

**DOLPHIN CONSERVATION AWARENESS  
PROJECT**

**By**

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## *Acknowledgements*

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## Background

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The Ganges River Dolphin (*Platanista gangetica*) is locally called Susu and is legally protected mammal (HMG, 1973) in Nepal. The species (River Dolphin) is distributed throughout the Ganges, Brahmaputra, Karnaphuli-Sangu and Meghna River systems, extending from the foot of the Himalayas to the tidal zone in India and Bangladesh. It is found in the slow flowing rivers in the plains of India and Bangladesh. In the case of Nepal, the species is found exclusively in the rivers with clear water and rapids.

The species were once abundant in Nepal throughout the Koshi, Narayani, Karnali and Mahakali Rivers and their feeder streams (Jnawali and Bhaju 2000). However, due to construction of low gated dams across river systems for irrigation and flood control by India, over-exploitation of prey species for human livelihoods, illegal killing and other human disturbances, the species populations are more or less confined to Karnali and Koshi River systems (Smith 1993). Further, Smith et. al. (1996) reported that the species is at the stage of threatened due to the effects of habitat degradation, segregation of breeding groups by downstream barrages, incidental catches during fishing operations and declines in prey fish populations. Although the River Dolphin population size has decreased compared to the past, it is still considered to be large enough to sustain if adequate conservation measures are taken-up.

Intensive fishing, harmful fishing techniques, habitat degradation, motorized transport, deforestation, use of chemical fertilizers, rock mining, removal of woody debris, channelization etc and population segregation are the major threats to Dolphins in Geruwa channel (Main channel of Karnali river) and the major activities that have influenced Dolphin population in the river basin are due to construction of Girijapuri barrage, motorized ferry crossing at Kothiaghat and Chisapani bridge construction (WWF-Nepal, 2006 and Timilsina, 1999). *Mahseer* is a very popular fish in Geruwa channel. This channel provides an excellent home ground for the fish resulting in an intensive fishing in the area. As *Mahseer* is also a favourite prey of the species, it is also seen around the fishing area. People, during the process, harm and even poach the River Dolphin.



Another very important factor causing decrease in the River Dolphin population is due to lack of conservation awareness among the people and minimal emphasis by the park authorities.





## *Goal*

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To promote conservation awareness among people at the local and global level on Dolphin conservation and its related issues, and at the same time bringing people together in conserving this endangered mammal in the long run.





## Objectives

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This project aims to build conservation awareness among people at the local and global level on Dolphin conservation through different awareness raising activities and also helps to ensure long term survival of Dolphins in future.

The specific objectives of the project are as follows:

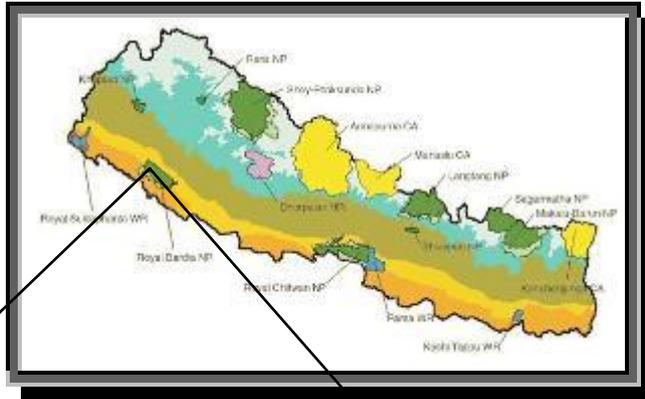
- Activity 1. To prepare habitat map of River Dolphins in Karnali river system,
- Activity 2. To prepare annual calendar and distribute to the people living around Karnali river and concerned institutions/organizations,
- Activity 3. To conduct secondary level interschool speech and essay competition,
- Activity 4. To design and launch website i.e. [www.dolphinnepal.org](http://www.dolphinnepal.org), and
- Activity 5. To develop online network group i.e. [www.groups.yahoo.com/group/dolphinnepal](http://www.groups.yahoo.com/group/dolphinnepal).



