

Crocodile Conservation Awareness Project (CCAP) (RSG Project: 05.06.06)

Final Report



**Submitted by
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**Submitted to
The Rufford Small Grants Foundation, UK**

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Team leader: Bishnu Hari Wagle

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Acronyms

BZ	Buffer Zone
CBO	Community Based Organization
CCAP	Crocodile Conservation Awareness Project
CCC	Crocodile Conservation Club
CITES	Convention on International Trade in Endangered Species of Wild Fauna & Flora
CNP	Chitwan National Park
DNPWC	Department of National Parks and Wildlife Conservation
FM	Frequency Modulation
HSS	Higher Secondary School
IUCN	International Union for the Conservation of Nature and Natural Resources
LSS	Lower Secondary School
Nrs.	Nepalese Rupees
PARC	Partnership for Rhino Conservation
RP	Resource Person
RSGF	Rufford Small Grants Foundation
SS	Secondary School
VDC	Village Development Committee
WWF	World Wildlife Fund

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1. Background

There are altogether 23 species of crocodilian in the world within its 3 families. Among the 23 species, only two species i.e., Marsh crocodile (*Crocodylus palustris*) and Gharial (*Gavialis gangeticus*) are found in Nepal.

Marsh crocodile are principally restricted to the Indian sub continent where they may be found in number of freshwater habitat types including rivers, lakes, and marshes. In India and Srilanka marsh crocodiles have adapted well to reservoirs, irrigation canal and manmade ponds and in some area may even found in coastal water lagoons (Whitaker 1987, Whitaker and Whitaker 1989). Historically marsh crocodile was relatively common throughout the Terai of Nepal in marshy lakes, ponds and small rivers (Groombridge 1982) and now it is reduced to isolated population primarily in protected habitat such as Suklaphanta Wildlife Reserve, Koshitappu Wildlife Reserve, Bardia National Park and Chitwan National Park (Andrews and McEachern 1994).

Historically, the gharial was abundant in all the large river systems of the Indian subcontinent. Its range extended throughout the Gangetic plain, west to the Indus River in Pakistan, north and north-east to Nepal and Bhutan, east to Burma, and south to Orissa in India (Neill 1971, cited in Shrestha, 2001). The gharial is now restricted to scattered, isolated population in India, Nepal and Bangladesh. It has been reported to be extinct in Burma and Pakistan (Behura and Singh 1978, cited in Shrestha, 2001). Until the early 1960s, gharials were found in all the major river systems of Nepal, including the Mahakali, Karnali, Babai, and Rapti rivers in western Nepal, the Kali Gandaki and Narayani rivers in central Nepal and the Koshi River in eastern Nepal. By the late 1970s, there had been a drastic depletion in their abundance and distribution; in fact, the wild gharial had become extinct in the Mahakali and Rapti rivers in western Nepal and Koshi River in eastern Nepal. The major threats faced Nepalese crocodile include human interferences, over fishing by locals, illegal collection of their eggs for food, flooding of nesting sites, pollution and construction of dams. Gharials in Nepal are fully protected under the National Parks and Wildlife Conservation Act 1973. There is provision of punishment with a fine ranging from forty to seventy five thousand rupees, or face an imprisonment ranging from one year to ten years or both for any person who kills or injures this animal. The animal is listed as "Endangered species" in IUCN Red data book and in "Appendix-I" of CITES animal category. Similarly, the marsh crocodile is listed as a vulnerable species in the IUCN Red Data Book and is protected by law in all the countries of its occurrence (Whitaker 1987).

To restore the rapidly dwindling population of crocodile in Nepal, breeding program was started with the establishment of Gharial Breeding Center in Kasara, Chitwan since 1978.

Thus, Crocodile conservation efforts in Nepal began in 1978 when Gharial Breeding Center was established in Kasara inside the Chitwan National Park. Over the interim years, the gharial and marsh crocodiles have been bred in captivity and released in the different rivers. However they have successfully been bred and released, there have been no attempts to educate people on the values of maintaining riverine habitat and the important link crocodiles play in healthy wetland ecosystems (Andrews, H.V. and P. McEachern, 1994). Intensive fishing has reduced food levels and effected crocodile numbers. They become entangled in nets and either drown or are killed by fishermen. Fishermen view them as competitors for a limited resource needed to feed people. Subsequently, egg collection and slaughter of crocodiles by tribal hunters have been on-going as deterrent to fishing competition, as a food item, and for body parts thought to have medicinal value. Habitat degradation along floodplain and river banks due to intensive agricultural practices has led to further depletion of habitat required to sustain viable crocodile populations in Nepal (Andrews, H.V. and P. McEachern, 1994).

