<u>CHHATTISGARH ELEPHANT VILLAGE, RESCUE AND CONSERVATION CENTRE</u> <u>&</u> <u>ECO EDUCATION, RESEARCH AND TOURISM CENTRE</u>

The Elephant is fighting a tough battle to survive on the Indian soil. And, if we do not help it fast, it could become extinct in less than a decade. In India, an estimated 26,000 elephants survive in the wild and given the rate at which they are losing their habitat, these populations are not enough to sustain them.

Elephants need a lot of space and food to survive. A single elephant needs an average of 150 kgs of food and 200 liters of water per day. As forest cover is reduced to small pockets elephants rummage through tribal settlements and villages, destroying plantations and fields in their quest for food. This puts them in direct conflict with tribals and farmers. A single elephant can devastate a small farmer's crop holding in one feeding raid. This makes elephants the target of retaliatory killings, especially when people are injured or killed. Each year, in India over 200 people are killed by elephants and more than 100 elephants are killed in retaliation. Over the last decade man-elephant conflicts have increased 20 fold.

The man-elephant conflict has been a serious issue for the State of Chhattisgarh. With an abundant forest cover, Chhattisgarh has been attracting migratory elephant herds displaced from neighbouring States of Jharkhand and Orissa due to massive mining and deforestation.

The elephants have chosen Chhattisgarh to be their home. They cannot be driven anywhere else as no forests exist on the either side. Chhattisgarh has become the new Elephant State of India, for which we have to create a conducive environment. Elephants come out of forests in search of food and water. The only way to sustain them inside forests is to recreate their habitat, namely water bodies and fodder.

For the first time, in a mammoth effort to save the elephants from extinction, the Chhattisgarh Government has taken the initiative, and a unique solution to resolve the manelephant conflict, has been worked out. Taking shape in Bilaspur, Korba and Surguja districts of Chhattisgarh, this project will be a milestone in conservation and serve as a role model for conservation elsewhere in India and the world.

Helping the Chhattisgarh Government in this mission is conservationist Mike Pandey, whose Panda award winning film 'Vanishing Giants' brought to the forefront the horrors of elephant capture in Surguja. His Earth Matters Foundation (EMF), in the nine years of its existence, has been, and continues to be committed to, the conservation of India's natural wealth, protection of the environment through widespread education and awareness.

In an attempt to resolve the elephant crisis in Chhattisgarh, Earth Matters Foundation has chalked out a programme to protect the local communities and the elephants by restoring forest balance and re-establishing fragmented elephant habitat.

The project involves

- A) Setting up an Elephant Village
- B) Working with the local communities of the 435 elephant affected villages
- C) Setting up an Elephant Reserve

Earth Matters Foundation will develop and implement the first two programmes i.e A and B, while the Chhattisgarh Government will run the Elephant Reserve, with EMF as advisor.

A) Elephant Village:

The need:

There are an estimated 4000 captive elephants in India used in various commercial activities like hauling wood etc., many are employed in temples, for tourism purposes and kept in private zoos. Some are used illegally in circuses, and some are bought by private owners. Once they become old, many of them develop arthritis, gangrene or painful sores. No longer considered useful, they are sold off to babajis who use them mercilessly to beg and then leave them to die a painful death.

Our objective:

To set up an elephant village for such old, disabled, injured and diseased elephants so as to ensure quality of life, dignity, and comfort for the ailing elephants. For this purpose the Chhattisgarh government has agreed to allot 1000 + 500 acres of forest land near Achanakmar Biosphere which is 60 to 80 kms from Bilaspur. This land will be given to Earth Matters Foundation on a 99 year lease. This village may extend into Korba and the adjoining Tiger Reserve. The Chhattisgarh Biosphere will ensure that the tribal laws are protected and that there is no development and land acquisition. This village will be run by Earth Matters Foundation.

Also other old, injured and diseased animals like the deer and the nilgai will be protected in this village. The idea is to make the environment as close as possible to living in the wild and also balance the eco system and biodiversity in this village.

Earth Matters Foundation has worked out the following plan:

The entire land provided to Earth matters Foundation will be roughly divided into the following two parts:

1) The 1000 acres of forest (enough to sustain 40-50 elephants), to house the Elephant Village will involve:

- > Building large thatched roof shelters/barns for ailing elephants.
- Digging of water bodies to sustain these animals, building bunds and de-silting the existing water bodies.
- Planting more trees of mixed endemic varieties, like bamboo, mahua, peepal, which will provide food for elephants and can be used for other purposes.
- Area for disposal and recycling of elephant dung. We are exploring new and innovative methods of reusing elephant dung, like compressing it wit ash to make bricks out of it.

