Clearing our roads of unfit vehicles can save energy dollars

Mahtab Uddin
is assistant professor of economics at the University of Dhaka, and research director at the South Asian Network on Economic Modelling (SANEM). He can be reached at mahtab.ud@gmail.com.

MAHTAB UDDIN

The war in Iran has sent shockwaves through global oil markets and triggered a severe worldwide energy crisis, amid which Bangladesh's vulnerabilities have been starkly exposed. One of the primary culprits exacerbating our acute local energy shortage is our fleets of archaic cars, buses, trucks, and other public transport.

We are still relying on vehicles from the 1990s and early 2000s. Decades-old unfit buses and CNG auto-rickshaws continue to dominate our roads. The fuel efficiency of these vehicles is disastrously poor. While these outdated petrol- or diesel-run (or CNG-converted) vehicles average 7-10 kilometres per litre, depending on road conditions and fuel type, modern electric vehicles (EVs) can travel 300 to 400 kilometres on a single charge. If we look at the energy equivalent, the mileage of a modern EV equals about 40 to 50 kilometres per litre of fuel.

If we could modernise these outdated vehicles, the energy demand in the transport sector would fall significantly. The fuel and foreign reserves saved could be redirected to secure our energy independence, allowing us to supply much-needed gas to homes and industrial sectors rather than burning it in traffic.

Furthermore, the running and maintenance costs of these antiquated vehicles are exceptionally high, while safety standards are practically non-existent. Bangladesh has one of the highest road traffic fatality rates in the world, and the contribution of these dilapidated vehicles to this grim statistic is undeniable. Modern vehicles are equipped with safety features, such as automatic braking and lane assist, which reduce accidents and fatalities. Older vehicles are also environmental hazards, and their lack of modern features deprives consumers of standard services.

FILE PHOTO: ORCHID CHAKMA

'The dilapidated buses and trucks we see in Bangladesh are practically extinct in other developing nations.'

Yet, the prices for these outdated metal traps are astronomical because of three primary reasons. Firstly due to staggering import duties. When Bangladesh embraced the free-market economy in the 1990s and began slashing import duties on various goods, vehicles were left out. Total import duties on cars in Bangladesh, based on engine capacity (CC), type, and age, range from 150 percent to 500 percent or more. This means if you buy a standard reconditioned car for $5,000 (approximately Tk 6 lakh) you might have to pay up to $15,000 in taxes alone (assuming a 300-percent duty), bringing the total cost to an absurd $20,000 (approximately Tk 24 lakh)

Second is the "golden goose" syndrome. A major reason behind keeping these duties high is the government's limited avenues for direct tax collection. The revenue department is extremely reluctant to reduce taxes in sectors that provide an easy and guaranteed income stream. Vehicle imports are thus treated as a convenient cash cow.

Third is a lack of strategic vision. There is a glaring absence of strategic policymaking on the government's part. What little awareness exists is limited to enacting laws, issuing fines, or filing cases against unfit vehicles. Basic economics dictates that fines alone cannot solve systemic issues. A sustainable solution requires a balanced application of both the "carrot" (incentives) and the "stick" (penalties).

To buffer our economy against future external shocks like the Iran crisis, the government must reduce import duties on all modern electric or hybrid vehicles (under five years old) to between five and 15 percent. While this might cause a slight initial dip in direct revenue, collecting only $750 on a $5,000 car at a 15-percent rate, the macroeconomic benefits will exponentially outweigh this loss. Environmental degradation will decrease, public safety will improve, and consumer satisfaction will rise. Most importantly, it will drive massive fuel savings. If a car operates for 15 years and burns an average of 1,500 litres of fuel annually, switching to a modern hybrid or EV reduces that demand to just 450-600 litres based on 30-40 percent fuel efficiency (or its electric equivalent) per year. Over 15 years, a single vehicle saves 13,000 to 15,000 litres of fuel, equivalent to about $19,000 to $22,000 as per the current average international gasoline price. Multiplied across hundreds of thousands of vehicles, this localised energy saving acts as a shield against global oil price spikes, significantly reducing our import dependency.

As for penalties, the BRTA must impose high renewal fees or surcharges on all vehicles over 15 years old, with the second-highest tier of fees applied to vehicles over 10 years old. However, timing is critical. This "stick" must only be enforced at least one year *after* the "carrot" (that is, reduced duties on new cars) is introduced. Otherwise, it will simply become an unjustifiable burden on the public. A one-year grace period allows citizens to prepare and transition accordingly.

However, it is crucial that the government prevents syndicates from monopolising car imports. The licensing process must be simplified and kept open so that anyone can participate in this business fairly.