Box 1 General Characteristics of Crocodilian

- All crocodilians depend upon wetland habitats and they are effective aquatic predators
- Crocodiles are cold blooded and have a body temperature similar to the surrounding air, land or water
- At smaller sizes they often eat aquatic insects, small fish and crustaceans and as they grow larger they tend eat more vertebrates, including fish, turtles, birds and mammals. Crocodiles have a tendency to retain hard, indigestible objects in their stomach and most crocodiles over two meters long have been found to have stones in their stomach. It is believed that the stones are used as gastrulates (to aid in grinding up food) and that they also may function as ballast (just as in a ship's hull).
- Crocodiles attempt to maintain their body temperature within narrow limits by basking in the sun when cool and seeking shade when hot.
- They are metabolically efficient and have fast reflexes and effective locomotors ability on land, where they walk on erect legs, and in the water, where they swim rapidly driven by their powerful tails.
- Crocodilians have complex behaviours including social interactions, dominance hierarchies, vocalization, coordinated feeding, and well developed maternal behaviour.
- Females deposit from 10 to over 60 hard-shelled eggs into a nest which is either a hole dug into the ground, or into a mound of vegetation formed by the female. Most females remain near their nest during incubation and may protect it from predators. Upon hatching, vocalizations made by the hatchlings induce the female to assist the hatchlings to emerge, and in some cases to carry the tiny babies to the water in her mouth. Hatchlings remain together near the mother for several months, deriving protection from her.
- As they grow and become more widely dispersed and independent, a large number of the offspring perish– some eaten by other crocodilians.
- The survivors reach maturity after a period of 5–15 years depending on the species.
- Females grow more slowly and reach maturity at a smaller size than males, who continue growing and usually exceed females in maximum size. Crocodilians can be long lived in the wild and there are records of particular individuals residing for decades at some locations.
- Adults of several species emit loud vocalizations during the breeding season

Local people can play an important role to make any conservation effort successful. Until and unless they realize the importance of conservation, they do not participate in the conservation endeavours. Realizing these facts, the Crocodile Conservation Awareness Project (CCAP), officially unregistered project tries to change the negative perception about the crocodile conservation of the local people through different types of awareness raising activities among different targeted groups. The project has been started from the financial support of Rufford Small Grants Foundation UK. The activities of the project are implemented with the permission of Department of National Parks and Wildlife Conservation (DNPWC) under the Ministry of Forest and Soil and Conservation of Government of Nepal.

The project activities have been implemented in the local communities and 10 different schools which are located in 6 different VDCs of the buffer zone area of Chitwan National Park.

Box 2: Importance of Crocodile

Crocodiles are important for several aspects, such as their existence indicates the healthy aquatic ecosystem and their hide and meat has a big commercial value (Whitaker 1987). As a “keystone species” crocodile maintain structure and function in aquatic ecosystem by their activities (King 1988). These ecological roles include selective predation on fish species, recycling of nutrients and maintenance of wet refugia during drought season. Crocodiles are very important to the river ecosystem and to humans. They contribute to the health of the ecosystem and biodiversity. They are the top predator and as such are an essential part of the biodiversity of these habitats (Rashid, 2003, cited in Deppert, 2004). They prey on the slow moving predatory fish thus removing the diseased individuals, thereby maintaining good stocks of commercially valuable fish in any water body. Few studies done in Africa, Australia and America indicate that the presence of crocs in a water system actually boosted fish stocks (Deppert, 2004). A loss of any species of crocodilian would represent a significant loss of biodiversity, economic potential and ecosystem stability (IUCN, 1998). Crocodiles are called the indicators of a clean aquatic environment for a very good reason. Without the mugger or the gharial in the wild we lose so much. These crocodiles feed on the weak and sick fish keeping the fish population strong and healthy. They also keep the water clean and uncontaminated by scavenging on dead animal matter. Without the crocodiles in the water systems, the larger predator fish will eat the smaller commercially important fish, resulting in a smaller population of fish for the fishermen. The crocodiles will eat the larger predator fish thereby allowing a greater population and commercial catch of fish in the river.

2. Objectives and Strategy

2.1 Objectives

- To contribute on crocodile conservation efforts in Chitwan National Park, Nepal through awareness raising activities among local people and high school students
- To disseminate (internationally) the information regarding crocodiles and their conservation issues/efforts in Nepal

2.2 Strategy

School students can play important role to aware their family and community. Today's students represent for future community and/or society. The educated and/or aware community about the conservation issues will play significant role for the sustainability conservation. Keeping these things in view, most of the activities were designed to mobilize the school students directly or indirectly.

3. Activities

3.1 School Selection

10 different schools were selected to implement the project activities. The selection procedure followed discussion with park staff and key informants; and direct observations. Nearness of the school from habitat of crocodile and dependency of the local community on the habitat are major criteria of selection. Thus, the following schools were selected from six different VDCs inside the Buffer Zone area of Chitwan National Park:

1. Kohilaha Lower Secondary School, Divyanagar
2. Adarsha Higher Secondary School, Divyanagar
3. Janaki Higher Secondary School, Meghauri
4. Saraswati Secondary School, Meghauri
5. Shajhapur Secondary School, Meghauri
6. Prabhat Higher Secondary School, Sukranagar
7. Laxmi Secondary School, Jagatpur
8. Siddhartha Lower Secondary School, Jagatpur
9. Someshwor Higher Secondary School, Gardi
10. Madi Secondary School, Basantapur

3.2 Crocodile Conservation Club (CCC) Formation

To organize the students in different conservation activities, Crocodile Conservation Clubs are formed in the selected schools. The headmasters and other teachers of respective schools facilitated in the process of club formation. The club members varied from 9 to 13 in number and comprised balanced teams of boys and girls; and the students from different classes as well. Name list of the club members of each school have been presented in annex 1.

3.3 Wall Magazine Publication at School

Each crocodile conservation club published wall magazines in their school (one magazine in every three months). Thus, altogether 40 wall magazines were published by the 10 crocodile conservation clubs. The students expressed the message of conservation through their article, song, poem and other creation in the magazine. The wall magazine served as an extension material among the school students and teachers. Students got opportunity to share the



information among their friends and teachers through the magazine.

