In fight with animals? Securing livelihood for wildlife and men

photo 4.3. Elephant profile card created by The Shola Trust

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In fight with animals?
Securing livelihood for wildlife and men

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In fight with animals? Securing livelihood for wildlife and men

[1] Travel to the South Indian nilgiri hills

1. You travel to the city of Bangalore (8.5 million inhabitants).
2. You travel further South to Mysore (900,000 inhabitants).
3. You pass the Mudumalai Tiger Reserve in the Nilgiris.
4. You reach Gudalur in the Nilgiris (50,000 inhabitants).
5. You travel further along street villages in the Nilgiri hills.
6. You travel along rural roads in the Nilgiri hills.

Text 4.7: The elephant’s rights

The conservation organisation The Shola Trust is based in Gudalur. Tarsh Thekaekara, a young local scientist, and his team of adivasi environmentalists try to find innovative solutions to avoid human-elephant conflicts. Tarsh explains: „We inform and teach people to learn from the peaceful coexistence of adivasis with elephants. Adivasis often see the situation from the animal’s perspective as well. It is the attitude of almost all the adivasis here to say, the elephant should not be here, but now it is and it has some rights – the rights to behave as elephants do and to eat. People warn each other about elephants nearby and adjust their behaviour as much as possible till the elephant moves away. If they can’t use their ripe jackfruits immediately they leave them outside their land for the elephant so that it won’t damage their house accidentally. This attitude is our approach to avoid human-elephant accidents.”

Tasks:

5. Read the text 4.7. Which attitude helps to avoid human-elephant accidents according to Tarsh? Do you agree or disagree and what are your arguments?
6. Read the text 4.8., look at the map 4.2 and the photo 4.3. Name and explain the two strategies of The Shola Trust to avoid human-elephant accidents.
7. Discuss the situation of wolves coming back to Germany. What are similarities and differences to the situation with elephants in the Gudalur area? How to avoid human-wolf conflicts?

Text 4.8: Individual characters

Ramesh, a young adivasi working for The Shola Trust explains: „Not all elephants are the same. They have different characters just like humans. One elephant is just curious and the best will be to leave him alone. One elephant runs away from noise, another one from lights. But the next elephant will get aggressive when you shout at him or start fireworks to chase him away.

The main work of our team is to create elephant profiles. We follow the elephants and observe them intensively. We watch the behaviour of individual elephants and document their key features. Their ear venes are absolutely individual just like human finger prints. But easier to identify are the shape of the ears, tusks, body and tails. Each elephant gets a name and a profile card.

Our team can so far identify about 100 individual elephants with their features and characters. It is very difficult and takes a lot of experience. We teach people. Often the same elephants come to visit and those few elephants the people can learn to identify.

Our second strategy to avoid human-elephant accidents is a warning system. People report the sighting of an elephant, we feed the information into the website and all people who registered get a message where to avoid which elephant. This is very effective. It is so effective that other organisations and the forest department want to learn from us.”

map 4.2, Online map of the warning system developed by The Shola Trust
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Tasks:

4. Read the texts.
   a) Tell advantages and disadvantages of the strategies mentioned.
   b) Review your own ideas according to the experiences told by The Shola Trust* team. Can you think of other solving strategies?

Text 4.2: Are fences a solution?
Answer by The Shola Trust team in Gudalur:

"See, people always think of fences immediately. And yes, in some places it may work. If you put an electric fence around the colony of tea estate workers it surely can help to protect them. But there are many problems involved with fences: If one farmer builds a wall around his land it will help him. Elephants go the easy way. If the next land is accessible the elephant will go there and eat his bananas. If there are many walls the elephant has to go a long way to get food. By the time it reaches an unprotected land it will be hungry and irritated and might even get aggressive. Fences are not really a solution. Who will pay and repair all these fences? You can’t put fences everywhere, it’s simply not possible. And even if you did – where shall the elephants go? Besides, elephants are very smart. One of our video traps recorded a tusker who easily broke an electric fence, it was very impressive. Female elephants sometimes let trees fall over the fence and guide their babies to pass it. So, just for some small places fences might be useful but they won’t solve the bigger issue."

Text 4.3: What about trenches?
Answer by The Shola Trust team in Gudalur:

"People thought of trenches, yes, also not much material costs involved. There was a forest village here where they dug trenches almost all around the village – with only an entrance on one side. What happened was that an elephant entered the village and didn’t find his way out... But generally trenches are no barrier for elephants. They gently slide down and climb up at an angle. Elephants can climb the mountains so they can climb a trench too."

