

# Current Affairs ANALYST



**Imposition of President Rule in Arunachal Pradesh: An Analysis**

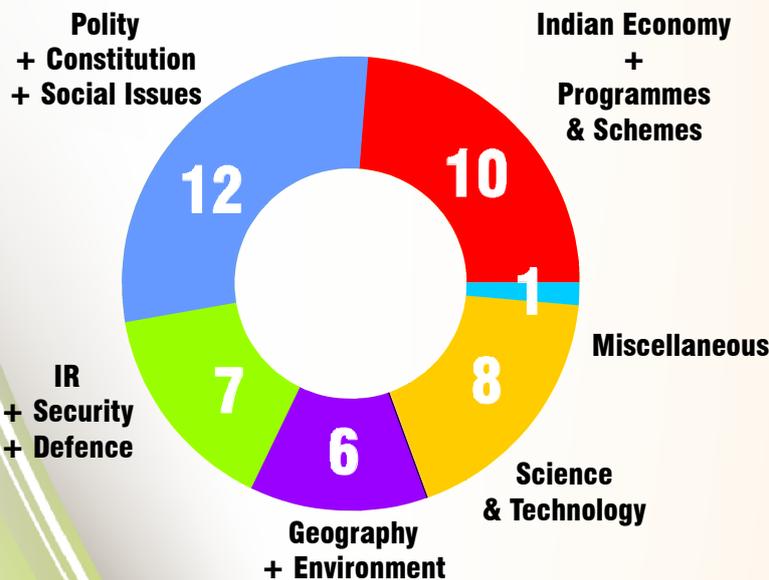


**Stand up Start up India Program**



**Zika Virus**

**in focus**



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# FOCUS



## A. Stand Up Start Up India Program



## B. Imposition of President Rule in Arunachal Pradesh: An Analysis



## C. Zika Virus

## A. Stand Up Start Up India Program

### Introduction

- Recently the Prime Minister of India unveiled start up stand up scheme. Startup India campaign is based on an action plan aimed at promoting bank financing for start-up ventures to boost entrepreneurship and encourage start ups with jobs creation. In recent years, the Indian startup ecosystem has really taken off and come into its own-driven by factors such as massive funding, consolidation activities, evolving technology and a burgeoning domestic market. According to the 2014 statistics there are 3100 start ups in India and this number could increase to more than 11500 by 2020.

### What is Start up ?

- A startup company or startup or start-up is an Entrepreneurial venture or a New business in the form of a company, a partnership or a temporary

organization designed to search for a repeatable and scalable business model.

### Why do we need Start ups in India?

- Since 2007, when starting up started becoming fashionable, India has created 7 unicorn or companies with a valuation of at least \$1 billion, Which is a decent number however when compared to USA and China it is miniscule which can be seen from the fact that China has 24.
- 2ndly India will be in the phase of demographic dividend in next few decades, However to utilize the fruits of Demographic dividend, we need to create more jobs for our burgeoning workforce and for that we need to create more start ups as start ups not only employ young people they also increase their overall skills by making them a multi-tasker.

- 3rdly Long term growth of any country depends on innovation and by continuously launching new and innovative ideas. If India need to compete with China and USA we need to create more start ups.
- 4thly start-ups hold the potential of creating more jobs at a time when the manufacturing sector is facing a slump that may last longer given global economic prospects and the slowdown in China, which has been one of the engines of global growth and with growing automation, the manufacturing sector may no longer be in a position to create jobs.
- **Key Features of Stand up India Programme**
- It is focused on to restrict role of States in policy domain and to get rid of "license raj" and hindrances like in land permissions, foreign investment proposal, environmental clearances. It was organized by Department of Industrial Policy and Promotion.
- According to this programme. A startup is an entity that is Headquartered in India which was opened less than 5 years ago and have an annual turnover less than Rs. 25 crores
- Single Window Clearance even with the help of a mobile application
- 80% reduction in patent registration fee
- Modified and more friendly Bankruptcy Code to ensure 90-day exit window
- Freedom from mystifying inspections for 3 years
- Freedom from Capital Gain Tax for 3 years
- Freedom from tax in profits for 3 years
- new schemes to provide IPR (Intellectual Property Rights) protection to start-ups and new firms
- Self-certification compliance
- Innovation hub under Atal Innovation Mission
- Eliminating red tape and Freedom from mystifying inspections for 3 years
- More incubators for new enterprises and 500 laboratories with 3-D printers are to be established
- The policy also provides for incubation infrastructure (land, in start-up jargon), a dire need for most start-ups.

#### Concerns raised from the scheme

- It is far from clear why only companies which satisfy the government's restrictive definition of a start-up - "driven by technology or intellectual property: - should have access to an enabling environment. In addition, to be eligible for schemes, start-ups will have to show that their innovation

has "significantly improved" existing processes. Oddly, there is no self-certification as to whether the "improvement" is significant - allowing the bureaucrat to once again insert himself into the process. It is thus possible that discretion - anathema to a start-up ecosystem - may have been built into the scheme from the outset.

- 2nd Giving Tax incentive to start up runs contrary to the statement made by Finance Minister to end all corporate tax exemptions in next few years.
- The most controversial proposal of this scheme is announcement of a Rs.10,000 crore fund of funds to spur start-ups under which. The government will take taxpayer funds to invest in other venture capital funds, which will then fund start-ups. However investment in venture capital firms are very risky, critics allege that When there is already thriving venture capital industry that funds start-ups, what is the rationale for the government to risk taxpayer funds by investing directly in it. The government does not have expertise in this field and therefore it is not suited to directly invest in venture capital firms. The limited tax resource of the government should instead be used for expanding Physical Infrastructure and improving the Health and education facilities.

#### Conclusion

- It is undeniable that India's start-ups need to be saluted, encouraged and fostered. The government deserves to be lauded for recognizing this and accomplishing it in its characteristic pomp and splendor. However, the temptation to translate that into policy actions by splurging taxpayer funds in venture capital is illogical and a travesty of the minimum government promise. The government should instead provide a investor friendly environment by giving tax incentives to start ups and cutting red tapism and then let them flourish at their own.

#### Other news related to start ups

##### RBI relaxes FDI norms to boost start-ups

- The Reserve Bank of India (RBI) recently relaxed several rules including Foreign Direct Investment norms to boost start-up activity in the country
- Currently only Venture Capital Funds (VCF) and Indian Venture Capital Undertakings (IVCU) are eligible to raise foreign venture capital investments
- In the new norms, start-ups are allowed to receive foreign venture capital investment irrespective of the sector in which they operate.
- The central bank simplified the process of dealing with delayed reporting of Foreign Direct Investment (FDI)-related transaction by building a penalty structure into the regulations itself.

- RBI is also considering certain other proposals like permitting start-up enterprises to access rupee loans under External Commercial Borrowing (ECB) framework with relaxations in respect of eligible lenders, issuance of innovative FDI instruments like convertible notes by start-up enterprises and streamlining of overseas investment operations for start-up enterprises.
- The new norms will enable transfer of shares from foreign venture capital investors to other residents or non-residents.
- Proposals like permitting start up to access ECB, issuance of innovative FDI instruments etc., which are under consideration, if goes through will improve investor participation and also help start-ups to raise capital at low cost

**How will this be beneficial?**

## B. Imposition of President Rule in Arunachal Pradesh: An Analysis

### Introduction

President recently imposed President Rule in Arunachal Pradesh. The move came after the Governor of the state recommended its imposition on the grounds of breakdown of constitutional machinery. The move is criticized widely by the party in power and many legal experts who believed that the grounds on which the governor recommended President Rule is frivolous as it also include 'Cow Slaughter' as, an Example of breakdown of constitutional machinery.

### Background

On December 9, a Group of rebel Congress MLAs approached Governor J P Rajkhowa, seeking to impeach Assembly Speaker Nabam Rebia. The rebel MLAs were upset with Rebia, who is a cousin of Chief Minister Nabam Tuki and seen as being in his camp, because they said he was trying to get them disqualified from the Assembly. Though the Assembly was not in session, Governor Rajkhowa agreed it was an urgent matter. Since the Assembly was originally slated to convene only on January 14, the Governor called for an emergency session of the Assembly on December 16, 2015, to take up the impeachment motion. As the Congress approached the High Court and later the Constitution bench of the Supreme Court against the Governor's convening of the special session, the Centre called for President's rule in the state under Article 356 of the Constitution. The Congress cried foul, saying this was the first instance of Article 356 being imposed while the case was being heard in court.

### Legal Arguments in this case:

- Many legal experts believe that Since, Chief Minister Nabam Tuki lost majority after 21 Congress MLAs revolted against him but they cannot join hands with the BJP to form a Government owing to the anti-defection law. Therefore, Government cannot be formed in the current circumstances; therefore the governor has no other option but to recommend for President Rule.

- Further, the failure of the assembly to meet for over 6 months amounts to a violation of Article 174, which can be interpreted as a failure of the constitutional machinery
- However, other believes that President should have waited till the verdict of Supreme Court on this issue is announce. The haste shown in imposing President Rule reflects that the decision is made on Political grounds rather than on constitutional ground.

### What is Article 356?

- According to Article 356, President's Rule can be imposed in a state if a situation has arisen in which the government of the state cannot be carried on in accordance with the provisions of the Constitution.

### Why this Article is Criticized?

- The expression "breakdown of constitutional machinery" has not been defined in the Constitution. It can happen due to political reasons such as, hung assembly, the Government losing majority in the assembly, failure of any political grouping to form a government, defections and break-up of coalition or because of insurgency etc.
- Unlike the President, who mostly acts on the advice of the Union Council of Ministers, Governors have some discretion, including for sending reports recommending central rule.
- Since Governor is a central government's agent and He has discretionary power with regard to imposition of President Rule and also because, breakdown of constitutional machinery is not defined anywhere in the constitution, This has resulted in blunt misuse of this article by the party in power in the centre. The worst misuse of it could be seen from 2 instances, First being when Janta Party government came to power in 1977, It dismissed all congress ruled state government by using Article 356,since it felt that since congress

government lost election at the centre, it has lost the mandate to rule at the state. Same grounds were used by the Congress government in 1980 while dismissing the Janta party government.

- Due to its widespread misuse by the executive, Supreme Court was forced to intervene in this matter, Thus in the S.R. Bommai case, the Supreme Court ruled in 1994 that courts can't question the Union Cabinet's advice to the President but they can question the material behind the satisfaction of the President regarding breakdown of constitutional machinery. It also said that, the use of Article 356 was justified only when there was a breakdown of constitutional machinery and not that of administrative machinery. Since then the usage of this article has reduced widely, since

it has inculcated fear in the minds of executive about Court nullifying the imposition of president Rule.

- The most recent example of the misuse of this article was in Buta Singh case. Where the Governor recommended president rule without giving chance to an Alliance which claimed that it has majority. The Supreme Court in January 2006 declared the dissolution of the Bihar assembly as null and void in the Buta Singh case. It held that the governor's report could not be taken at face value and must be verified by the council of ministers before being used as the basis for imposing President's rule. The "drastic and extreme action under Article 356" cannot be justified on whims and fancies of the Governor and the council of ministers should not accept it as "gospel truth".

## C. Zika Virus

Zika virus is an emerging mosquito-borne virus that was first identified in Uganda in 1947 in rhesus monkeys through a monitoring network of sylvatic yellow fever. It was subsequently identified in humans in 1952 in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the America, Asia and the Pacific.

- Genre: Flavivirus
- Vector: Aedes mosquitoes (which usually bite during the morning and late afternoon/evening hours)
- Reservoir: Unknown

### Signs and Symptoms:

The incubation period (the time from exposure to symptoms) of Zika virus disease is not clear, but is likely to be a few days. The symptoms are similar to other arbovirus infections such as; dengue includes fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache. These symptoms are usually mild and last for 2-7 days.

### Potential complications of Zika virus disease

During large outbreaks in French Polynesia and Brazil in 2013 and 2015 respectively, National Health Authorities reported potential neurological and auto-immune complications of Zika virus disease. Recently in Brazil, local health authorities have observed an increase in Guillain-Barré syndrome (neurological syndromes) which coincided with Zika virus infections in the general public, as well as an increase in babies born with microcephaly (a foetal deformation of an abnormally small head) in northeast Brazil.

Agencies investigating the Zika outbreaks are finding an increasing body of evidence about the link between

Zika virus and microcephaly. However, more investigation is needed to better understand the relationship between microcephaly in babies and the Zika virus. Other potential causes are also being investigated.

### Transmission

Zika virus is transmitted to people through the bite of an infected mosquito from the Aedes genus, mainly Aedes aegypti in tropical regions. This is the same mosquito that transmits dengue, chikungunya and yellow fever.

### Diagnosis

Infection with Zika virus may be suspected based on symptoms and recent history (e.g. residence or travel to an area where Zika virus is known to be present). Zika virus diagnosis can only be confirmed by laboratory testing for the presence of Zika virus RNA in the blood or other body fluids, such as urine or saliva.

### Prevention

Mosquitoes and their breeding sites pose a significant risk factor for Zika virus infection. Prevention and control relies on reducing mosquitoes through source reduction (removal and modification of breeding sites) and reducing contact between mosquitoes and people.