3.4 Teaching and Field Visit

Students were provided knowledge about the role of crocodile as a key stone species and the issues of their conservation through the classroom activities. Lecture and group discussion methods were used to deliver the information/knowledge of conservation. Moreover, the representative students from each school were participated in the field visit. Major places that students visited were:

- ◆ Museum at the headquarter of Chitwan National Park,
- ◆ Gharial Breeding Center at Kasara inside Chitwan National Park and
- ◆ Surrounding of Rapti River which is the main natural habitat and release site of crocodile in Nepal.



At the breeding center, a class was organized for the students to describe the breeding center's activities. Students actively participated in the discussion session of the class where Park Ranger Sujan Maharjan and Prem Chapagain of Gharial Breeding Center clarified the queries of the students. The name list of the students participated in field visit is presented in annex 3.

3.5 Conservation Rally

In the morning of day of field visit, students possessed a rally at Jagatpur area with the message of conservation in banner and display-cards. The concept of the rally was developed by the students themselves and the CCC members mobilized their friends to participate in the rally.

About 100 students from 10 different schools involved in the rally.



3.6 Drawing Competition



A drawing competition was organized among the lower secondary (class 6-8) and secondary level (class 9-10) students in April 10, 2007. The program was organized by Laxmi Crocodile Conservation Club and held at Laxmi Secondary School, Jagatpur,

Chitwan. The students from different schools made their drawings which were evaluated by a team of experts on the same day.

Besides the students, following persons were present in the program:

- **Chief Guest:** Nari Narayan Paudel, President, School management Committee, Laxmi Secondary School
- **Special Guest:** Toya Nath Paudel, Vice-president, Youth Group for Poaching Control, Jagatpur
- **Guest:** Sujan Maharjan, Ranger, Chitwan national Park
- **Guest:** Shiva Lal Gaire, Ranger, Chitwan national Park
- **Guest:** Mukta Bahadur Paudel, Headmaster, Laxmi Secondary School
- **Guest:** Anjana Bhattarai, Teacher, Laxmi Secondary School
- **Guest:** Suman Bhattarai, Team Leader, PARC
- **Guest:** Uttam Luintel, Birendra Campus, Chitwan
- Bishnu Hari Wagle, Team Leader, CCAP and
- Radha Chhetri, Field Assistant, CCAP

The name list of the participating students is present in annex 2.

On the inauguration session, the Chief Guest said that such type of activities at grassroots level should be organized regularly and it would certainly motivate not only the students but the whole community. Similarly, headmaster of Laxmi Secondary School said that they were very happy with the efforts of crocodile conservation awareness project and they

would always be ready to support such programs. Sujan Maharjan, Ranger of Chitwan National Park argued that such community based activities for conservation are very essential not only for the conservation of single species but also for the conservation of whole biodiversity.

Similarly, Toya Nath Paudel and Suman Bhattarai highlighted the need of collaboration of different organizations/projects for the meaningful conservation.

In the closing session, Ram Narayan Mahato, the first prize winner student said that they are very much interested to participate in such program and they would certainly convey the message of conservation not only among their friends, but also among their family members and community. He also requested that guidance and support only for short period like one year is not sufficient to smoothly run the clubs' activities and it should be continued for the years to come.

Among the 16 participants, followings were awarded with prizes and letter of certificates:

S.N.	Name of student	School	Rank
1	Ram Narayan Mahato	Sajhapur Secondary School	First
2	Man Bahadur Tamang	Siddhartha Lower Secondary School	Second
3	Sanjaya Mahato	Prabhat Higher Secondary School	Third
4	Biraj Lama	Prabhat Higher Secondary School	Fourth
5	Binu Kunwar	Laxmi Secondary School	Fifth

The RSGF logo was used in the certificate conferred to the students.

3.7 Support to Students

Some students at primary level (class 1-5) were provided educational materials. The students were selected so that they were from the poor family background whose parents were more dependent on the park resources and have problem to afford the educational materials for their children. School



teachers and headmaster assisted to select such students. CCAP directly supported forty students' often different schools. Among the forty students, twenty were boys and remaining twenty were girls. The support materials included a package of exercises copies including conservation copies published by CCAP, pencils, erasers, and pencil sharpeners. The purpose of the support is to imprint the value of crocodile on their mind from the

childhood through the message of conservation printed in the exercise copies in and to reduce the chance of avoiding study by the student from poor family due to financial problem of affording such materials. The In addition, we partially shared (through conservation copies) on the support provided by the Partnership for Rhino Conservation which supported the students in the similar way. The name list of the students receiving support is presented in annex 5.

3.8 Awareness Raising Materials Production/Distribution/Exhibition

3.8.1 Pamphlet

The pamphlets are displayed in the relevant public areas. The pamphlets are also distributed to the different related organizations so that they can display and distribute to other relevant organizations and individuals.



3.8.2 Conservation Copy



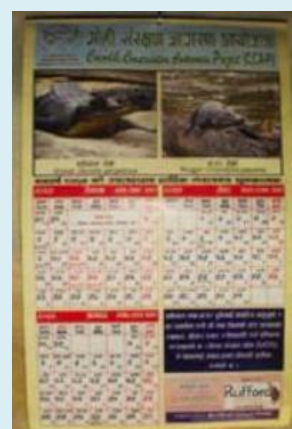
CCAP in collaboration with the Partnership for Rhino Conservation (PARC), RSG project based in the same working area of the CCAP has produced exercise-copies with the message of conservation in front and back of cover pages.