## Project Area

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**The Map showing Karnali River (The project Area) in Nepal**





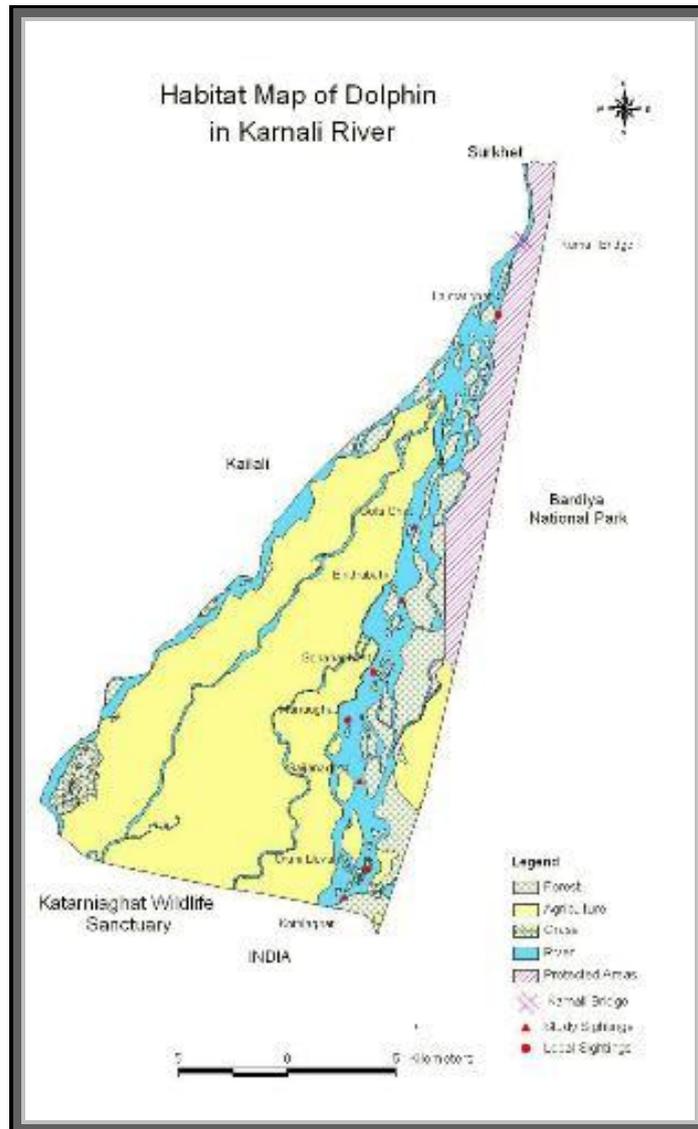
## *Activities' Details*

### Activity 1: Preparing habitat map of River Dolphins

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Participatory Rural Appraisal (PAR) technique was used to identify potential habitat of River Dolphins in the Karnali River System. Tool such as participatory resource mapping and interview with key informants were used. Based on the information a population survey was carried out in October, 2006 (Post monsoon) along Geruwa channel (the main channel of Karnali river). A Raft was used for the survey. The raft was halted for 15- 25 minutes in high Dolphin potential areas. Surfacing of Dolphins was observed and the sighted point was recorded using a GPS. After completion of the fieldwork, these GPS coordinates were transferred to a Topo Map. The Topo Map was digitized using a GIS software (Arc View GIS 3.1 version), later which was developed as a habitat map of River Dolphin in the Karnali River. Habitat map of Dolphins was prepared on the basis of both local sightings and study sightings.

Please view the habitat map of the River Dolphins in the Karnali River.