This can be done by using insect repellent; wearing clothes (preferably light-colored) that cover as much of the body as possible; using physical barriers such as screens, closed doors and windows; and sleeping under mosquito nets. It is also important to empty, clean or cover containers that can hold water such as buckets, flower pots or tyres, so that places where mosquitoes can breed are removed.

Special attention and help should be given to those who may not be able to protect themselves adequately, such as young children, the sick or elderly. During outbreaks, health authorities may advise that spraying of insecticides be carried out. Insecticides recommended by the WHO Pesticide Evaluation Scheme may also be used as larvicides to treat relatively large water containers.

#### **Treatment**

Zika virus disease is relatively mild and requires no specific treatment. People sick with Zika virus should

get plenty of rest, drink enough fluids, and treat pain and fever with common medicines. If symptoms worsen, they should seek medical care and advice. There is currently no vaccine available.

Vaccines manufacturer, Bharat Biotech, announced a breakthrough in developing the world's 1ST Zika vaccine. The Hyderabad-based company has submitted 2 vaccine candidates -- one inactivated and one recombinant -- to the Indian Government. The regulatory approval will be granted only after the pre-clinical studies conclude, which according to the company will take another 5 months.

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# 1. INDIAN ECONOMY + SCHEMES

## Ministry of Shipping initiated Project Green Port to make Indian ports cleaner and greener

### Project 'green port'

To achieve growth with sustainability, the Ministry of Shipping has started 'Project Green Ports' which will help in making the Major Ports across India cleaner and greener. 'Project Green Ports' will have 2 verticals - one is 'Green Ports Initiatives' related to environmental issues and 2nd is 'Swachh Bharat Abhiyaan.'

#### (a) Green Ports Initiatives

Under this 12 initiatives which will be implemented in a strict time bound fashion in order to achieve the targets. Some of these initiatives are preparation and monitoring plan, acquiring equipments required for monitoring environmental pollution, acquiring dust suppression system, setting up of sewage/waste water treatment plants/ garbage disposal plant, setting up projects for energy generation from renewable energy sources, completion of shortfalls of Oil Spill Response (OSR) facilities (Tier-1), prohibition of disposal of almost all kind of garbage at Sea, improving the quality of Harbor wastes etc.

#### (b) Swatcha Bharat Abhiyaan

Under Swachh Bharat Abhiyaan, the Ministry has identified 20 activities with certain time-line to promote cleanliness at the port premises. Some of the activities include cleaning the wharf, cleaning and repairing of sheds, cleaning and repairing of port roads, painting road signs, zebra crossing, pavement edges, modernizing and cleanliness of all the toilet complexes in the operational area, placement of dustbins at regular intervals, beautification and cleaning of parks, boards indicating cleanliness messages, cleaning and repairing of all drainages and storm water systems and tree plantation.

In order to achieve these objectives, regular training will be provided to the staff in order to generate awareness and inculcate a positive attitude towards keeping the Environment Clean and Green. All the Major Ports have already initiated action on the above mentioned activities and are making good progress.

## 'EASWAR PANEL' ON INCOME TAX REFORMS

### Background

Easwar panel was formed by the government to simplify the income tax structure in India and also to

reduce tax disputes which has increased over years.. A key reason for the country's exceptionally narrow taxpayer base and frequent tax litigation lies in its unpredictable tax regime, brought on by the grey areas in the Income Tax Act- of 1961 and the scope for arbitrary interpretation of its provisions.

### What is TDS?

Tax Deducted at Source (TDS), as the very name implies aims at collection of Revenue at the very source of income. It is essentially an indirect method of collecting tax which combines the concepts of "pay as you earn" and "collect as it is being earned." Its significance to the government lies in the fact that it proposes the collection of tax, ensures a regular source of revenue, provides for a greater reach and wider base for tax. At the same time, to the tax payer, it distributes the incidence of tax and provides for a simple and convenient mode of payment.

The concept of TDS requires that the person, on whom responsibility has been cast, is to deduct tax at the appropriate rates, from payments of specific nature which are being made to a specified recipient. The deducted sum is required to be deposited to the credit of the Central Government. The recipient from whose income tax has been deducted at source gets the credit of the amount deducted in his personal assessment on the basis of the certificate issued by the deductor.

### Key Provisions and findings of Eashwar panel

- The Panel observed that nearly 65 % of the personal Income-tax collection in India was through Tax Deducted at Source (TDS) and TDS provisions need to be made more tax friendly and not as 'tedious' as they have remained over the years.
- The panel has proposed that the threshold for Tax Deducted at Source (TDS) on interest income be raised from Rs .10,000 a year to Rs. 15,000, besides cutting the TDS rate by half from the present 10% to 5%. It has also proposed that non-residents, who do not have a PAN, should not be subjected to a higher TDS of 20% if they submit a Tax Identification Number (TIN).
- It recommended "enhancement and rationalization of the threshold limits and reduction of the rates of TDS. TDS rates for individuals and HUFs to be reduced to 5 % as against the present 10 %.
- Presently, TDS is applicable on "such tiny annual limits" of Rs. 2,500 in case of payment of interest on securities and on interest on NSS accounts, Rs. 5,000 for payment of interest on private deposits

and commission or brokerage and Rs. 10,000 for payment of bank interest. Therefore, For interest on securities it proposed raising the threshold for TDS to Rs 15,000 from Rs 2,500 annually and halving the tax rate to 5%.

- The panel recommended raising TDS limit for payments to contractors from current limits of 30,000 for single transaction and Rs.75,000 annually to Rs 1 lakh as annual limit.
- The Easwar panel also recommended that securities held for more than 12 months should be included in the definition of capital asset. It also recommends that trading profits from shares amounting to 5 lakh or less a year, be treated as capital gains even where the holding period is less than 12 months.

#### Analysis of Easwar panel recommendations

- Successive governments have tried hard to woo Indian savers to equities through a concessional capital gains tax regime. But such efforts have been stifled due to taxman's own interpretation, for instance, by treating stock market profits as business income rather than capital gains, on a case-to-case basis. The Easwar panel disentangles this problem by specifically including 'securities' held for more than 12 months in the definition of 'capital assets'. This amendment, if implemented, will give a boost to stock market liquidity and persuade small investors to be more active while managing their equity portfolios.
- The provision of Tax Deduction at Source (TDS) bring in 2/3rd of the country's personal tax collections and are an easy means for the IT department to meet its annual revenue targets. But TDS is also grossly unfair, as it sweeps many citizens who fall below threshold limits - such as pensioners and homemakers -haphazardly into the tax net. The panel's recommendation for raising the threshold limits for TDS on such things as interest from deposits would definitely improve up things.

It has also sought to reduce the burden of compliance among the self-employed. A presumptive tax regime for professionals and doubling of the threshold for businesses required to maintain audited accounts, will provide immense relief to small business owners.

#### Conclusion

The suggested changes of Eashwar Panel can go a long way in freeing smaller taxpayers from the tyranny of the taxman and help widen a tax base that is overly reliant on salaried individuals, while leaving out the self-

## Changes in Gold Monetization Scheme

Gold Monetization scheme was launched to mobilize the Idle Gold lying with Indian households & temples

which is estimated up to 20000 tones & cut on India's gold import which may touch a gigantic 1000 ton a year thus reduce pressure on current account. Scheme will facilitate the depositors of gold to earn interest on their metal accounts. Once the gold is deposited in metal account, it will start earning interest on the same. The tenure of gold deposits is likely to be for a minimum of 1 year. The minimum quantity of deposits is pegged at 30 gram to encourage even small deposits. The gold can be in any form, bullion or jewellery. Gold collected will be cleaned & melted to measure purity at test centers. The bank will use these deposits to make loans to others and receives interest in return. The difference between the interest paid and received is the bank's income

#### Why reforms were needed:

Monetization scheme allows earning some regular interest on gold if put in Gold Account and saves carrying costs as well; however, it attracted only 400 grams of gold in 1<sup>st</sup> 2 week & 900kg of gold as of 20 January 2015. . Banks and consumers received the scheme coldly. Factors behind it are:

- 1) Emotional & cultural connect of Indians with gold ornaments. Provision of melting them & convert in pure bars may be a great hurdle.
- 2) Lack of collection & Purity Testing centers across the country.
- 3) Interest rate offered for short & medium term (2.25%) is not even enough to recover the making charges of jewelry which are in between 15 to 18%.
- 4) Disclosure of source & ownership proof may inhibit investors.
- 5) Unavailability of premature withdrawals options & penalty charges.

#### New changes & how they impact:

- 1) Government will pay banks a total commission for the 1<sup>st</sup> year to incentivize their participation in popularizing the scheme. This commission includes 1.5% for handling charges and is expected to encourage crucial support as similar programs failed in the past as a result of negligible returns for banks.
- 2) Premature redemption under Medium and Long Term Government Deposits (MLTGD), Any Medium Term (5-7 Years) Deposit will be allowed to be withdrawn after 3 years and any Long Term (12-15 Years) Deposit after 5 years, however this may reduce interest rates. Early withdrawal will provide flexibility to peoples.
- 3) Gold depositors can also give their gold directly to the refiner rather than only through the Collection and Purity Testing Centers (CPTCs). This will encourage the bulk depositors including Institutions to participate in the scheme.

- 4) Bureau of Indian Standards (BIS) has modified the licensing condition for refiners already having National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation from the existing 3 years refining experience to 1 year refining experience. This is likely to increase the number of licensed refiners.
- 5) BIS has published an Expression of Interest (EOI) on its website inviting applications from the more than 13,000 licensed jewelers to act as a CPTC in the scheme. This will improve the infrastructural support by penetration of collection centers.
- 6) The quantity of gold collected under the scheme will be expressed up to three decimals of a gram. This will give the consumer better value for the gold deposited.
- 7) Banks are free to hedge their positions in the case of short-term deposits.
- 8) Government has also launched the dedicated website [www.finmin.nic.in/swarnabharat](http://www.finmin.nic.in/swarnabharat) and toll free number 18001800000, which provide all the information of the schemes & popularize it.
- 9) Government clarified that Tax exemptions under the GMS include exemption of interest earned on the gold deposited and exemption from capital gains made through trading or at redemption.
- 10) Gold to be deposited with the CPTCs/Refineries can be of any purity. The CPTC/Refiner will test the gold and determine its purity which will be basis on which the deposit certificate will be issued.

#### Other Reforms required & way forward:

Still there are issues which need to be resolved to make the scheme a success. The interest rates are too low to encourage the large scale participation, scheme need the interest rate revision. An Indian do not wants to see his long-preserved, family-inherited, emotionally-critical, piece of yellow metal lose its identity and 'feel' by melting it. The government can offer a choice to the customer with respect to the melting of the ornament. A differential rate of interest can be offered on melted and non-melted gold. This can be done still not compromising on the purity assessment. Someone who isn't willing to melt his ornaments will have to settle with a lower rate of return. To resolve the issue of ownership & to check the inflow of smuggled gold, the government can partly address the problem to a certain extent by making invoices mandatory only for gold brought in the form of bars or coins and not necessarily for household ornaments. The banks can track the transaction with sufficient proofs on address and identity. In case, the quantity exceeds a particular limit, even on ornaments, questions can be raised.

## CCEA Approves Hybrid Annuity Model

### WHY IN NEWS?

- The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi, has given its approval for the Hybrid Annuity Model as one of the modes of delivery for implementing the Highway Projects. The main object of the approval is to revive highway projects in the country by making one more mode of delivery of Highway projects

### What is Hybrid annuity model?

- HAM is a Combination of EPC model and BOT-(Build Operate Transfer) Annuity model. Under this model. The government will provide 40% of the project cost to the developer to start work while the remaining investment has to be made by the developer.

### Why do we require HAM?

- Most of the earliest highway projects allocated through PPP mode were implemented through BOT-TOLL MODE. Under this model the private party is selected to build, maintain and operate the road based on the fact that which private bidder offered maximum sharing of toll revenue to the government. Here, all the risks- land acquisition and compensation risk, construction risk (i.e risk associated with cost of project), traffic risk and commercial risk lies with the private party. The private party is dependent on toll for its revenues. The government is only responsible for regulatory clearances.
- To reduce the risk for private player, and to attract private players, The 2nd model of PPP i.e. BOT-ANNUITY model was introduced under which the private player would built, maintain and operate the Project and government would pay the private player annually fixed amount of annuity. Though it was a better model than BOT-TOLL because it reduced traffic and commercial risk however cost risk remained as private player was solely responsible for the cost incurred in the project.
- In last few years many of the highway projects were stuck due to various reasons like Loss of promoters interest, Land acquisition issue, environmental reasons, excessive and unrealistic bidding by the private players and Lack of fund availability for private players due to high NPAs of the banks and lack of long term financing options in India.
- To counter this and to remove the deficiencies of government brought in EPC model. EPC stands for engineering, procurement and construction. It is a model of contract between the government

and private contractor. The EPC entails the contractor build the project by designing, installing and procuring necessary labour and land to construct the infrastructure, either directly or by subcontracting. Under this system the entire project is funded by the government rather than the PPP model where there is cost sharing. The project is awarded via bidding. Thus it shifts all the risk from the private players to the government and is the other extreme of BOT model where all risk was borne by the private player

- However EPC model could be used only as a short term emergency measure as there is an inherent limitation in implementing projects on EPC mode as such implementation is restricted by the financial resources available with the Government and also therefore it is unsustainable to use this model in the long run. In that context, MoRTH decided to introduce a mixed model in order to sustain the pace of implementation of highway projects where risk are divided rationally between both the private players and the government.

