**HealthCare and Conservation of Lion Tailed Macaques**

Premise: Lion tailed Macaques are one of the most critically endangered species native to South India and primarily Karnataka.

We belong to the urban area of Karnataka (Bangalore), studying in Electrical and Electronics Dept where we are familiar with the technological advancements made in electronics and IoT and wish to implement these advancing technologies in conserving this precious species which enrich our culture and heritage native to our homeland.

It is an Old world monkey and generally avoids humans.

Lion-tailed macaques have black hair. It is easily recognised by its silver-white mane that surrounds the head from the cheeks down to its chin. Its face has no hair and is black in colour. Head to body length is about 61 cm and weighs about upto 10 kg, making it one of the smallest among the macaques species. The black tuft is more prominent in males than females with the tail being about 25 cm in length.

The life expectancy for a wild lion-tailed macaque is 20 years while it is 30 years in captivity.

Lion-Tailed Macaque- UPSC Environment and Ecology

Conservation of the lion tailed Macaque:

As per the assessment carried out by the International Unit for Conservation of Nature (IUCN) it was reported that 3000-3500 of the lion-tailed macaque population was dispersed in Kerala, Tamil Nadu and Karnataka. Its red list categories it as ‘endangered ‘.

Their population range is becoming significantly limited due to spread of agriculture and commercial farming for tea, coffee. Construction of new dams nd irrigational facilities are also a factor in their decline.

Despite conservation efforts, habitat loss remains the key component in their population decline.

Working of the project:

Our project uses the concept of FPGA to process various information such as the heart rate, temperature, blood pressure and uses GPS to monitor its whereabouts in a non intrusive manner.

We use the Cloud Connectivity Kit to store this data in the cloud. Any anomaly in the vital statistics of the animal would be detected and sent to the Government Authority or whomsoever concerned.

This project uses the concept of FPGA, IoT interfaced by the cloud connectivity kit.

Expectations:

We can expect accurate results regarding the health, temperature monitoring and even habitat maintainence from this project. This in turn conserves the animal habitat as well as aids us to be on the look out regarding the health and well being of the macaque.

