

WEATHER FORECAST

YESTERDAY'S TEMPERATURES

DHAKA H 31.8 L 20.3

MYMENSINGH H 31.5 L 19.0

CHITTAGONG H 32.0 L 23.0

SYLHET H 32.7 L 19.0

RAJSHAHI H 31.6 L 19.5

RANGPUR H 30.0 L 19.8

KHULNA H 31.8 L 20.1

BARISAL H 31.8 L 20.0

COX'S BAZAR H 32.5 L 23.0

Weather may remain mainly dry with temporary partly cloudy sky over the country in 24 hours till 6:00pm today, says the Met office. **The sun sets in the capital today at 5:18pm and rises tomorrow at 06:07am.** Highest and lowest temperatures recorded in some major cities and towns yesterday were:

TANGENTS

BY IHTISHAM KABIR

The World in a Pixel

"Pixel" is a compaction of "picture element." It was coined in the late 1960s when engineers and scientists in the United States started transforming photographs into a digital form. While the rest of the world ran on film, engineers at Jet Propulsion Laboratory, wanting to help NASA deal with pictures taken and sent back by its spacecraft, started looking at digital pictures. Folks at Eastman Kodak were figuring out how to place all three layers of colour pictures into one digital sensor. MIT researchers worked the mathematics with two-dimensional grids of numbers representing brightness, including, for example, how to sharpen such an image. These ground-breaking activities – and trails blazed by pioneers at other universities – were the forefather of today's digital photography.

My first brush with digital images came in 1979, when I was an undergraduate engineering student in the United States, and pixels were confined to expensive laboratories. I was browsing the shelf of new books in the library one day when I ran into one on computer pictures. Opening it I came across a line of reasoning that profoundly influenced my subsequent career.

The author was proposing a thought experiment that I paraphrase below:

"Imagine a square grid with 256 rows and 256 columns. Now imagine each cell of the grid has a number between 1 and 256, 1 being black and 256 being white. Numbers in-between represent shades of grey. Then this grid actually represents a black-and-white picture."

So far, so good – if you are not mathematically inclined, please stay with me because the climax of this thinking does not require mathematics. Our thought experiment continues:

"The total number of different pictures you could make on this grid would be very large but finite: 256 multiplied by itself 256 times, or 256 raised to the power of 256."

Finally, the conclusion that boggled my mind: "And among those pictures would be the face of each and every person who walked or will ever walk on earth. In fact, there will be many, many pictures representing each person."

I thought that was a deep insight that might change the world.

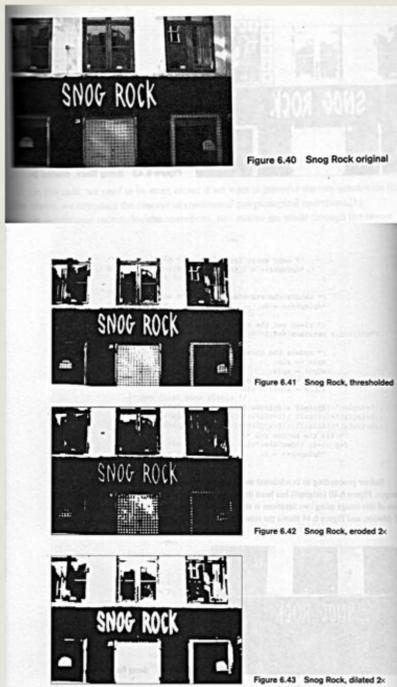
And indeed it did. Initial progress was slow because computers lacked power. But as they became more powerful, the grid of numbers, called a digital image, became bigger, better, and easier for people to use.

Each number in that grid is a pixel. My entire software engineering career was devoted to making these tiny pixel things run fast. When I started work in Silicon Valley in 1983, I wrote "code" for a machine the size of a refrigerator and costing a few hundred thousand dollars. It did a fraction of what you can do with photos on your cellphone today. During the next decade or two the power of that large machine was miniaturized into desktop and laptop computers. I played a small part in this revolution. At Sun Microsystems I led teams of engineers to build computers that, for the first time, had pixel computing integrated into them, a technique that sees widespread adoption today. In parallel, the silicon technology needed for squeezing ever more pixels into a digital camera also evolved.