2) The remaining 500 acres will be at an elevation and will be utilized to build:

- A Mahout village which will have ethnic eco friendly structures to house the mahouts and their families. Common bathrooms and toilets will be constructed. The village will also have medical facilities and a preschool setup for the mahout families.
- Earth Matters would also set up a Mahout training centre. These mahouts would gradually be enrolled by the state as Elephant Drivers and Kunki Trainers. (Elephant Mahouts would be treated the same as the driver category, Government of India)The idea is to create a special Chhattisgarh force of trained elephants to handle problem elephants.
- > A Veterinary hospital which will specialize in treating elephants.
- > A solar power generating unit.
- > Biomass plant will be set up to meet fuel requirements.
- Four Cottages, for long term visitors like researchers and EMF staff will also be built. One of these with also have an administrative office.

Eco- education elephant welfare and resource centre

Eventually, portions of the elephant village and mahout village will be further developed to attract tourists and encourage eco-educational tourism. This centre will cater to students and other tourists interested in eco educational packages where they can interact with the elephants and spend time with them to gain first hand knowledge and experience one to one moments with them. Visiting elephant psychologists and environmentalists will give the visitors useful information and interesting facts about the elephants and nature.

The eco education elephant welfare centre could be run by the Ministry of Tourism and not Earth Matters. This would give a great boost to tourism as well as hold tremendous possibilities for eco-education in future tourism undertakings.

- The village will have a core sector and a general sector. In the general sector Overhead walkways will be built to enable people/tourists to sight/observe these animals in a non invasive manner. These walkways will lead to a central portico where tourists can enjoy their meals and also share them with the animals. They can interact with the elephants and spend time with them to gain first hand knowledge and experience one to one moments with these magnificent creatures. An eco friendly eating joint will also be built where the tourists can buy their meals and also buy food to feed the elephants.
- At the Mahout village a garden with waterfalls and fountains will be created. A central hut and campfire area for evening story telling and educational sessions will be set up. Living quarters/accommodations will be built to accommodate such short term tourists and students. These quarters will be able to accommodate around 200 visitors. It is suggested that these be in the form ten 20 bed dormitories (separate dormitories and bathrooms for girls and boys). A common canteen will also be set up. This eco education elephant welfare centre will be separate from Earth Matters Foundation and will be run by the Government of tourism. This would give a great boost to tourism as well as hold tremendous possibilities for eco-education in future tourism undertakings.
- A resource centre, compete with a media library and an arrangement to view films will be established.

********* Environment friendly practices will be used in building all the structures and Conservation policies will be followed in day to day activities of this village.

B) Working with the local communities of the 435 elephant affected villages across districts of Surjuja, Jashpur, Korba and Raigarh.

The need:

The need is to resolve the man-elephant conflict.

Our objective:

To provide immediate solutions for the local communities of the 435 affected villages, to protect themselves and their property, and balance the needs of elephant conservation with sustainable human development. Our objective is to find effective solutions for them to coexist with the elephants and finally encourage them to participate in long-term conservation and management of these animals and forests. Earth Matters Foundation will develop and implement this programme.

Earth Matters Foundation proposes the following strategies :

1. Protecting farmers:

Providing a solar powered photosensitive digital light system (photovoltaic cells with a twenty year lifetime) in each of the 435 affected villages, which will enhance visibility at night. It is during night time when most elephant accidents occur. When villagers hear an elephant heard approach they run helter-skelter in panic and often run into an elephant which sensing a threat attacks the villager. These solar powered light systems will enable the villagers to see in the dark. These will be fixed in the main courtyards or wherever suitable. These lights will also function as an early Warning System to alert the villagers of approaching elephant herds. The lights will have special beacons on top, which can be switched from green to red to alert people as to the presence of elephants in the area.

2. Protecting Farmer's crop:

Providing designs and constructing underground silos in each of the 435 affected villages to protect harvest and store grain away from the reach of elephants. Also investigating and locating suitable government structures or buildings presently not in use and refurbishing them for grain storage and protection.

Capsicum / Red chilli treatment will be used as buffer crops around the crop holdings to try to protect the food crops.

3. Reforestation:

Reforestation will be carried out in two parts:

- > In the area demarcated for the elephant reserve and along the corridors.
- > 'Friends of Earth' Programme in and around the villages: This will be done in partnership with the villagers and children. Earth Matters Foundation will undertake to put together a brigade of around 500 local children (60% of whom will be girls) to launch a reforestation drive around their villages. The objective is to plant 1 crore Bamboo plants and 10 lakh Peepal, Mahua and other mixed endemic varieties. The children will be given incentives to plant and look after a pre determined number of trees for a year. The incentives will be in the form of bonds, and other village development facilities like building of a school, medical centre etc. To ensure the welfare of these endemic plants, this time period is extendable for another year, and added incentives will be given. (Details to be worked out.) These trees, apart from providing food for elephants, will also provide sustainable income for the local community and supply them with timber for huts and other such uses. To motivate them further they will also be enrolled as 'Friends of Earth' and given 'Friends of Earth' badges and T- shirts. Earth Matters Foundation will also train some of these girls to conduct visual education programmes. We hope to involve Government nurseries to supply us with plants and the Forest Department to help with reforestation.