The River Dolphins were observed in the 20 km stretch of Karnali River from Gola-ghat to Kothia-ghat (Ghats are points of religious significance in Hinduism) during the study in Geruwa channel. They were sighted very often at Gola-ghat, Bindrabahi, Saijanaghat and Kothia-ghat. These spots are regarded as primary habitats during winter season. The channel width and depth of sighted spots ranged from 100-150 m and 5-15 m respectively. These spots are regarded as primary habitats of Dolphins during winter season. But, according to the people, they were also sighted at Lalmatighat, Sonahaphant, Manaughat and Orai dovan. Habitat map of Dolphins was prepared on the basis of both local sightings and study sightings.

Shrestha (1989) observed Dolphins within a range of 46 km during his 1982 and 1983 surveys. His 1986 survey also sighted Dolphins in the same range (Shrestha, 1995). However, these species were found in a range of 36 km from Kothiaghat in 1994 and 1995 (Shrestha, 1995). Smith during his 1990 survey river Dolphins were observed within a range of 18 km and 20 km in his 1993 survey (Smith 1993, 1994). Timilsina (1999) sighted Dolphins in the range of 17 km and identified primary habitats of Dolphins where the convergent streams create an eddy counter current system whereas marginal habitat where low or no eddy counter current.

There is often fluctuation in distribution range of Dolphins depending upon change in water level in the river. During the winter season; most of the Dolphins' major habitats was wide deep pools. However, Dolphins were also seen in other spots during rainy season when water level becomes high.



Photo: Taking GPS point of the Dolphin sighted area



## Activity 2: Preparation and distribution of annual calendar

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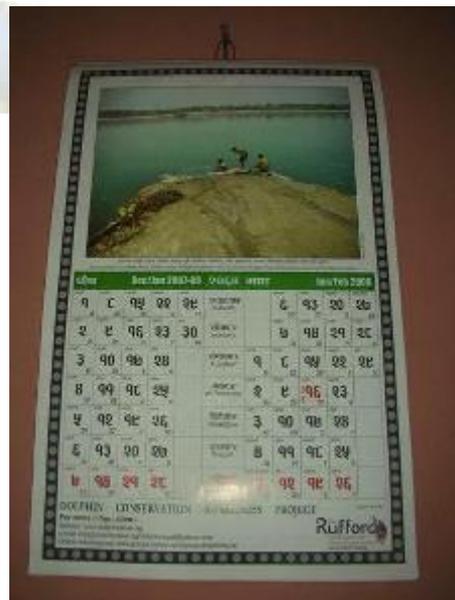
Preparation in preparing a calendar was made before the field visit to survey the habitat of the River Dolphins. All the required photographs were taken during field visit. These photographs were arranged with relevant information and later handed over to *Rajdhani Press* at Kathmandu to design a 3 pages (printed both sides) calendar and publish. A total of 1000 copies were published in May, 2007. The calendar depicted conservation messages regarding Dolphin conservation. These were distributed to different individuals, students, organizations and institutions related to the biodiversity conservation. On special request, some other organizations also received the calendar. The recipients of this annual calendar are given below:

- Local people around Karnali river;
- Students of different schools in the Karnali River and other area;
- Students of Institute of forestry, Pokhara;
- Lecturers, Readers and Professors of Institute of Forestry, Pokhara;
- Kathmandu Forestry College, Kathmandu;
- Different Leasehold Forest User groups;
- Resource Identification and Management of Resources, a project at Gajuri, Dhading;
- Centre for Biodiversity and Environment Conservation, Pokhara;
- National Trust for Nature Conservation/Bardia Conservation Project, Bardia;
- National Trust for Nature Conservation/Suklaphanta Conservation Project, Kanchanpur;
- Ranger Association of Nepal, Babarmahal, Kathmandu;
- Department of Forest Research and Survey, Babarmahal, Kathmandu;
- Department of National Park and Wildlife Conservation and different National Parks and Wildlife Reserves;
- Department of Forest, Kathmandu;
- Bardia National Park, Bardia;
- District Forest Office, Dhading, Chitwan and Nawalparasi;
- Wetland friends of Nepal;
- Red Panda Network, Illam;
- WWF/TAL program, Bardia; and
- Australian Aid, Kathmandu.