If these measures are adopted, modern vehicles will rapidly replace the clunkers currently plying our roads. The dilapidated buses and trucks we see in Bangladesh are practically extinct in other developing nations. Countries like China, Vietnam, Malaysia, Indonesia, and even our neighbours Sri Lanka and India now boast public transport systems that are vastly more modern and efficient. Fifty percent of all cars in China are EVs, while in neighbouring Nepal, the number is 70 percent. EVs are helping many economies withstand gasoline price increases.

For many years, Bangladesh spent billions on roads, highways, and megaprojects. But we never spent or let the private sector spend on public transport. This needs to change. Bangladesh needs to revolutionise public transport. And for doing so, the high tax on modern vehicles needs to be rationalised as well. This transition is vital for the people, the economy, the environment, and for our future energy sufficiency. The upcoming budget would be a good opportunity for this to be taken into consideration.

Brain circulation, not brain drain: A new model for overseas PhD funding

Dr Mo Hoque
is senior lecturer in Hydrogeology and Environmental Geoscience at the University of Portsmouth, UK. He can be reached at mo.hoque@port.ac.uk.

Dr Ashraf Dewan
is research director at the School of Earth and Planetary Sciences, Curtin University, Australia. He can be reached at a.dewan@curtin.edu.au.

MO HOQUE *and* **ASHRAF DEWAN**

Bangladesh has long recognised the value of acquiring advanced training abroad. Over the years, public funds have supported postgraduate study and research through a number of government-backed schemes, including science fellowships and overseas scholarships for university teachers. These investments matter as they help develop skilled researchers, expose scholars to stronger research environments, and connect Bangladesh to global knowledge networks. But the design of these schemes remains partial.

In most cases, the public purse pays for tuition and maintenance, and the scholar goes abroad, studies, publishes research, and returns, or sometimes does not return, immediately. This makes the individual highly benefitted. The country may also benefit in the long run if the scholars do return, apply their skills within an institutional setting, and contribute to sustained, locally rooted research ecosystems. However, the pathway between funding one person and strengthening the research capacity of Bangladesh remains too weak and too dependent on chance. That is where reform is needed.

Bangladesh should move from funding isolated overseas PhDs to funding structured doctoral partnerships that build institutional capacity at home while the student is still abroad. Put simply, the aim should no longer be to only produce a doctorate. It should be to produce a doctorate, a research link, a publication stream, and a stronger Bangladeshi institution at the same time.

Publicly funded overseas PhD scholars should not be academically detached from Bangladesh during the years of their doctoral training. Each scholar should be attached—before departure—to a host department, university, or recognised research institute in Bangladesh. Each should have a Bangladeshi co-supervisor alongside the overseas supervisory team, who would join supervisory meetings online regularly. The scholar should also maintain formal Bangladeshi institutional affiliation throughout their PhD, and that affiliation should appear in their publications. Where the local supervisor makes a genuine intellectual contribution, this should be recognised through co-authorship of scholarly or creative works.

International higher education already makes use of joint supervision, sandwich doctoral models, and hybrid supervisory meetings. In many fields, especially those involving Bangladesh-based fieldwork, environmental monitoring, public health, education, or social development, there is no reason such arrangements cannot be built into public doctoral awards from the outset.

This would not require a dramatic increase in cost, either. The largest expense in overseas PhD support is tuition and student maintenance. In comparison, the additional elements needed are modest: light support for the Bangladeshi co-supervisor, coordination, and one or two short visits by the student to the Bangladeshi host institution during the degree. The visits could include seminars, field activities, mentoring of junior students, and work on joint publications. For research projects rooted in Bangladesh, this would be especially valuable.

Thus, one publicly funded PhD would no longer support only one student. It would also help train a local supervisor in international doctoral practice, strengthen a department or research centre, generate co-authored papers with Bangladeshi affiliation, and create a living research link that can continue after the doctorate is earned. This is not simply about sending talent abroad, but also about turning that process into brain circulation rather than a narrow and uncertain form of brain gain.

This matters because Bangladesh has already invested substantially in research fellowships. The 2024-2025 national budget speech reported that 760 individuals had received support under the then Bangabandhu Science and Technology Fellowship Trust for study and research at home and abroad, with 515 having completed their awards and 245 continuing. This shows that Bangladesh has invested in advanced training. The question is whether that investment is extracting enough national value while scholars are still in training. The answer, at present, is no.

