

Sound education is the best tool to surge & overcome social hurdles

EUGENIO MONTEIRO

Rising from colonial domination that left it materially and morally depleted, any country would strive to find a path to live comfortably in freedom.



Eugenio Monteiro

I realise India has achieved much in recent years after having wasted nearly 43 (1947-1991) on socialist/collective ideology. These sought to 'square the circle' hardly evaluating whether or not the plight of the suffering poor was improving; moreover, the country's reconstruction was slow because it did not generate additional wealth. Countries with a similar track-record should learn from each other to avoid making the same mistakes. Quite simply, to grow faster...

Deeply steeped in Indian culture is the value of education as a means to individual and social advancement. Education is regarded as the best approach to overcoming multiple social hurdles. Getting good grades at affordable public schools qualify many to pursue higher studies in medicine, engineering, management, IT, etc. The motivation to learn is important for personal gain and the country's progress.

In later years higher institutions of learning were found to be lack-

ing in number to cope with the rush of increased demand. The shortfall was readily plugged by private entities. In post-independent India it would seem that private initiative might be welcomed only if the State failed to deliver. Luckily, private initiative is always resourceful as long as pre-set guidelines are in place to assure that standards are high enough. It would seem logical that any State would not downplay the role of private entities in education.

The State should determine the rules of the game while becoming responsible for their implementation. Education should be left to those who can best deliver it. The State should support such initiatives and step forward in their absence. The regulatory body must ensure that candidates are not overcharged due to a lack of supply.

Some courses are in very high demand which tightens the selection process and raises overall standards. For example, 1.5 million candidates applied for 10,575 places available at the IIT-Indian Institute of Technology in 2016. There was a similar proportion applying for the IIM-Management and Medical Colleges. Intense preparation in the run-up to the admission tests leads to improved knowledge levels; those who fail to get admitted to the Faculty of first choice are keenly considered at any other faculty.

In a country that boasts of strong rates of economic growth, there are



too few technical staff and specialists across a wide spectrum of activities: in the many fields of the construction industry, in auto-repair and other machinery, electronics, computers, etc. The pull to emigrate is also felt due to wage differences; therefore there is a need to train many more technicians than are required. Quality work may only derive from qualified training. The ongoing Skill India programme is rooted in the belief that quality production hinges on manpower being trained adequately. Last year 11.7 million youngsters received professional training. As training schools themselves become more experienced they will be able to provide better services going forward.

Agriculture should not be downplayed

The best way to produce food-

stuffs, create jobs, transform produce for export is to work on and innovate in agriculture. There is a bias skewed to modernity that seems to recognize technology only as inherently good. The primary sector is therefore doomed to failure in favour of working at factories or in call-centres.

Entrepreneurs with a vision are invited to turn agriculture into a catchy and promising sector.

Agriculture is essential to the population. In India it is estimated that 30% of agricultural produce is lost to inadequate refrigeration networks, poor transportation and storage facilities. Then come product transformation and further down-the-line distribution to retail chains. Processed foods last longer and may reach across every corner of the vast country. Local policies should target price stability in

order to ensure that work remains profitable and investment pays off.

Research into each product on ways to add value as well as to the entire food chain it is a part of, may fetch higher incomes including those tilling the land. By studying a soils' aptitude, compatible richer crops may be adopted. Higher yields will ensue.

It represents a clean break away from what 'was always done'.

India's agricultural sector is large providing 47 per cent of employment (active population) and accounting for 17.4 per cent of GDP. Every effort to cut back on waste and enhance production will lead to higher incomes for farmers. The country's farmed area under irrigation borders on 40 per cent, enabling two or three harvests a year. Here, there is room for work, expansion and improvement.

Education in this field must start at school level, on local or best-suited vegetable varieties, with practical experimentation at home, to describe and discuss the evolution at the class. Their economic significance and on good farming practices to achieve higher outputs must also be considered.

A knowledge-based agriculture will ensure a marketplace for allits products.

To discuss India is much like discussing any other country. At the end of the day food is critical anywhere.

The fascinating & unexpected aspects of Budget 2018

BY AAKAR PATEL



Aakar Patel

The Union budget presented on February 1 had some fascinating and unexpected aspects. First was the lack of defence spending, which upset our strategic experts. India spends Rs 400,000 crore a year on its army. To put the number in perspective, the Modicare scheme (which we will discuss later), that intends to cover 50 crore poor Indians is estimated to cost only Rs 10,000 crore a year.

The spend on the army includes a pension payout which is 10 times bigger than Modicare, meaning Rs 100,000 crore. One rank one pension is something no other government servant, like postman, sweeper or teacher get. Only retired soldiers demand, and secure, such permanent benefits from a poor nation.

The 4 lakh crore does not

to Rs 1400 per year per family. This means an amount of around Rs 11,000 crore to Rs 14,000 crore.

Second, that the scheme is only an announcement. The government says it will take six months to work out how the scheme will work and begin to implement it in the second half of the year. Surely it should have been thought through first and then announced.

