” for sick people.



# Nepals Turtle species on the global scenery and there evaluation for conservation needs

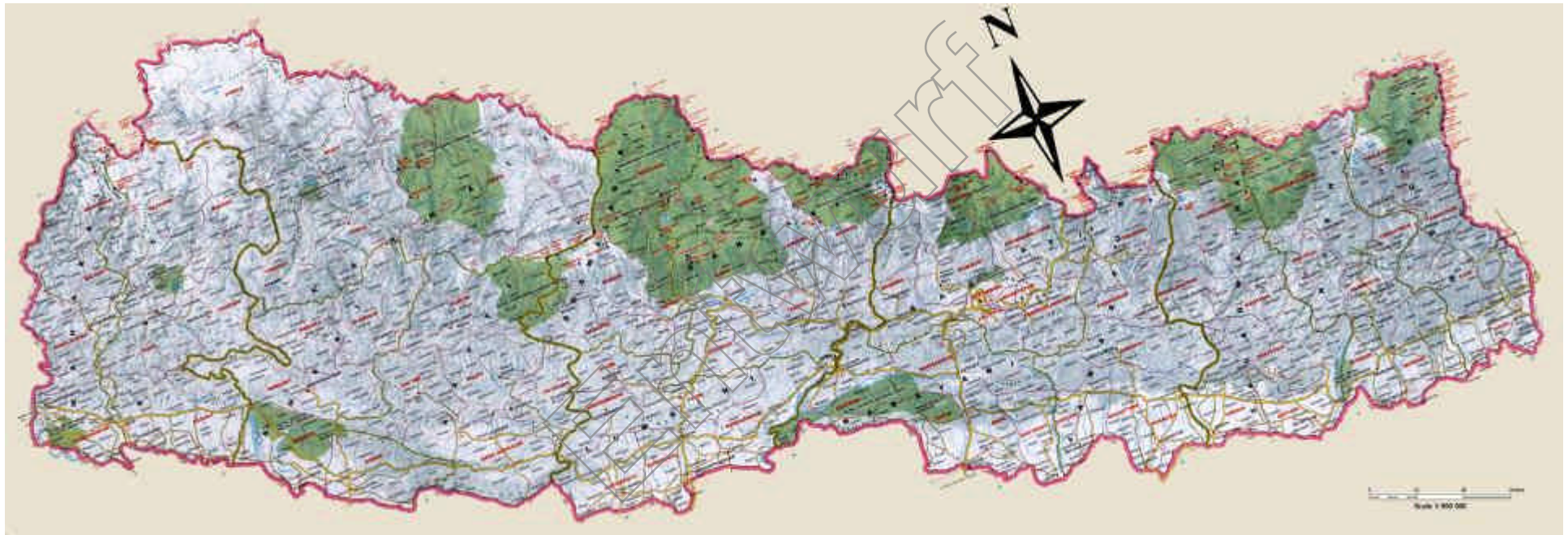
## Conservation aspects

### Why to develop Conservation Centres

All turtles in Nepal are threatened by **international trade, local use, tourist articles, killed as “pests”** on fishery farms

- To catch turtles is a tradition in many areas of the lowlands. If they cant be sold on markets they remain kept alive in cooking pots until they die and then they are thrown away
- There are no more fully grown adults caught of the genus *Pangshura* and all Softshells.
- Genera occurring east and west of Nepal like *Geoclemys*, *Morenia*, *Hardella*, and the big growing *Kachugas* cant be found anymore in wild.
- Turtles are used as human food by animistic indigenous people and much appreciated as food items in China and India.

# Presentation of Nepal's turtle species and their distribution in Nepal



## Presentation of Nepals turtle species and their distribution in Nepal



***Chitra indica:*** This turtle lives in big rivers and prefers to bury in the sand.





*Lissemys punctata*. Lives in stagnant waters eg ponds, ditches slow flowing rivers



*Aspideretes hurum*. It is found in rivers and streams, but also in lakes and ponds



*Aspideretes gangeticus*. Prefers rivers but may also be found in ponds and lakes.



***Melanochelys tricarinata.*** Lives on humid areas in grasslands, along river systems and in moist forests



***Cycllemys oldhamii*. In Nepal only known with very few specimen from 1 locality**



*Melanochelys trijuga*. Lives in stagnant waters with dense vegetation of water plants



***Pangshura tentoria circumdata***



*Pangshura flaviventer. It lives in small and big river systems*





*Pangshura smithii smithii*. Found mainly at the lower part of the Sapt Koshi.



