

KAMAL HOSSAIN AT 70

He remains our voice of conscience

As Kamal Hossain rounds off seventy years of his life, a grateful Bengali nation recalls all his contributions and remembers, too, all the travails he has been through in these past many years. He could have been a great president; he has always had the potential to be a modern head of government.

SYED BADRUL AHSAN

WHEN in November 1981, Kamal Hossain challenged Justice Abdus Sattar for the presidency of Bangladesh, there were many among us who truly believed that he had a good chance of taking charge of the country. In the event, he lost. But that did not in any way diminish Kamal Hossain's hold on the popular imagination.

If anything, in these past many years, he has in a way been transformed into an effective moral voice for the country. His opinions on the issues that matter, his presence on the national and global stage, all of these have reinforced our feeling that this man of the law also happens to be our point of reference on all other matters which exercise our imagination.

Perhaps one of the sadder truths of our era is that Dr Kamal Hossain is the last of a generation of committed Bengali politicians who reshaped the historical landscape in our part of the world in the tumultuous times between the mid-1960s and early 1970s. All the men who served with him, who were inspired by the charismatic, purposeful leadership of Bangabandhu Sheikh Mujibur Rahman, have gone to their graves, all in tragic circumstances.

Maybe he would have met a similar fate had circumstances been less than propitious for him. It was pure chance that on the day Bangabandhu was murdered in 1975, Kamal Hossain, as a dynamic young foreign minister of Bangladesh, was away on a trip to Europe.

He chose not to return home when he heard of the bloodbath

that claimed the life of the nation's founding father. Despite the insistent calls made to him by the usurper regime of Khondokar Moshtaque to come home and serve in that cabal, he stayed away from the country.

He was to remain in self-exile for a number of years, utilizing his time in intellectual and academic pursuits at places like Oxford. When he did return, in the Zia years, it was clear that he meant to bring about the changes so necessary for a nation yet in a state of shock over the assassinations, between August and November 1975, of Bangabandhu and the four leaders of the Mujibnagar government.

It was a fractious, faction-ridden Awami League he confronted on coming back home. It then fell upon him to work out a miracle, to make the old party functional

again. He suggested that the self-exiled Sheikh Hasina, elder daughter of the Father of the Nation, be brought back home and asked to provide leadership to the Awami League.

The rest is history. And history is also what you spot in the way Kamal Hossain's fortunes have fluctuated in all the decades since he stepped into politics more than four decades ago. He was one of those bright young men, along with Rehman Sobhan, Anisur Rahman and Nurul Islam, who were to play a pivotal role in the shaping of the Bengali nationalist struggle.

As legal counsel to Sheikh Mujibur Rahman in the Agartala Conspiracy Case, Kamal Hossain demonstrated the finesse that would soon have him elevated to the position of constitutional adviser to the chief of the Awami League. It was a job he did extremely well in the difficult, and eventually abortive, negotiations between the Awami League and the Yahya Khan junta in March 1971.

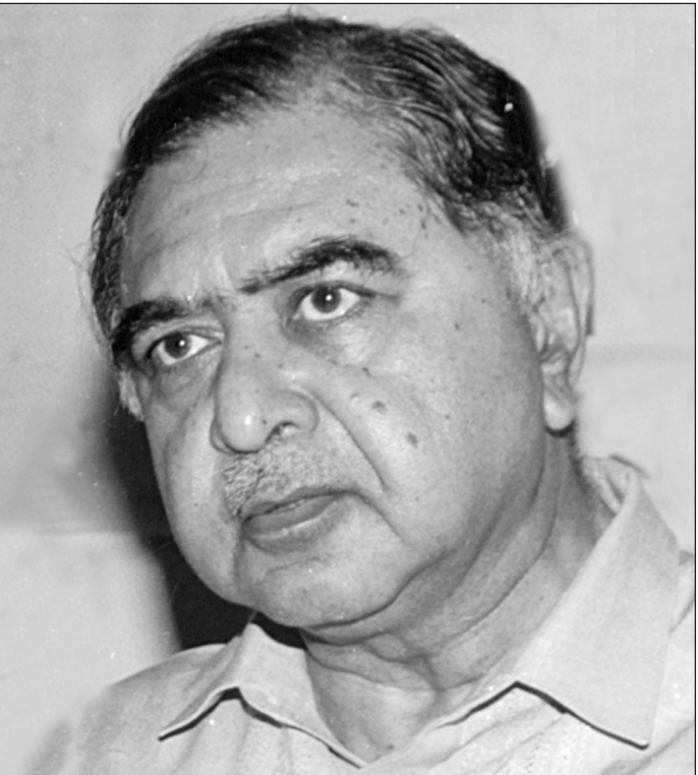
When the negotiations collapsed, and the Pakistan army went on a spree of genocide all