And so the pixel was unleashed from the laboratory to every corner of the world, far and wide. From selfies to drones to closed circuit TVs to scans of your unborn children, the pixel is everywhere and here to stay.

Seeing the state of today's imaging technology, I often wonder what Henry Fox Talbot, the inventor of photography, would say. Would he be shocked? Amazed? Or boundlessly delighted?

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www.facebook.com/ikabirphotographs or follow ihtishamkabir on Instagram



Pixel processing, circa 1995.

PHOTO: IHTISHAM KABIR



The stumped driver of a CNG-run auto rickshaw gets out of the vehicle after its front wheel fell in an open manhole. Vehicles are often damaged after falling in such barely-visible manholes in the capital while death in manholes or open sewers is not too uncommon either. Despite this fact, the authorities seem to be unmoved to address the situation. The photo was taken yesterday near Sundarban Square at Gulistan in Dhaka.

Bangladesh to raise Rohingya issue at CPA conference

STAFF CORRESPONDENT

Bangladesh will brief the parliamentarians of Commonwealth Parliamentary Association (CPA) member countries on the Rohingya issue tomorrow.

Foreign Minister AH Mahmod Ali will brief the parliamentarians around 3:30pm.

The government will also place the issue as a special component at the ongoing CPA conference.

CPA executive committee chair and Jatiya Sangsad Speaker Dr Shirin Sharmin Chaudhury disclosed the information yesterday at a press conference following a meeting of the committee at a city hotel.

The conference, which started on Wednesday at Bangabandhu International Conference Centre in the capital, will end on November 8. The prime minister will formally inaugurate it tomorrow.

At the press conference, the Speaker said, "As agendas of CPA were fixed earlier, the Rohingya issue was not included. But the issue is no longer related to Bangladesh only; it is rather an international one. I think we will be able to create a global opinion through this conference."

She said around 500 delegates from 180 national and provincial parliaments from 52 countries will be informed about the Rohingya issue at the conference.

"Bangladesh is hosting the 63rd CPA conference. We can discuss the Rohingya issue formally and informally with the speakers, deputy speakers and parliamentarians. We can seek their supports..." she said.

She said the country should take the opportunity of parliamentary diplomacy through the CPA to find a permanent solution

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Decentralise power

Advises Mel Senen Sarmiento, three-time mayor of Calbayog city in the Philippines

TAWFIQUE ALI

Calbayog -- a city in Samar province of the Philippines -- was recognised as the country's cleanest and second most peaceful city. The man behind this achievement was Mel Senen Sarmiento, the city's mayor from 2001 till 2010.

The Daily Star met Mel Senen for an exclusive interview while he was attending a World Bank-sponsored international conference in Dhaka on October 28 and 29.

During the interview, the successful mayor of three consecutive terms shared his views on possible steps for planned urbanisation in Bangladesh.

Mel Senen's popularity as a city mayor paved the way for his becoming a member of the Philippine House of Representatives from 2010 to 2016. He later served briefly as a secretary (minister) of interior and local government. Also, from 2004 to 2010, he was secretary general of the League of Cities of the Philippines.

Notable excerpts from his interview are as follows:

It's a cliché that failing to plan is planning to fail.

Prior to passing the 1991 local government code, our government used to be very centralised and it was unable to meet aspirations of a hundred million people. So, there were brewing public grievances.

Manila was as devastated as Warsaw in Poland after the Second World War. It [the devastation] however gave us an opportunity to rebuild our city.

An American planner provided a master plan for Manila. Unfortunately, our leaders did not take that plan seriously. The lack of appreciation for the master plan was a big mistake -- a lesson every country should learn from and should avoid.

So, from power to water supply to storm drainage system, it's very important to plan. Remind everybody here to be guided by the master plan. It is very important. It should be a lesson here in Dhaka that everyone should remain aware that there is a plan.

There are two city corporations involved

in Dhaka city, but make sure you have only one plan to ensure everything is harmonised and done holistically.

Philippines central government was basically micro-managing the country. Our economy was going down terribly. Centralised form of government could not deliver desired public services. Suddenly we woke up in the late 80s.

In the mid 1980s, the central government realised that it would be very hard for the central government to run day-to-day affairs of the country and the mayors should not be kept as branch managers without power.

