first

# A last call to protect our children



of April in 1930, a law came into

force in the then Indian subcontinent restraining child marriage. The Child Marriage Restraint Act,

1929, made it absolute that marriage solemnised before one reaches the minimum marriageable age would be seen as a violation of law and thereby, a punishable offence. "Whoever, being a male above

twenty-one years of age, or being a female above eighteen years of age, contracts a child marriage shall be punishable with simple imprisonment which may extend to one month, or with fine which may extend to one thousand Taka, or with both," reads Article 4 of the law.

In independent Bangladesh, we inherited that law and it is still in force. Once the president gives consent to a new bill passed by the parliament on Monday (February 27), this over-eight-decade-old law would be replaced by The Child Marriage Restraint Act 2017. The idea behind the new law for-

mulation was to make it more stringent and time befitting. And in many counts it is truthfully done. Provisions are incorporated keeping higher degrees of punishments for the offenders both in terms of fine amount and jail term.

The time lapse for taking such offence into cognisance is one year in the 1929 Act, and that has been extended to two years in the new bill that the parliament just passed. Meaning, any court can take a child marriage case into cognisance within two years of the solemnisation of the marriage.

Motives, so far, stand clear that the government wants to give a message

to all and sundry that child marriage is a big offence in Bangladesh and no one can get away with it without facing tougher punishments.

This strong message should have been well celebrated particularly in a country where 65 percent of women (of 20 to 24 years of age group) get married before the age of 18. And this day (February 27, 2017) should have been marked in the history as a red letter day, especially in a country which has the world's highest rate of marriage involving girls under the age

But unfortunately, there is very little to cheer about. And one single aberration in the would-be law spoiled the very spirit of a stringent Child Marriage Restraint Act. While our colonial rulers nearly a century back kept no leeway and made the minimum marriageable age (18 and 21, respectively for female and male) absolute, the government of the day thought it otherwise. In the Child

Marriage Restraint Bill 2017, it has kept a provision permitting parents, and in absence of parents, the guardians of under-age children, to get their wards married off with a court of laws consent for the 'best interest' of the children under 'special circumstances."

When the government first envisaged such a plan two years back to keep a small 'window' open for girls to get married before the age of 18, it had proposed for a 16-year ceiling and showed some socio-economic contexts as pretext. And the 'window' was meant only for under-aged girls then. Very unfortunately, as many voices

were raised from civil right and child right platforms from home and abroad against keeping any 'deviating provision' in the new law, the subsequent months saw further deviation in the bill designed by the Women and Children Affairs Ministry and scrutinised by the parliamentary

standing committee on this ministry. Instead of paying any heed to all those protesting voices, the ministry let go of the 16-year ceiling, practically making it possible now for children as young as 15, 14 or even younger to get married under this socalled 'special circumstances' provision.

More unfortunate is the role played by the parliamentary committee, which thought it wise to give an equal 'opportunity' to boys as well. So the members of this committee, who attended the bill scrutiny meeting and incidentally all of whom are women lawmakers, recommended the special 'window' be kept open for both boys and girls, meaning that by applying the 'special circumstances' provision parents and guardians can now attempt to get their male and female child married at any minor age.

There has been a thought process in circulation within the government circle that pregnant adolescent girls,

particularly in rural areas, would be ostracised by their communities if they cannot marry. Allowing marriage in 'special cases', such as pregnancy, is their proposed solution. But marriage does not protect girls. Research consistently shows that child marriage goes hand in hand with dropping out of school, losing out on job opportunities, and experiencing domestic violence. And then the question arises, what on earth is their logic behind keeping this 'special circumstances' provision applicable for a male child too? No one in this lawmaking process ever bothered to explain before the nation what prompted them to think that they must have such provision of marriages for under-aged boys. This is disturbing to say the least.

Girls who get married before the age of 18 have an increased risk of complications during pregnancy and childbirth and are more likely to be exposed to violence and abuse. Child marriage negatively impacts schooling and reduces a child's opportunities in life. Unicef says child brides are less likely to receive medical care during pregnancy than women who marry as adults. In Bangladesh, only 16 percent of girls (those married off before 15) get proper medical care during pregnancy, compared to 47 percent women (those who get married after 18 years).

Marriage before the age of 18 is a fundamental violation of human rights. The Convention on the Elimination of All Forms of Discrimination against Women, for example, covers the right to protection from child marriage in Article 16, which states: "The betrothal and marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage...." The right to 'free and full' consent to marriage is recognised in the Universal Declaration of Human Rights, which says that consent cannot be 'free and

full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. Although marriage is not mentioned directly in the Convention on the Rights of the Child, child marriage is linked to other rights - such as the right to freedom of expression, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices and is frequently addressed by the Committee on the Rights of the Child.