***Pangshura smithii pallidipes***. Lives in big river systems, lakes canals and ponds



*Indotestudo elongata*. Forests and woodland of Siwalik and Terai, mainly Sal forests



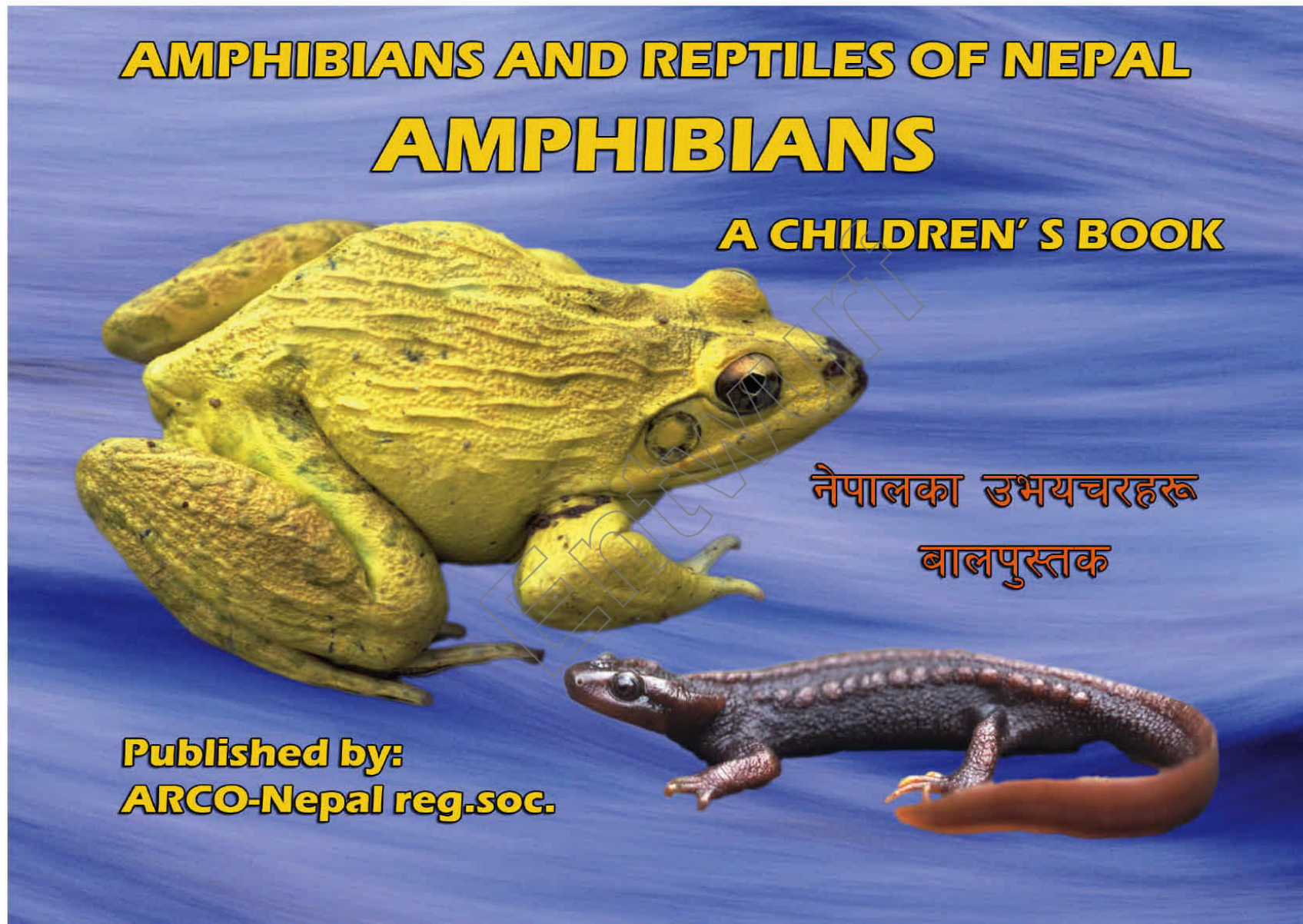
Education to public  
and at early school level

**Seminar presentation on Turtle Conservation at Natural History Museum  
Kathmandu. 2010**



**Seminar presentation on Turtle Conservation at Natural History Museum  
Kathmandu, 2010**

Education to public and at early school level



Presentation of the new “children books”