In 1987, President Corazon Aquino approved an executive order for empowerment of mayors... and subsequent passing of the 1991 local government code amply empowered the local government authorities on delivering basic services of healthcare, social welfare, agriculture and environment and people's empowerment.

Decentralisation started with the new law, providing automatic allocation of 40 percent of the national budget to local governments. The allocation could not be withheld by the government, nor could it be debated in the parliament.

Because resources are allocated automatically to the local public representatives, we, as mayors, were empowered to accomplish in three years what our national leaders were unable to do for decades.

So, decentralisation of power and empowerment of the local government bodies with resources and authority are also vital here as well for desired development and public services.

The mayors in the Philippines were authorised to borrow money from finance institutions like World Bank or any other with the local bodies to repay the debt with at best 20 percent of their annual budget.

Except currency, the Philippines mayors take care of almost everything of a citizen -- from all the day-to-day services to transport and education.

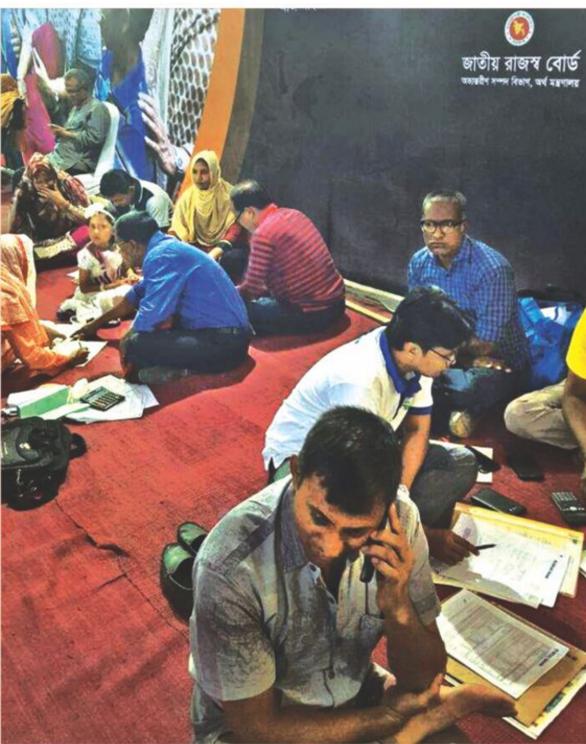
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"An American planner provided a master plan for Manila. Unfortunately, our leaders did not take that plan seriously. The lack of appreciation for the master plan was a big mistake -- a lesson every country should learn from and should avoid."

"...decentralisation of power and empowerment of the local government bodies with resources and authority are also vital here as well for desired development and public services."

MEL SENEN
MAYOR, CALBAYOG CITY, PHILIPPINES



Not Hassle Free

Thanks to limited seating arrangements, people complete their tax return forms sitting on the ground at the office of the National Board of Revenue's under-construction headquarters in the capital's Agargaon. With a promise to ease taxpayers' hassle, the week-long annual income tax fair began Wednesday. At the fair, taxpayers are able to submit their returns directly and avail related services without paying any fee to the lawyers. As a result, it drew a large number of people. But due to a lack of proper arrangements, such as chairs or tables so that citizens can complete the procedures hassle-free, many along with their families had no other options but to sit on the floor. The photo was taken yesterday.

PHOTO: COLLECTED

Family feud behind Kakrail murders

Say investigators

STAFF CORRESPONDENT

The murders of a woman and her teenage son in the capital's Kakrail were committed over family feud and properties, investigators said yesterday.

The information came following the primary interrogation of two arrestees -- her husband Abdul Karim and his third wife Sharmin Akter Mukta.

The slain woman, Shamsun Nahar, 46, was the first wife of Karim. She and their son Sajjadul Karim, aged around 17, were found hacked to death in their Kakrail house on Wednesday.

Meanwhile, a Dhaka court remanded the two arrestees for six days each, said Kazi Mainul Islam, officer-in-charge of Ramna Police Station.

A third accused, Al Amin Jony, brother of Abdul Karim's third wife Mukta, is still on the run, he said.

Abdul Karim is a businessman and film director-producer, said police.

A brother of the slain woman, Ashraf Ali, filed the murder case with the police station accusing three named persons --

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