**Key features Of HAM MODEL (Figure No. 1.1)**

- Under this the government will pay 40% of the project cost to the concessionaire during the construction phase in five equal installments of 8% each.
- Revenue collection would be the responsibility of the National Highways Authority of India (NHAI); developers will be paid in annual instalments over a specified period of time.
- An important feature of the hybrid annuity model is allocation of risks between the partners-the government and the developer/investor. While the private partner continues to bear the construction and maintenance risks as in BOT (toll) projects, it is required only to partly bear the financing risk. The developer is insulated from revenue/traffic risk and inflation risk, which are not within its control.

- In the hybrid annuity model, one need not bring 100% of finance upfront and since 40% is available during the construction period, only 60% is required to be arranged for the long term. This makes it attractive and viable for the private player to invest in Highway projects. It also reduces burden on the Government as unlike EPC, the government has to provide only 40% of the project cost.

**Conclusion**

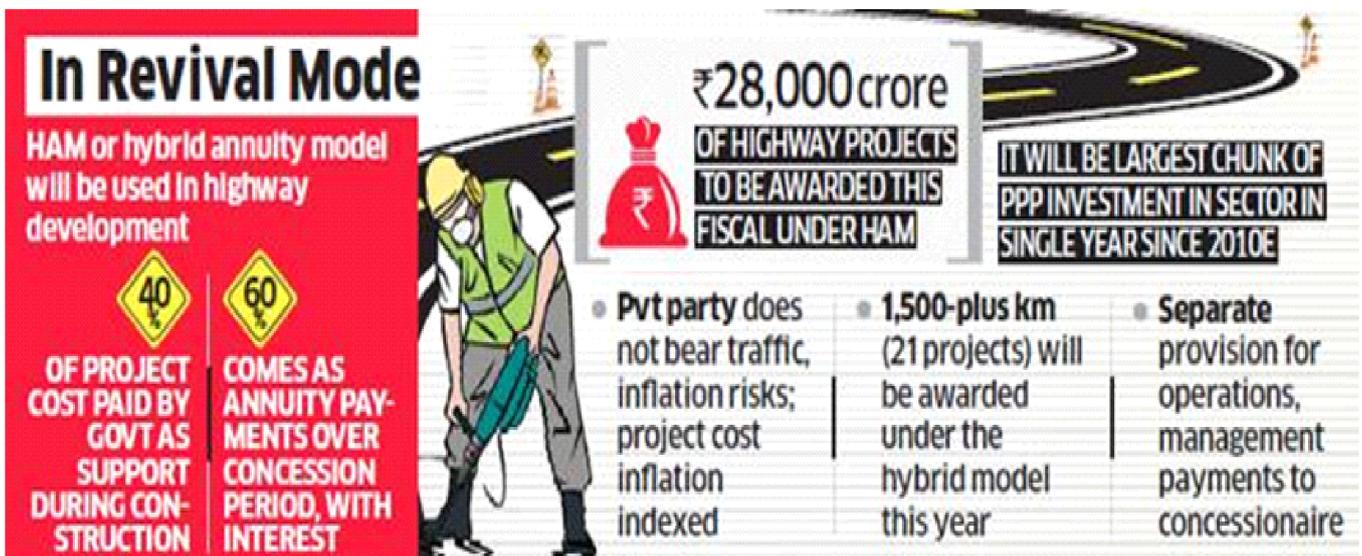
- By adopting the Model as the mode of delivery, all major stakeholders in the PPP arrangement - the Authority, lender and the developer, concessionaire would have an increased comfort level resulting in revival of the sector through renewed interest of private developers/investors in highway projects and this will bring relief thereby to citizens / travelers in the area of a respective project.

It will facilitate uplifting the socio-economic condition of the entire nation due to increased connectivity across the length and breadth of the country leading to enhanced economic activity.

**Union Government inks loan agreement with ‘World Bank for Neeranchal National Watershed Project’**

Union Government has signed a loan agreement with World Bank with a total budget outlay of Rs.2142 crores for the Neeranchal National Watershed Project to improve watershed management in rural rain fed areas.

The loan has been sanctioned by the World Bank's concessionary lending arm International Development Association (IDA) for US\$ 178.50 million with a maturity of 25 years, including a 5 year grace period. It will give impetus to longstanding partnership between the World Bank and Union Government in the watershed management. The loan credit will support



(Figure No. 1.1)

the watershed activities of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) in selected sites in 9 states of Andhra Pradesh, Chhattisgarh, Telangana, Jharkhand, Gujarat, Maharashtra, Madhya Pradesh, Odisha and Rajasthan.

#### Neeranchal National Watershed Project:

The project is implemented by the Union Ministry of Rural Development over a 6-year period (2016-21) to support the PMKSY in hydrology and water management, agricultural production systems, capacity building and monitoring and evaluation.

It seeks to ensure access to irrigation to every farmland (Har Khet Ko Pani) and for efficient use of water (Per Drop More Crop).

It will be implemented in 9 states of Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telangana.

It aims to :

- Fulfil the watershed component of the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) to reduce surface runoff of rainwater, increase groundwater levels and better water availability in rainfed areas.
- Bring institutional changes in watershed and rainfed Agricultural management practices.
- Build systems that ensure watershed programmes and rainfed irrigation management practices for coordinated and quantifiable outcomes.
- Devise strategies for the sustainability of watershed management practices in program areas.
- Support the improved equity, livelihoods and incomes of the people through the linkage on an area of inclusiveness and participation in local areas.

### India to be fastest growing economy in 2016: UN

The recently released United Nations World Economic Situation and Prospects 2016 report by UN has stated that India will be the fastest growing big economy in the world in 2016. It has also said that India's economy, which accounts for over 70 % of South Asia's GDP, is projected to grow by 7.3 % in 2016 and 7.5 % in 2017, slightly up from an estimated 7.2 % in 2015.

#### Other highlights of the report:

- Improvement in the macroeconomic environment in India helped by the sharp decline in the prices of oil, metals and food.
- Rise in consumer and investor confidence even as India's government faces difficulties in implementing its wide-ranging reform agenda and some economic indicators, such as industrial production, remain volatile.

- South Asia is expected to be the world's fastest growing region in 2016 and 2017 despite challenging Global conditions.
- It has been said that India is an exception in the global scene with improved macroeconomic foundations and economic reforms.
- India's spending on infrastructure, health and education is very low compared to other nations such as China in the region.
- It has quoted that India needs to revisit its fiscal policy given the limitations of using monetary policy to spur economic growth and it is a good time for the country to increase its spend on the social sector and on employment-creation activities, even if it means "deviating" from fiscal consolidation goals for the time being.
- The decline in oil prices of course will provide some room to offset the burden of fuel bill. So India should recheck fiscal efforts and raise revenues so that it is able to increase spending on the social sectors.

The report has come at a point when the global economies across the world are witnessing a slowdown. Such projection for India will help to enhance Indian image in the world in terms of good macroeconomic stability and will showcase a good picture for the nation.

### UNESCAP released world economic situations and prospects 2016 report

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has recently released World Economic Situation and Prospects (WESP) 2016 report. The report highlights that the world economy stumbled in 2015 and only a modest improvement is projected for 2016/17.

#### Highlights of the Report

1. Global growth is estimated at a mere 2.4% in 2015, marking a downward revision by 0.4% points from the UN forecasts presented in 2015.
2. The world economy is projected to grow by 2.9% in 2016 and 3.2% in 2017, supported by generally less restrictive fiscal and still accommodative monetary policy stances worldwide.
3. The large capital outflows and increased financial market volatility, growth in developing and transition economies has slowed to its weakest pace since the 2008 global financial crisis.
4. Given the much anticipated slowdown in China and in other large emerging economies notably the Russian Federation and Brazil, the pivot of global growth is partially shifting again towards developed economies in 2016.

5. In 2016 and 2017, South Asia region is expected to be the world's fastest-growing region despite challenging global conditions.
6. GDP growth in the least developed countries is expected to rebound from 4.5% in 2015 to 5.6% growth in 2016, but will fall short of the Sustainable Development Goal target of at least 7% GDP growth per annum in the near term.
7. It indicates that the challenges for policymakers around the globe are likely to intensify in the short run in view of the weaknesses in the world economy.
8. It also shares some positive recent trends in environmental sustainability. Global energy related carbon emissions experienced no growth in 2014 for the 1st time in 20 years.
9. The broad slowdown in economic growth in many developing economies and generally weak wage growth will restrain progress in poverty reduction in the near term.
10. The terms-of-trade of commodity exporters have deteriorated significantly, limiting their ability to demand goods and services from the rest of the world.

### Major headwinds for global economy

The WESP 2016 report identifies 5 major headwinds for the Global Economy. These are:

1. Persistent macroeconomic uncertainties
2. Low commodity prices and diminished trade flows
3. Rising volatility in exchange rates and capital flows
4. Stagnant investment and productivity growth
5. Continued disconnect between finance and real sector activities

### India and WESP 2016

India will be the fastest growing big economy in the world in 2016. The report has projected India's growth rate at 7.3% in the year 2016 and 7.5% in 2017, which is slightly up from an earlier estimated 7.2% rate in 2015.

### About United Nations World Economic Situation and Prospects (WESP) report

WESP report is published annually at the beginning of the year jointly by the UN Department of Economic and Social Affairs (UN/DESA), the UN Conference on Trade and Development (UNCTAD), the 5 UN regional commissions and the World Tourism Organization (UNWTO).

## Government approves Hybrid Annuity based PPP model for wastewater recycling in 'Namami Gange Programme'

The Union Cabinet has approved the proposal for taking up Hybrid Annuity based Public Private Partnership (PPP) model under Namami Gange Programme which aims to reform the wastewater sector in India. Marking a paradigm shift in the implementation mode, Hybrid Annuity based Public Private Partnership (PPP) model will now be adopted to ensure performance, efficiency, viability and sustainability.

For this the Government is establishing to set up a Special Purpose Vehicle (SPV) to plan, structure, procure concessionaires, monitor implementation of such PPP projects and develop market for treated waste water through appropriate policy advocacy under overall guidance of National Mission for Clean Ganga (NMCG) which will be established under Indian Companies Act 2013 for providing required governance framework and enabling functional autonomy.

The SPV would enter into a Tripartite Memorandum of Agreement (MoA) with participating State Governments and concerned Urban Local Bodies (ULBs) which will aim at introducing reforms and regulatory measures for recovery of user charges on Polluters Pay principle, restrictions on usage of ground & fresh water for non-potable purposes through stricter monitoring and guidelines that promote re-use of treated wastewater.

### Background:

It had been observed that benefits accrued from substantial investments made under various past programmes (Ganga Action Plan I & II, NGRBA, Yamuna Action Plan) were less than optimal. Some of the last initiatives which were in a stalled mode, the approval paves the road ahead for complete reform in the wastewater sector in India, implementation of projects in a fast track mode and ensure effective utilisation of funds released under 100% funded 'Namami Gange' - central sector scheme.

The move comes in the backdrop of the government failing to generate the kind of interest and support it expected for its flagship Namami Gange programme.

### Benefits:

- This is a futuristic step where the market development for treated waste water and structural reforms are complementing the projects. This will help taking up more number of projects with the same allocation as made available under Namami Gange programme with reduced financial liability in the initial years.
- Spreading the stakes of the private participant over the entire period of concession would ensure continued operations over long-term.

- Linking of performance standards with the annuities will ensure desired objective of treated water of appropriate standard. It would help gradual capacity building of the Urban Local Bodies by setting ground for recovery of user charges on Polluter Pays Principle.
- Development of the market for treated water will lead to reduced demand on riverine fresh-water and will result in enhanced flows in river Ganga. These steps would also kick-start the process of responsible use of water in general and go a long way in mitigating the projected water shortage in the country.

## Decline in Export Sector in India + Currency War + Reasons for Free Fall of Rupees

- India's merchandise exports contracted for the 13th month in a row in December. Export contracted by 14.75% in December. India's overall exports are projected by the commerce ministry to decline 13% from the previous year's level to \$270 billion in 2015-16, with a trade deficit of around \$120-125 billion. The Government's earlier target of \$900 billion in exports of goods and services by 2020, raising the country's share in world exports to 3.5% from 2% now, looks more daunting.