*Tylotriton verrucosus*



*Ichthyophis sikkimensis*



*Rhacophorus maximus*



*Polypedates maculatus*



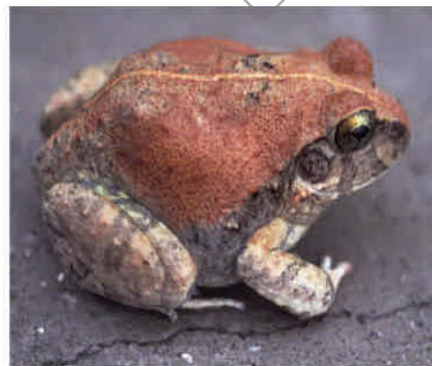
*Polypedates taeniatus*



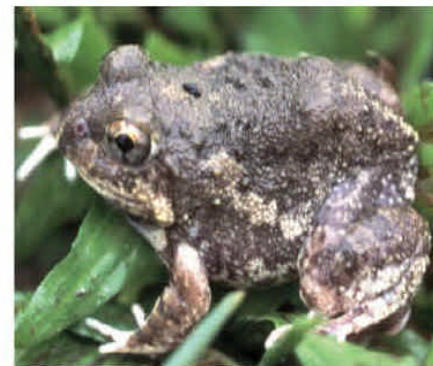
*Philautus annandalii*



*Sphaerotheca breviceps*



*Sphaerotheca maskeyi*



*Sphaerotheca rolandae*



*Paa blanfordii*

1. Einleitung

2. Zielsetzung

3. Methodik

4. Ergebnisse

5. Diskussion

6. Schlussfolgerungen

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# AMPHIBIANS AND REPTILES OF NEPAL

# TURTLES

A CHILDREN'S BOOK

नेपालका  
कछुवाहरू

Published by:  
ARCO-Nepal reg.soc.

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# AMPHIBIANS AND REPTILES OF NEPAL

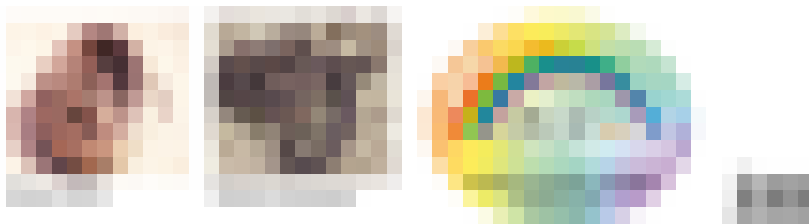
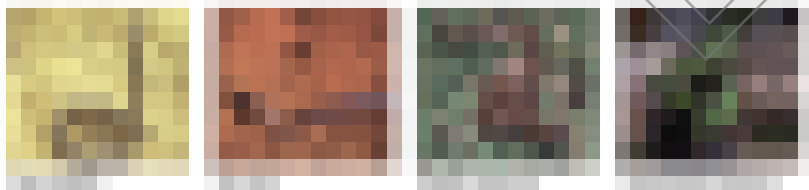
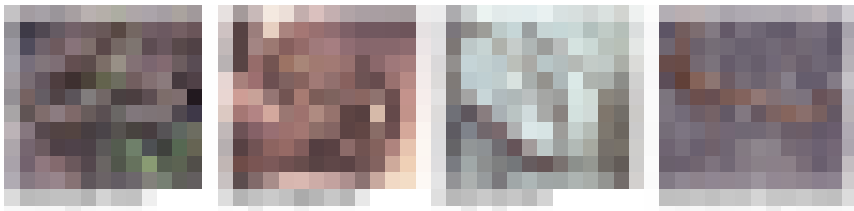
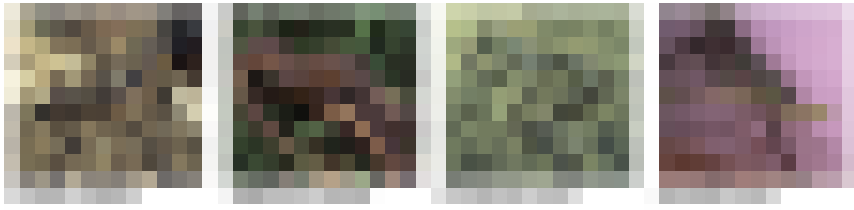
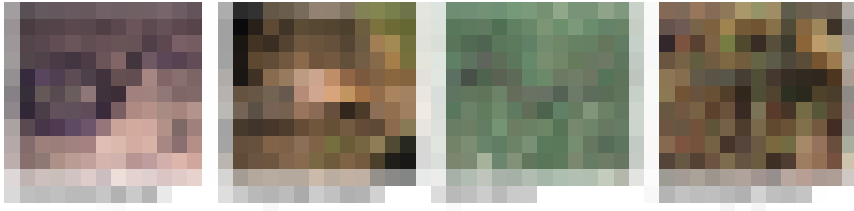
## SNAKES

**A CHILDREN'S BOOK**

नेपालका उभयचर तथा सरिसृपहरू

सर्पहरू  
बालपुस्तक

**Published by:**  
**ARCO-Nepal reg.soc.**



FRUITWURF

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FRUITWURF



# AMPHIBIANS AND REPTILES OF NEPAL LIZARDS AND CROCODILES

A CHILDREN'S BOOK

नेपालका उभयचर तथा सरिसृपहरू

छेपाराहरू र गौहीहरू:

बालपुस्तक

Published by:  
ARCO-Nepal reg.soc.