Photo- Plates: 1

Some photographs of the calendar distributed





### Activity 3: Secondary level interschool speech/essay competition

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Altogether 9 students from the different five secondary and higher secondary schools participated in the speech and/or essay competition. The venue for competition was the hall of Bardia Conservation Project located within the premise of Bardia National Park's office.

Due to some practical difficulties (i.e. Students having only one day off in a week), the programme was arranged for a day. The one hour essay writing started in the morning. Topic of the essay was "Dolphin Conservation and Our Responsibility". Three persons from different disciplines were members of the evaluation committee. Based on the committee's evaluation, three students respectively Mr. Pradeep Rijal, Miss Goma Khanal and Miss Bandana Adhikari were awarded first, second and third prizes.

Speech competition started in the afternoon, of the very day, and the topic was "Dolphin Conservation and Its Challenges". The participants were allotted 20 minutes each to deliver speech. Three students Mr. Praveen Timilsina, Mr. Santosh Acharya and Mr. Dhipendra Acharya were awarded first, second and third prizes respectively.

Participant's names are tabulated in table 1.



Table 1: The Name list of the participants in the competition is given below.

<b>S. No.</b>	<b>Name of the Student</b>	<b>Name of the School</b>	<b>Address of the school</b>
1	Miss Goma Khanal	Tribhuvan Secondary School	Suryapatuwa, Bardia
2	Miss Maya Chaudhary	Tribhuvan Secondary School	Suryapatuwa, Bardia
3	Mr. Nikhil Giri	Tribhuvan Higher Secondary School	Bhuri gaun, Bardia
4	Mr. Dhipendra Acharya	Tribhuvan Higher Secondary School	Bhuri gaun, Bardia
5	Mr. Praveen Timilsina	Chure Higher Secondary School	Thakurdwara, Bardia
6	Mr. Santosh Acharya	Janjyoti Secondary School	Shivapur-5, Bakuwa
7	Miss Bandana Adhikari	Janjyoti Secondary School	Shivapur-5, Bakuwa
8	Mr. Pradip Rijal	Jagdamba Secondary School	Madela, Bardia
9	Miss Pratibha Pokharel	Jagdamba Secondary School	Madela, Bardia



Photo-Plates: 2



Photo: Participants delivering speech, writing essay and receiving award in the Essay/Speech competition held at NTNC/BCP hall, Bardia



#### Activity 4: Website building and launching

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The domain of the website, [www.dolphinnepal.org](http://www.dolphinnepal.org), was registered in October, 2006 from Pokharacity.com (leading web-hosting agency of Pokhara) at Pokhara, Nepal. The website has been allotted 20 M.B. space. It is dynamic in nature hence online uploading facility is available.

Necessary contents are being uploaded in the website. The web site is well designed placing relevant information of Dolphins and making it visual at first glance. Interested viewer can get important information from the website. Facilities like Sharing information, interacting with other, putting profile in the member list, publishing online reports, thesis and publications are available here.

The sustainability of the website is in question after termination of the project. Taking this problem into consideration, [dolphinnepal.org](http://dolphinnepal.org) has planned to merge with [wetlandfriends.org](http://wetlandfriends.org) (both the products of Rufford Grant) to encompass broader area of biodiversity conservation and its associated issues in newly designed website. Regarding the matter discussion was made with Chief Executive of Wetland Friends of Nepal. It was agreed that the newly launched dynamic website will incorporate wetland, freshwater, biodiversity and environmental issues.

Please find the home page of the website developed.