Thirdly, the scheme expects state governments to pay about half the cost, and this conversation with states has not started.

Fourth, that such



include another Rs 30,000 crore or so that India spends annually on groups like the CRPF, which are also on permanent defence deployment in Kashmir and the Northeast. They are included in the definition of 'armed forces' and protected by laws like AFSPA.

While the Narendra Modi government has not cut defence spending, it has increased it only by about 6 per cent per year, each year, since 2014. This is only marginally more than the rate of inflation, meaning actual spending has been more or less flat. Experts worry that at a time when the Chinese government is becoming aggressive in its zone of influence, India is not taking up the challenge.

To me this attitude of Modi, which is to talk loudly but carry a small stick, is wise. I don't have any problem with nations maintaining armies. It is not really a question of becoming an unarmed nation or turning the other cheek or anything like that. But we must put our security in perspective and prioritise. The average Indian citizen is far more likely to be affected by disease and poverty than a Chinese invasion.

We must put our security in that context and if we do, then Rs 400,000 crore is too high a price and Rs 100,000 is too high a pension payout. Whatever other experts might feel, I think Modi has done a terrific job in restricting, if not quite cutting, this absurd sum. Let us now turn to the scheme that is being called Modicare. It will offer insurance to 10 crore families, and if we count the average family as five people, it covers 50 crore individuals with a maximum benefit of Rs 5 lakh per family.

Experts have the following issues with this scheme. First that Arun Jaitley has not allocated enough money for it. Only Rs 2,000 crore has been allocated while the actual cost is likely to be much higher. Insurance premiums for a coverage of Rs 5 lakh is likely to be around Rs 1100

schemes already exist in a few states (which are already paying Rs 1100 or so) but they have not made sufficient impact.

Fifth, for many Indians it is the physical access to a quality hospital that is the problem. Good facilities do not exist in many parts of India and so an insurance based solution does not resolve the lack of basic infrastructure.

Sixth, studies have shown that India's government medical facilities are among the worst in the world, including issues like absenteeism and unaccountability. So the problem is also governance. It would be an abdication to ignore this and look only at insurance schemes.

All of these objections have merit and need to be addressed. However, the health plan is still an excellent idea. Even if it is only an announcement, it will force the government to spend at some stage. It elevates the issue of the health of the weakest and most deprived Indians. It brings healthcare into the national conversation, from where it has been absent unlike defence and one rank one pension.

As long as the pressure exists, the money will be found. Once the citizen is armed with the money, she will also demand the facility. Whether Rs 5 lakh is sufficient or not is also something we will discover.

For all of these reasons, I think this move is a terrific one. I have no love of sympathy for the sort of religious majoritarianism that Modi has practiced all his political life. What is happening under him is frightening and alarming on that front.

But that should not stop us from applauding him when he comes up with something good. The health scheme has changed the national conversation. For that reason it must be supported.

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The power, potential & persistent threat of fine dust particles

DR ALVARINHO LUIS

Dust is a very serious environmental issue in the metropolitan cities. Minute particles in air known as aerosols, which come from combustion of fossil fuels, wildfires, agricultural waste burning and other sources, are important in shaping weather and climate.

Apart from causing a numerous health-related problems such as asthma, these particles, which are smaller than one-thousandth the width of human hair (smaller than 50 nanometres), act as nuclei for condensation of water vapour in the atmosphere at 1-2 kms above the ground (troposphere). Now the latest research suggests that ultrafine aerosols can cause storms to intensify, clouds to

grow and more rain to fall. Meteorologists can now blame dust pollution for flooding at many places.

Scientists have investigated the role of substantial convection and precipitation enhancements by ultrafine aerosol particles, which add to our knowledge of the interactions between aerosols, clouds and precipitation. Until now the role of smaller particles below 50 nanometres, such as those produced by vehicles and industrial processes, was uncertain. The new study published in Journal Science on 26 January 2018, revealed that these particles, whose effects on clouds have been mostly neglected in studies, can invigorate clouds in a much more powerful way than their larger counterparts (greater

than 50 nanometres).

Scientists carried out measurements of aerosols in Manaus metropolis in the Amazon rainforest area with 2 million people to mimic the aerosol concentrations to preindustrial times (hundreds per cubic centimetre). The study capitalized on data gathered from ground-based and air-borne measurements during 2014-15. They showed how particles below 50 nanometres can invigorate clouds in a much more powerful way than their larger counterparts when specific conditions are present. In a warm and humid environment with no large particles to attract airborne moisture, water vapour can build up to extreme levels, causing relative humidity to rise well beyond cent per cent.