# Presentation of the new exhibition posters



# The conservation ideas:

Education to public and at early school level

Law enforcement as for all other CITES regulated species with actions against poachers

Turtle Conservation Centres for assurance colonies, training and education

- **At the National Parks: KTWR, CNP, BNP, SWR**
- **Special protected zones like Ramsar sites: Godha godi Tal or others**
- **Under private communities eg: Budoholi TCC**

Release and restocking programs, eg. rivers, lakes



**A Turtle Conservation Centre at Kasrah, Chitwan National Park**





**Turtle Conservation Centre, Kasarah CNP built for terrestrial and palustrine species**



**Realisation of a Recreation area (Jamunkhadi Park) by damming in SE Nepal may also serve as turtle sanctuary**

**ARCO-Nepal y ARCO-España presents/a:**

**Planning for „Budoholi“**

**A New Turtle Conservation Centre in South  
East Nepal**

**Conservación de Tortugas amenazadas en un  
nuevo Centro en el SE de Nepal**



**Field meeting in 2010 at the SUMMEF project site**



## •Background and Introduction

Jhapa is one of the rich districts in Nepal. It is situated to the north - west of West Bangal in India and part of it is also joined with the Bihar State of India to the south. The district is not only rich in natural and cultural resources; it is also rich intellectually. Some of the historical political movements such as *Khamarrok Andolan*, *Jhapa movement* of the mid 70's to 80's were all germinated and expanded from the district. This resulted in the growth of many young people prepared to sacrifice their life for the noble cause of equitable society and social justice. This led to an organized political movement instigated from Jhapa and gained currency in the whole of the kingdom in the following decade. During the course, many people suffered the repression of Panchayati Government. Among them are the martyrs Ramnath Dahal, Netra Ghimire, Biren Singh Rajbanshi, Krishna Kuinkel and Narayan Shrestha gunned down to death on 21<sup>st</sup> Falgun, 2029 B.S. These leaders after the advent of democracy are regarded as martyrs and respected by the people as freedom fighters. The incident of that martyrdom is known as **Sukhani Incident** in the history therefore the **Sukhani Martyrs Memorial Foundation–Nepal (SUMMEF)** is established on behalf of their memorandum in 2056 BS in Kathmandu.

To honour the martyrdom and to boost up their spirit of patriotism and justice Sukhani Martyr's Memorial Foundation (SUMMEF), a Jhapa

based NGO, initiated a project to establish a **Martyrs' Memorial Park**

(**MAMEP**) and conservation garden in over a 22 ha of land in

Sanischare, Jhapa received from the government of Nepal. The

SUMMEF constituted a technical taskforce to closely examine the

present status, identify issues of the area, develop a long-term vision

and prepare a long-term plan, which can be gradually implemented. This document presents a park development and conservation plan for the area.

## •Planning Area

The area is situated in the eastern part of Nepal and western part of West Bengal state of India and south of Ilam district north of Bihar and West Bangal of India (location map 1).

It measures about 0.681 km long from east to west and about 0.345km from north to south.

Administratively the area is situated in the Sanishchare Village Development Committee (VDC) ward No. 9, of Jhapa district in the Tarai of Eastern Development Region. Geographically the area lies between 26° 40' north latitude and 88° 01' east longitude.

The total planning site is about 0.235 Sq.Km. less than 1% of the 2725 ha area of the Shanishchare VDC. The total area of Jhapa district is 160379.8 ha.



