

## Design of Passenger Cabin for Jungle Safari Vehicle



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**Abstract:**

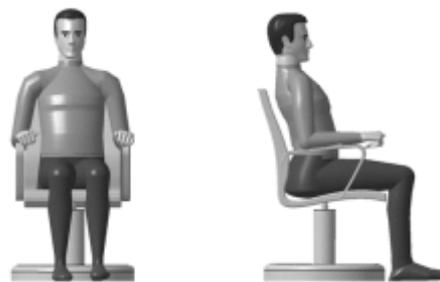
Nature is the mother and protector. It's through nature that we experience and learn several things. For this it is necessary to travel into the lap of nature where numerous unknown experiences are encountered. Exploring jungle always brings out numerous surprises for both nature lovers and explorers. Forest safari vehicles are mainly used for this purpose. Safari today provides people with numerous opportunities to view animals that in the past they would have only read about and seen in pictures and on TV or in zoos. While tourism is expanding; there is limitation on how much visit that the animal population can sustain. So the natural habitat should not be destroyed by the emission and noise pollution. More over the safari vehicle should be designed considering eco tourism.

Design process started with a primary research and an identified need for the change of passenger compartment in jungle safari vehicle. Data collection was carried out by adopting methodologies such as literature review, product study, market study and user study. Quality Function Deployment (QFD) and Product Design Specification (PDS) were generated based upon data analysis. Four concepts were generated with respect to the derived PDS, and one final concept was shortlisted by participatory method. The aesthetics requirements identified through data collection have been addressed in the developed concepts and a final concept was selected by weighted ranking method. Ergonomic study was done using CATIA V5 software to understand the seating position and packaging.

This study has resulted in a prototype visualization model of a safari vehicle that has excellent visibility without compromising on safety, good noise reduction and solar powered spot lights. The developed concept can be implemented on an existing bench mark SUV.



**Finalised concept of jungle safari vehicle**



**Ergonomics of seat**



**Ergonomics**



**Mock up model**