Text 4.4: So what would be the best solution?
Answer by The Shola Trust team in Gudalur:

"Elephants normally walk long distances. More forests and green corridors between the protected areas and forests would be needed. So that was one of our ideas. We wanted to raise funds to buy land to establish green corridors. We bought some land also. But land prices have shot up too much. It is just not possible to buy enough land. Not all land needed is for sale anyway. So we, from the Shola Trust, concentrate on other ideas now. But yes, reforestation would help."

Text 4.5: Should forest dwellers be resettled?
Answer by The Shola Trust team in Gudalur:

"That’s what the government thinks and some environmentalists too. They think to separate humans and wildlife would minimise conflicts. But according to us this is not needed and it wouldn’t be helpful. We found out that almost all deadly accidents with elephants do NOT happen inside the forests where elephants are seen regularly, but outside the forests where elephants randomly come and where people don’t have much experience how to spot elephants and how to deal with them."

Text 4.6: What does the government do?
Answer by The Shola Trust team in Gudalur:

"It’s good that people are not forcefully resettled from the forests. Now forest dwellers like adivasis have rights to live where they have been living for generations. The next generation might want to move out of the forest anyway. A good strategy are Kumkis. Kumkis are tamed elephants used by the forest department. They are very helpful. When wild elephants are lost in settlements or plantations two or three tamed elephants guide them back to the forest. But before Kumkis reach accidents might have happened already. And Kumkis can’t be everywhere. So we still search for more solutions."

* The Shola Trust is a small conservational organisation in Gudalur in the Nilgiri hills. Almost all team members are adivasis.

[1] Travel to the South Indian Nilgiri hills

Lead-in:
We are going to discuss human-wildlife conflicts in the South Indian Nilgiri hills. Look at the photos and read the descriptions.

- “Adivasi” (also: “adivasis”) are the indigenous people of India. The term “adivasi” literally means “first inhabitants” in English.

Tasks:
1. Describe the travel in your own vivid words. To help you may check the travel route or further information on a map or use the internet.

2. Imagine a travel from the nearest airport in Germany to your home town. Identify differences and similarities to the travel shown in the photos here.

3. Explain how the surrounding changes from the city of Bangalore to the village of Kadichankolly. Take a special notice to population and wildlife.

4. Think of our subject of human-wildlife conflicts. What kind of wild animals might live in the Nilgiri hills? Which animals, do you think, are dangerous for humans?

**Text 2.1: Wildlife of the Nilgiri hills**

The Nilgiri hills have a wide range of altitude from 250 to 2650 metres. The tropical evergreen forest located at high altitudes is found only in Southern India and is filled with endemic species. Since the British colonial era vast areas of forests from these hills have been cut down and replaced with tea, coffee, pepper and timber plantations of teak and eucalyptus. Tea cultivation has been the main economy of the Nilgiri area till today.

To protect the remaining forests and wildlife the Nilgiri Biosphere Reserve was declared by UNESCO in 1986. It includes six national parks and two wildlife sanctuaries in three South Indian states. The more or less continuous forest of the reserve covers an area of 5520 km².

The Nilgiri Biosphere Reserve is home to 23 % of all vertebrates found in India and is filled with endemic species. The Kattunayakanas are the most forest dependent of all these adivasi communities. Their villages lie within the forests and they depend a lot on minor forest produce and honey collection.

For centuries people from outside the Nilgiri hills have been migrating into the Nilgiris. Though they have lived in close proximity with the forests, they do not have a history of forest dependance. The majority of them were traditionally engaged in paddy cultivation and other agriculture. Besides tea cultivation tourism has become an important economy in the Nilgiris. There are now a total of forty four resorts in the Masinagudi area and there are more coming up everyday. The tourist infrastructure around it.

**Text 2.2: Population of the Nilgiri hills**

There are roads, tourist infrastructure and human settlements within the protected areas of the Nilgiri Biosphere Reserve and a dense population and infrastructure around it.

The original inhabitants of the Nilgiris are adivasis, the indigenous people of India. Today about 22,000 adivasis live in the Nilgiris. The Kattunayakanas are the most forest dependent of all these adivasi communities. Their villages lie within the forests and they depend a lot on minor forest produce and honey collection.