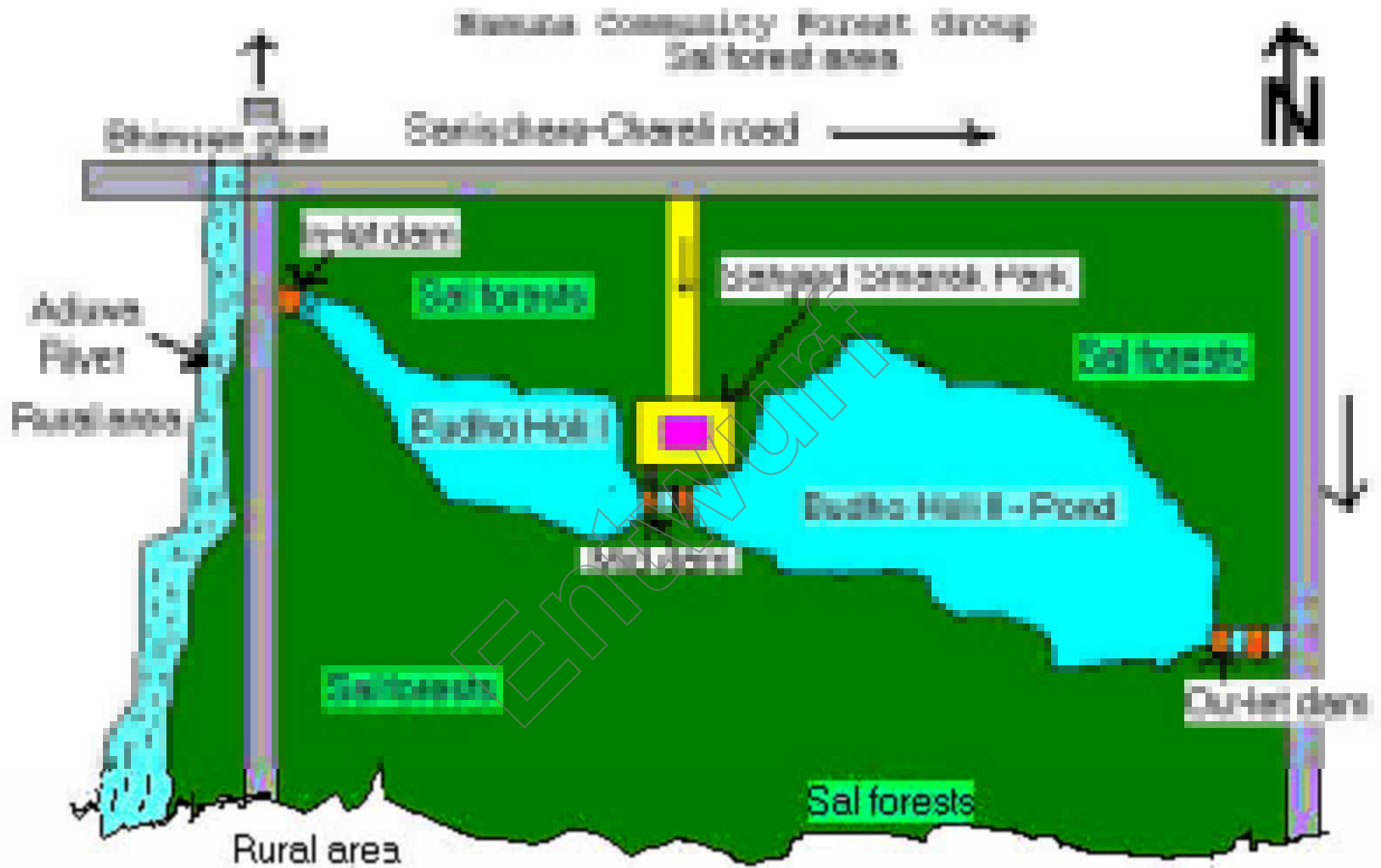


Fig.: Proposed Restoration of Budho Holi into Wet and Ecosystem by K.R. Rai; 2004

## The physical conditions

### Precipitation

The area has Sub tropical climate. The area falls under monsoon climatic Zone.

Temperature recorded at Chandragadhi meteorological station shows a variation of less than 8 degree Celsius minimum in winter to 37degrees Celsius maximum in summer. Average annual maximum and minimum temperatures are 33.5 and 14.5 Celsius respectively and relative humidity 82.4 %.

The monsoon wind causes rain from June through September. In some years scanty rainfall also occurs during mid winter months.

The average annual precipitation recorded in Birtamod is 2542mm, (+ 476mm) and almost 84% rain falling between June to September.

## Drainage

Sarki (Bhimsen) Khola is the main drainage adjunct to the planning site and Adhuwa Khola drains the western side of the planning site. There is permanent water source at the head of the planning site and an eutrofied lake believed to have been established by Bhimsen, one of the Mahabharat era hero in the mythological age, which has a cultural significance for the people in Jhapa. The Adhuwa Khola and the drained lake (Bhimsen Pokhari) are fed by a permanent spring of water 920m North and North-west culvert of the area.

Land use of the area consists of almost 75.90% forest, 15.62 % wetland. Due to erosion and degradation the valuable wetland site has declined in the past. Still there is some open area almost 6.70%, which can be potentially used for establishing recreation center. About 6.70 % of the land (1.5 ha) is encroached by the unauthorized settlers, which can be turned into productive wetland.

Over 6500 people live in 10 settlements and 1150 households in the immediate vicinity of the planning area. There are 18 organizations supposed to be providing services to the community. The area is a cultural mosaic with different ethnic groups and traditions being followed. The area is the confluence of both diverse mountain and terai culture of Nepal with over 15 different languages being spoken.