Worldwide, more than 700 million women alive today were married as children. More than one in three - or some 250 million - were married off before they turned 15. Girls who marry before they turn 18 are less likely to remain in school and more likely to experience domestic violence. Young teenage girls are more likely to die due to complications in pregnancy and childbirth than women in their 20s; their infants are more likely to be stillborn or die in the first month of life.

Maternal deaths related to pregnancy and childbirth are an important component of mortality for girls aged 15-19 worldwide, accounting for 70,000 deaths each year. If a mother is under the age of 18, her infant's risk of dying in its first year of life is 60 percent, greater than that of an infant born to a mother older than 19.

When girls are married off young and they get pregnant young, a stiff and uneven competition ensues between the child-mother and the fetus for whatever food the mother intakes. In this competition, the fetus obviously gets defeated by the mother, who, in most cases, is herself malnourished. In the process, the babies of such under-aged mothers are given birth to see the light of this world with low birth weight and poor diseaseresistance capacities. This cycle of undernutrition goes on and on.

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# The economics of the Rooppur Nuclear Power Plant

ABDUL MATIN

HE contracted price for the 2,400 MWe Rooppur Nuclear Power Plant, consisting of two Russian VVER-1200 reactors, is USD 12.65 billion. If we add USD 550 million, which we already spent for the project, the total price comes to USD 13.2 billion. This is a big sum of money, enough to build four Padma bridges! Is it reasonable? For comparison of power plants of different sizes, it is convenient to quote the price on per unit (kWe) basis. USD 13.2b for 2,400 MWe comes to USD 5,500/kWe on this basis.

In 2009, I advised the Bangladesh Atomic Energy Commission (BAEC) at a roundtable conference organised by The Daily Star to build two generation-III nuclear reactors, each of 1,000 MWe, at Rooppur. It was expected that the plant would be operational by 2018-19. Based on the experience of two similar reactors (VVER-1000) being built by the Russians at Kudankulam (Units 1 and 2) in India at that time, I estimated that the cost for a nuclear plant at Rooppur would not exceed USD 2,000/kWe. It may be mentioned here that the construction

1,300/kWe. Unfortunately, there was very little activity on the Rooppur project until 2013 when BAEC signed several agreements with the Russians for a feasibility study and for site preparations. As a matter of fact, BAEC should have

started in 2002, and actually cost USD

of the Kudankulan Units 1 and 2

undertaken a large-scale programme of recruitment, and training of engineers in 2009, as suggested at the roundtable, and developed expertise in this field. They missed this opportunity due to their inexperience in dealing with nuclear power projects. We are now paying a heavy price for their mistake. We cannot blame the BAEC alone as it lost its autonomy with time and all decisions on Rooppur are now taken by the Ministry of Science and Technology.

After the disastrous nuclear accident at Fukushima in 2011, many countries, particularly in Europe, decided to phase out nuclear power plants. Russia, China and India, on the other hand, continued with nuclear power but incorporated new safety features in the designs that increased the cost of the power plants significantly. For example, the cost of two new VVER-1000 reactors at Kudankulam (Units 3 and 4) increased from USD 1,300/kWe to USD 3,000/kWe. The construction of the units 3 and 4, by the way, started in February 2016.

Because of the delay in preparation of the feasibility study, I suggested in March 2013 to consider two VVER-1200 reactors, instead of two VVER-1000 reactors, for Rooppur. My suggestion was based on several factors. (i) Because of the delay, the Rooppur nuclear plant was unlikely to be operational before 2023 when a 1,200 MWe reactor could be safely integrated into the grid. The per unit capital cost (i.e. USD/kWe) of a larger

nuclear plant is usually lower than that of a smaller plant because of the economies of scale. (ii) The VVER-1200 plant incorporates modular and compact design intended to substantially reduce the plant cost and construction time. (iii) The VVER-1200 reactors have better safety features than the VVER-1000 reactors.

BAEC finally decided to buy two

VVER-1200 reactors but its price tag of USD 5,500/kWe was shocking. For reasons explained above, I didn't expect the price to be much higher than USD 3,000/kWe. Considering the additional costs for cooling towers and complex foundations due to poor soil conditions at Rooppur, the price could perhaps reach \$4,000/kWe but no more. A price tag of USD 5,500/kWe is simply unreasonable and unacceptable.