across occupied Bangladesh, it was expected that Kamal Hossain would take, like so many others, the beaten, tortuous paths to exile and ultimate armed struggle for national liberty. He did not, or could not.

Rehman Sobhan and Amirul Islam left a fearsome Dhaka without him. On a day in early April, the Pakistan military authorities informed a depressed Bengali nation that Kamal Hossain had been taken into custody. And then he was heard of no more, not that day, not in the nine months of the war that would claim the lives of three million Bengalis.

Rumours about Kamal Hossain, none of them complimentary to him, abounded, though. MR Akhtar Mukul spent the entirety of the war castigating Kamal Hossain over Shwadin Bangla Betar about his alleged cooperation with the Yahya regime in Rawalpindi. He had, it was insinuated, gone over to the enemy to undermine the incarcerated Bangabandhu.

Ironically, it was Bangabandhu who first informed us of the courageous stand Kamal Hossain had taken in his state of imprisonment



in Pakistan. Pressure, psychological and systematic, was exercised on the young lawyer to repudiate the undisputed leader of the Bengali nation before the military tribunal trying him for treason.

To his everlasting credit, Kamal Hossain spurned all such sugges-

tions. On January 8, 1972, it was a free Kamal Hossain, along with his family, who accompanied a liberated Bangabandhu Sheikh Mujibur Rahman to London.

A new phase in his life, in the history of the country he was returning to, had begun. Over the next twelve months, as minister for law in Bangabandhu's government, Kamal Hossain was to preside over the drafting and eventual adoption of a constitution for the People's Republic of Bangladesh. It was his finest hour.

As Kamal Hossain rounds off seventy years of his life, a grateful Bengali nation recalls all his contributions and remembers, too, all the travails he has been through in these past many years. He could have been a great president; he has always had the potential to be a modern head of government. Then again, it is just as well that he has been neither of these that he has regularly served as our voice of conscience. That is the tribute he deserves, and gets, this morning.

Syed Badrul Ahsan is Editor, Current Affairs, The Daily Star.

Feats of a Bangladeshi scientist

Bent bumpers that straighten overnight, dents in car doors that disappear, and bent out of shape metal structures magically regaining the original shape and look, may all become possible due to the ground-breaking research of a Bangladeshi engineer.

OMAR KHASRU

RECENTLY Dr Abul Hussam, a Bangladeshi born professor at George Mason University in Fairfax, Virginia, US, made news when he was named the winner of the million dollar Grainger Challenge awarded by the US National Academy of Engineering, for developing an inexpensive filtration system for arsenic contaminated water. This low-cost device may help put an end to what the World Health Organization call the "largest mass poisoning of a population in history."

A team of researchers led by Dr Taher Saif, a professor of Bangladeshi origin in the Mechanical Science and Engineering Department at University of Illinois at Urbana-Champaign, also made news worldwide.

The panel, headed by him and assisted by Jong Han and Jagannathan Rajagopalan, two graduate students, demonstrated that slightly modified metals remember their original shapes and bend. Dented and crumpled metal can snap back to the unbent shape and form, with a little heat.

