# Battery Cart from Scrap Steel

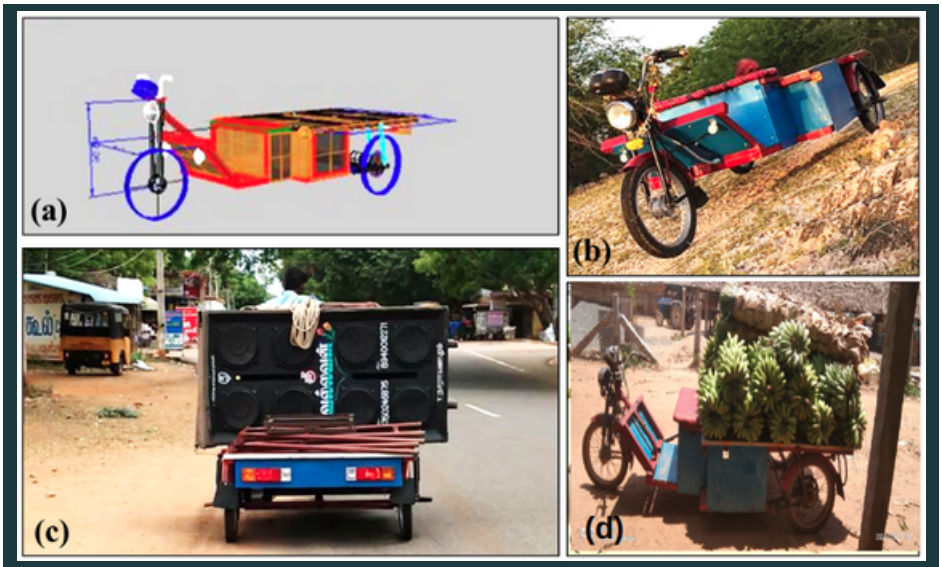
**KID: 20230110**

**Background:**

The high cost of transportation has been a major problem for farmers in villages near Sivaganga, Tamil Nadu. In rural villages, small farmers frequently transport their goods or produce in quantities less than a ton to the local markets. However, the high cost of hiring larger vehicles for transportation significantly reduces their profits. To overcome this problem, a low-cost prototype electric loader was developed using scrap metal and vehicle materials. This battery-powered vehicle is capable of transporting up to 500 kg of goods, including animal fodder, rice seedlings, bananas, and vegetables. This innovation provides an affordable and sustainable solution to the transportation problem faced by farmers in these areas.

**Novelty:**

The uniqueness of this idea lies in its low-cost solution to the transportation problem faced by farmers in rural areas. The use of scrap metal and vehicle materials to develop a battery-powered vehicle makes it an innovative and cost-effective solution. Moreover, the project can be viewed as a waste-to-value initiative that has benefited the agricultural sector.




The electric loader. (a) Design layout, (b) Testing on rocky terrain, (c) Travelling with a load on a rural road, (d) Transporting agricultural produce to the local market

**Social & Sector Relevance:**

The development of this low-cost loader has significant social and sector relevance. It has helped reduce transportation costs for farmers and enabled them to sell their produce at a higher profit. It has also provided a sustainable solution to the high cost of diesel-powered vehicles, reducing carbon emissions and improving air quality. However, it is to be noted here that the speed of the electric loader is designed to be less than 20 km/h, considering safety in this prototype model.

**Future Aspiration:**

The low-cost electric loader has the potential to revolutionize agricultural transportation in rural areas. The future aspiration of this idea is to promote its adoption in other villages and to develop further innovations in the field of agriculture using robotics technology.


**Further References:**

NEWS7 Tamil – links ( https://fb.watch/8UHx4RCY4u/ )
SUN News - links(17.43) https://www.youtube.com/watch?v=e7fUvHa-orY

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