

# HUMAN-WILDLIFE-CONFLICT

## COEXISTANCE IN NEPAL

### unsolved issues

Invited as key-note speaker at the special meeting of the National Trust for Nature Conservation  
Kathmandu and Bardiya - Nepal

Frits Spangenberg plead for major changes in the policies to lower the number of human wildlife conflicts. In close harmony with park rangers, local representatives and National Trust specialists new ways were found for future measures.

Full lecture and results of the workshops

#### BACKGROUND

Nepal is considered by many travelers as a magical country, because of its stunning Nature, eight of the ten highest mountains can be found in this landlocked nation that was never occupied by another nation. Spectacular groups of temples in Kathmandu valley have no comparison elsewhere in the world. The Nepali people consist of almost one hundred different ethnic groups with their own language and customs; It cannot be denied that Nepal is a very poor country, due to political instability and corruption, a lack of industry and dependance on agriculture and tourism. Every year during the monsoon period, roads and bridges are washed away. These logistic setbacks make mid- or long-term planning much more difficult. The Nepali culture is very strong in improvising, where human-wildlife-coexistence needs a long-term policy, clear measures and strict maintenance. The successful management of the wildlife parks takes its role in an increasing number of human-wildlife conflicts including death tolls. For this reason it is urgent to develop a long term policy especially to prevent that the population turns against wild animals. The consequences would than hard to be overseen.



#### NATURE'S GREAT UNCONFORMITY AND SHIFTING BASELINE

Since the 1950's Nepal remained untouched by modernization'; the southern border with India was a virgin or primary jungle and forest where wild animals struggled for life and where only the Tharus lived, an ethnic group with a natural resistance to malaria. As soon as malaria medication and prophylaxis became available, peasants from northern India invaded southern Nepal, burnt down the jungle and around 1970 tigers, elephants and rhinos were almost extinct. Just before it was too late a number of Protected Areas were designated, several villages in the area removed and a buffer zone around the 800km<sup>2</sup> (Bardiya National Park) was supposed to be a safe area for people and wildlife. Wildlife became dependent of protection. Today scientists from all over the world study and improve the grassland for the deer, as a prey base for the tigers. Analysis of the tiger habitat and assessment of the ecohydrological characteristics are relevant activities, since Homo Sapiens devastated the Natural context. I call this destruction on one side and systematic partial repair on the other a Great Unconformity. If mankind had kept his hands off some areas large enough to maintain their own ecosystem, we would not have to try to restore parts of it now. Older generations, to their regret, have seen nature disappear and take their sorrow into their grave, new generations open their eyes and



see the beauty around them and fix a new baseline; this is repeated generation after generation and became part of our 'civilization'. From the two remaining elephants and a few roaming individuals, Bardiya managed to have a herd of 120 animals; the Save the Tiger project increased the number of tigers from 18 to more than 86 in 2022. But since even the buffer zone became more populated with peasants and when wild animals are crossing the badly maintained fences, the number of incidents between wild life and life-stock and humans increase and shall keep increasing if no drastic measures are taken.

## POPULATION NUMBERS AND POPULATION PRESSURE

The population of Nepal is growing fast and doubled between 1985 and 2020 to over 30 million. Although I have no recent reliable data from qualitative interviews I was told that couples tend to marry at a later age and wait with creating a family because of its costs and constraints on the free lifestyle. But just like everywhere else in the world this comes first in the higher educated population in the cities. In the countryside crowds of young children are everywhere and for rural people having children is still their livelihood at their old age. Besides the demographic numbers the population pressure is huge and has to be taken into account. Youngsters of today need more space, are more mobile, have a larger footprint than their parents or grandparents. The current youth is generally more demanding, more conscious of their rights and more materialistic orientated. Where their ancestors could be described as more humble, passive and oriented towards the group, most youngsters have their social media and are very well aware of developments in the world and are much more individualistic. This has its consequences, no one can deny them the symbols of modern society, such as motorcycles, modern travel, eating Sushi or air-conditioning. They take more space mentally and physically. So even if the absolute population numbers would stagnate the pressure on the environment shall keep increasing significantly. More wild animals, more people everywhere, poor regulations shall lead to a growing number of incidents between mankind and wild life.



## THE WORLD IS CHANGING

We live in a world of ever faster transition. Traditions are predictably used to determine life, now they have become folklore and touristic attractions. Transition or change will touch us all, it will change the pictures of respect, power, wealth and mobility. If we see these changes coming, we can prepare ourselves. Those who passively trust in traditions and predictability and who do not have access to the English language and internet shall lose ground. This pattern is not new, it is a worldwide phenomenon and becomes stronger and also effects the coexistence of the people of Nepal and its Wildlife. From personal observation I collected impressions that mostly traditional living peasants, located too close to the Protected Area, often in the Buffer zone, became victims of incidents with wild animals. These incidents include damages to the farmland, mostly by elephants; life-stock, mostly by leopards or personal injuries and death, mostly by tigers and elephants. The NTNC (Nepal Trust for Nature Conservation) created a smart program of compensation for incidents with wild animals. For wildlife unpalatable crops, such as menthe and chamomile are promoted; electric fences are installed and predator proof corrals for



life-stock are stimulated. In the past ten years more than US\$ 540,000 was contributed as compensation. But just like everywhere else in the world: monetary compensations are only of a short-term relief and soon become a dissatisfier. As the population is growing in numbers and as the number of tigers, leopards and elephants is also increasing a long term policy has great urgency.