The RSGF logo and contact details of the team leaders were printed on the cover page. These copies served as a part of stationeries and are also distributed for the students from the poor family background who are

especially more dependent on the natural resources of the park and its surroundings. The messages on the cover pages should have increased the awareness level of the students and their family members.

3.8.3 Wall Calendar

On the occasion of Nepalese New Year 2064 B. S., one thousand copies of wall calendars were published. The



calendar consisted 4 pages where about 50% area of whole page contained the pictures and message of conservation and remaining 50% area included national festivals, holidays, national and international days. Some selected drawings of the school students from the drawing competition organized by the project were also printed on the calendar as a message of conservation. The RSGF logo along with the contact detail of team leader was also printed on the calendar. The calendars were distributed to local people at free of cost, directly by the project and indirectly through CBOs. In addition, those were distributed to other relevant governmental and non-governmental organizations, schools etc. Since, calendar use to be hanged on every household throughout the year, it should have created magnificent positive effect on crocodile conservation.

3.9 Essay Competition

Inter school essay competition entitled "Role of Local Community on Crocodile Conservation" was organized on the occasion of Vijaya Dashami (the greatest festival in Nepal). The essays were collected from different schools and evaluated by a team of experts. Among the 19 participants from 8 different schools, top four essays were awarded with prizes and letter of certificates. Use used RSGF logo in the certificate.



Name list of the students participated in the competition is presented in annex 4 and followings were the top four students.

S.N.	Name of student	School	Rank
1	Prahlad Chapagain	Someshwor Higher Secondary School	First
2	Bhuwan Paudel	Aadarsha Higher Secondary School	Second
3	Suresh Lamichhane	Someshwor Higher Secondary School	Third
4	Binu Kunwar	Laxmi Secondary School	Fourth

Prize distribution program was organized at Adarsha Higher Secondary School, Divyanagar, Chitwan in 26 November, 2007. Bishnu Hari Wagle, team leader of CCAP chaired the prize distribution program whereas Tulasi Prasad Ghimire, headmaster of Adarsha Higher Secondary School was the Chief Guest.

The Chief Guest highlighted the need of such programs at school level; requested for the continuity of such program; and also committed to support such program in the days to come.

Similarly, Prahlad Chapagain, student of Someshwor Higher Secondary School (also the first prize winner) said that they were very much interested to be involved in conservation related field and they need continuous support and guidance.

3.10 Notice Board Distribution

CCAP prepared 10 notice boards in collaboration with the Partnership for Rhino Conservation. Those boards were distributed to the Crocodile Conservation Clubs (CCCs) of each school. CCCs have fixed those boards in an appropriate place of the respective schools. The purpose of distributing those boards is to provide a secured space to publish and/or paste conservation related news, messages and other relevant materials.



The boards were distributed at about the end of the project activities; and hopefully, this will encourage the students and teachers to share the information of conservation.

3.11 Website

The website www.crocodilenepal.org was registered in March 2007 from Pokharacity.com at Pokhara, Nepal. The website is dynamic in nature and allocated 50 MB space. The website contains useful information about the crocodiles found in Nepal and their conservation efforts and issues. We have used the RSGF logo in the website. The website is still being updated.

4. Project Management

4.1 Coordination

Prior to the direct implementation of the field activities, we informed the Department of National Parks and Wildlife Conservation (DNPWC), Chitwan national park, local NGOs and other stakeholders. As per our request DNPWC formally provided a permission letter to launch the project activities. Similarly, we made participation of the Chitwan national park, local NGOs/Conservation Groups, School teachers/students/management committee in our activities as guests/resource persons/ participants/organizer.

In collaboration with PARC, we published exercise copies with message of conservation in front and back cover and also prepared and distributed the Notice boards to each Crocodile Conservation Club. We also discussed and got idea from WWF Nepal launch the school based activities. Similarly, we had discussion with Antoine Joseph, Program officer of SOS Crocodiles which is supporting Gharial Breeding Center of Kasara and now they have proposed CCAP as one of the technical partners of their proposed project “Sustainable Conservation of Gharial in Nepal”.

4.2 Appointment of Local Field Assistant

Under the direct supervision of team leader; Mrs. Radha Chhetri, a local resident of the project area was appointed as Field Assistant to assist the project for the period of 9 months. Her major responsibilities were to assist in organizing the field activities, establish effective communication between the park, project, school and other stakeholders and to assist the club members in publishing the wall magazine.

5. Project in Media

The news of the project activities were broadcasted from the local FM radio in Chitwan (Synergy FM and Kalika FM) and Nawalparasi (Bijaya FM). Similarly, an interview with the team leader (Bishnu Hari Wagle) was broadcasted from the Annapurna FM Radio of Pokhara, Nepal. The interview was of 15 minute duration where 3 RSG recipients described about their project activities and the species concerned. Besides this, news of the project activities were published in Chitwan post, a daily magazine published from Chitwan, Nepal.

6. Outputs and Success of the Project

The outputs of the project have been summarized in the following table. Success of the project has been evaluated by the indicators of success.