### Reasons for fall in exports

- Global factors are most important reasons for the slowdown. Due to slow growth in India's export market there is lack of demand for Indian goods.
- Fall in crude oil price has also effected badly India's export earning; Since India is big exporter of refined petroleum products.
- Third most important reason behind the fall in exports is Yuan's Devaluation as India's top competitor in many of its key exports such as steel, chemicals and textiles is China
- Fourthly, though tariff barrier has decreased over the years in developed countries, the non-tariff barriers have been increasingly used against Indian exports and the most potent weapon of non-tariff barrier is imposition of phytosanitary norms of WTO to restrict Indian export access to these markets.
- Fifthly, in most of the Free Trade Agreement we signed, the other country or bloc is getting more benefits than India, in fact India is getting hurt from some of them in this dealings. For example, India-Asean free trade agreement has hurted India's export of oil palm and textiles because of competition from Indonesia and Vietnam. Further, most of India's preferential trade agreements (PTAs) are shallow in terms of product coverage. For example, the India-Mercosur PTA doesn't include textiles and apparel items, which face prohibitive import duties of up to 35 %.

- While all these external factors have played a role in decline of our factors, however the root cause for this decline is much broader. Despite all attempts at diversification, India's merchandise exports have a narrow base, with the top 20 categories accounting for 78 % of the total. Even in top export categories like textiles, India is exporting low value commodities such as cotton yarn or apparel rather than technical textiles. India's manufacturing exports are fast losing price competitiveness, primarily because of poor logistics infrastructure compounded by a weak trade facilitation regime. India's over-dependence on road freight means that the cost of logistics as a percentage of GDP remains as high as 13-14 %, compared with 7-8 % in developed countries. Exports incentives in the range of 2 to 3 % of export value can't fully compensate for the additional cost incurred on account of an inefficient trade infrastructure.

- India's ill-conceived trade pacts have also resulted in inverted duty structure - High import duties on raw materials and intermediates, and lower duties on finished goods - That discourage the production and export of value-added items. Thus, apparel can be imported into India duty free while its raw material -manmade fibers attract an import duty of 10 %. That makes no sense. Similarly, finished products such as laptops or cell phones can be imported more cheaply than all their parts (imported) separately because of duty inversion.
- Lastly, the relative appreciation of rupee against dollar vis-à-vis other currencies like the euro, real, rouble, or Yuan have hamper India's exports competitiveness.

### What is required to boost India's export?

- Firstly, in short run rupees should be allowed to depreciate more in order to make our exports competitive in comparison to China and other emerging countries.
- Secondly, India should sign FTA giving due weight age to commercial interest also. In recent years India has signed many trade pacts, more for Geopolitical reasons than commercial ones which have hurted India's exports, fixing the trade regime should be the top priority for the government.
- Thirdly, India's traditional export market i.e. developed countries in Europe, North America, Japan etc. are either slowing down or they are negotiating Multilateral trade agreements like TPP which would prevent market access to these markets, Therefore in order to ensure long term stability and sustainability of India's exports, India should focus more on African and Latin American Markets by signing more FTA,s in these region.

- Create indigenous sources of supply, where possible, for imports that form parts of exports to provide a cost advantage, or at least reduce the cost disadvantage. Many of India's exports today have significant import components.
- Reduce barriers for foreign direct investment that can provide capital and expertise for export oriented activities.
- Improve domestic infrastructure as; Roads, ports and power. For example, India is one of the largest producers in the world of fruits and vegetables and the largest producers of milk. Yet, India's share of the world trade in this is less than 1%. This is attributed largely to lack of investment in post-harvest technology and infrastructure that can deliver these perishables to the world market.
- Tighter regulation for exports subject to international quality control. Note that India is one of the largest exporters of pharmaceutical products. Yet, some Indian companies recently, were handed large fines and also banned by the US and UK regulators for not meeting quality controls. This has the impact of painting a successful industry with the same broad stroke and undermining its potential growth.

#### Reasons for the Fall of Rupees.

- The Indian Rupees recently touched 3 year low when Rupee value to 1\$ touched the 68 mark. What is more surprising in the present fall of rupees is that this fall is happening despite the fact that oil prices are below \$30 barrel, as in 2013 higher oil price was one of the reason for the weakening of Rupees as India imports 80% of the oil that it consumes. Oil is bought and sold internationally in dollars. When Indian oil marketing companies buy oil they pay in dollars. This pushes up the demand for dollars and drives down the value of the rupee against the dollar.
- Global economic slowdown: This is the major factor which is contributing to both the stock markets and Indian currency fall. China's Yuan devaluation has also been hurting the sentiments globally. China has been witnessing a slowdown. IMF has cited a sharp slowdown in China trade and weak commodity prices that are hammering Brazil and other emerging markets.
- Crude oil prices: US is the biggest importer of crude oil. So when the crude prices go down, it means US will be saving more dollars to buy it, as a result dollar as a currency strengthens, leading to fall of Indian Rupee and other currencies at the forex market.
- FIIs have been in the sell off mode in equity segment for last 3 months. This is due to the end of Fed Tapering. During Quantitative easing programme unleashed in USA, FII flow increased tremendously in emerging market because of lower interest rate being offered in USA. With end of Fed tapering the interest rate will increase in USA, which has attracted back FII investors back to USA and other developed countries which are considered safe investment. Due to stagnation in growth rate in most emerging economies, investors are apprehensive that India will also meet the same fate in coming years due to which FII investors are putting their money away from emerging economies.

- India's Trade deficit: Exports contracted for 13th month in a row in December 2015 as outward shipments shrank 14.75% to \$22.2 billion amid a global demand slowdown. Imports too plunged 3.88% to \$33.9 billion in December over the same month previous year.
- Despite the ongoing depreciation, the Rupee has still performed relatively better this year than other Asian emerging market currencies, having lost about 1.6% against the dollar, compared to a fall of around 3.4 % in the South Korean won and a drop of around 2.3 % in the Malaysian ringgit.

#### Currency War: An Analysis

- China has devalued its currency twice in last 6 months, many economists believe that it is in response to Quantitative Easing Programme of the USA which has led to depreciation of US dollar against YUAN and affected Chinese exports. This devaluation is termed as maturation of currency war which is prevailing in world economy since last few years.

#### What is currency war?

- A currency war refers to a situation where a number of nations seek to deliberately depreciate the value of their domestic currencies in order to stimulate their economies. Although currency depreciation or devaluation is a common occurrence in the foreign exchange market, the hallmark of a currency war is the significant number of nations that may be simultaneously engaged in attempts to devalue their currency at the same time.
- More than 20 countries having reduced interest rates or implemented measures to ease monetary policy from January 2015 and January 2016, the trillion-dollar question is - are we already in the midst of a currency war?

#### Why do countries indulge in Currency War?

- It may seem counter-intuitive, but a strong currency is not necessarily in a nation's best interests. A weak domestic currency makes a nation's exports more competitive in global markets and simultaneously makes imports more expensive. Higher export volumes spur economic growth, while pricey imports also have a similar effect because consumers opt for local alternatives to imported

products. This improvement in terms of trade generally translates into a lower current account deficit (or a greater current account surplus), higher employment, and faster GDP growth. The stimulative monetary policies that usually result in a weak currency also have a positive impact on the nation's capital and housing markets, which in turn boosts domestic consumption through the wealth effect.

### Negative Effects of a Currency War

- Currency depreciation is not the panacea for all economic problems. Brazil is a case in point. The Brazilian real has plunged 48% since 2011, but the steep currency devaluation has been unable to offset other problems such as plunging crude oil and commodity prices, and a widening corruption scandal. As a result, the Brazilian economy is forecast by the IMF to contract 1% in 2015, after barely growing in 2014.

### So what are the negative effects of a currency war?

- Currency devaluation may lower productivity in the long-term, since imports of capital equipment and machinery become too expensive for local businesses. If currency depreciation is not accompanied by genuine structural reforms, productivity will eventually suffer.
- The degree of currency depreciation may be greater than what is desired, which may eventually cause rising inflation and capital outflows.
- A currency war may lead to greater protectionism and the erecting of trade barriers, which would impede global trade.
- Competitive devaluation may cause an increase in currency volatility, which in turn would lead to higher hedging costs for companies and possibly deter foreign investment.

### Are countries today indulging in currency war?

- The Yuan has lost 5.8% since August 10 when the Chinese central bank devalued the currency. The European Central Bank's (ECB) has promised to further its quantitative easing programme, While recently, Japanese central bank has brought negative interest rate in Japan which is likely to make YEN weaker. Even central bank of many emerging economies like Turkey, Brazil and South Africa are also following easy monetary policy in order to make their currency weak. This has proved that countries are indulging in currency war currently.

### Should India indulge in Currency War?

- In 2015, the Rupee has depreciated just about 5% against the dollar, compared with a 20-35% loss in currencies of Brazil, Argentina and Turkey. At the

same time, the rupee's peers in Asia have fallen about seven to 9% over the past year. Many experts believe that our lack of indulgence in currency war has led to fall in India's exports and therefore India should indulge in currency war in order to protect our turf. However if we closely analyze we find that Currency war is not a solution for India for number of reasons.

- Currency depreciation is not the panacea for all economic problems. Brazil is a case in point. The Brazilian real has plunged 48% since 2011, but the steep currency devaluation has been unable to offset other problems such as plunging crude oil and commodity prices, and a widening corruption scandal.
- At a time, when India is starved of domestic capital, foreign capital has been a savior. In fact, India has been making all efforts to attract foreign capital. A weak rupee impacts their return on capital and would starve India of foreign capital.
- India's imports are inelastic and therefore a weak currency could lead to Balance of payment crisis.
- We have also seen other negative effects of currency war above, Therefore India not rely on weak currency to boost its growth and exports instead it should focus on doing real reforms including improving infrastructure, labour reforms, passing GST to have a long term stable and sustainable positive effect on growth and trade.
- Key Terms

### What is Quantitative Easing (QE) ?

- Quantitative easing is an unconventional monetary policy tool which was used by the Central bank of the USA (Federal Reserve) to boost the economy after the financial crisis of 2007-08.
- The Federal Reserve had to resort to quantitative easing because the conventional monetary policy tools used to control money supply had become ineffective. The main tool of conventional monetary policy in the USA is the federal funds rate. The Federal funds rate is the rate at which banks lend overnight to each other. It is the Inter-bank rate. (In India, the key policy rate is repo rate. Though, its mechanism is not the same as the Federal funds rate. Repo rate is the rate at which RBI lends to the banks against securities
- In the aftermath of the financial crisis, the United States started reducing its federal funds rate to increase the money supply in the economy. It was intended to boost the economy and lower the unemployment rate. By December 2008, interest rates had reached to 0%. It became impossible to cut interest rates further and hence quantitative easing was used.

In quantitative easing, Federal Reserve Bank buys Government bonds and other financial assets from commercial banks to inject cash into the economy. Japan was the 1ST country to use Quantitative Easing.

- From where does the Federal get money to buy bonds?

The money is created electronically and credited in the reserves accounts of the banks.

When Federal buys bonds from the bank, it increases its reserves. Banks have to keep a certain percentage of deposits as reserves with the Federal. Increasing the reserves lets banks lend more money as now it has extra reserves parked with the Federal.

How does Quantitative Easing work?

Quantitative Easing is the buying of Government bonds from the banks. It has the following effects:

- The price of the bonds increases as its demand increases.
- Their interest rates reduce.
- Bank has more money kept as reserves than it is required. It can lend this money to consumers and businesses. Hence, money supply in the economy increases.

## Why will Investor and Savers invest their money if they will get Negative Returns?

- Generally, Central Banks opted for negative interest rates when there is recession and during recession generally there is deflation and therefore even if investors get negative returns, due to consequent deflation, there inflation-adjusted yields could still end up being positive, despite values of nominal yields are still negative.
- Individual investors would not be the only ones buying bonds, many institutions such as banks, due to the strict regulations aimed at lowering systemic risk, would be forced to hold on their balance sheets high-quality bonds, as well as brokers working on repo markets would continue buying bonds to use as collateral. Thus these people will continue to buy bonds even when the interest rate is Negative.
- Another reason that would make investing in negative yields no longer senseless is the attractive currency game that investors could start playing. Holding bonds in a currency that is shortly going to be appreciated means being likely to cover the losses of negative interest rates with the gains of a stronger currency.

## INDIA and USA Settle 100 tax Disputes

- India and the US have solved over 100 transfer pricing disputes for sectors such as information technology (software development) services (ITS) and information technology-enabled services (ITeS) over 1 year period.
- India signed the framework agreement with the US revenue authorities in January, 2015, seeking to resolve about 200 transfer pricing cases. The framework was finalized under the mutual agreement procedure (MAP) provision contained in the India-USA Double Taxation Avoidance Convention (DTAC).
- The tax disputes arose after India's tax authorities made allegedly aggressive TP adjustments. These have now been amicably settled thanks to a bilateral framework agreement signed a year ago. What paved the way for the agreement was the provision of mutual agreement procedure (MAP) in the India-US Double Taxation Avoidance Convention.
- Encouraged by the success of the framework, the US has opened the bilateral advance pricing agreement (APA) programme to India. Coupled with the growing trend of the Indian tax department signing (APAs) with MNCs' Indian units to avoid cross-border tax disputes - in all, 39 such treaties have already been signed.