The planning site is rich in biodiversity. Over 23 invertebrates, 18 fishes, 14 amphibians, 21 reptiles, 32 birds and 8 mammalian species were recorded during planning exercise. *Shorea rubusta* is the dominant forest vegetation with occasional appearance of *Schema* species. Under-storey vegetation is present whose identification is still being carried out. The immediate impact zone of the area is under rice cultivation with seasonal crops being planted on the east and the west whereas on the south there exists tea plantation. Mixed Agriculture is the predominant occupation of the people adjacent to the proposed project site.

The immediate problems within the area adjacent to the project site are associated with lack of awareness on the needs for recreation facility in the urbanizing Jhapa district. The root problems were lack of stakeholders' vision to develop the area as recreation center and inadequate training and exposure to the community on wetland development, aquaculture, apiculture and both in situ and ex situ conservation of biodiversity for the livelihood of the people.

Inadequate institutional capacity was another problem. In some cases crop damage by the wildlife were also reported by the farmers within the immediate impact zone of the project. During dry season people also expressed problem of fire blazing the forest area. For the conservation point of view, blocking of migratory route from the south of the site due to established intensive farming system was a problem, which makes the area biologically disconnected. Since the wetland was not rehabilitated, people reported loss of aquatic vegetation and birds. The use of chemical fertilizers and pesticide, though very minimal in agricultural operation, this can be a potential environmental problem in the wetland.

In some instances illegal harvest of forest & their products has been reported as a problem. This is due to weak socio economic condition and inadequate income and employment opportunity of the poor people. This has resulted in a decrease in wild biological species. There is no funding support from outside for the development and management of the project so far.

Lack of planned approach to utilize the biological resources of the site has not offered the wide benefit to the people that potentially gain benefits from the unique resources presently found there. Since there is no development in tourism there is no publicity of the areas, which can benefit from village tourism.

Considering the above problems and with a view to maximize the social and institutional benefits and minimize the negative impacts of the project, stakeholders meeting was held several times in the planning site. A total of major 18 stakeholder groups including local community were consulted in and around the planning site, they include women, disadvantaged groups, NGO's and special interest groups. Problem analysis of stakeholders provided insights for the development of the planning site. There was no conflicting interest from the stakeholders other than for the illicit settlers in the land nearby. For the sustainable management of the project site and to establish Martyr's memorial park a conservation and development plan is proposed which consists of 6 components. To address each of the components 6 general objectives with 20 operational objectives are envisaged for an integrated development and conservation of Martyrs' Memorial project site covering wider activities for the livelihood improvement of the people in the area. This requires a development and conservation plan for improvement on the existing physical infrastructure, conservation of biodiversity, and improvement and development of institutional capacity and legal framework.

Since the project activities are largely environment- friendly, the adverse environmental impacts foreseen are minimal. In order to mitigate the negative impacts measures will be taken so that pristine environment could lie maintained.

The plan, here after called Master Plan, covers wide range of activities including its physical development, conservation and livelihood of the people, which are prioritized, based on the needs of the project and funding availability. In the first phase the emphasis will be placed on the development of infrastructure followed by recreation and biodiversity conservation. Total project estimate comes to be NRs.28,548,550.00 out of which NRs.19,047,550.00 is for physical infrastructure development..

Approx. 230.00US \$

Initial project funding is anticipated from the government and donors. The operational cost of the project after it's establishment will be met through managing the Martyr's memorial park and from local support in this endeavour.