S. N.	Output	Activities	Indicator (and/or means of verification)
1	Students often different schools inside the BZ area of CNP are organized for crocodile conservation	<ul style="list-style-type: none"> CCC formation in 10 different Schools inside BZ area of CNP 	<ul style="list-style-type: none"> Name list of club and club members Minute book of the club Participation of students in Project activities
2	Awareness level of students and teachers	<ul style="list-style-type: none"> Teaching Wall magazine 	<ul style="list-style-type: none"> Report Hardcopy and Photograph of

	increased	<ul style="list-style-type: none"> · publication · Drawing Competition · Essay Competition · Support to students · Distribution of awareness raising materials 	<ul style="list-style-type: none"> · The magazine · Commitment of students; Conservation message expressed by students in magazine, essay, drawing · Number of participants in field visits, drawing/essay competition, name list of the students receiving support
3	Awareness of the local community of six different VDCs of BZ area of CNP increased for crocodile conservation	<ul style="list-style-type: none"> · Rally by the student · Awareness raising materials displayed and distributed to the community 	<ul style="list-style-type: none"> · Commitment of the local leader/people · Photographs of rally · Hardcopy and photographs of calendar, conservation copy and pamphlet
4	Worldwide availability of information on efforts/issues of Crocodile conservation in Nepal	<ul style="list-style-type: none"> · Website development and hosting 	<ul style="list-style-type: none"> · Website: www.crocodilenepal.org · Information available in the website · Response from different national and international organization

7. Important Steps for Future

We feel following steps are important for future:

- **Renew and strengthen the school clubs:** School based activities through the school clubs are very effective ways to educate the present and the future community on conservation. Since the school-club members use to be passed out with the SLC examination, the continuity of the clubs' activities in the school remains questionable without their annual renewal. Involvement of at least one teacher as a guide of the club would be an effective way to make the club more sustainable. Similarly, their knowledge and skill should be strengthened. They should have accessibility to the information of conservation.
- **Collaboration and networking of conservation clubs**
- **Mobilization and strengthening of CBOs towards conservation**
- **Park-people Interaction:** there is some misunderstanding among the local people and park officials regarding the use rights of local people. For example; fishing groups viewed park has been encroaching their traditional rights by limiting the area, time and methods of fishing; but park official argue that they are making their fishing practice more sustainable with the provision of license. But, they have very

limited interaction on such matters. Therefore, it needs more and more interaction between park and local community on such issues to get co-coordinated efforts for conservation.

- **Specific trainings to specific groups:** about safe fishing techniques for indigenous fishing group; about organic farming (minimum use of chemical use on farming) for farmers to minimize the effect of chemical fertilizer on wetland habitat;
- **Skill Development training to poor people to generate alternatives of their livelihoods**
- **Development and distribution of educational materials in local language**

8. Financial Information

The detail on how the budget was utilized is presented in the following table:

S.N.	Description	Budgeted		Actual		Remarks
		Nrs.	£ Sterling	Nrs.	£ Sterling	
1	Allowances					
1.1	Team leader (270 days @ Nrs. 5000)	135000	985.40	135000	979.11	food and accommodation
1.2	Assistants	60000	437.96	59000	427.91	
1.2.1	Field assistant (1 no. *9 months @ Nrs.5000)			45000	326.37	paid to field assistant
1.2.2	Resource person (RP) (20 days @ 700)			14000	101.54	paid to RPs during school teaching program
2	Travel	15000	109.49	20000	145.05	
2.1	Within project area for field assistant			6000	43.52	
2.2	Kathmandu visit (1 person @ 2000*2 times)			4000	29.01	to take permission from DNPWC
2.3	Within project area for team leader and resource persons (5 times @ 2000)					
3	Drawing competition	20000	146	26720	193.80	
3.1	Drawing set (16 no. @ 650)			10400	75.43	
3.2	Refreshment (24 person @ 100)			2400	17.41	
3.3	Banner (1no. @ 1000)			1000	7.25	
3.4	Evaluation (3 evaluator @ 1500)			4500	32.64	paid to evaluator
3.5	Transportation (16 person @ 120)			1920	13.93	paid to participants
3.6	Prize and certificates (lump sum)			6500	47.14	
4	Field Visit	32000	233.58	20000	145.05	
4.1	Launch and refreshment (46		87.59	9200	66.72	

	person @ 200)					
4.2	Bus fare (39 student @ 200)	145.99		7800	56.57	paid to students
4.3	Resource persons (2 RP @ 1000)			2000	14.51	paid to resource person
4.4	Banner (1 no.@ 1000)			1000	7.25	
5	Essay competition	20000	146	20700	150.13	
5.1	Prize and certificates (lump sum)			6200	44.97	
5.2	Evaluation (3 evaluator @ 1500)			4500	32.64	paid to evaluator
5.3	Banner (1 no. @ 1000)			1000	7.25	
5.4	Tea and snacks (300 Person @ 30)			9000	65.27	
6	Calendar	60000	437.96	67000	485.93	
6.1	Production cost (1000 no.@ 60)			60000	435.16	paid to press for designing and printing
6.2	Distribution cost (lump sum)			7000	50.77	
7	Support to ccc	60000	437.96	65000	471.42	
7.1	Wall magazine (4 Issues @ 1000*10 clubs)			40000	290.11	paid to clubs
7.2	Stationeries for clubs (10 no. @ 400)			4000	29.01	
7.3	Notice board (10 no. @ 2100)			21000	152.30	board preparation and transportation cost
8	Stationeries, equipments and teaching materials	25000	182.48	26000	188.57	
8.1	Teaching materials (10 set @ 500)			5000	36.26	
8.2	Digital camera (1 no. @ 21000)			21000	152.31	
9	Other Extension materials**			18000	130.55	
9.1	Conservation copy production (120 dozen @ 100)			12000	87.03	paid to press
9.2	Pamphlet production (3000 no. @ 2)			6000	43.52	paid to press
10	Support to student** (40 student @ 525)			21000	152.31	cost of education materials except the cost of conservation copies
11	Website	25000	182.48	24000	174.06	paid for designer and hosting cost
12	Communication**			6500	47.14	
13	Report preparation	30000	218.98	19000	137.80	literature (printing, photocopy) and payment to reviewers
14	Bank charge (Account transfer)**			4827	35	
15	Contingency	48200	351.82			
	Total	530200	3870	532747	3863.83	

** cost of those items were not included during budget planning and those were covered from the contingency

Planned exchange rate: 1 £ sterling = 137 Nrs.