The research was funded by the National Science Foundation, and the findings were published in the March 30, issue of the Journal of Science. The novel innovation has been publicized in news dailies all over the world, but amazingly and unfortunately, nary a pip in his

native country or in the Bangladesh media. There have been features on Dr Saif and his landmark achievement in the US, China (The People's Daily), Australia, India, Malaysia and elsewhere.

Normally, if a hanger or even a paper clip is bent, it is nearly impossible to restore the metal to the 100% original state. Physical properties like this are determined by the metal's crystalline and chemical structure.

The crystalline structure, or microstructure, is the result of tiny groups of atoms that take on different sizes, depending on how the atoms within each group are packed together. When bent or dented these atoms become unyielding, and refuse to revert to the original shape.

Dr Saif and his associates have concocted metals that remember their original shapes and, with a little heating, can snap back to new after being crumpled or dented.

"We showed for the first time that metal can snap back after deformation," Dr Taher Saif told the New York based LiveScience magazine (April 2 issue).

Dr Saif graduated from Bangladesh University of Engineering & Technology (Buet) with a BS in Civil Engineering (Structure) in 1984. He joined Buet as a faculty member in 1984, and worked as a lecturer in the Civil Engineering Department for two

years prior to leaving for the US to pursue higher studies in 1986.

He received a Masters in Civil Engineering from Washington State University in 1987, and a PhD. in Theoretical and Applied Mechanics from renowned Cornell University in 1993. He was a Post-Doctoral Fellow at Cornell from 1993 to 1996, and worked as a Research Associate at the same university in 1996-97.

Dr Taher Saif joined University of Illinois at Urbana, Champaign, as a faculty member in 1997. He was promoted to the rank of Associate Professor in the Department of Mechanical and Industrial Engineering in 2003, and is currently serving as a Willett Faculty Scholar and a researcher at the university's Micro and Nanotechnology Laboratory.

In the study, Dr Saif and graduate students Jagannathan Rajagopalan and Jong H. Han, explored aluminum films and gold films. The aluminum films were 200 nanometers thick, 50-60 microns wide and 300-360 microns long. The gold films were 200 nanometers thick, 12-20 microns wide and 185 microns long (News Bureau, University of Illinois at Urbana Champaign, 29 March. 2007).

They found that the type of metal did not matter. What mattered was the size of the grains in the metal's crystalline microstructure, and a distribution in the size. If the grains are uni-

formly too small, the metal will be brittle and break while being bent.

If the grains are uniformly too large, the metal will bend, but then stay in that position. To return to the initial shape, what's needed is a balance between brittleness and malleability. That balance can be achieved through a combination of small and large grains.

Variations in the microstructure lead to plastic deformation in the larger grains and elastic accommodations in the smaller grains. The bigger grains bend, but push and pull on the smaller grains, which become elastically deformed, like a spring.

If the metal is then left alone, the smaller grains will release this energy and force the bigger grains back to their original shapes over time. Applying heat can speed up this local release of energy.

The pioneering research has widespread and far-reaching significance and practical use. Modified metals that can regain their original shape even after they have been bent may soon be available.

After a fender bender caused by a car accident, for example, the springy gains in the modified metal could get sprung and release all their stored energy and force the big grains back to their initial positions (LiveScience, April 2).

Bent bumpers that straighten overnight, dents in car doors that disappear, and bent out of shape metal structures magically regaining the original shape and look, may all become possible due to the ground-breaking research of a Bangladeshi engineer.

The author is an administrator at a private university.

Pakistan-US relations

Pakistan and the United States would be better served by a policy of mutual engagement, in which US officials frankly share their concerns with Pakistan's rulers and go beyond them to engage Pakistan's people. It would be far better than the current policy of portraying one individual -- General Musharraf -- and one institution -- the Pakistan army -- as America's best bet.

HUSAIN HAQQANI

THE military regime headed by General Pervez Musharraf remains a close ally of the United States, and the US remains unwilling to criticize Musharraf out of fear of losing his cooperation.