While ultrafine particles are

small in size, they can reach large numbers to form pollution plume which is generated by the converging wind patterns. These particles act as condensation nuclei which quickly and efficiently draw excess water vapour from the atmosphere. This enhanced condensation liberates more latent heat of condensation in the lower atmosphere, which enhances the upward movement of air (cold-phase invigoration). The additional condensation from this process increases the amounts of both warm rain and supercooled cloud water. Cumulatively, these enhanced ice-related processes at middle and upper levels of the atmosphere (between 3 and 9 kms above the ground) further enhance convection (turbulent air movement in the vertical), but to a much lesser

degree relative to enhanced condensation at low levels. As more warm air is pulled into the clouds, more droplets are launched aloft, producing a runaway effect that results in more ice and snow pellets, lightning, and rain.

Even under clean and humid conditions, like those that exist over the ocean and some land in the tropics, tiny aerosols have a big impact on weather and climate and can intensify storms in a great way. The results suggest that from pre-industrial to the present day, human activity possibly may have changed storms in these regions in powerful ways. The recent cyclone Ockhi that devastated the coastal region from Kerala to Gujarat may have been driven by aerosols forcing.

Triple celebrations of St Padre Pio of Pietrelcina

FR SIMON FERNANDES

The year 2018 will go down in the annals of the International Franciscan Capuchin Order as a significant one. This year the great Franciscan Capuchin Order celebrates three important events in the life of one of its favourite saints in modern times, St Padre Pio of Pietrelcina (May 25, 1887 - September 23, 1968).

This year marks the 100 years of his mysterious stigmata 1918-2018. This year also marks 50 years of the death 1968 - 2018 of the mystic saint. Added to this the Franciscan Capuchin Province of St Anthony Goa celebrates 50 years of the foundation 1968-2018 of the Friary named after the saint, at Navelim, Goa. It is indeed a rare coincidence where three important events merge together to form a spiritual confluence, a veritable sangam. Truly, Melas are held at the sangam. This miraculous coming together of three important events in the life of St Padre Pio calls for a joyful and resounding celebration from the part of the great Franciscan Capuchin family working in the Archdiocese of Goa and Daman.

The life of St Padre Pio is well-known to the people all over the world. Padre Pio is indeed everybody's saint. His life continues to inspire millions across the globe. It is a matter of great joy and delight to share the triple events that is, the Hundred Years of his Stig-

mata, fifty years of his death and the fifty years of the Franciscan Capuchin presence at Navelim, Goa. While the inaugural function will be held on February 4, with a Solemn Eucharistic celebration, followed by a short programme, there will also be spiritual and cultural programmes to enhance the jubilee festivities during the following months. The triple celebrations will conclude with the feast of St Padre Pio on September 23.

His Stigma Indeed St Padre Pio was a friar, priest, and a mystic chosen by Christ to be stigmatized with His mysterious wounds. He received the stigmata on 20th September in the year 1918 in a dramatic episode while he was hearing confessions in the church of Our Lady of graces at San Giovanni Rotondo in Foggia. This phenomenon continued for fifty long years until the end of his life. The stigmata have generated much interest and controversy. Most famously he was the only priest ever to have received the stigmata or wounds of Christ. Before him it was St Francis of Assisi (deacon) the founder of the great Franciscan Order on 17th September, 1224 at Mount Alverno, in Italy. The blood flowing from the stigmata smelled of perfume or flowers. His wounds have been examined by many people including physicians. The observations were inexplicable and the wounds never became infected. The wounds had unusually



smooth edges with no abnormalities in the bone structure. His bleeding hands and feet were meticulously covered. It is observed that at the time of the Padre's death the body appeared unscathed, with no sign of scarring. The doctors observed that his body seemed drained of blood at the moment of his approaching death.

His Death As we celebrate fifty years 1968-2018 of the death of St Padre Pio we recall the agony and

ecstasy of his sufferings in his life. Indeed his life had been a prolonged way of the cross, a sorrowful life never free from pain. The saint speaking to his spiritual gurus revealed his deepest secrets concerning his living agony. Transverberation or piercing of the heart indicating the union of love with God literally brought him to the gates of death in pain. He felt even his bowels were not spared by the piercing fiery sword. The crown of thorns on his head and the scourging were experi-

enced by him on and off. One may even conclude that the man of God lived death in his person while being alive.

His physical death came at a time when all his blood stream was drained off from his mortal body. On 23rd September the valiant soldier of Christ and the true son of the Poverello of Assisi winged his way to heaven to receive the crown of glory.

Padre Pio Friary, Navelim We place on record that this foundation was the first one in India to be named after the saint. Truly it had its humble beginnings. The changing scenario of the Indian Franciscan Capuchin order required specific changes. Thus in the course of time this humble friary and Chapel had to be renovated to house students aspiring for priestly and religious life. Hence initial stage formation was held at Navelim for couple of years. Side by side it continued to be a centre for Herbal Medical Care.

For several years this centre was run by well known late brother Peter Ratos, O F M Cap. At present St Padre Pio, friary in Navelim is a full time centre for the devotion of St Padre Pio with a team of dedicated friars who conduct residential retreats, counselling, mission animation, popular preaching, and confessions.

The jubilee is indeed a moment to sing the praises of the Lord and move onward forward as the love of Christ urges us on 2Cor 5.14.