Actual exchange rate: 1 £ sterling = 137.88 Nrs.

9. References

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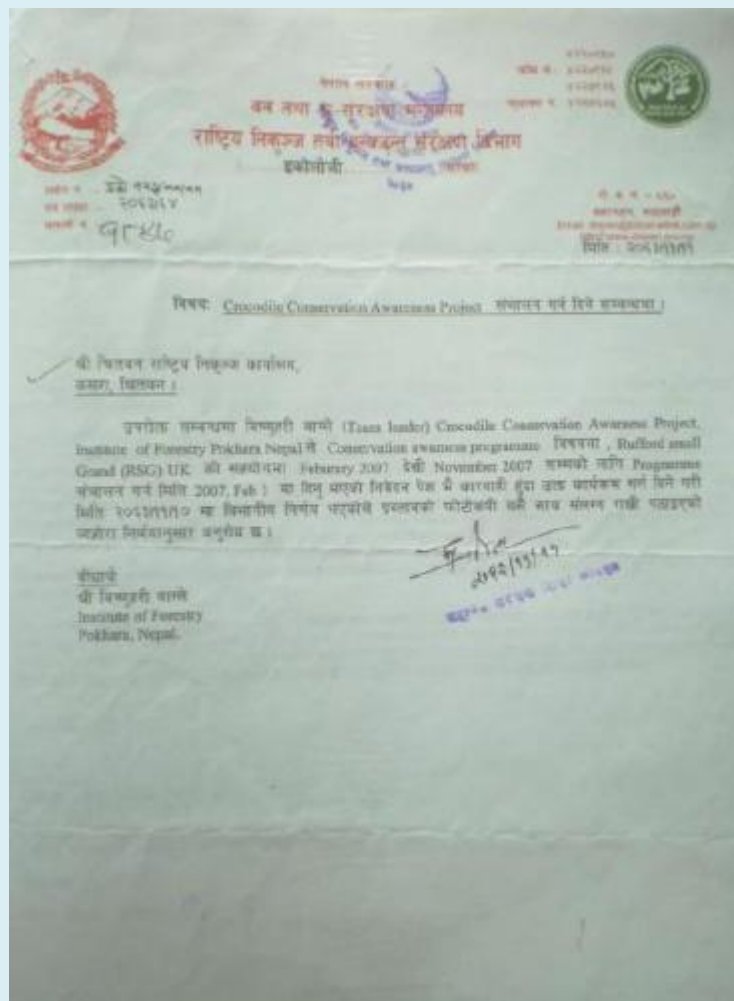
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10. Photo Plates



Permission letter provided by DNPWC to launch project



Student's participation in Drawing Competition



Some drawings from Drawing Competition: Top left: by Ram Narayan Mahato, Top right: by Man Bahadur Tamang, Bottom left: by Biraj Lama and Bottom right: by Sanjaya Mahato



Students' rally at Jagatpur

Students in the breeding center



Students inside museum during field visit

Park ranger answering students' queries at breeding center



Student participation in discussion class



Students in the breeding center



Prize distribution of essay competition



Participation of students in prize distribution program of essay competition



Chief Guest delivering speech on conservation during prize distribution program of essay competition



Winner of essay competition delivering speech on conservation



Certificate of essay competition



Calendar published by the project on the occasion of new year 2064 B. S.



Local transportation of notice boards

Conservation messages and notices

11. Annexes

Annex 1: Name List of Club Members

School name	Laxmi Secondary School	Class
Club name	Laxmi Crocodile Conservation Club	
President	Keshav Raj Sunar	9
Vice-President	Binu Kunwar	9
Secretary	Devi Aryal	8
Treasurer	Bibek Tiwari	8
Member	Sumitra Chalise	9
Member	Saraswati Neupane	8
Member	Suman Shrestha	9
Member	Sagar Paudel	9
Member	Rukshad Kayastha	9
Member	Akelesh Thakur	9
Member	Man B. Nepali	8

School	Janaki Higher Secondary School	Class
President	Uttam Mahato	8a
Vice-President	Teknarayan Bhandari	10
Secretary	Manisha Neupane	9a
Vice-Secretary	Shiva Raj Giri	9b
Treasurer	Bishnu Aryal	9a
Member	Hima Adhikari	8c
Member	Subash Mahato	8c
Member	Gyatri Aryal	8b
Member	Suraj Gurung	
Member	Shanta Pahari	8a
Member	Laxmi Bhusal	9b

School	Adarsha Higher Secondary School	Class
Club name	Adarsha Crocodile Conservation	Club
President	Sujan Gurung	10a
Vice-President	Ishowar Gautam	8b