### How it will be beneficial?

- The success of the MAP mechanism would help allay MNCs' fears of high-pitched TP adjustments in India
- It will boost investor sentiment - especially for multinational companies and it is expected to pave the way for greater transfer pricing cooperation between the 2 countries, a development that is likely to enhance foreign investment flow.
- Combination of a robust APA programme and a streamlined MAP would be helpful in creating an environment of tax certainty and encourage MNCs to do business in India.

### What is Transfer pricing?

- Transfer pricing is the practice of setting up prices for trading valuables between two entities across different tax jurisdictions. The valuables can be tangibles, intangibles, services and financial transactions and the entities can be company divisions and departments, or parent companies and its subsidiaries.
- Ideally, the parent company is supposed to buy/sell from its cross-border subsidiary on the same rate as it would have bought from an independent

entity/external entity. This is technically known as "Arm-length's principle". Organization for Economic Co-operation and Development (OECD) endorses arm-length's principle for transfer pricing. Tax authorities followed suite and enforced MNCs to comply with the arm length's principle.

- Transfer pricing without arm length's principle is vulnerable to be misused by the companies to evade taxes by showing minimum profits in countries where taxes are high and maximum profits in countries where taxes are low.

### What is Advance Pricing Agreement?

- The APA scheme, introduced in the Income Tax Act in 2012, is aimed at providing certainty to taxpayers in the domain of transfer pricing by specifying the methods of pricing and setting the prices of international transactions in advance. These agreements allow MNC units to declare a value for their transactions with their Overseas Parents as per the rules prescribed by India and avoid audit or questioning by Indian authorities for 5 years. As for bilateral APAs, the tax authorities in the home country of the MNCs could accept the taxes paid in India by the Indian unit as valid business expenditure, negating the chances of double taxation.

## SEBI Panel recommendation on Growth of Alternative Fund Industry

The committee formed by the Securities and Exchange Board of India (SEBI) and headed by Infosys founder N.R. Narayana Murthy suggested a slew of tax reforms to create a favorable tax environment for investors and changes in existing laws to facilitate capital-raising by Alternative Investment Funds (AIFs) and boost entrepreneurship.

Other issues addressed by the committee include how to unlock domestic sources of venture capital and private equity and other funds for AIFs; enable and encourage onshore fund management in India; and Reform the AIF regulatory regime to facilitate and optimize investments by AIFs.

AIFs or money collected from high net-worth investors to invest primarily in unlisted securities and start-ups to promote entrepreneurship, more than doubled during the past year-outpacing traditional investment vehicles such as mutual funds and market-linked insurance products. To sustain & enhance this panel suggested following reforms:

- " The Government should introduce a Securities Transaction Tax (STT) on all distributions (gross) of AIFs, investment, short-term gains and other income and eliminate any withholding of tax. After STT, income from AIFs should be tax-free to investors. The exempt income of AIFs should not be subject to withholding tax of 10%; the exempt investors too should not be subjected to the tax.

This will reduce tax disputes and enable enhanced & smooth collection of taxes.

- The introduction of STT for private equity and venture capital investments, including SEBI-registered AIFs, should have parity with the taxation of investments in listed securities.
- Given the high risk and relatively illiquid and stable nature of private equity and venture capital, it needs to at least be treated at par with volatile, short-term public market investments for taxation.
- AIFs and portfolio companies should be exempted from certain income tax provisions so that they are subjected to tax only when receiving dividend or interest income during the holding period or realize capital gains at the time of exit to promote investments into AIFs.
- In recent, past has started losing out business to overseas jurisdictions such as Singapore due to current rate of 20% tax with 3 year holding on domestic AIFs for backing an entrepreneur. The loss of business to India results in loss of tax revenue that would have otherwise come to India & loss of employment opportunities. The panel suggested that AIF investments held for a year must qualify as Long-Term Capital Gains (LTCG) & 0% LTCG regime must apply to all SEBI registered AIFs to encourage investment in risk capital that creates new ventures, jobs, and encourages entrepreneurship.
- The central board of direct taxes should clarify that investors in the holding companies are not subject to the indirect transfer provisions. This will attract more foreign investors into India-centric private equity and venture capital fund vehicles.
- AIFs should be allowed to invest in charitable and religious trusts also.
- The Government should work on ways to unlock those domestic pools of capital including large capital pools from pensions, insurance, DFIs and banks, and charitable institutions, which currently constitute only around 10% of the total private equity and venture capital invested in India annually, should contribute more to develop the AIF industry.
- All banks, pensions, provident funds, insurance companies and charitable endowments must create an internal management system and utilize a minimum of 2-5% of the corpus to invest in SEBI-approved Category 1 AIFs. Also, the panel urged the regulators to increase the investment limits for banks and insurance companies in AIFs from the current 10% to 20% of the total corpus of an AIF.
- Domestic pension funds in India including the National Pension System and the Employee Provident Fund Organization should allocate up to 3% of their assets to AIFs by 2017, further rising to 5% by 2020.

- Existing norm on investment limits for AIFs restricts diversification and should be done away Timely. It is recommended that restrictions placed by RBI limiting FVCI (foreign venture capital investor) investments to only 10 sectors should be removed. The rationale for this is that almost every significant sector of the Indian economy is in need of private equity and venture capital and hence a wide array of sectors should be accessible to FVCI investors.
- The panel also suggested that SEBI change its eligibility norms for investors to invest in AIFs. The present norms require an investor to invest at least Rs.1 crore in an AIF. Any individual with a total annual income of at least Rs.50 lakh should be allowed to put money in AIFs if he is capable of identifying potential investments and its belonging risks.
- Slump in crude oil prices has adversely affected the economy of oil exporting countries specially the rich Arab countries, RUSSIA etc.. Generally investors from these countries had surplus capital which they used to invest in emerging economies to earn higher returns, but these investors are taking their money away from emerging economies and also new FII is not flowing from these countries into emerging countries including India. This has also resulted in stock market fall.
- Rupee has fallen to 2 year low, it has fallen to 68 for 1 \$.This heavy depreciation of Rupee in Last few months has made FII investment in India Prone to foreign exchange risk. Which had led to FII investors pulling out money from India? Since economist believes that Rupee can touch 70 marks in few months which would decrease the real rate of returns for FII INVESTORS IN India.

## Why stock market is falling in India?

- Sensex in India have been at free fall from Last 10 months, when the Bharatiya Janata Party won a majority in the general elections, the stock market surged. The Nifty rose to 7275 as the election results came through. The optimism continued until March 2015, when the index hit an all-time high of 9119. The Nifty is now backing to 7300-7400 levels again. Recently Sensex crashed 905 points in a single day, tracking a sharp selloff across global markets. The Sensex ended 855 points lower at 26,987, its biggest one-day point fall since July 6, 2009 .The fall in stock market is more surprising as India's GDP is growing at 7.3%,which is one of the Fastest In the world.

### Reasons Behind the Fall?

- Global slowdown is one of the most important reasons behind the fall in the stock market, since it has made investors risk averse about investment.
- US Federal Reserve has finally ended Quantative Easing programme under which the interest rates were kept quite low in order to revive investment and growth in the economy, Due to lower interest years many investors shifted to emerging economies where interest rates were very high in comparison to US, However since interest rates have been increased by the US fed reserve, it has made US market attractive for investor since it is stable.
- Slowdown in growth in emerging economies like Russia, Brazil and South Africa has made investors apprehensive about prospects in emerging economies, this has resulted in capital outflow from all of these countries to safe markets like US and thus the fall in Indian stock market is in line with what is happening in other emerging economies.
- The slow economic recovery, poor show reported by Corporate India quarter-after-quarter, fresh concerns over rising NPA of public sector banks and Number of important reforms like GST and Labour reforms being stuck in Parliament Logjam has dwindled the investors "animal spirit" and also its optimism to invest.
- Slowdown in the Chinese economy and devaluation of Yuan.

### Would this fall Persist in Long Run?

- While, the stock market is not necessarily a great barometer of economic health. But every industry-specific market index has lost ground in the past year. No industry has delivered a standout performance in terms of better profits or higher revenues. The breadth of the downturn suggests that the stock market is indeed indicating serious problems within the Indian economy.
- However, This fall may not persist in long run, since the Fundamentals of Indian economy are strong .We are the fastest growing economy in the world, Twin deficits i.e. Fiscal and current Account deficit both are under control.
- The country's demographic profile makes sustaining high growth rate easily possible. India is one of the few countries in the world with the inherent ability to bring interest rates down. That our inflation is down is not merely a consequence of falling global commodity prices but also due to disinflationary trends in domestic economy clearly evident from the CPI.
- If commodity prices remain subdued then it would continue to help an importing nation like India. And when the corporate earnings recovery does eventually gather momentum, it would witness a curb of 20%+ for 3-4 years easily. GST, of course, would be an added boost to the market. Thus it is unlikely that the fall in stock market would persist in Long run.

## Government Identifies 104 NH Stretches to Raise Rs. 1 lakh Crore

The Ministry of Highways has identified 104 toll roads for monetization and raise funds from this process.

The ministry intends to give out these projects to private companies in toll-operate-transfer mode. The private companies entrusted for the purpose will collect toll as well as will be responsible for the maintenance of the stretch for which they are collecting toll. For the Government, the proceeds from such monetization will be used for new roads as well maintenance of National Highways.

The stretches to be auctioned will be finalised once the proposal is approved by the Government. Toll will be collected by the selected concessionaire, according to provisions of the National Highways Fee (Determination of Rates and Collection) Rules, 2008.

### Expected Outcome:

The move could increase efficiency of toll collection and help the Government secure future cash flows for use in building new highways. It will also open opportunities for toll operators and encourage pension and wealth funds to invest in India. The model had been designed for the private sector to invest in low-risk assets.

## Richest 1% Now Wealthier Than Rest of the World, Says Oxfam

Oxfam has released a report in which it has said that the richest 1% people of the world are now richer than the rest of the world. It also calculated that 62 individuals had the same wealth as 3.5 billion people, the bottom half of the global population, compared with 388 individuals 5 years earlier. The wealth of the most affluent rose 44 % since 2010 to \$1.76 trillion, while the wealth of the bottom half fell 41% or just over \$1 trillion.

It argues that, growing inequality poses a threat to economic expansion and social cohesion which has already posed a risk to some of the countries in the world. It makes the world more prone to inequality and increases the gap between the rich and the poor.

To curb this increasing gap between the rich and the poor it is necessary that the governments should take steps to reduce the polarization, estimating tax havens help the rich to hide \$7.6 trillion where rich people park their excess money. Politicians who invest their large amount of money off shores should agree on a global approach to end the practice of using offshore accounts. Then only the world can be brought on an equal platform.

## Amendments In Power Tariff Policy

Power sector provides thrust to the growth and prosperity of a nation. It is the most important input for the industrial sector, agriculture and rural sector. Power affects the way individuals live and contribute to the national development. Even the SDGs (Sustainable Development Goals) have made availability of clean and quality energy as one of the measurable targets. The composition of power sector also reflects the country's commitment to environmental sustainability.

	PRODUCTION	TRANSMISSION	DISTRIBUTION
Electricity for all	Coal washery based projects	Increase capacity	Use of micro grids
Efficiency	Expansion of existing power plant	Competitive bidding for augmenting transmission capacity	Smart metering
Environment sustainability	RGO (renewable generation obligation), Hydro projects with long term PPAs and exemption from reverse bidding.	No inter- state transmission charges for solar and wind power	RPO (renewable purchase obligations), Bundling of renewable with conventional power, Thermal power plants to use treated sewage water,

Power sector has seen stupendous growth in recent times in terms of generation and transmission trying to match the demand sought by surging Indian economy. At the same time new issues have cropped up related to regulation of liberalized power sector, PPA (Power Purchase Agreements), upgrading of transmission capacities, ensuring availability of quality energy to all and many more. The amendments to the Tariff policy

2006 takes holistic view of the sector and tries to take care of all the issues with the focus on 4 Es: Electricity for all, Efficiency to ensure affordable tariffs, Environment for a sustainable future, Ease of doing business to attract investments and ensure financial viability and achieving the objectives of Ujwal DISCOM Assurance Yojana (UDAY). The following matrix summarize them.

**The main highlights of the amendments are:**

- Electricity for all to be ensured through micro-grids and power from coal washery based plants.
- Increasing efficiency and reducing cost by expanding the existing capacities of production units, augmenting transmission capacity through competitive bidding of transmission projects, and use of "Time of Day" metering using smart meters.
- Focus on Renewable Power Obligation (RPO) and Renewable Generation Agreements (RGO) to promote renewable energy and energy security. 8% of electricity consumption excluding hydro power, shall be from solar energy by March 2022 and New coal/lignite based thermal plants after specified date to also establish renewable capacity to fulfill their RGO.
- Bundling of renewable power with power from plants, no inter-State transmission charges and losses to be levied for solar and wind power.
- Procurement of 100% power produced from Waste-to-Energy plants.
- Thermal plants within 50 km of sewage treatment facilities to use treated sewage water to release clean drinking water for cities and reduce pollution of rivers like Ganga.
- Promotion of Hydro projects through long term PPAs (15 years beyond the current 35 years) and exemption from competitive bidding till August 2022.
- it will help to even out rates as hydro projects have long gestation period and high costs.
- Pass through for impact of any change in domestic duties, levies, cess and taxes in competitive bid projects.
- Clarity on tariff setting authority for multi-State sales. Central Regulator to determine tariff for composite schemes where more than 10% power sold outside State.