A revised national framework could change that. The University Grants Commission (UGC), together with the Ministry of Education and other relevant ministries and public bodies, should create a common set of minimum conditions for all government-funded overseas PhD schemes. These conditions should include a formal Bangladeshi host institution, a local co-supervisor, participation in scheduled online supervisory discussions, visible Bangladeshi affiliation in scholarly outputs, and at least one structured engagement visit during the degree. Oversight does not need to be heavy. Publications, supervisor confirmation, and a brief annual update should be enough.

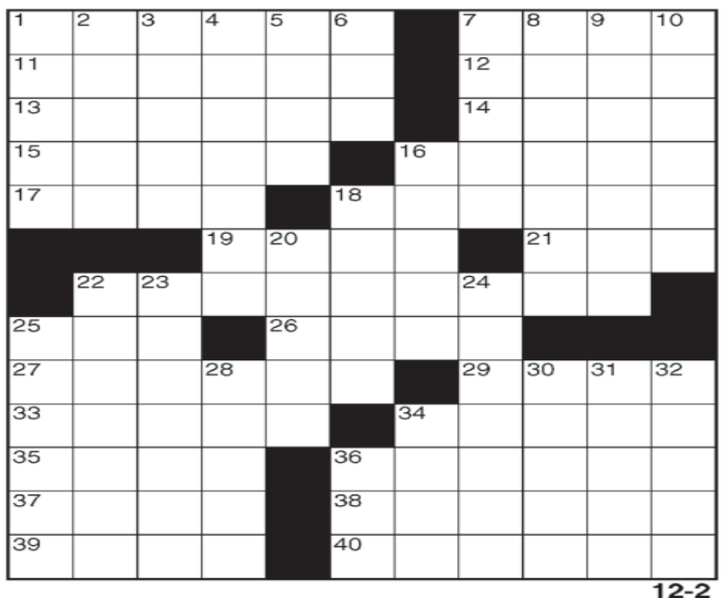
This proposal is not about forcing return, nor is it about adding bureaucracy for its own sake. It is about recognising a simple truth: national research capacity should begin to grow during the pursuit of a PhD, not just afterwards. If public money is being used to support higher study abroad, then public policy should ensure that Bangladeshi institutions are part of that knowledge journey from the beginning.

Bangladesh now has an opportunity to revisit how overseas doctoral support is designed. A new government often reviews inherited policies, funding priorities, and institutional arrangements. Now is therefore the right moment to move from a scholarship-focused mindset to a system-building mindset. The country does not need to spend significantly more, but make existing spending work harder. Funding PhDs in a way that also strengthens research supervision, publications, and institutions in Bangladesh would be far more valuable. Bangladesh should not fund only degrees abroad, but also fund national research capacity through them.

CROSSWORD
BY THOMAS JOSEPH

ACROSS
1 Pay
7 Rugged rock
11 One-of-a-kind
12 Valiant person
13 Sense
14 Regarding
15 Movie-based toy
16 Toys with tails
17 Lowly worker
18 Target of modern mapping
19 Pull in
21 Relieve
22 Grotesque building features
25 Idler
26 Bible twin
27 Detaches, as a brooch
29 Arrests
33 Perfume
34 Asian capital
35 Sea dogs
36 Sarcastic
37 "Got it"
38 Up
39 High home
40 School break

DOWN
1 Legal actions
2 "Tomorrow" singer
3 Bottle size
4 Water source
5 Destroy
6 By now
7 Bike part
8 Do museum work
9Hunting goddess
10 Spurred on
16 Lake Turkana setting
18 Disgusting
20 Operative
22 Magazine holder
23 Current measure
24 Nut
25 Make a raid, perhaps
28 Miniature map
30 Biscotti flavor
31McCoy's nickname
32 Zodiac dozen
34 Take on
36 Butter unit



12-2

THURSDAY'S ANSWERS

N	I	T	R	O	■	C	R	A	M	S
O	C	H	E	R	■	R	U	P	E	E
R	E	E	S	E	■	E	M	O	T	E
M	A	C	■	S	E	A	■	C	A	N
A	G	O	■	T	A	M	■	A	L	T
L	E	T	T	E	R	■	A	L	S	O
■	■	T	E	S	T	F	L	Y	■	■
S	L	O	E	■	H	E	L	P	M	E
P	A	N	■	M	E	L	■	S	O	X
A	R	C	■	A	N	T	■	E	T	A
D	E	L	A	Y	■	S	O	N	I	C
E	D	U	C	E	■	A	F	O	O	T
S	O	B	E	R	■	D	A	W	N	S

WRITE FOR US. SEND US YOUR OPINION PIECES TO
dsopinion@gmail.com