Secretary	Bhuwan Paudel	9a
Vice-Secretary	Ganga Ram Adhikari	9a
Treasurer	Dil B. Rana, Magar	8a
Member	Kabita Dhakal	8b
Member	Hema Gurung	8a
Member	Gita Bhatta	9b
Member	Mina Mahato	9a
Member	Kamala Sharma	10b
Member	Gyanu Rimal	9b

School	Kohilaha Lower Secondary School	Class
Club name	Kohilaha Crocodile Conservation Club	
President	Sagar Mahato	7
Vice-President	Champa Chaudhary	6
Secretary	Sangeeta Khanal	8
Treasurer	Sumitra Nepali	8
Member	Om Prasad Kafle	6
Member	Kabita Mahato	6
Member	Asha Mahato	7
Member	Rishi Ram Ghimire	7
Member	Kishor Kumar B. K.	8

School	Prabhat Higher Secondary School	Class
Club name	Prabhat Crocodile Conservation Club	
President	Omkar Mahato	10b
Vice-President	Sabitri Bhattarai	9b
Secretary	Binita Shrestha	9a
Vice-Secretary	Sarita Gurung	8c
Treasurer	Kamal Paudel	10a
Member	Jyoti Bhandari	8a
Member	Srijana Acharya	8c
Member	Sanjaya Mahato	8c
Member	Omkumari Mahato	8b
Member	Keshar Bahadur Magar	9a
Member	Laxman Mahato	10a

School	Saraswati Secondary School	Class
Club name	Saraswati Crocodile Conservation Club	
President	Sarita Paudel	10
Vice-President	Arjun Tiwari	10
Secretary	Ser Bahadur Kumal	10
Vice-Secretary	Ruku Sapkota	9
Treasurer	Pushpa Bhattarai	8
Member	Dipa Kumal	9
Member	Hemant Kumal	10
Member	Shova Paudel	8
Member	Padam Paudel	9
Member	Bhoj Bahadur Kumal	8
Member	Prajapati Sapkota	10

School	Siddhartha Lower Secondary School	Class
Club name	Siddhartha Crocodile Conservation Club	
President	Manoj Karki	8
Vice-President	Usha Tamang	7
Secretary	Bikash Ghalan	6
Vice-Secretary	Rojina Timilsana	8
Treasurer	Mamina Achhami	8
Member	Nav raj Bastola	6
Member	Menuka Magar	6
Member	Saraswati Magar	7

School	Sajhapur Secondary School	Class
Club name	Sajhapur Crocodile Conservation Club	
President	Sushma Chhetri	9
Vice-President	Ram Chandra Marahatha	10
Secretary	Pomnath Sapkota	10
Vice-Secretary	Sumitra Devkota	10
Treasurer	Meera Basnet	8
Member	Megh Raj Paudel	9
Member	Goma Chapagain	10
Member	Rajesh Mahato	9

Member	Jyoti Chaudhari	9
Member	Apsara Mahato	8
Member	Jitram Mahato	8
School	Someshowar Secondary School	Class
Club name	Someshowar Crocodile Conservation Club	
President	Suresh Lamichhane	9A
V-president	Lila Mahato	9A
Secretary	Bishal Raj Paudel	8B
Treasurer	Prahlad Chapagain	9A
Member	Suk B. Nepali	9C
Member	Jamuna Bhushal	9A
Member	Shanta Lamichhane	9C
Member	Laxmi Dahal	8B
Member	Kamal Raj Paudel	8A
Member	Sarashowati Pariyar	8A
Member	Uttam Mahato	9B
School	Madi Secondary School	Class
Club name	Madi Crocodile Conservation Club	
President	Dhiraj Gupta	9A
V-president	Keshari Neupane	9B
Secretary	Rabindra Sapkota	8A
V-secretary	Dharma Raj Bhushal	8A
Treasurer	Rachana Thapa	9A
Member	Sunita Paudel	8A
Member	Bhima Kumari Paudel	8B
Member	Jyoti Ramdas	9A
Member	Prem Kumari Neupane	9C
Member	Suresh Lamichhane	9B
Member	Janak Raj B.K.	8B
Member	Dipendra Mahato	9C
Member	Sanjaya Chaudhary	8C
Member	Sarmila B. K.	7

Annex 2: Name list of students participated in drawing competition

S. N.	Students' name	School name
1	Aklesh Thakur	Laxmi SS
2	Bibek Tiwari	Laxmi SS
3	Binu Kunwar	Laxmi SS
4	Biraj Lama	Prabhat HSS
5	Devi Aryal	Laxmi SS
6	Keshav Raj Sunuwar	Laxmi SS
7	Man Bahadur Nepali	Laxmi SS
8	Man Bahadur Tamang	Siddhartha LSS
9	Rajan Kumal	Saraswati SS
10	Ram Narayan Mahato	Sajhapur SS
11	Rupesh Kafle	Saraswati SS
12	Sanjaya Mahato	Prabhat HSS
13	Saraswati Neupane	Laxmi SS
14	Suman Shrestha	Laxmi SS
15	Sumita Chalise	Laxmi SS
16	Surya Aryal	Siddhartha LSS