# Dolphin Nepal E-Society



## MENU



- Home
- Members List
- Reports/Thesis
- Projects
- Publications
- River Systems
- Photo gallery
- MAPS
- Bio Diversity
- Links (Useful links)
- Contact Us



### Essay: Dolphin Conservation and Our Responsibility

This essay has got first position in Interschool essay competition held in November, 2006 in Bardia Conservation Program hall, Bardia, on the topic "Dolphin Conservation and Our Responsibility". It was organized by Dolphin Conservation Awareness Project (DCAP) with the financial support of Rufford Maurice Laing Foundation under? Small Grant Program (SGP). Originally, it was written in Nepali language and here it has been presented into English version.

#### Introduction

Dolphin, a mammal, is known as intelligent, well sensed and superior living being after human. We are also familiar with Dolphin with its local name suns in our area. Scientifically, we call it Platanista Gangetica. In fact, Dolphin is developed form among mammals. Now it is being endangered due to lack of proper conservation measures taken timely and also adding anthropogenic activities against it. In real sense, Dolphin is sensitive, laborious and intelligent mammal which always with very cautious involved in taking care of its off springs. Having seen peculiar behaviour of Dolphins, researchers from all over the world are seriously and surprisingly engaged in studying on Dolphin and also teaching others. We are also familiar about the existence of these mammals in Nepal. Major rivers like Karnali, Koshi and Narayani in Nepal are the suitable habitat for these endangered mammals to live.

The role and need of us students in Dolphin conservation is not a strange in fact. It is well said that students are the eyes of life and students have capacities to face any difficulties they encounter. Students can do any difficult task in simple manner as they wish. Therefore realizing responsibility and duty of students, it is our prime job to protect both aquatic and terrestrial life in a sustainable way. In addition, it is dire need to make habitat's environment favourable for endangered Dolphins from every sector like students, civilized society and intellectual community so that Dolphin can exist with no problems.

Putting all these things in discussion is the first effort to protect Dolphin these days.

Our responsibility and duty for Dolphin conservation is explained more clearly from following given points:

1. First and foremost step for Dolphin conservation is to increase people's participation extensively so that it develops interest to conserve these endangered mammals.
2. Increase awareness among people doing activities like fishing, poisoning etc against suitable habitat of Dolphins.
3. Develop necessary infra-structures for tourism industry.
4. Enact proper law against illegal activities like poaching, fishing etc. and emphasis given on its enforcement effectively.
5. Organize Dolphin related programs at village level to bring people out from their traditional thinking by mentioning its importance and reasons to conserve them.

From the above points, it is clear that Dolphins are how important. We hardly find people who do not get attracted of Dolphins. That is why we must not late to conserve these precious and attracted mammals. Conservation of overall aquatic animals is also an indispensable part of Dolphin conservation. By enacting proper and sufficient law, we should conserve Dolphins.

Conclusion: Definitely Dolphin is a multiple use animal. So, we should make efforts or invest our energy from different sectors like students, schools and eco-clubs for long term conservation of Dolphins to recognize our country (i.e. Nepal) as Dolphin rich country in future as it has now been recognized as hilly country. Also, our duty and responsibility is to make our country as an example all over the world. It is no doubt to recognize Dolphin as an example of developed animals falls under our duty and responsibility because one existence depends on other. Lastly, I must say that lets conserve Dolphins and let's make the environment clean.

Thank you!!!  
 Writer's Name: Praveen Timilsina  
 School's Name: Shree Chure Higher Secondary School, Bardia  
 Class: Ten (10)  
 Roll no. Two (2)

### JOIN NOW

- [Dolphin Group Nepal](#)

### JOIN MEMBER LIST

- [Click here to Join](#)

### GLOBAL DISCUSSION ROOM

- [Click here to enter](#)

### Calendar

### Check E-mail



## Activity 5: Formation of online network group

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The online network, [www.yahoo.groups.com/group/dolphinnepal](http://www.yahoo.groups.com/group/dolphinnepal), on Dolphin conservation was formed in May 22, 2006 (at the occasion of Biodiversity Day). Probably, this could be the first online network on Dolphin in Nepal. The website [www.groups.yahoo.com/group/dolphinnepal](http://www.groups.yahoo.com/group/dolphinnepal) is a forum of persons with interest on River Dolphin to discuss, share information and make comment.