**Analysis:**

The tariff policy though gives idea of future roadmap of power sector but cannot have the force of legislation. Therefore there is need to bring the amendments in the Electricity Act of 2003.

- a. Policy is going to help the power deficit states, augment the spot market and will reduce the price and help trading in power as it allows the selling of PPA tied but non-required power with two days notice.
- b. It will reduce the price of electricity. It will also result into optimal utilization of the generation assets of the states. Increasing transmission capacities will also result into movement towards "one nation, one grid and one rate".

- c. But the policy fails to address the issues of prohibitive charges and conditions applied by states like Maharashtra to prevent competitive power through open access.
- d. Because allowing open access will not allow states to cross-subsidize the agriculture and BPL sector by industry and commercial establishments. This issue also needs to be addressed.
- e. Regional politics plays great role in determining the prices of the electricity sold and this hampers the financial health of the discoms and prevents them from investing in technology to reduce technical losses. Therefore the success of UDAY scheme depends on many other factors.
- f. The real issue in green energy sector is of implementation of RPO, RGO and bundling provisions.
- g. RPOs has been proposed earlier but failed to take off because of high cost of renewables and financial capacities of discoms. It needs to be seen what will happen in this case. The Bundling provision has also been hotly contested in recent.
- h. The steps like allowing pass through though will help the producers but will affect the interests of the consumers who don't have bargaining power. Government may levy additional tax or levies to increase their kitty at the cost of consumers. Passing on the enhanced costs to discoms and then to consumers will have political costs which many states will eschew.

**Conclusion:**

Overall in spite of various layers of governments involved and apprehensions about them accepting the amendments in letter and spirit these amendments will benefit power consumers in multiple ways. They will spur renewable power for a cleaner environment and protect India's energy security. These will ensure financial viability of the sector and attract investments, promote transparency, consistency and predictability in regulatory approaches across jurisdictions. It will further facilitate competition, efficiency in operations and improvement in quality of supply of electricity and thus improving the quality of life on Indians.

**Exempting NPS withdrawal from tax**

Recently PFRDA made proposal to Finance Ministry to exempt NPS withdrawal from tax. If NPS withdrawals are exempted from tax then the scheme has the potential to become the cynosure of voluntary investors. 7th Pay Commission headed by A K Mathur has also recommended giving EEE (Exempt - Exempt - Exempt) status to NPS and bringing it at par with EPF.

The contributions to NPS, which was started in 2004, and returns on them are tax exempted, but withdrawals attract tax. This has withered away potential investors. Apart from this there are other issues like less awareness about the pension products, low levels incomes and resulting low investment and saving capacity, low commission/fee for distributors and inability to reach the untapped sector constituting mainly of unorganized sector.

#### Challenges:

Out of Indian labour force of 48 cr. only 6 cr have access to any kind of pension cover and according to a recent report released by Crisil ratings agency, only 8% of employees who retire from the private sector in India are covered by pensions. All these data point to the challenge present in front of policy makers and opportunities available in form of untapped market for pension product providers.

#### Recent Initiatives to improve attractiveness:

Recently a number of steps have been taken to make NPS more attractive. Giving statutory status to PFRDA in 2014, use of digital technology in registration, making contributions and exiting from the scheme has made the whole process hassle free. In 2015-16 Budget additional tax deductions of Rs. 50,000 for investment in NPS were given. With change in the market situation and need for investment in infrastructure in India, permissions to invest in REITs (Real Estate Infrastructure Trust), INVIT (Infrastructure Investment Trust), IDFs (Infrastructure Debt Funds) have been given.

Apart from these steps the decision of active management of NPS assets is a challenging one. It gives the Fund Managers option to invest in stocks. This can bring huge returns at the same time puts them to both market risk and fund manager risk. Earlier only passive management was allowed. In passive management of funds, the investment is made only in market indexed funds. This puts them only to market based risks avoiding fund manager risk.

#### What else needs to be done:

In spite of these steps the penetration of NPS remains low with only 1 cr. subscribers. To improve this a number of steps should be taken. Some of them are:

- Give private fund managers permission to manage government employee's contribution. This will increase private player assets under management and give them more leeway in making investments in high return but more risky options.
- Give employees option to choose their fund manager.
- Rationalize the fee charged by Pension Fund Managers to make the field more attractive. G. N. Bajpai committee recommended that the fee should have a fixed component and variable component at place of present fixed component determined by lowest bidder.

#### Pension products in India

##### NPS:

- Savings -cum- tax savings instrument started in 2004
- Defined contribution based scheme
- Open to all in 18-60 age group and compulsory for central Government employees.

##### EPF:

- Started in 1952 and managed by EPFO
- Compulsory for Government employees
- Has 3 components Provident Fund, Insurance and Pension
- Fixed interest rates decided by EPFO.
- Tax exemptions at deposit, interest and withdrawal stage.
- Compulsory contribution from employer for salaried employee with salary below 15000.
- Open to salaried employees only

##### PPF:

- Savings -cum- tax savings instrument started in 1968
- Open to all and initial duration of 15 years which can be extended and maximum deposits of Rs. 1,50,000 in a year.
- Interest rate determined by government
- Loan can be taken on deposits and multiple options at the time of maturity either to continue or to withdraw.

##### APY:

- Started in 2015
- Open to all in the age group of 18-40 years
- Age of start of pension 60 yrs.
- Fixed pension depending on contribution in the multiples of Rs 1000 and upto maximum of Rs 5000.

Other Pensions products sold by insurance companies and mutual funds

#### 20 Smart Cities selected for the Project

Smart cities project which is an ambitious project of the NDA Government to transform the urban landscape in India has moved one step ahead with the selection of first 20 cities after an inter-city competition. The city's performance was measured on 3 broad divisions which included:

**City level:** includes vision and goals, strategic plan, citizen engagement, self assessment and potential for investment with a combined weight of 30%.

**Area Based Development:** focusing on smartness of the proposal, citizen engagement, result orientation, process followed and implementation framework with a combined weight of 55%.

**Pan city solution** with same criteria to be followed as in area based development and with a combined weight of 15%.

Bottom-up approach with citizen participation has been taken up for the 1st time in the formulation of city vision and plan. The 20 cities selected are from 11 states and Union Territory of Delhi. Bhubaneswar topped the list which included 3 of cities from Madhya Pradesh. 2 each from Andhra Pradesh, Karnataka, Tamil Nadu, Gujarat, Maharashtra and Rajasthan and one each from the remaining 5 made it to the winning list. 23 States and UTs who could not make to the list of winners will be given an opportunity to participate in a 'fast track competition'. Each top ranking city from these left out states can upgrade their smart city proposals and submit them by April 15, this year for inclusion in the mission.

20 winning cities and towns have proposed a total investment of Rs.50,802 cr over 5 years with all the cities proposing Public-Private-Partnership as a major vehicle of resource mobilization. 10 of the 20 cities have proposed to mobilize Rs. 8,521 cr. under PPP model while others have also indicated this option. A total area of 26,735 acres has been identified by these cities for making them smart through necessary interventions.

#### What are the concerns raised?

If the whole process is analyzed on the basis of the cities selected and methodology followed following points can be underlined.

- North-East India and eastern India with large states like UP, Bihar and West Bengal doesn't find any place except for Guwahati (Assam) and Bhubaneswar (Odisha). Though the selection was based on competition but it betrays the incapacities of ULBs of some of the poor states and past failures. The question remains how their capacities are going to be improved through systemic interventions remains a question.
- In the area based project already well off area, which can be made smart at their own without government support are chosen, for example in New Delhi the NDMC area including Cannaught Palace, Janpath area with booming business and posh localities has been chosen.
- Implementation has been the main reason of failure of Indian programmes and schemes, which still

needs to be seen in Smart City project. A study by IIM Ahmadabad professors regarding JNNURM found that nearly 36% of projects suffered from Time and cost overruns.

- Accountability should be the inbuilt feature of a project of such scale. Who will be accountable for the implementation of the projects, SPV or Municipal Councils or Union government and how the accountability is going to be ensured? These are some questions which need to be answered.
- Apprehensions are raised that Smart cities may emerge as exclusive societies or cities catering to the needs of only well off. Like the retrofit proposal of New Delhi Municipal Corporation has no mention of street hawkers and vendors in the Cannaught Place area. How can a city be smart without being inclusive?
- Level of involvement of Indian Educational institutions like IITs and IIMs is not clear. There is too much focus on getting handholding support from foreign or multilateral agency like (JICA) Japan International Cooperation agency), KfW. There is no focus on developing indigenous capabilities in the field of urban planning and design.
- The wish list of the cities is too ambitious. Like NDMC proposes to be the 'global benchmark for a capital city' with certain measurable targets given as 0% of slum population and PM2.5 and PM10 level of 10µg and 20µg respectively by 2025. These targets appear too ambitious to be achieved by 2025 and at the same time there is no mention of how these are going to be achieved.

#### What after selection?

After selection of the cities in the Challenge, the process of implementation will start with the setting up of the SPV. It is proposed to give complete flexibility to the SPV to implement and manage the Smart City project. The SPV may appoint Project Management Consultants (PMC) for designing, developing, managing and implementing area-based projects. SPVs may take assistance from any of the empanelled consulting firms in the list prepared by MoUD and the handholding agencies.

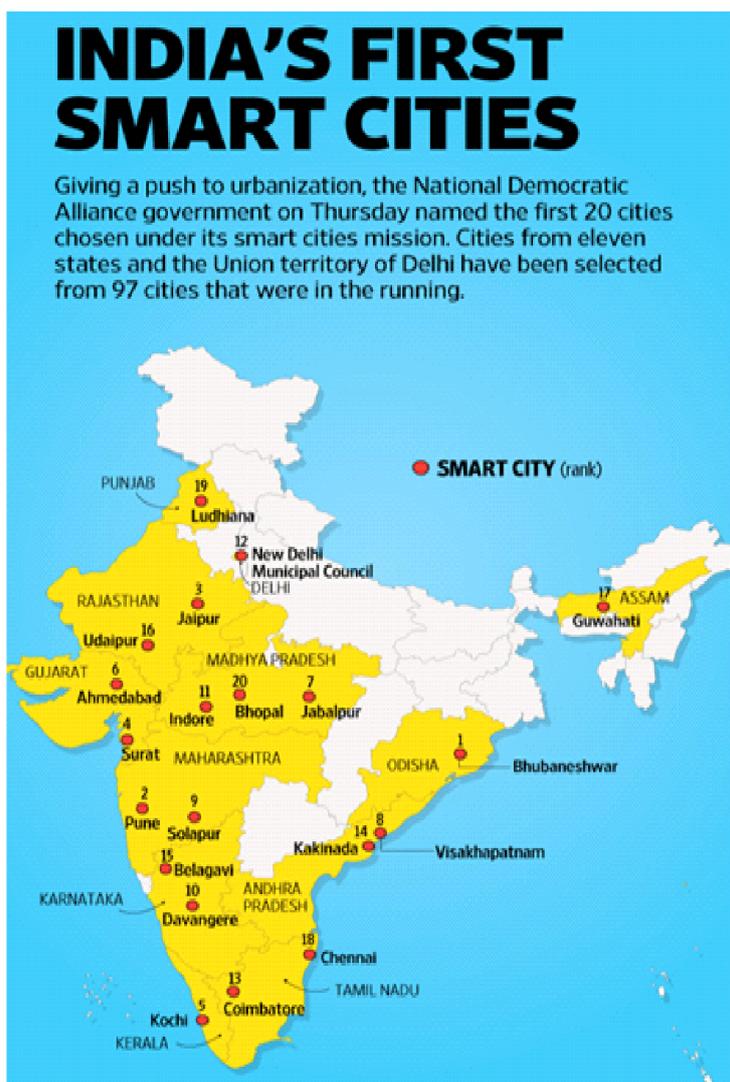
SPV will be headed by a full time CEO and have nominees of Central Government, State Government and ULB on its Board. The execution of projects may be done through joint ventures, subsidiaries, public-private partnership (PPP), turnkey contracts, etc. suitably dovetailed with revenue streams.

The SPV will be a limited company incorporated under the Companies Act, 2013 at the city-level, in which the State/UT and the ULB will be the promoters having 50:50 equity shareholding. The private sector or financial institutions could be considered for taking equity stake in the SPV, provided the shareholding pattern of 50:50 of the State/UT and the ULB is maintained and the State/UT and the ULB together have majority shareholding and control of the SPV.