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**Tasks:**

1. Read the text 2.1. Explain the Nilgiri Biosphere Reserve to an interested person.
2. The text 2.1 mentions large mammals who live in the Nilgiri hills. Debate if and how these wild animals are dangerous for people.
3. Give a presentation about the Nilgiri Biosphere Reserve using information and photos online. You may start with: https://en.wikipedia.org/wiki/Nilgiri_Biosphere_Reserve
4. a) Watch the video „Nilgiri Biosphere Reserve“ (3:56 min) at: www.youtube.com/watch?v=VzTW_eCC4Wt. What did you see and learn?
   b) Watch „A Day in Nilgiri Biosphere Reserve - A Lifescape to Experience“ (19:54 min) at: www.youtube.com/watch?v=YNhDo1M4k4E&feature=share. What did you see and learn?
5. Read the text 2.2. Talk about the population of the Nilgiri hills to an interested person.
6. The text 2.2 mentions different population groups living today in the Nilgiri hills. Debate if and how the people differ in their relationship to and understanding of forest and wildlife.

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**Text 4.1: In search for solutions**

Prakash is a young adivasi working for the conservational organisation The Shola Trust:

„Whenever we hear of some human-elephant conflicts we go there to identify what has happened. We talk to the local people and document the details of the conflict. Wild elephants can destroy plants, damage houses and even hurt or kill people. We try to find solutions how elephants and humans can share the land without serious conflicts.

The adivasis and other local people have lived together with elephants for generations and mostly accept them. They know how to spot and how to avoid them. In fact many of us feel sorry for an elephant when it runs into an estate or settlement. It means that the elephant didn’t find enough food in the forest.

Many of the people who get into conflicts with wild elephants are from outside areas. They came here to work on tea estates and the houses of the workers are close to the forests. Those people say we should capture all elephants and take them to another sanctuary. But the problem is everywhere the forests are shrinking. We try to find other solutions.“

**Tasks:**

1. Explain the map 4.1. a) What is the aim of Prakash´s work with The Shola Trust?
   b) The population of the Gudalur area is not homogeneous in their attitude towards wildlife and wild elephants. What differences can you see from what Prakash says?
   c) Collect ideas with your classmates or in your group how to avoid human-elephant conflicts.
   a) Remember the problems you learnt about. As a source of information you may read again the texts 3.4 and 3.5.
   b) Do a brainstorming and write down all the ideas. There might not be one big solution, but rather many small helpful ideas.
   c) Analyse the ideas within your group: Did you consider that elephants are protected? Who will profit from your solution (farmer, tea plantation workers, school children etc.)? What might be a negative side effect of your strategy? Are your ideas practically possible?
   d) Present your ideas to the class.

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**Legend**

- Division Boundary
- Range Boundary
- Beat Boundary
- Gudalur Houses
- All Villages
- Highways
- Small Roads
- Small Towns
- Natural Cover
- Elephant Presence
  - Never
  - Some times in the year
  - All through the year

map 4.1. Classification of elephant presence in the Gudalur area of the Nilgiri hills
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[3] Human-elephant conflicts

Text 3.4: Problems for the people

Elephants normally don’t attack people, but an elephant under stress and with an aggressive nature might do so. If that happens the person attacked can only run for his or her life and most probably won’t outrun the elephant.

21 persons in the Gudalur area got killed by elephants (and many more got injured) within three years. Whereas in the same area and time span 3 people got killed by tigers, as registered by The Shola Trust. The wild animal which the people of the Gudalur area fear most is the elephant.

But most accidents with wild elephants actually happen accidentally. A person walking in the mist around a corner could suddenly stand in front of an elephant. Elephants walk long ways and often use their habitual ways through nature. When they feel disturbed by people coming across their way they might injure them seriously but just trying to chase them away with their trunk. People might be successful with chasing elephants away by shouting at them – but this action might backfire at them in case the elephant turns aggressive.

When wild elephants are around children can’t go to school. This is the main reason for adivasi children to miss school days, as many adivasi children have to walk through the forest on their way to school.

Elephants passing tea plantations on their way to the next forest patch are a threat for the tea pluckers and workers there. To avoid accidents the workers need to stop their work till the elephants have moved away.

A coffee or tea plantation doesn’t offer elephants any food. Normally they find their food in the forest: leaves, grass, bamboo. Elephants can smell for kilometres - when they smell sweet ripe jackfruits they walk a long way to get them.

Elephants cause significant damage as they move through the area. When they smell food grains, sugar or salt stored in houses for example they might damage houses, injure and even kill people accidentally. And banana plantations offer them a nice meal.

Tasks:
7. Watch the videos showing wild elephants in the Gudalur area presented by your teacher. Collect the various problems people face when wild elephants are around. As a source of information read the text 3.4.
8. Read the text 3.5.

Text 3.5: Problems for the elephants

The Indian elephant has been listed as endangered. The population is threatened by habitat loss, degradation and fragmentation of forest areas. But poaching is no problem any more as it is punished by imprisonment. And probably to the same extent people are scared of elephants, they are fascinated by them. One of the gods in Hinduism, Ganesha, has an elephant head. A large majority of the people loves god Ganesha, but elephants are not seen as holy.