# Vista aérea Google

Zona recreativa NE de la presa

Zona Conservación de Tortugas SE



West of Dam to be used for recreation





Proposed wetland area for TCC, 2010

## The Budoholi Turtle Conservation Centre

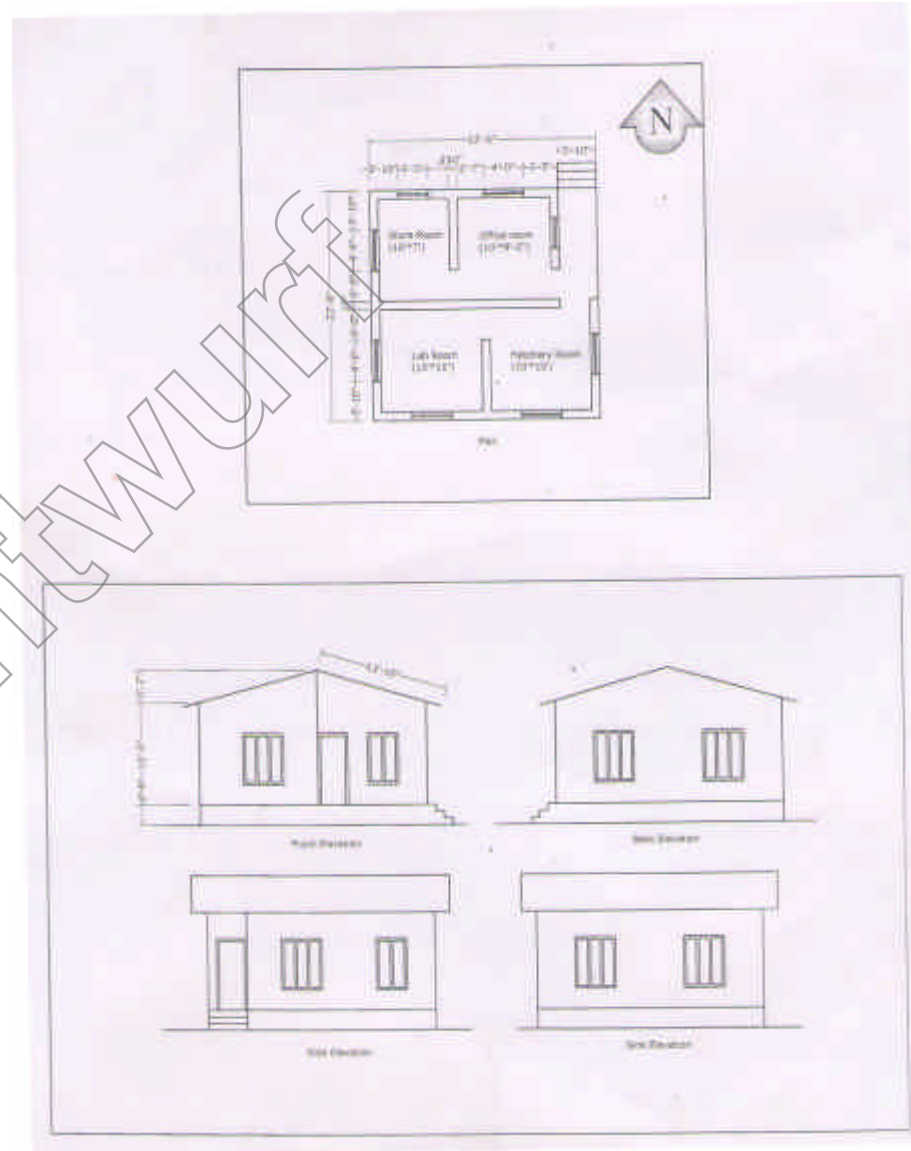
Oficina

Centro de visitantes

Incubación

Criadero

Laboratorio



## Why to develop the BUDO HOLI Turtle Conservation Centre

### Humanitary reasons

#### 1) Who or what are projects beneficiaries

- Local people
- The rare and endangered turtle species
- Motivation, education and employment of local people for respect and appreciation of natural environment, its fauna and flora by conservation strategies for endangered turtle and tortoise species
- Creation of nationwide awareness
- Habitat conservation and management

#### 2) In what way is the project original?

- Working on species and environment conservation by emphasizing on local indigenous people
- Protecting endangered turtle species including species with **high CITES protection status**

## Why to develop the BUDO HOLI Turtle Conservation Centre

### Conservation aspects

All turtles in Nepal are threatened by **international trade, local use, tourist articles, killed as “pests”** on fishery farms

To catch turtles is a tradition in many areas of the lowlands. If they cant be sold on markets they remain kept alive in cooking pots until they die and then they are thrown away

There are no more fully grown adults caught of the genus *Pangshura* and all Softshells.

Genera occurring east and west of Nepal like *Geoclemys*, *Morenia*, *Hardella*, and the big growing *Kachugas* cant be found anymore in wild.

Turtles are used as human food by animistic indigenous people.



User profile information and bio



Main content area with text and a watermark 'Entwurf'.

Right sidebar containing a yellow button and a list of items.

## **Education and Awareness**

**At the Croc Bank, we believe that education is the ultimate key to long term sustainable conservation. We devote a large part of our time and resources towards educating people of all ages and backgrounds in the importance of conserving reptiles and natural ecosystems. How do we know our education program is working? One clear indication is that after thirty plus years in action, many of India's leading environmental proponents, including top decision makers and corporate activists cite the Croc Bank experience as an early turning point during their informative years. Something that Team Croc Bank is very proud of!**

## **Conservation and Research**

**In line with our mission statement, the Croc Bank believes that successful conservation is built on sound scientific research and the two actions are tightly knit. To this end, the Croc Bank has joined forces with many of the world's foremost experts and organizations in an effort to better achieve these immense tasks. At the core of our ambitious operation is a dedicated Scientific Committee made up of Indian and international experts**