### Smart City Project

Smart City project focuses on making urban spaces more livable, aesthetical pleasing, socially more inclusive and administratively smart by using innovative solutions to the problems faced with application of latest technology. Some other aspects of this project are:

- It is based on comprehensive planning and people participation. SWOT analysis of the city is to be done and then projects to be decided based on the inherent potential.
- It is a competition based project in which cities compete with each other for getting selected for funding.
- Participation of all the stakeholders centres, state, Municipal Bodies is ensured.
- A SPV is to be created to ensure co-ordination and implementation of the project.
- Both PAN city project and area specific projects are to be taken.
- The area based project will be implemented through retrofitting, redevelopment and Greenfield strategies.
- Time bound implementation of the project.
- Financial viability of the project is to be ensured so that the projects don't suffer from policy changes in future and are self-sustaining.
- Focus on convergence of schemes like Digital India, Swachha Bharat, AMRUT Mission etc.
- PPP mode has been chosen to raise resources and implement the projects



## SEBI Panel recommendation on Growth of Alternative Fund Industry

The committee formed by the Securities and Exchange Board of India (SEBI) and headed by Infosys founder N.R. Narayana Murthy suggested a slew of tax reforms to create a favorable tax environment for investors and changes in existing laws to facilitate capital-raising by Alternative Investment Funds (AIFs) and boost entrepreneurship.

Other issues addressed by the committee include how to unlock domestic sources of venture capital and private equity and other funds for AIFs; enable and encourage onshore fund management in India; and Reform the AIF regulatory regime to facilitate and optimize investments by AIFs.

AIFs or money collected from high net-worth investors to invest primarily in unlisted securities and start-ups to promote entrepreneurship, more than doubled during the past year-outpacing traditional investment vehicles such as mutual funds and market-linked insurance products. To sustain & enhance this panel suggested following reforms:

- The Government should introduce a Securities Transaction Tax (STT) on all distributions (gross) of AIFs, investment, short-term gains and other income and eliminate any withholding of tax. After STT, income from AIFs should be tax-free to investors. The exempt income of AIFs should not be subject to withholding tax of 10%; the exempt investors too should not be subjected to the tax. This will reduce tax disputes and enable enhanced & smooth collection of taxes.
- The introduction of STT for private equity and venture capital investments, including SEBI-registered AIFs, should have parity with the taxation of investments in listed securities.
- Given the high risk and relatively illiquid and stable nature of private equity and venture capital, it needs to at least be treated at par with volatile, short-term public market investments for taxation.
- AIFs and portfolio companies should be exempted from certain income tax provisions so that they are subjected to tax only when receiving dividend or interest income during the holding period or realize capital gains at the time of exit to promote investments into AIFs.
- In recent, past has started losing out business to overseas jurisdictions such as Singapore due to current rate of 20% tax with 3 year holding on domestic AIFs for backing an entrepreneur. The loss of business to India results in loss of tax revenue that would have otherwise come to India & loss of employment opportunities. The panel suggested that AIF investments held for a year must qualify as Long-Term Capital Gains (LTCG) & 0% LTCG regime must apply to all SEBI

registered AIFs to encourage investment in risk capital that creates new ventures, jobs, and encourages entrepreneurship.

- The Central Board of Direct Taxes should clarify that investors in the holding companies are not subject to the indirect transfer provisions. This will attract more foreign investors into India-centric private equity and venture capital fund vehicles.
- AIFs should be allowed to invest in charitable and religious trusts also.
- The Government should work on ways to unlock those domestic pools of capital including large capital pools from pensions, insurance, DFIs and banks, and charitable institutions, which currently constitute only around 10% of the total private equity and venture capital invested in India annually, should contribute more to develop the AIF industry.
- All banks, pensions, provident funds, insurance companies and charitable endowments must create an internal management system and utilize a minimum of 2-5% of the corpus to invest in SEBI-approved Category 1 AIFs. Also, the panel urged the regulators to increase the investment limits for banks and insurance companies in AIFs from the current 10% to 20% of the total corpus of an AIF.
- Domestic pension funds in India including the National Pension System and the Employee Provident Fund Organization should allocate up to 3% of their assets to AIFs by 2017, further rising to 5% by 2020.
- Existing norm on investment limits for AIFs restricts diversification and should be done away Timely. It is recommended that restrictions placed by RBI limiting FVCI (Foreign Venture Capital Investor) investments to only 10 sectors should be removed. The rationale for this is that almost every significant sector of the Indian economy is in need of private equity and venture capital and hence a wide array of sectors should be accessible to FVCI investors.
- The panel also suggested that SEBI change its eligibility norms for investors to invest in AIFs. The present norms require an investor to invest at least Rs.1 crore in an AIF. Any individual with a total annual income of at least Rs.50 lakh should be allowed to put money in AIFs if he is capable of identifying potential investments and its belonging risks.

## Domestic Tyre Companies Seek Protection Against Dumping From China

Domestic Tyre Manufacturers has demanded for imposition of anti-dumping duty and hiking of customs duty on cheap bus and truck radials made from China, saying existing investments in the sector have been seriously threatened.

### What is Anti Dumping Duty?

Dumping is said to occur when the goods are exported by one country to another country at a price lower than its normal value. This is an unfair trade practice which can have a distortive effect on international trade. Anti dumping is a measure to rectify the situation arising out of the dumping of goods and its trade distortive effect. Thus, the purpose of anti dumping duty is to rectify the trade distortive effect of dumping and re-establish the fair trade. The use of anti dumping measure as an instrument of fair competition is permitted by the WTO. In fact, anti dumping is an instrument for ensuring fair trade and is not a measure of protection per se for the domestic industry. It provides relief to the domestic industry against the injury caused by dumping.

### Issues in Indian Tyre Market related to Dumping:

Currently, India offers a ready and growing market with very low import tariffs on tyres. As against basic import duty of 10 %, tyres can be imported at much lower duties under various trade agreements.

On the other hand, Chinese Government continues to provide multiple direct and indirect subsidies to push countries exports. Therefore, import prices from China continue to be much lower than from other countries. Besides, huge surplus capacities in China are abetting dumping of tyres in India thus there is unhindered growth of cheap imports (cheap bus and truck radials) from China & adherence to Bureau of Indian Standards (BIS) mark on tyre products, especially those made by Chinese companies is poor. This is threatening the future of domestic investments which in tyre manufacturing in India by domestic and multinationals are to the tune of Rs. 36,000 crore.

### Actions to be taken to Establish the Balance:

Automotive Tyre Manufacturers' Association (ATMS) asked for measures like imposition of anti-dumping duty and increase in customs duty on tyres from 10% to 30 % & strict adherence( BIS)Bureau Of Indian Standards to in order to safeguard the domestic industry.

Moreover, Free Trade Agreements (FTAs) need to be revisited so that tyres and natural rubber are accorded the same treatment & inverted duty between tyres and natural rubber can be corrected.

If measures are not taken timely then it has the potential to not only undermine Make in India but also make the industry unviable with the onslaught of cheap imports and dumping from China.

### Related Concept:

**Inverted Duty:** when import duty applicable on the finished product (e.g. tyre) is lower than the import duty on the raw material (e.g. rubber) or intermediate product which discourages domestic value addition.

## UNESCAP released World Economic Situations and Prospects 2016 Report

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has recently released World Economic Situation and Prospects (WESP) 2016 report. The report highlights that the world economy stumbled in 2015 and only a modest improvement is projected for 2016/17.

### Highlights of the Report

11. Global growth is estimated at a mere 2.4% in 2015, marking a downward revision by 0.4 % points from the UN forecasts presented in 2015.
12. The world economy is projected to grow by 2.9% in 2016 and 3.2% in 2017, supported by generally less restrictive fiscal and still accommodative monetary policy stances worldwide.
13. The large capital outflows and increased financial market volatility, growth in developing and transition economies has slowed to its weakest pace since the 2008 global financial crisis.
14. Given the much anticipated slowdown in China and in other large emerging economies notably the Russian Federation and Brazil, the pivot of global growth is partially shifting again towards developed economies in 2016.
15. In 2016 and 2017, South Asia region is expected to be the world's fastest-growing region despite challenging global conditions.
16. GDP growth in the least developed countries is expected to rebound from 4.5 % in 2015 to 5.6 % growth in 2016, but will fall short of the Sustainable Development Goal target of at least 7 % GDP growth per annum in the near term.
17. It indicates that the challenges for policymakers around the globe are likely to intensify in the short run in view of the weaknesses in the world economy.
18. It also shares some positive recent trends in environmental sustainability. Global energy related carbon emissions experienced no growth in 2014 for the first time in 20 years.
19. The broad slowdown in economic growth in many developing economies and generally weak wage growth will restrain progress in poverty reduction in the near term.
20. The terms-of-trade of commodity exporters have deteriorated significantly, limiting their ability to demand goods and services from the rest of the world.

**Major headwinds for Global Economy:**

The WESP 2016 report identifies 5 major headwinds for the Global economy. These are:

6. Persistent macroeconomic uncertainties
7. Low commodity prices and diminished trade flows
8. Rising volatility in exchange rates and capital flows
9. Stagnant investment and productivity growth

10. Continued disconnect between finance and real sector activities

**India and WESP 2016**

India will be the fastest growing big economy in the world in 2016. The report has projected India's growth rate at 7.3% in the year 2016 and 7.5% in 2017, which is slightly up from an earlier estimated 7.2% rate in 2015.

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## 2. POLITY + CONSTITUTION + SOCIAL ISSUES (POLITY)

### Jharkhand to set up Fast Track Courts for Trial of Witchcraft-related Attacks.

Reason: Due to prevailing superstition among a section of the Rural Populace.

- Fast track courts in 5 districts for speedy trial of cases relating to witchcraft incidents.
- The Cabinet, chaired by Chief Minister Raghubar Das, approved the setting up of courts.
- Since, Jharkhand's creation in November 2000, the state has witnessed more than 700 killing of women for being engaged in witchcraft.

### The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Act, 2015 to be enforced with effect from January 26, 2016

- To make Amendments in the Principal Act, namely, the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) {PoA} Act, 1989.

#### The key features are:

- New offences of atrocities like, tonsuring of head garlanding with chappals, denying access to irrigation facilities or forest rights, using or permitting manual scavenging, abusing in caste name, perpetrating witchcraft atrocities, touching or using words, acts or gestures of a sexual nature against members of Scheduled Castes and Scheduled Tribe are included.
- Addition of presumption to the offences -If the accused was acquainted with the victim or his family, the court will presume that the accused was aware of the caste or tribal identity of the victim unless proved otherwise.
- Establishment of Exclusive Special Courts and specification of Exclusive Special Public Prosecutors also, to exclusively try the offences under the (PoA) Act to enable speedy and expeditious disposal of cases.
- Power of Special Courts and Exclusive Special Courts, to take direct cognizance of offence and as far as possible, completion of trial of the case

within 2 months, from the date of filing of the charge sheet.

- Defining clearly the term 'willful negligence' of public servants at all levels, starting from the registration of complaint and covering aspects of dereliction of duty under this Act.

### India Ranks 76 in Corruption Perception Index

Corruption is pervasive. Corruption kills. It affects almost all dimensions of people's daily lives, from roads built poorly, to unequal access to healthcare and medicine, crime and violence on our streets and across our borders, to political choices distorted by money and greed. Corruption erodes people's sense of equity and their belief in justice. It undermines trust in government, business and society, and sustains both poverty and inequality. Virtually everyone around the world is affected by corruption, yet it is the poor in our societies who suffer most from it.

Public sector corruption isn't simply about taxpayer money going missing. Broken institutions and corrupt officials fuel inequality and exploitation - keeping wealth in the hands of an elite few and Trapping many more in poverty.

The Berlin-based corruption watchdog Transparency International (TI) has put India at rank 76 out of 168 countries in its latest Corruption Perception Index.

The country's 2015 corruption perception score remains the same as last year's - 38/100 - showing lack of improvement. India shares its rank along with 6 other countries: Brazil, Burkina Faso, Thailand, Tunisia and Zambia. China fared worse than India and Brazil at rank 83 with a score of 37. TI has also noted that Pakistan is the only country among the SAARC countries, to have improved its score this year, though its rank remains poor at 117.

The 2015 Corruption Perceptions Index clearly shows that corruption remains a blight around the world. But, 2015 was also a year when people again took to the streets to protest corruption. People across the globe sent a strong signal to those in power: it is time to tackle grand corruption.

Based on expert opinion from around the world, the Corruption Perceptions Index measures the perceived levels of public sector corruption worldwide. Not one of the 168 countries assessed in the 2015 index gets a

perfect score and 2/3rd score below 50, on a scale from 0 (highly corrupt) to 100 (very clean). More than 6 billion people live in a country with a serious corruption problem.

Based on the context of corruption, our understanding of how change happens and our experience of how to stop corruption, Transparency International will prioritise three areas: 1) People and partners 2) Prevention, enforcement and justice 3) Strong movement.

### Asia Pacific

**Average score: 43/100**

**Top scorer: New Zealand (88)**

**Lowest scorer: North Korea (8)**

**67% OF COUNTRIES SCORE LESS THAN 50**

### In brief

If there was one common challenge to unite the Asia Pacific region, it would be corruption. From campaign pledges to media coverage to civil society forums, corruption dominates discussion. Yet despite all this talk, there's little sign of action. Between Australia's slipping scores and North Korea's predictably disastrous performance, this year's index shows no significant improvement. Has Asia Pacific stalled in its efforts to fight corruption?