Although elephants are in no real danger of being killed they face problems due to shrinking forests and dense human settlements. When elephants don’t find enough food they starve. When elephants get lost among human settlements they get under stress.

As shown in the photo 3.5 elephants may even die due to stress: A small group of elephants got lost outside the forest. People tried to chase the elephants away and the irritated elephants were running here and there. The forest department brought tamed elephants to guide the wild elephants back to the forest. The pressure the people needed to stop their work till the elephants had moved away.

A coffee or tea plantation doesn’t offer elephants any food. Normally they find their food in the forest: leaves, grass, bamboo. Elephants can smell for kilometres - when they smell sweet ripe jackfruits they walk a long way to get them.

Elephants cause significant damage as they move through the area. When they smell food grains, sugar or salt stored in houses for example they might damage houses, injure and even kill people accidentally. And banana plantations offer them a nice meal.

photo 3.5. A young elephant died due to stress in the Nilgiris
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[3] Human-elephant conflicts

Text 3.1: Deforestation

With agriculture and other land use being intensified and with the increase in purchase of land by people the areas outside of protected areas are getting highly fragmented. Elephants like other animals now find it difficult to move from one forest patch to another, as all their green corridors are being cut off.

Ramesh Mathan took the photo 3.1. He is a young adivasi man from Gudalur working with the small local conservational organisation The Shola Trust. He says:

“We have noticed the deforestation. It may not be obvious at once, but if you look at the same spot a year later you can find out that deforestation is happening. People cut trees to add a few metres to their fields, and some time later it happens again.”

Tasks:
1. Look at the map 3.1 and the foto 3.1.
   a) Describe what you see.
   b) Visit the website https://maps.google.de and find the spot of the map 3.1 with the settlements named Berambadi and Lakkipura.
   c) Explain how the needs of wildlife and people’s interest differ here.
2. a) Read the text 3.1. Explain the problem of deforestation in the Gudalur area.
   b) Think of strategies against deforestation and discuss them with your classmates.
   c) What are so called green corridors?
   d) Visit the website www.bund.net/tiere-pflanzen/wildkatze/projekt-wildkatzensprung/ and learn about an initiative for green corridors in Germany. What is the aim of the initiative?

Text 3.2: Prakash

“My name is Prakash. I am 24 years old. I am an adivasi from the Mullakurumba community. I’ve got a bachelor’s degree in geography. For the last four to five years I have been working for the conservational organisation The Shola Trust. I started my work for The Shola Trust with setting up camera traps in estates and other places. There are tigers, leopards and many elephants here in the Nilgiri hills. They live in the forests, but when they don’t find enough food in the forest and get lost they come to human habitation. It was my work to upload fotos of the camera traps on Facebook and to write e-mails to other organisations.”

Tasks:
5. Read the text 3.2 and look at the photo 3.2.
   a) What, in Prakash’s opinion, makes the wild animals to leave the forests?
   b) Summarise the problems why wild animals come into human settlements and agricultural areas. Remember what you have learnt so far or go back to the texts 2.1, 2.3, 3.1.
   c) Think why camera traps are used. Share your ideas with your classmates.
6. Read the text 3.3. Look at the photos 3.3 & 3.4.
   a) Why won’t Ramesh allow the hotel guests to walk around on their own?
   b) If you were in India as a tourist, would you love to see wild elephants? Give reasons for your point of view.

Text 3.3: Ramesh

“My name is Ramesh. I am 28 years old. I am an adivasi from the Paniya community. I did a course in hotel management. Now I work at a ecotourism hotel with beautiful nature around. We don’t let our guests walk around alone – this would be too dangerous. Two wild Indian bisons live on the estate here. And there are leopards and wild elephants in the forests around. Often we see their tracks. A few weeks back a male elephant came close to our hotel building. An American girl was very happy to see the elephant while she was safe on the terrace. The elephant ate some forest fruits and went off peacefully. But they can get very angry and dangerous when they feel disturbed.”

Tasks:
7. a) Why won’t Ramesh allow the hotel guests to walk around on their own?
   b) If you were in India as a tourist, would you love to see wild elephants? Give reasons for your point of view.

Map 3.1. Human settlements and agriculture at the border of the Bandipur and Mudumalai Tiger Reserve in the Nilgiri hills

Photo 3.1: Deforestation in the Gudalur area of the Nilgiris

Photo 3.2: A leopard shot by a camera trap.

Photo 3.3: People running away from a wild elephant in the Nilgiris

Photo 3.4: An adivasi girl injured by an elephant in the Gudalur area