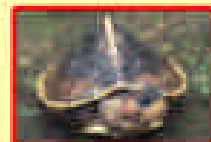
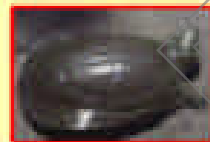
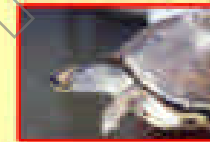


# SAVE US



## WE ARE ON EXTINCTION

Amphibian and Reptile  
Conservation of Nepal



*people eat, kill, export  
and worship us,  
destroy our habitats*



*and empty land remains*

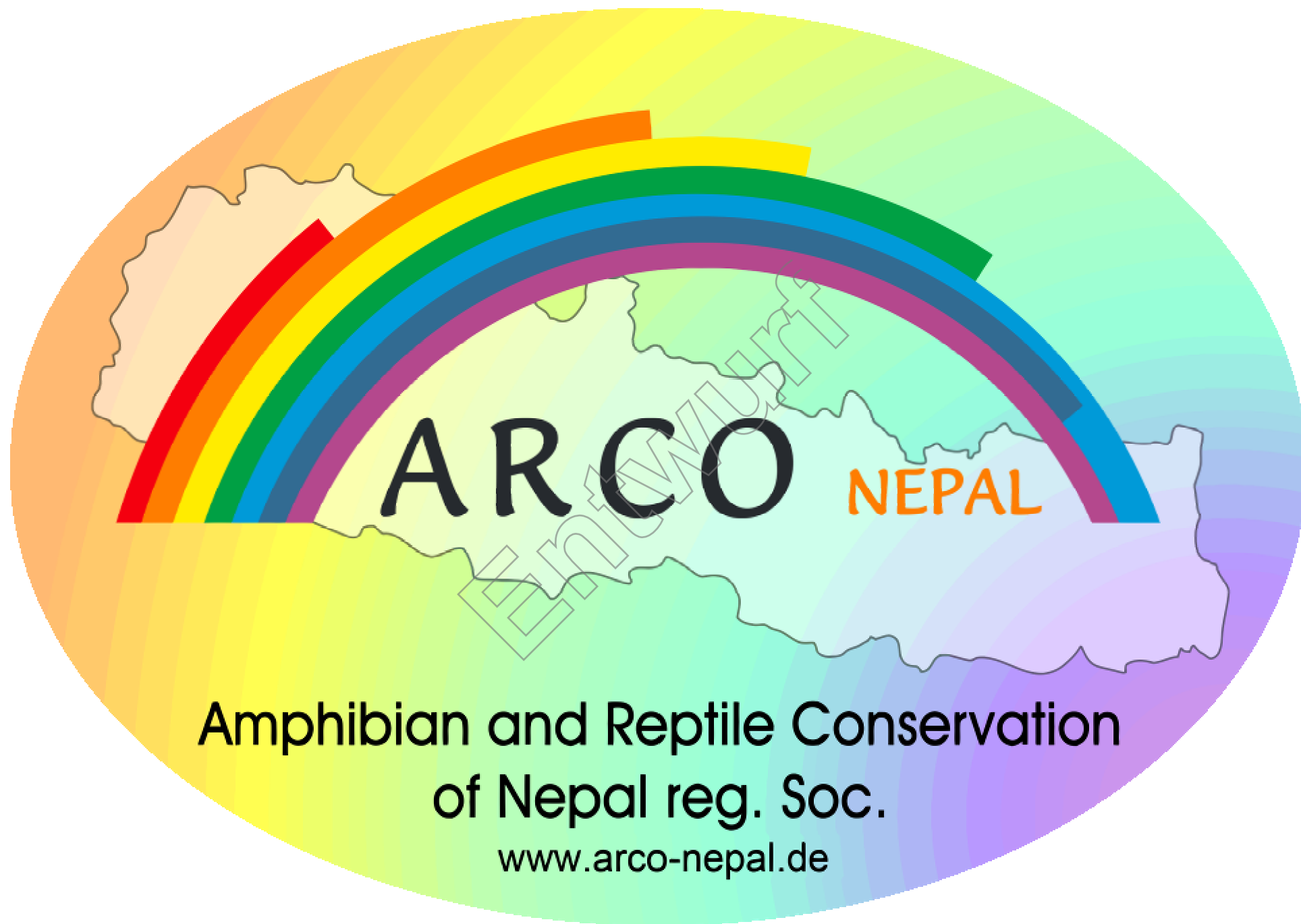
[www.arco-nepal.de](http://www.arco-nepal.de)



**ARCO-Nepal fights for Turtle  
Survival for future generations**

**Conserving Turtles and their Natural Habitats – gives a future to all!!**





**ARCO** NEPAL

**Amphibian and Reptile Conservation  
of Nepal reg. Soc.**

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