Annex 3: Name list of students participated in field visit

S. N.	Students name	School name
1	Abhinash Lama	Siddhartha LSS
2	Akelesh Thakur	Laxmi SS
3	Amrit Gurau	Koilaha LSS
4	Bhuwan Paudel	Adarsha HSS
5	Bikash Ghalan	Siddhartha LSS
6	Binita Shrestha	Prabhat HSS
7	Binod Mahato	Sajhapur SS
8	Binod Sapkota	Sajhapur SS
9	Binu Kunwar	Laxmi SS
10	Dasharath Aryal	Janaki HSS
11	Dhiraj Gupta	Basantapur SS
12	Ganga Ram Adhikari	Adarsha HSS
13	Gyanu Rimal	Adarsha HSS
14	Jyoti Chaudhari	Sajhapur SS

15	Kamal Bhurtel	Janaki HSS
16	Keshar Thapa	Prabhat HSS
17	Man Bahadur Nepali	Laxmi SS
18	Manoj Thapa	Prabhat HSS
19	Mira Basnet	Sajhapur SS
20	Nar Bahadur Mahato	Janaki HSS
21	Omkar Mahato	Prabhat HSS
22	Pushpa Bhattarai	Saraswati SS
23	Ram Narayan Mahato	Sajhapur SS
24	Rikesh Mahato	Koilaha LSS
25	Rojina Timilsina	Siddhartha LSS
26	Sabitri Bhattarai	Prabhat HSS
27	Sagar Mahato	Koilaha LSS
28	Saraswati Neupane	Laxmi SS
29	Shiva Prasad Bhandari	Sajhapur SS
30	Sirjana Acharya	Prabhat HSS
31	Sita Sapkota	Saraswati SS
32	Sujan Gurung	Adarsha HSS
33	Sujata Gurung	Adarsha HSS
34	Sumita Sharma	Laxmi SS
35	Sunita Sharma	Laxmi SS
36	Surya Aryal	Siddhartha LSS
37	Umesh Dhakal	Sajhapur SS
38	Uttam Mahato	Janaki HSS
39	Uttam Mahato	Someshwar HSS

Annex 4: Name list of students participated in essay competition

S. N.	Name of student	School
1	Akelesh Thakur	Laxmi SS
2	Bachan Chandra Adhikari	Adarsha HSS
3	Bhuwan Paudel	Adarsha HSS
4	Binu Kunwar	Laxmi SS
5	Jyoti Chaudhari	Sajhapur SS
6	Kul Prasad Bhandari	Janaki HSS
7	Laxmi Bhusal	Janaki HSS

8	Manmaya Mahato	Sajhapur SS
9	Prahlad Chapagain	Someshwor HSS
10	Prakash Dhungana	Janaki HSS
11	Ram Narayan Mahato	Sajhapur SS
12	Ramesh Maheto	Prabhat HSS
13	Rojina Timilsina	Siddhartha LSS
14	Sagar Mahato	Koilaha LSS
15	Saraswati Neupane	Laxmi SS
16	Shisir Giri	Prabhat HSS
17	Sitaram Chaudhari	Prabhat HSS
18	Suresh Lamichhane	Someshwor HSS
19	Surya Aryal	Siddhartha LSS

Annex 5: Name list of students receiving support from CCAP

S. N.	Student name	Class	School	Sex
1	Manav Dharai	1	Adarsha HSS	Male
2	Santoshi Timilsena	1	Adarsha HSS	Female
3	Sajan Kumal	2	Adarsha HSS	Male
4	Bikas Kumal	3	Adarsha HSS	Male
5	Bidhya Darai	1	Janaki HSS	Male
6	Roshan Mahato	2	Janaki HSS	Female
7	Tirtha Adhikari	2	Janaki HSS	Male
8	Sujan Tamang	3	Janaki HSS	Male
9	Sagar Bote	1	Koilaha LSS	Male
10	Suraj Bote	2	Koilaha LSS	Male
11	Fulmaya Bote	2	Koilaha LSS	Female
12	Buddhi Maya Bote	3	Koilaha LSS	Female
13	Rashmi Gurung	1	Laxmi SS	Female
14	Pooja Pariyar	2	Laxmi SS	Female
15	Sandeep Dhungana	3	Laxmi SS	Male
16	Sushma Gurung	3	Laxmi SS	Female
17	Shila Mahato	1	Madi SS	Female
18	Guieda Kumari Mahato	2	Madi SS	Female
19	Pradip Mahato	3	Madi SS	Male
20	Amrita Tiwari	3	Madi SS	Female

21	Kishor Shrestha	1	Prabhat HSS	Male
22	Shanti Tamang	1	Prabhat HSS	Female
23	Sujata Nepali	2	Prabhat HSS	Female
24	Sanju B. K.	3	Prabhat HSS	Female
25	Hem Raj Tamang	1	Sajhapur SS	Male
26	Bishal Sapkota	2	Sajhapur SS	Male
27	Anu Tamang	3	Sajhapur SS	Female
28	Biplav Mahato	3	Sajhapur SS	Male
29	Megh Raj Mahato	1	Saraswati SS	Male
30	Harke Kumal	3	Saraswati SS	Male
31	Bhim Maya Kumal	3	Saraswati SS	Female
32	Ritika Ghimire	2	Saraswati SS	Female
33	Raj Kumar Mahato	1	Siddhartha LSS	Male
34	Rojina B. K.	1	Siddhartha LSS	Female
35	Suman Moktan	2	Siddhartha LSS	Male
36	Sandesh Gurung	3	Siddhartha LSS	Male
37	Sangeeta Mahato	1	Someshwor HSS	Female
38	Shila Paudel	2	Someshwor HSS	Female
39	Anju Mahato	2	Someshwor HSS	Female
40	Rajib Paudel	3	Someshwor HSS	Male