

July 13th, 14th and 15th news:

International:

Failure to educate girls could cost world \$30 trillion: report

Failing to let girls finish their education could cost the world as much as \$30 trillion in lost earnings and productivity, yet more than 130 million girls are out of school globally, the World Bank said in its report.

Women who have completed secondary education are more likely to work and earn on average nearly twice as much as those with no schooling, according to a report by the World Bank.

About 132 million girls worldwide aged 6 to 17 do not attend school, while fewer than two-thirds of those in low-income nations finish primary school, and only a third finish lower secondary school, the World Bank said.

If every girl in the world finished 12 years of quality education, lifetime earnings for women could increase from \$15 trillion to \$30 trillion, according to the report.

Other positive impacts of completing secondary school education for girls include a reduction in child marriage, lower fertility rates in countries with high population growth, and reduced child mortality and malnutrition, the World Bank said.

The benefits of educating girls are considerably higher at secondary school level in comparison to primary education, said Quentin Wodon, World Bank lead economist and main author of report.

Women who have completed secondary education are at lesser risk of suffering violence at the hands of their partners and have children who are less likely to be malnourished and themselves are more likely to go to school, the report said. The report was published ahead of U.N. Malala Day on 12th July, which marks the birthday of the Pakistani activist

National:

Swachh Survekshan Grameen 2018 launched

The Ministry of Drinking Water and Sanitation on 13th July launched a rural cleanliness programme, the 'Swachh Survekshan Grameen 2018', to rank all states and districts on the basis of qualitative and quantitative evaluation.

The Ministry of Drinking Water and Sanitation (MDWS) has commissioned the survey on rural cleanliness and this ranking will be based on district-level surveys of public places like schools, anganwadis, haat-bazaars, panchayats and citizen's perception of Swachhta. Top performing states and districts will be awarded on October 2

The rankings will take a set of comprehensive cleanliness parameters into account. The criteria include a survey of public places, citizens' perspective of cleanliness, their recommendations and data from Swachh Bharat Abhiyan.

The programme plans to survey 6,800 villages in 680 districts across the country. It also plans to cover 34,000 public places in the villages.

According to the ministry, to take feedback from citizens on the Swachh Bharat Abhiyan, around 55,000 citizens would be interviewed and their views on sanitation issues would be taken. The ministry has engaged a private organization for the survey.

According to ministry officials, the information would be obtained from its Integrated Management Information System (IMIS).

NCPCR Recommends Artificial Intelligence to Deal with Fee Related Problems

National Commission for Protection of Child Rights (NCPCR), an autonomous body under the Ministry of Women and Child Development, has prepared a Model Fee Regulatory Framework for unaided private schools, and shared it with the Human Resource Development Ministry to be further passed on to the states.

The framework includes digital strategies to deal with the menace and suggests that appropriate government must develop a suitable online mechanism using digital technology and artificial intelligence.

This online system shall be accessed by the administrator at state level, and district fee regulatory committee (DFRC) for respective districts, provided that the state level administrator has access to the information of all schools in the state.

Bilateral:

University of Houston signs MoU with IPE to build scientific, technical knowledge through joint research

The University of Houston has signed a memorandum of understanding (MoU) with the Indian Institute of Petroleum and Energy (IPE) to build scientific and technical knowledge through joint research.

The agreement was signed at Houston by IPE founding director VSRK Prasad and UH Vice President for global strategies and studies, Jaime Ortiz.

It covers key areas of possible collaboration in faculty exchanges, offshore and onshore petroleum engineering, process control systems and process safety in all chemical engineering fields and non-conventional energy areas. The MoU also covers possible student exchanges for short-term visits and learning.

IPE was established in 2016 in Andhra Pradesh initiated by the Ministry of Petroleum and Natural Gas. It offers undergraduate degrees in petroleum and chemical engineering and is planning to offer various graduate programmes in energy-related fields.

India inaugurates its largest visa centre in Bangladesh

India on 14th July inaugurated its largest visa centre in the world in the Bangladeshi capital to reduce the waiting time for applicants.

Bangladeshis constitute one of the largest number of visitors from a single country to India. Last year, India issued 1.4 million visas to Bangladeshi nationals.

The new integrated state-of-the-art Indian Visa Application Centre (IVAC) spread in an 18,500 square feet commercial area at Jamuna Future Park in Dhaka will replace all the existing centers in Dhaka in two phases.

Economy:

India pips France to become world's 6th largest economy; these 5 nations are still ahead

India has now become world's sixth-largest economy, pushing past France, according to the updated World Bank figures for 2017.

France has been pushed to seventh spot in the list, AFP reported. When compared with \$2.582 trillion for France, India's GDP stood at \$2.597 trillion at 2017 end.