We are paying this price because our negotiators didn't have the expertise to properly scrutinise the quoted price. If we build two nuclear plants of the same type, one in Europe and another in Bangladesh or India, the one in our region will cost much less due to our lower material and labour costs. We normally break the cost of power plants into three components, namely, (i) equipment cost, (ii) material cost and (iii) labour cost. The equipment cost is usually the same, irrespective of the location of the plant. The costs of material and labour vary from place to place and need adjustments. If we know the equipment cost, material cost and

labour cost of a plant in Europe, we can easily estimate its likely cost in our region by multiplying the material and labour costs by appropriate indices as is done in ORCOST or similar computer codes for estimation of capital costs of power plants. For our region, the indices are significantly less than 1. This makes the plants much cheaper here.

India, with its expertise in this field, successfully negotiated a reasonable price for the Kudankulam Nuclear Plant. Our seemingly inexperienced negotiators failed to do so, and hence we are now paying a much higher price. They negotiated in unusual hurry, without hiring any independent consultant and without taking any assistance from the local

experts who have the experience of similar negotiations. What are our options now? It may

not be too late to renegotiate the price by adjusting the material and labour costs of the project as suggested above. We can use local workers and local materials like steel, cement, shingles, etc and thus reduce the cost of construction and erection significantly. We can also use locally manufactured electrical cables, sanitary wares, tiles, etc to further reduce the cost. If we can renegotiate skilfully, there is no reason why the price should not come down to the level of USD 4,000/kWe or less. This will save at least USD 3.6b, enough to build another Padma ot Jamuna bridge.

The other option is to discard

VVER-1200 reactors and build VVER-1000 reactors like India is doing. Even if we pay a price of USD 4,000/kWe, which is much higher than the Indian price of USD 3,000/kWe, we can still build three 1,000 MWe reactors at Rooppur with a total capacity of 3,000 MWe for USD 12b only. In this case, we shall get 600 MWe more power by paying USD 1.2b less.

Renegotiation of a contract is not easy but worth trying since the stakes are very high. It can perhaps be done if the issue is taken seriously by the government and discussed with Russia at the highest level.

Professor of BUET and author of Nuclear Power

## WALK IN INTERVIEW March 8, 2017. 10:00 am



THE LEADER Renata Limited (formerly Pfizer Limited) is one of the leading pharmaceutical companies

and market leader of Animal Health business in Bangladesh. To support the ongoing growth, Renata is looking for Smart, Energetic, Self-Driven and Career Conscious candidates for the following position in its Animal Health Division.

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Disseminating scientific information to the veterinary community, achieving sales objectives through the generation of prescriptions and exploring new markets

Pre-requisites to apply

 DVM (Doctor of Veterinary Medicine) from any recognized University (Preference will be given for experienced candidates with higher starting salary)

Willing to visit poultry and dairy farm on regular basis to prescribe Renata's products

- Proficient at communicating in both English and Bengali
- Willing to travel extensively and work anywhere in Bangladesh
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- A good and healthy working environment

Candidates are requested to appear for a WALK-IN-INTERVIEW with a CV along with two (2) Recent Passport-Size Photographs and all Academic Certificates (Both Original and Photocopy). Candidates must arrive at 10.00 am at the location mentioned below on the specified date (08/03/2017) Wednesday.

Corporate Headquarters: Plot-1, Milk Vita Road, Section-7 Mirpur, Dhaka-1216, Bangladesh. www.renata-ltd.com

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## **ACROSS** 1 "Guys and Dolls" song

6 Cake coating 11 Office desk fixture 12 Opera's Callas

13 Mechanical man 14 Computer command 15 "Yup" opposite

17 Glimpse 18 "Jeremy" band

DOWN

1 Army address

2 First numero

5 Praise highly

6 Cast doubt on

7 Sedan or SUV

9 Three squared

10 Airport area

8 Eye part

4 Henry Mancini song

3 Flow out

22 Play start 23 Dark looks 27 Onion's kin

29 Boring

30 Tribe symbols 32 Face feature 33 Outdoor event provision 35 Butter square

**CROSSWORD BY THOMAS JOSEPH** 16 Sleep attire, for short 38 Notion 39 Ryan of film 18 Treaty 41 Quite impressed 19 Cave sound

> 45 Map division 20 Fighting 46 Staff symbol 21 Van Morrison song 24 Horse stopper 47 Added to the payroll 48 Bank job 25 Lascivious desire

26 Captain Hook's helper 28 Wrote to, in a way 31 Comic Caesar 34 Horse sound

35 Swanky 36 Opposed 37 Eye drop

40 Had a snack 42 Boxing great 43 Director Craven

44 Salamander

E EDAL ARSEC EGO

ARENA GETIN ATE CADDIES TRIALS DEW ARY ORB GENOME NEW SATANIC ATHENA IOWAN LAMA INES OBAMA

NOY

TEWS