When Musharraf fired the Supreme Court Chief Justice, prompting massive demonstrations, the US State Department's comments called for "restraint on all sides." The Department spokesman insisted that Musharraf was "acting in the best interests of Pakistan and the Pakistani people."

There is a pattern in US-Pakistan relations. For sixty years they have gone through cycles of massive aid, followed by threats of sanctions and then application of sanctions.

Pakistan has been an ally of the United States during the cold war, in the war of resistance against the Soviet occupation of Afghanistan and currently in the global war against terror. Each period of close US-Pakistan ties began with great hopes, and ended up in tremendous disappointment for both sides.

The reasons are not difficult to identify. During each period of close ties, the US depended on an army general to deliver on a spe-

cific laundry list of expectations. The general in question sought US economic and military assistance, which prolonged his rule and improved Pakistan's position in its military competition with the much larger neighbour, India.

Close relations between Pakistan and the United States are in the interest of both nations. But the relationship must go beyond the exchange of aid and policy concessions that has characterized their interactions thus far.

Currently, the Bush administration seems desirous of continuing its reliance on General Musharraf, assuming that increased aid would somehow increase American leverage on a weakening military regime in Pakistan.

Congress, on the other hand, seems to be contemplating restrictions on aid and the prospect of sanctions. Neither approach is likely to serve even the short-term purpose of securing Pakistan's cooperation in the global war against terrorism.

Soon after the fall of East Pakistan and the emergence of Bangladesh in 1971, Air Marshal Nur Khan -- a war hero and former Pakistan Air Force chief -- told an American diplomat that Pakistan had suffered because its elite was "addicted to aid."

US Congressman Gary Ackerman, Chairman of the Middle East and South Asia subcommittee of the US House of Representatives Committee on Foreign Affairs, echoed a similar view when he observed at a recent hearing: "There doesn't seem to be any problem in Pakistan that can't be cured with a little more US assistance."

The actual and budgeted amounts of US aid for Pakistan during the period 2001-2008 total \$ 5.174 billion. It is estimated that an additional \$ 80-100 million are given each month in coalition support funds -- a total of \$4.75 billion until August 2006. There are no publicly available estimates for covert transfers of funds to Pakistan's army and intelligence services.

Most of the American aid money has gone towards Foreign Military Financing (FMF) and Economic Support Fund (ESF). Very little of it has flowed in ways that are visible to the Pakistani people, in altering their daily lives.

For comparison, actual and budgeted USAID figures for 2001-2007 reflect \$ 1.2 billion in FMF, \$ 1.9 billion in ESF, \$ 111.7 million for child survival and health and a token \$ 64 million for democracy promotion. The allocation for child survival and health amounts to

less than a dollar per person, given the size of Pakistan's population.

The United States is viewed by most Pakistanis as being firmly behind army rule in their country. The three periods of significant flow of US aid to Pakistan have all coincided with military rule.

According to figures provided by the United States Agency for International Development (USAID), between 1954 and 2002, the US provided a total of \$ 12.6 billion in economic and military aid to Pakistan. Of these \$ 9.19 billion were given during 24 years of military rule, while only \$ 3.4 billion were provided to civilian regimes covering 19 years.

On average, US aid to Pakistan amounted to \$ 382.9 million for each year of military rule, compared with only \$ 178.9 per annum under civilian leadership for the period until 2002. The largesse towards the Musharraf regime almost doubles the average figure of annual aid under military rule, to \$760 million per year for each year of military rule.

Pakistan and the United States would be better served by a policy of mutual engagement, in which US officials frankly share their concerns with Pakistan's rulers and go beyond them to engage Pakistan's people. It would be far better than the current policy of portraying one individual -- General Musharraf -- and one institution -- the Pakistan army -- as America's best bet.

Husain Haqqani is Director of Boston University's Center for International Relations and Co-Chair of the Hudson Institute's Project on Islam and Democracy.