The US remains the world's largest economy followed by China, Japan, Germany and Britain, AFP reported.

In April earlier this year, the International Monetary Fund (IMF) projected India to grow at 7.4 per cent in 2018 and 7.8 percent in 2019, leaving its nearest rival China behind respectively at 6.6 and 6.4 percent in the two years.

In 2017, China at 6.8 percent was ahead of India at 6.7 percent, giving China the tag of being the fastest growing emerging economies, as has been witnessed for the major parts of the past several years.

Notably, with a growth rate of 7.1 percent, India was the fastest growing country among emerging economies in the year 2016. But due to the demonetization in late 2016 and implementation of the Goods and Services Tax (GST), India's economy slowed down a little bit to 6.7 percent in 2016. In 2017, India's growth rate dropped to 6.7 percent.

Science and Technology:

First-ever colour X-ray on a human performed

New Zealand scientists have performed the first-ever 3-D, colour X-ray on a human, using a technique that promises to improve the field of medical diagnostics, said Europe's CERN physics lab which contributed imaging technology.

The new device, based on the traditional black-and-white X-ray, incorporates particle-tracking technology developed for CERN's Large Hadron Collider, which in 2012 discovered the elusive Higgs Boson particle.

The CERN technology, dubbed Medipix, works like a camera detecting and counting individual sub-atomic particles as they collide with pixels while its shutter is open.

This allows for high-resolution, high-contrast pictures.

The machine's "small pixels and accurate energy resolution meant that this new imaging tool is able to get images that no other imaging tool can achieve," said developer Phil Butler of the University of Canterbury.

According to the CERN, the images very clearly show the difference between bone, muscle and cartilage, but also the position and size of cancerous tumors, for example.

The technology is being commercialized by New Zealand company MARS Bioimaging, linked to the universities of Otago and Canterbury which helped develop it

South Africa's MeerKAT radio telescope to unlock mysteries of universe

A scientific mega-project to unlock cosmic conundrums from dark energy to detecting extraterrestrial life was given a boost on 13th July when the 64-dish MeerKAT radio telescope was inaugurated in the remote South African town of Carnarvon.

Built at a cost of 4.4 billion rand, MeerKAT will be incorporated into the complex Square Kilometre Array (SKA) instrument, which when fully operational in the late 2020s would be the world's biggest and most powerful radio telescope

Up to 3,000 dishes co-hosted in Africa and Australia will then be able to scan the sky 10,000 times faster with 50 times the sensitivity of any other telescope and produce images that exceed the resolution quality of the Hubble Space Telescope, scientists said of SKA.

MeerKAT is a followup to the KAT 7 (Karoo Array Telescope), built in the vast semi-desert Karoo region north of Cape Town to demonstrate South Africa's ability to host the SKA. Its name is a play on words: in Afrikaans "meer" means "more", as in "more KAT", but it also refers to the small mammal native to the Karoo and famed for standing on its hind legs to view the world.

Besides ground-breaking astronomy research, MeerKAT is also pushing boundaries in big data and high-performance computing with the likes of IBM helping develop systems able to handle the dizzying amount of data fed from each individual antenna to supercomputers buried deep underground to limit radio interference.

The biggest radio telescope of its kind in the southern hemisphere, MeerKAT looks like a cluster of eggs when you first see it about an hour's drive outside Carnarvon.

But up close, each sensitive dish is almost as high as a three storey building, rotating on a fixed pedestal as it scans the sky. Chosen because of its remoteness, with hills providing an extra shield against radio interference, the project site is the main African base for hundreds of antennae that will eventually be placed as far as Kenya and Ghana.

The expansion is expected to start next year, said Adam, with the first prototype dish built in China already on site about 450 kilometres north of Cape Town in the Northern Cape province. MeerKAT will operate independently before being incorporated into SKA 1 sometime around 2023, Adam said

Sports:

Hima Das becomes 1st Indian woman to win gold at IAAF World U- 20 Athletics Championships

Hima Das created history by becoming the first Indian woman to win a gold at the IAAF World Under- 20 Athletics Championships in Tampere, Finland. She clinched the top spot in the women's 400 meters final race on the third day of the competitions. The 18-year-old Das clocked 51.46 seconds to win the gold.

Persons in news:

TCA Raghavan: Former careered diplomat Dr. TCA Raghavan was appointed as the Director General (DG) of Indian Council of World Affairs (ICWA). He was selected by Governing Body and Governing Council of ICWA headed by Vice President M. Venkaiah Naidu. The post of DG is equivalent to the rank Secretary to Government of India. Dr. Raghavan is Indian Foreign Service (IFS) officer of 1982 batch. He had served as India's High Commissioner to Islamabad (Pakistan) and Singapore. He has also served in Indian missions in London, Kuwait and Thimphu