Resource platforms or centres in villages, wherever possible, for dissemination of information & also creating a group of volunteers for elephant 'hulla parties'. To prevent straying of cattle into forest area land will also be demarcated for pasture.

4. Eco Education and awareness generation:

Earth Matters Foundation would run a widespread awareness generation programme to sensitise locals through mobile vans, equipped with screens and projectors to screen films on relevant subject and other eco educational packages:

- To help the local communities understand the necessity of interdependence on nature for survival and development and to instil them a feeling of love and respect for the elephants
- To initiate pre school education and educate the communities on health, sanitation, woman-child nutrition etc.

- Earth Matter's Foundation will empower women by encouraging them to participate in various village development activities, educating them on woman-child nutrition etc. Womens programmes
- > To generate awareness and promote general health and sanitation among the communities. A homoeopath will visit the villages on a regular basis.

5. Non land use income generation such as handicrafts etc., and other income generation measures:

Earth Matters foundation aims at providing non-land use income generating opportunities to the communities for the purpose of employment creation and poverty alleviation.

Lands will be demarcated for other income generating programmes like planting medicinal plants and herbs on a turnkey basis

6. Bio gas plants:

To provide an effective, eco-friendly replacement for fuel wood, ultimately aiming at conserving the forests.

C) Setting up an Elephant Reserve:

The Chhattisgarh Government will run this reserve with EMF as advisor.

- The Elephant Reserve: To sustain the elephants which have migrated into Chhattisgarh from the neighboring States of Jharkhand and Orissa and conserve their habitat and the biodiversity, the Chhattisgarh Government will set up an elephant reserve. Labour will be hired to carry out a reforestation drive with the support of Forest Officers. Water bodies to sustain these animals will be dug, bunds will be built and the existing water bodies will be de-silted. The Reserve will be surrounded by electric fencing/ditches/moats. Kunki elephants will be hired from Karnataka and/or Assam to push the 135 problem elephants back into the jungles of the Badalkhol biospheres. (Badalkhol biosphere is the proposed location for the Elephant Reserve.) Efforts will be made to create new elephant habitats and water bodies and to conserve the existing ones.
- Re-establishing corridors: The last remaining elephant habitats in India are mostly small, isolated and fragmented because they have been interrupted by human encroachment. The elephant populations get confined to 'habitat islands'. As the elephants cannot mix with other herds there is a danger of inbreeding. This adversely affects elephant populations. So as to enable the herds to mix freely, efforts will be made to connect the various elephant corridors and establish migratory routes. Areas of fragmented corridors will be identified and reestablished. A re forestation drive will be initiated and overseen. A targeted 1 million Bamboo & 200,000 Peepal, Mahua & other endemic species will be introduced in the area by involving farmers. For forest and interior areas, forest personnel & labour form villages will be acquired. This would be a two to four year programme. If need be, the Government of Chhattisgarh will acquire private lands for this purpose.

Time Frame: The above are the broad lines along which we are thinking, but much of it will depend upon availability of funds and survey reports. We would like to see this as continuous programme over five years. Again, this time period is dependent upon many environmental, budget and other factors like the naxalite movement etc.

Preparatory Phase:

This will extend over five to six months in with Earth Matters Foundation will put together survey teams which will include elephant experts, elephant catchers, conservationists and botanists. They will the study the landscape and map out exact locations suitable for the various programmes i.e. Elephant Village, Elephant Reserve, Villages for construction of silos, solar light warning systems and suitable forest areas identified for the reforestation drive. Architects will be engaged to plan out the various components, various teams will be set up to execute the programmes. Local communities will be approached and involved wherever possible. The trees for the reforestation drive will be identified and collected in a nursery and children will be enrolled. Mahouts will be enrolled.

> Kunkis will be hired from Karnataka/Assam and brought in to push the elephant herds into the Elephant Reserve.

Tribal Welfare and Development Activities

A. Sensitizing Locals through Eco-education programs

This will be a major area of focus for the foundation.

Widespread information and educational activities and awareness generation programs will be conducted to sensitize locals through mobile vans, equipped with screens and projectors to screen films on relevant subject and other eco-educational packages to help the local communities understand the necessity of interdependence on nature for survival and development and to instill them a feeling of love and respect for the elephants. This will be done through panchayats, workshops, school programs and at weekly village markets.

B. Women's Programs

Women will be empowered by encouraging them to participate in various village development activities, educating them on woman-child nutrition etc.

C. Health and Sanitation

Generate awareness and promote general health and sanitation among the communities. The Government will also provide proper sanitation systems for the villages. A homoeopath will visit the villages on a regular basis.

D. Child Education

All our awareness and sensitization programs have to go along with education at the grassroot level especially for children. Many of the elephant affected villages still don't have primary education facilities. EMF will initiate pre school education for children, with special emphasis on the girl child. A few girls/women from each village will be trained to become teachers to implement the above programs.