Until very recently 26 members have joined the network. More members are expected to join in upcoming days. The main objective of forming online network is to make intensive discussion on issues related to Dolphin conservation in and outside Nepal.

This facility can also be accessed from [www.dolphinnepal.org](http://www.dolphinnepal.org).





## Outputs of the Project

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S. No.	Activities Outputs	Activities Outputs
1	Habitat Mapping of the River Dolphins	Area with clear water in the Karnali River of Nepal - mapped
2	Essay competition	Awareness level of the students on River Dolphin conservation increased
3	Speech Competition	Awareness level of the students on Rive Dolphin conservation increased
4	Web site formation <a href="http://www.dolphinnepal.org">www.dolphinnepal.org</a>	Information on Dolphin related issues documented and shared
5	Online network formation <a href="http://www.groups.yahoo.com/group/dolphinnepal">www.groups.yahoo.com/group/dolphinnepal</a>	Persons interested in River Dolphin conservation has come together in a common forum to interact regarding River Dolphin related issues.
6	Calendar publishing and distribution	Conservation messages shared with persons living in and around Karnali river and other parts of Nepal



## Project's Success

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S. No.	Activities Indicators	Activities Indicators
1	Habitat Mapping of the Dolphins	<ul style="list-style-type: none"><li>• Map of Dolphin Habitation</li><li>• Photographs</li></ul>
2	Essay Competition	<ul style="list-style-type: none"><li>• Award Certificates</li><li>• Letter of Participation</li><li>• Name list of participated registered</li><li>• Photographs</li></ul>
3	Speech Competition	<ul style="list-style-type: none"><li>• Award Certificates</li><li>• Letter of Participation</li><li>• Name list of participated registered</li><li>• Photographs</li></ul>
4	Website Formation	<ul style="list-style-type: none"><li>• <a href="http://www.dolphinnepal.org">www.dolphinnepal.org</a></li><li>• Number of Visitors visiting the Site</li></ul>
5	Online Network Formation	<ul style="list-style-type: none"><li>• <a href="http://www.groups.yahoo.com/group/dolphinnepal">www.groups.yahoo.com/group/dolphinnepal</a></li><li>• 26 Members Registered the Site</li><li>• Regular Posting of Messages</li></ul>
6	Calendar Publishing and Distribution	<ul style="list-style-type: none"><li>• Hard Copy of Calendar</li><li>• Photographs</li><li>• Calendar Recipients (Individual and Organization)</li></ul>



## *Future Programme*

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Experiences gained from the Dolphin Conservation Awareness Project (DCAP) and other projects in the past, few pressing needs were identified in the field of River Dolphin Conservation.

Karnali River area is populated with large inhabitants of Ethnic communities called *Tharus* and *Sonaha*. These communities are characterized traditionally with fishing livelihoods. They are thus highly dependent on the river for their food and earning, which is fish. These communities are socio-economically poor and low in educational status, making them more dependent in the Rivers. However, their destructive fishing style, lately developed, destructive fishing nets and poisoning the river kills all fishes inclusive of young ones and the fishing environment itself. As fish is diet for the River Dolphin such activities could humpier its availability.

Considering these major factors, the future dolphin conservation programme should address the issues in the field of local livelihoods, extension of conservation messages and/or research findings and research programme identifying the dolphin characters and its associated issues simultaneously for a long term conservation of the River Dolphin. Livelihoods stand as the major focus of Nepal, therefore, has greater significance from peoples' point of view.



## Project's budget

Total amount of finance incurred during the project period is presented in table 2.

