

Bharat New Car Assessment Programme

For Prelims: Bharat New Car Assessment Programme, Global NCAP, Ministry of Road Transport & Highways

For Mains: Positive Outcomes and Challenges Related to Bharat NCAP.

Source: TH

Why in News?

The Ministry of Road Transport and Highways, Government of India, has introduced the Bharat New Car Assessment Programme (Bharat NCAP).

- This indigenous star-rating system aims to evaluate the <u>safety of vehicles</u> in the event of a collision, empowering consumers to make informed decisions while purchasing cars.
- This comprehensive program is set to come into effect from October 1, 2023, and will play a pivotal role in curbing the alarming number of road fatalities in India.

What is Bharat NCAP?

- About: Under the Bharat NCAP initiative, vehicles, particularly passenger cars, will be subjected to rigorous crash testing procedures, and based on their performance as per protocols laid down in the soon-to-be-published Automotive Industry Standard 197, they will be assigned a safety rating ranging from one to five stars.
 - The programme is applicable to passenger vehicles with not more than eight seats in addition to the driver's seat with gross vehicle weight not exceeding 3,500 kgs.
 - The test procedure involves Frontal Offset Test, Side Impact Test and Pole-Side Impact Test.
 - This rating will provide consumers with a clear indication of a vehicle's safety standards in the event of a collision.
 - Notably, Bharat NCAP is voluntary, encouraging manufacturers to nominate their vehicles for testing, thereby driving the production of safer cars in the Indian market.
- Testing Parameters: Bharat NCAP evaluates vehicles based on three crucial parameters:
 - **Adult Occupant Protection:** This parameter assesses the level of protection a vehicle offers to adult passengers in the event of a crash.
 - **Child Occupant Protection:** The safety of child occupants is equally vital. This parameter gauges a vehicle's effectiveness in safeguarding young passengers during collisions.
 - Safety Assist Technologies: Modern vehicles are equipped with a range of safety assist technologies. This parameter examines the presence and effectiveness of these technologies in preventing accidents or minimizing their impact.
- **Mandatory and Recommended Testing:** While the Bharat NCAP is voluntary, certain scenarios can trigger mandatory testing:
 - **Base Model Testing:** The base model of a popular variant, with a minimum sale of 30,000 units, may be subjected to testing.

- Ministry Recommendations: If recommended by the Ministry of Road Transport and Highways based on market feedback or public safety concerns, certain models might undergo testing.
- Evolution and Alignment with Global Standards: The Bharat NCAP draws inspiration from the Global NCAP, a project initiated by the U.K.-based NGO Towards Zero Foundation.
 - The Global NCAP acts as a collaborative platform for new car assessment programs worldwide including countries such as the U.S. which has the world's oldest crash testing regime since 1978.
 - Over the years, India's testing protocols have evolved, with more than 50 crash test results published for the Indian market.
 - Notably, Tata achieved India's first 5-star car rating in 2018.

Possible Outcomes:

- **Reduced Fatalities**: With India witnessing around **1.5 lakh road fatalities** annually, Bharat NCAP aims to reduce casualties by encouraging the **production of safer vehicles**.
- Healthcare and Insurance Relief: Improved vehicle safety would lead to a reduction in the burden on <u>healthcare</u> and <u>insurance</u> sectors, resulting in positive societal and economic impacts.
- Manufacturer Reputation: Manufacturers can enhance their brand reputation through consumer-centric practices, fostering higher consumer loyalty.

Challenges:

- **Diverse Road Conditions**: India's road infrastructure varies greatly, from **congested urban roads to poorly maintained rural highways.**
 - Different road conditions can impact the way vehicles behave during crashes, making it challenging to design a one-size-fits-all safety assessment framework.
- Affordability and Market Dynamics: A substantial portion of the Indian population seeks budget-friendly vehicles, which might pose a challenge for manufacturers in implementing advanced safety features.
 - Striking a balance between affordability and safety could be a complex task, requiring innovative engineering solutions.
- Variety of Vehicles: India's automotive market is diverse, featuring a wide range of vehicle types and sizes.
 - Designing crash tests that effectively evaluate safety across this diversity, from compact cars to SUVs, requires thorough consideration of different vehicle dynamics.
- Consumer and their Preferences: While the Bharat NCAP aims to empower consumers, the challenge lies in creating awareness about safety ratings and convincing buyers to prioritize safety over other features.
 - Consumer preferences might still lean towards design, features, and price, limiting the immediate impact of safety ratings.

Way Forward

- Collaborative Safety R&D Hubs: There is a need to establish safety research and development hubs in collaboration with academic institutions and manufacturers.
 - These hubs can focus on addressing specific safety challenges unique to India, fostering innovation through joint research.
- Road Safety Awareness through Art: There is a need to collaborate with local artists to
 create safety-themed public art installations near accident-prone areas that can raise
 awareness about the importance of safe driving.
- "Safety Score" Integration: Insurance companies can assign a safety score to each vehicle model based on its NCAP rating.
 - This safety score can be **displayed prominently on advertisements and dealerships,** making safety a focal point of consumer decisions.