Weighing the Iranian nuclear threat

David Albright, a physicist and former United Nations nuclear inspector, is one of the world's most respected experts on rogue nuclear programs. The president of the Institute for Science and International Security (ISIS), a Washington-based non-governmental organization, Albright is especially noted for his close tracking of Iran's program. On Monday, Iranian President Mahmoud Ahmadinejad announced that Tehran, in defiance of the United Nations, was now capable of producing "industrial-scale" enrichment of uranium. "With great honour, I declare that as of today our dear country has joined the nuclear club of nations," Ahmadinejad said. While Iranian officials continue to deny that they are pursuing enrichment to make nuclear weapons, US and European governments believe that is clearly Tehran's intention. NEWSWEEK's Michael Hirsh asked Albright about Ahmadinejad's announcement and his assessment of Iran's nuclear program.

MICHAEL HARISH

Excerpts: NEWSWEEK: Tell us what this announcement means.

David Albright: Iran has installed about a thousand centrifuges underground, distributed in six or seven "cascades," and Ahmadinejad is declaring today that this is "industrial-scale" enrichment. A year ago, they were saying the goal was 3,000 centrifuges, so he has changed the benchmark somewhat. But I would be surprised if they started

enrichment today. They have led governments in the European Union and the IAEA (the International Atomic Energy Agency) to believe that they would not.

How long have the Iranians been working up to this moment? And what does this say about how close Iran is to a nuclear weapon?

They're still a couple of years away, in a worst-case scenario, from being able to produce enough highly enriched uranium for nuclear

weapons. Ahmadinejad's announcement today is an attempt to "put facts on the ground" (to make it more difficult for the world to challenge Iran's right to its nuclear program, and to raise the stakes for any future negotiation).

This began when the Iranians broke the suspension early last year (In January 2006, Iran removed the IAEA's seals on 52 centrifuges at its pilot plant, and a month later Iran began to enrich at a small number of centrifuges at its underground Natanz facility.

That brought to a halt the self-

imposed suspension that had been in place since October 2003). So Iran has moved forward in an aggressive way, and the pace has been faster than expected. Certainly Iran still needs to demonstrate that it can enrich uranium in these thousand centrifuges, but this has exceeded the expectations put forward in the (US) National Intelligence Estimate that Iran couldn't have a nuclear weapon until 2010 to 2015.

How closely can we track where Iran is? Recently the deputy

director general of the IAEA wrote a letter to Tehran asking the Iranians to agree to the installation of remote cameras at Natanz. Any response?

Not yet. The IAEA is the best source of intelligence on Iran's nuclear program. But Iran has weakened the inspections it can do (under the Nuclear Non-proliferation Treaty, to which Iran is still a signatory), and it has been Iran's pattern to resist those inspections, and increasingly to withdraw from voluntary obligations. For example, Iran promised the IAEA it would notify the inspectors if it started construction of a new nuclear facility, but a couple of weeks later Iran took that back. Iran went back to the old condition of inspections, which is that, "Six months before the nuclear material is introduced we'll tell you."

Is Iran moving toward being able to build a weapon without us knowing about it?

It depends. They're probably going to need to install 3,000 centrifuges to have the capability to produce



nuclear weapons ... they'll probably need another year to do that. That will be enough to make enough highly enriched uranium to make one bomb, or perhaps two bombs, a year.

What can be done

about it now?

If Iran does not start enriching, then negotiations are still possible. If it does start enriching underground, then negotiations are much less likely. The only thing that can stop Iran is Iran itself. There's no way to stop them short of bombing the

facility, which is highly unlikely and certainly not desirable. Iran's centrifuge facilities are too dispersed. And we don't know where they keep their new centrifuges or have new facilities under construction.

So what should the solution be?

Probably the solution is to find a way to finesse this condition (put forward by European negotiators) of suspension, so talks can start. (Iran would agree to re-suspend its program in return for US and European agreement to suspend the sanctions process.) If this isn't negotiated soon, then the start-up of enrichment could happen any day. After that negotiations become much more difficult.

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