Table 2: Financial details of the project

SN	Details	Planned		Actual		Remarks
		NRs	£	NRs	£	
1	<b>Project Leader</b> ( <i>Field allowance@500/day*240days</i> )	<b>120,000.00</b>	<b>952.38</b>	<b>120,000.00</b>	<b>944.88</b>	Food and Accommodation
2	<b>Assistant</b> ( <i>Field allowance @500/day*120days</i> )	<b>60,000.00</b>	<b>476.19</b>	<b>60,000.00</b>	<b>472.44</b>	Food and Accommodation
3	<b>Travel and Communication</b>  3.1 Travel ( <i>1 Person*3 times*NRs 3000</i> )  3.2 Local travel ( <i>2 persons</i> )  3.3 Communication	<b>10,000.00</b>	<b>79.36</b>	<b>18,000.00</b>	<b>141.73</b>	Travel from Pokhara to Bardia and within Bardia districts. Telephone calls.
4	<b>Expert Fee</b> ( <i>@1000.00*2 persons</i> )	<b>20,000.00</b>	<b>158.73</b>	<b>20,000.00</b>	<b>157.48</b>	Reviewers costs
5	<b>Speech competition</b>  4.1 Launch ( <i>@NRs150*30 persons</i> )  4.2 Prizes ( <i>Lump sum</i> )  4.3 Participants DA ( <i>@NRs 200*30 persons</i> )  4.4 Judges fee ( <i>@NRs 1,000*3 persons</i> )  4.5 Hall Fare  4.6 Banner	<b>20,000.00</b>	<b>158.73</b>	<b>19,500.00</b>	<b>153.54</b>	
6	<b>Essay competition</b>  5.1 Refreshment( <i>@NRs 75*30 persons</i> )  5.2 Prizes ( <i>Lump sum</i> )	<b>20,000.00</b>	<b>158.73</b>	<b>12,250.00</b>	<b>96.45</b>	



	5.3 Judges fee (@NRs 1,000*3 persons)			3,000.00		
	5.4 Stationary (Lump sum)			3,000.00		
	5.5 Co-ordination with different schools			1,000.00		
7	<b>Website designing and hosting</b>	<b>25,000.00</b>	<b>198.41</b>	<b>25,000.00</b>	<b>196.85</b>	Costs of Web designing and hosting the site.
8	<b>On-line network group formation</b>	<b>5,000.00</b>	<b>39.68</b>	<b>5,000.00</b>	<b>39.37</b>	Internet costs
9	<b>Calendar preparation and Distribution</b>	<b>60,000.00</b>	<b>476.19</b>	<b>70,000.00</b>	<b>551.18</b>	Press, designing and publishing costs. Mailing charges
	8.1 Calendar (@ NRs 60*1000)			60,000.00		
	8.2 Distribution (lump sum)			5,000.00		
10	<b>Digital Camera</b>	<b>10000.00</b>	<b>79.36</b>	<b>12000.00</b>	<b>94.48</b>	Nikon, 3 Mega pixel
11	<b>GIS software fare(@ NRs 500/day*4 days)</b>	<b>2,000.00</b>	<b>15.87</b>	<b>4,000.00</b>	<b>31.49</b>	Digitization of 5 Topo-Sheets
12	<b>GPS on hire (@ NRs 200/day*30days)</b>	<b>6000.00</b>	<b>47.61</b>	<b>6,000.00</b>	<b>47.24</b>	
13	<b>Report preparation and submission</b>	<b>10,000.00</b>	<b>79.36</b>	<b>10,000.00</b>	<b>78.74</b>	Literature study, photocopy, Net surfing
14	<b>Contingency (10%)</b>	<b>36,800.00</b>	<b>292.06</b>	<b>30,000.00</b>	<b>236.22</b>	Hire Raft and Vehicle; snacks during field survey, group meetings; Purchase toposheets, Bank charge (i.e. Account transfer fee).
15	<b>Total</b>	<b>4,04,800.00</b>	<b>3212.69</b>	<b>4,05,750.00</b>	<b>3194.88</b>	

**Note:** Exchange Rate (Planned) 1 £ = 126 NRs,  
Exchange Rate (Actual) 1 £ = 127 NRs



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