### ECOLOGICAL SYSTEM OR A ZOO

If long term policies stay away the number of incidents will keep increasing and will lead to disastrous scenarios. One scenario would be to transform (parts of) the wild parks into large zoos with serious barriers and fencing. The idea of a restored ecological system is then abandoned. Another scenario would be to transform the villages into gated communities, giving more freedom to the wild animals and keeping the people and their livestock safe inside the walls. All of the participants of the workshops were opponents of both these options. Yet the buffer zone should be free from settlements and safe corridors should enable the animals to move from one protected area to another. With the help of scientists from all over the world and especially from the Universities of Wageningen and Leiden and the Himalayan Tiger Foundation, all from the Netherlands, different concepts of fencing between the wild park and residential areas were developed. Fences can keep elephants, tigers, and leopards away. Unfortunately the local population regularly is taking down the fencing in order to feed themselves. Fences can only keep wild animals away if the local communities are motivated to maintain the fencing. In a small minority of the villages the fencing was kept in good condition resulting into zero incidents. The possibility of good maintenance of fencing by the local community is possible, but it needs strong local leadership, which is often absent. As a park manager commented: "We cannot educate elephants and tigers, so we must address ourselves to teach the people how to coexist with wild animals".



### CONFLICT IN HARMONY

Society needs conflict to stay awake and to innovate. Nature is always evolving, moving, disrupting, reshaping and only rarely static. To cope with the dynamics of nature, we need to understand conflicts and find solutions, again and again. Since the wild animals were almost extinct in the 1970-ies, the nature conservation concentrated on 'Save the Tiger' programs with a remarkable positive result. Over the years most of the energy went to wildlife and its habitat, much less attention went to the people, who came with larger numbers closer and even inside the wild park. Since the IUCN Specialist Group for Species Survival introduced the phrase 'Coexistence' combined as Human-Wildlife-Conflict & Coexistence, this is another proof of how situations change. Coexistence demands a mutual responsibility. From detailed studies we know that tigers and elephants are intelligent species and are mostly risk avoiding. With a little help, such as a sound prey base and effective fencing, most animals will stay inside the protected areas. Adolescent animals (15-24 month) are a risk factor. But these risks can be overseen and handled. Elsewhere in the world, old cows and goats are made available as prey, at least it prevents most of the unexpected attacks. Unauthorized entering of the park by individuals should be considered as an attempt of suicide and subject to punishment or fines.

### CAN WE CHANGE THE BEHAVIOR OF PEOPLE?

Yes, we can change the behavior of people, but for that we have to fully understand the way of life of the people we are dealing with. Different people are open for different persuasion techniques. If we want to convince somebody to change his or her behavior, we must know more about the specific

sweet or soft spots. Positive incentives always work better and are more sustainable than negative impulses. Negative measures can be communicated and kept on the shelves, in order to direct the attention to the positive measures. Negative impulses are fines, deprivation, shame, losing opportunities, isolation and unforeseen consequences. This makes people unhappy, uncertain and could lead to resistance, where positive stimuli create opportunities and stimulate people to join in and to improve the results of their personal gains. Persuasion tactics can be aimed at the individual or to the community, if the community is involved and social control is stimulated by the peers, we have found a more powerful tool. Gaming with peers is fun and can become a positive activity in itself, with little costs. Of course, usually the first degree of compensation is a monetary one, for the individual or for the village school or the community. Relatively easily done and easily given, but very hard to get rid of. For local peasants a monetary compensation easily becomes a business model. But money always comes too late and too little.

Beforehand we know it is a dissatisfier. Individual compensation can be very disruptive for the community spirit, when one family or household becomes richer than its peers. In order to prevent the business model idea by the recipients, we advise to announce major changes in the compensation technique. Effectivity is key for any persuasion technique and frozen formats tend to become ineffective and even counterproductive. Changing the behavior of people is possible, but also a constant challenge.



The most effective persuasion technique can be found within the target group itself; is it a Fear Of Missing Out, like 'only two more tickets for this price', 'most villagers in another region report to be very happy with their choice', 'this change makes you look better and more healthy', 'your children shall be proud of you'. Prevention of incidents are more easy to reward than compensation after an incident. Maintenance of fencing should be a key priority. The most effective incentive for maintaining shall be produced by the target group itself. Make sure that you know who you are dealing with by listening to the local population, even if it concerns illiterate people from different castes that have no idea of the power of fencing, electric wiring and other features of modern life.

## GLOBAL WARMING

Global warming figures are presented as general changes, but this will vary per region. Predictive models say that southern Nepal has to expect relatively more warming, which will need animals to move up to cooler, higher regions. Since we find people everywhere in Nepal, this creates a huge challenge.

### My recommendations:

1. Organize rewards for villages that create safety for villagers and for wildlife in stead of rewards for victims of their own unsafe behavior
2. Fine the unauthorized access to the parks and treat these as attempts to suicide
3. Improve education, improve English language skills and give young generations access to internet.
4. Involve local populations and make them part of the solution and assure their full support

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This article was written on the basis of two interactive workshops in Kathmandu (April 6) and Bardiya (April 11, 2022) and represent my personal opinion