you can feel the engine running is if you put a finger on the dashboard and feel the humming.

At first glance, Md Nahian Bin Hossain, Md Tawsif Ahmed, Md Bakhtiar Uddin, Md Yasin Ali and Sharof Shahrul Haque will not strike you as extraordinary. But ask them about their dreams and you will realise that they are. "We wanted to build a car that everyone can buy," they say. And they built it to take part in a competition called 'Eco Run', jointly organised by JICA and BUET earlier this year. First of its kind in Bangladesh, the competition was about building fuel efficient cars. A total of seven institutions, six engineering universities and a technical college took part. Their team stood first.

Dr Monon Mahbub, assistant professor at the department of mechanical engineering of BUET was the team manager. He says, "Based on the experience of building this car, we can say that it is possible to commercially produce cars for Tk. 150,000 cost and profit included."

Bill Gates once said, "If General Motors had kept up with technology like the computer industry has, we would all be driving $25 cars that got 1,000 MPG"

These students are then on the right track.

They had twelve months to build it but they finished it in less than four. "We got all sorts of help from our professors and other students," says Bakhtiar.

So are they now treated like celebrities on campus?

"Students at other departments come up with brilliant designs and models all the time," says Bakhtiar politely.

"But it has created quite a stir," says Nahian.

So what makes their car special and how does it give more mileage than other cars?

"We optimised all features to make it more efficient and economic," explains Nahian. "The chassis, the body and the windshield were made lighter than those of other cars."

They are confident that they can improve the performance of the car further provided they have access to more resources.

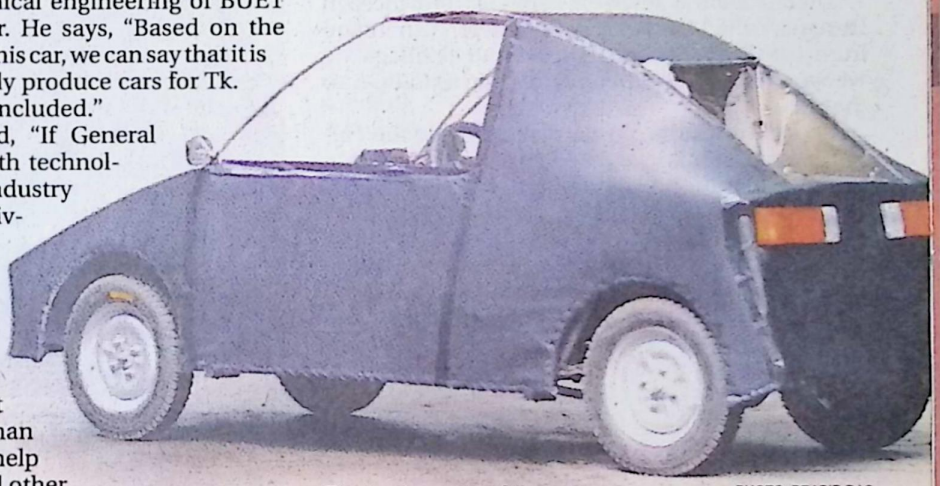
"In countries like Japan and USA, companies spend so much money on R & D activities" says Bakhtiar. "They have already designed cars for the next 20 years. Our resources were limited. We have created a model on which improvement is possible."

Nahian adds that using composite materials for the body will make it even lighter and cheaper.

Not that there weren't obstacles in the way. Low budget, lack of modern labs and engineering shops were some of the odds against which they had to work. Ultimately dedication and determination won.

Nahian elaborates: "Our labs and shops must be modernised. In developed countries, universities partner with top companies and share ideas. Our industries are not interested in sustainable industrial development. They do not want to invest in R&D. They are not risk takers. Their only motive is profit making."

Engineers from BUET have made their mark in the world market and they regularly get hired by top companies like Intel, Microsoft, Google and Sun Microsystems. "There should be regular competitions like 'Eco Run' so that students can use their power of imagination and be innovative," says Dr Mahbub.



The basic model of the car. PHOTO: PRABIR DAS

The car has a huge potential to help Bangladesh's working class, especially the countless families forced to travel on overburdened buses and unsafe rickshaws and motorcycles. It can be a modern-day people's car, an ultra cheap vehicle that has the potential to bring greater mobility to the masses of Bangladesh.

"There is no incentive for research in our universities", Dr Mahbub says. "Every research activity may not produce desired results, but it is still important because future students may be able to build on it. Someone comes up with a brilliant idea. Someone else builds on it through research and experimentation. That's what academia is all about."

Improving fuel economy offers the promise of reducing our oil use without requiring us to sacrifice driving our vehicles. Reduced oil use, in turn, means both fewer carbon dioxide emissions and a smaller economic impact thereby improving the environment and our economic security.

Newton said, "If I have seen further it is by standing on the shoulders of giants." These students have shown how to build safe, fuel efficient cars at a cheap cost. "Our car industry can take it to the next level," says Dr Mahbub.