### The good

The public desire for change is huge. In India, Sri Lanka and elsewhere, we've seen a host of governments coming to power on anti-corruption platforms. As corruption continues to dominate media coverage across and beyond the region, increasing interest in the issue has sparked a raft of new research into both public and private sector corruption.

### The bad

So why this picture of zero progress? Despite boastful efforts on petty corruption, Malaysia's 1MBD scandal brought the crux of the challenge into sharp focus: is political leadership genuinely committed to fighting corruption throughout society? The Malaysian prime minister's inability to answer questions on the US\$700 million that made its way into his personal bank account is only the tip of the iceberg.

In India and Sri Lanka leaders are falling short of their bold promises, while governments in Bangladesh and Cambodia are exacerbating corruption by clamping down on civil society. In Afghanistan and Pakistan a failure to tackle corruption is feeding ongoing vicious conflicts, while China's prosecutorial approach isn't bringing sustainable remedy to the menace. This inability to tackle root causes holds true across the region - witness, for example, Australia's dwindling score in recent years.

### What needs to happen

Reversing corruption is clearly not solely down to governments, but they're the ones with the largest role and the power to create enabling environments for others. This year's poor results demand that leaders revisit the genuineness of their efforts and propel the region beyond stagnation. They must fulfil promises and ensure efforts aren't undermined in practice. Anti-corruption commissions are a prime example here: while their creation across the region is commendable, ongoing political interference and inadequate resources has meant many are unable to fulfil their mandate. This has to be addressed

## Gujrat Control of Terrorism and Organized Crime Bill Returned back by The President 3rd time

### Details of the Bill : Contents and Present Status:

On March 31, 2015, the Gujarat Assembly passed the Gujarat Control of Terrorism and Organised Crime Bill (GCTOC) with a view to curbing "Organised crime". It is, essentially, an Anti-terrorism law modelled on laws such as the Maharashtra Control of Organised Crime Act. The bill's 'Objects Statement' says, "The illegal wealth and black money generated by organised crime is very huge and has serious adverse effect on economy. It is noticed that the organised criminal syndicates make a common cause with terrorist gangs and foster macro terrorism which extends beyond the national boundaries..."

In September 2015, the Home Ministry cleared the GCTOC Bill and sent it to President Pranab Mukherjee for his assent, but on January 28, the President sent it back to the Union Home Ministry seeking clarifications on some of the provisions in the Bill.

### Controversial Issues with The Bill

1. Among the controversial provisions of the Bill is Clause 16 which makes confessions before police officers admissible in court. The section stipulates that "a confession made by a person before a police officer not below the rank of Superintendent of Police shall be admissible in the trial of such accused, co-accused, abettor or conspirator."

The Prevention of Terrorism Act, 2002, a Central anti-terror law that has since been repealed, had a similar provision on confession to police being admissible as evidence in court. Charges against the accused in cases such as Godhra and the Akshardham terror attack were based largely on confessions of accused before police officers. In the Akshardham case, all the accused were later acquitted by the Supreme Court. These 2 provisions in the Gujarat bill are what 2 earlier presidents had objected to while returning it.

- The Bill also provides for extension of the period of investigation from the stipulated 90 days to 180 days.

If there is no bail and period of probe is lengthened, it effectively means that a person can be detained for 180 days merely on the basis of phone records

- No bail : It makes offences under the Gujarat Control of Terrorism and Organised Crime Act, 2015, non-bailable. Clause 20 (4) of the Bill states, "Notwithstanding anything contained in the Code of Criminal Procedure, no person accused of an offence punishable under this Act shall, if in custody, be released on bail or on his own bond."
- The Bill also makes "evidence collected through the Interception of wire, Electronic or Oral communication" admissible in the court.

In July 2015, the Centre had sent back the GCTOC Bill to the state government after certain objections were raised by the Ministry of Information and Technology, which said that the Bill was in conflict with The Indian Telegraph Act, a Central law. Under the provisions of The Indian Telegraph Act, in case of a public emergency, an officer of secretary rank can give permission to intercept calls. The Gujarat Government has entrusted the Home Secretary to authorise such interceptions. But the Gujarat Government rejected these objections and went ahead with the Bill.

The recent cases of sedition slapped on leaders of the Patidar quota stir, including Hardik Patel, are based heavily on telephonic conversations among the accused. Under the Indian Telegraph Act, such interceptions are admissible as evidence before the court but it is considered a "corroborative" piece of evidence, not a conclusive piece of evidence.

- It provides immunity to the State Government from Legal action through an Ambiguous idea of "good faith." Section ( 25) of the Bill states, "No suit, prosecution or other legal proceeding shall lie against the State Government or any officer or authority of the State Government for anything which is in good faith done or intended to be done in pursuance of this Act."

### Instances of The Bill Returned Earlier

This is the 3RD incarnation of the Bill, which has come back each time with minor changes. The original bill, the Gujarat Control of Organised Crime Bill (GUJCOC), was passed by the Gujarat Assembly in 2003, when Narendra Modi was Chief Minister. In 2004, then president APJ Abdul Kalam returned the Bill while objecting to the provision related to interception of communications. In 2008, they introduced it again in the state assembly and sent it to the Union Ministry when Pratibha Patil was President. But she too returned it, while objecting to the provision on confessions made to a police officer.

In 2015, the Gujarat Government made some minor changes to the bill: adding 'Terrorism' to the name of the original Bill and saying that confession of an accused must be made before an officer of the rank of SP or above for it to be admissible in court. The assembly then passed the Bill, which was then sent to President Pranab Mukherjee.

What next ?

The Home Ministry will write to the State Government conveying the clarifications the President has sought. Once it hears from the State Government, it will provide additional inputs to the President. The Ministry has informed the President that it will submit a re-worked Bill for his approval.

## NFHS Survey 2015

After a gap of 10 years Government has recently released the NFHS survey 2015.

### Background

- Since 2005 various surveys have indicated towards significant improvement in health Indicators, the most significant being RCEP (Regional Comprehensive Economic Partnership) survey. However all of them were non-official surveys therefore they were not reliable for policy perspectives. However only first phase of NFHS survey is released

### Key findings of the NFHS survey

#### (a) Child Health

- Findings for the 13 States of Andhra Pradesh, Bihar, Goa, Haryana, Karnataka, Madhya Pradesh, Meghalaya, Sikkim, Tamil Nadu, Telangana, Tripura, Uttarakhand, West Bengal and 2 Union Territories of Andaman and Nicobar Islands and Pondicherry show promising improvements in maternal and child health and nutrition. All 15 States/Union Territories have rates below 51 deaths per 1,000 live births, although there is considerable variation among the States/Union Territories. Infant mortality rates range from a low of 10 in Andaman and Nicobar Islands to a high of 51 deaths per 1000 live births in Madhya Pradesh.
- Full immunization coverage among children age 12-23 months varies widely in the 1st Phase States/Union Territories. At least 6 out of 10 children have received full immunization in 12 of the 15 States / Union Territories. In Goa, West Bengal, Sikkim, and Pondicherry more than 4/5th of the children have been fully immunized. Since the last round of National Family Health Survey, the coverage of full immunization among children has increased substantially in the States of Bihar, Madhya Pradesh, Goa, Sikkim, West Bengal and Meghalaya.
- The results from NFHS-4 in 15 States/Union Territories indicate that fewer children are dying in infancy and early childhood.

#### (b) Fertility

- All 1st Phase States/Union Territories except Bihar, Madhya Pradesh and Meghalaya have either achieved or maintained replacement level of fertility a major achievement in the past decade. All First Phase States/Union Territories except Bihar, Madhya Pradesh and Meghalaya have either achieved or maintained replacement level of fertility a major achievement in the past decade.

### (C) Access to basic amenities

- Indian families in the 1st Phase households are now more inclined to use improved water and sanitation facilities. Over 2/3rd of households in every State/Union Territory have access to an improved source of drinking water, and more than 90% of households have access to an improved source of drinking water in nine of the 15 States/Union Territories. More than 50% of households have access to improved sanitation facilities in all First Phase States/Union Territories except Bihar and Madhya Pradesh. Use of clean cooking fuel, which reduces the risk of respiratory illness and pollution, varies widely among the 1st Phase States/Union Territories, ranging from only about 18% of households in Bihar to more than 70% of households in Tamil Nadu and more than 80% of households in Pondicherry and Goa.
- Poor nutrition is less common than reported in the last round of National Family Health Survey. Fewer children under five years of age are now found to be stunted, showing intake of improved nutrition. In nine States/Union Territories, less than 1/3rd of children are found too short for their age.

### What does NFHS Survey 2015 indicate?

- The NFHS survey 2015 reaffirmed the findings of the RSOC survey conducted by ministry of child & women in 2013-14 about rapid improvement in indicators related to family health in last 1 decade.
- The survey indicated that infant mortality rate and immunization increased significantly in all 13 states covered in its 1st phase.
- The survey also showed a reduction in maternal mortality rates and institutional deliveries and rapid improvement in the Fertility rates.
- The survey shown a definite improvement nutrition levels among children
- The rapid improvement in indicators is attributed to many factors which include:
- Government schemes like Janani Suraksha Yojana and Janani shishu suraksha Karyakaram have played a significant role in improving institutional delivery and reducing maternal mortality rate Indicators. This scheme has led to Better care for women during pregnancy and childbirth.

### Reasons for better Indicators

- Better implementation of Schemes like ICDS, mid day meal, SABLA, PDS played an important role in reducing Stunted and Malnutrition levels.
- NRHM also played important role in improving general health
- Increasing awareness, education and greater availability and choice of birth control options have led to drastic improvement in fertility rate.

### Areas of concern

- Though malnutrition and stunting has decreased over the years, still it is found that in Bihar, Madhya Pradesh and Meghalaya more than 40% of children are stunted.
- Anemia has also declined, but still remains widespread. More than half of children are anemic in ten of the 15 States/Union Territories. Similarly, more than half of women are anemic in eleven States/Union Territories.
- Over-nutrition continues to be a health issue for adults. At least 3 in 10 women are overweight or obese in Andaman and Nicobar Islands, Andhra Pradesh, Goa, Puducherry, and Tamil Nadu.

### Conclusion

- Though the survey indicated towards definite improvement in most of the indicators, A lot still needs to be done to reach the level achieved by some of our neighboring countries like Bangladesh and Srilanka. The survey indicates the usefulness and positive impact of the schemes like mid day meal, ICDS, PDS AND NRHM, in the light of improvement shown by the survey the incumbent government should relook at their decision of reducing the funds in these schemes in the upcoming budget.

## Minority Status for AMU, JAMIA, St. Stephens: Pros and Cons

- Recently, In the case of AMU, the Attorney General has argued that Aligarh Muslim University and Jamia Millia Islamia are not minority educational institutions since, it was set up by an act of Parliament, not by Muslims. This has triggered a debate about Minority Institution that whether in a secular country a Government university can have a status of both Central University and Minority Institution.

### What is Minority Institution?

- Article 30(1) of the Constitution, gives all religious and linguistic minorities the right to set up and run educational institutions, including schools, colleges and universities. This was presumably done to assure minorities of being able to maintain and propagate their unique and special educational

aspects. The law guarantees that governments will not discriminate in giving aid on the basis of their being 'minority' institutions, thus sealing in a commitment by the Government of India to allow minorities to flourish.

What Benefits AMU and JMI would get if they are allowed to retain Minority status?

- They would have freedom to reserve seats for Muslims, for example in Jamia and AMU 50% seats are reserved for Muslims.
- Secondly they would get the freedom to not implement the Reservation policy i.e. giving 50% reservation to the SC/ST and OBC, s. Also there land could only be acquired by the government after paying compensation.

#### Arguments in favour of Retaining Minority Status for AMU and JMI?

- NCMEI said that, "Jamia was founded by the Muslims for the benefit of Muslims and it never lost its identity as a Muslim minority educational institution, was therefore, "covered under Article 30(1).
- In 1920, the Indian Legislative Council set up the University and all assets of Mohammedan Anglo Oriental College were transferred to it. Those arguing for minority character say that, 'this was done by an Act as that was the only way a university could be set up at the time'. Muslims collected Rs. 30 lakh, and handed it over.
- Critics are saying that Government cannot fund and run a minority institution as this would violate the principle of secularism, However Indian secularism is Unique here; Government actively interfere in religious issue, which can be seen from an Annual provision of Rs. 45.5 lakhs and Rs. 13.5 lakhs out of consolidated funds of India for the maintenance of Hindu Temples under Article 290(A) of the constitution, the special status of the Cow and permission to keep Kirpan. Thus, support of Government to minority institution is not a violation of Indian version of Secularism.

#### Arguments against -

- The Act of 1988, states that "it shall not be lawful for the university to adopt or impose on any person, any test whatsoever of religious belief or profession in order to entitle him to be admitted there in as a teacher or student or to hold any office therein or to graduate thereat". They also argue that, the application to be declared a minority institution was made in 2006, when reservation for OBCs was introduced in Higher Educational Institutions. Making it a minority institution acted against poor and disadvantaged Muslims.
- In the famous Azeez Basha v/S Union of India case, to which AMU was not a party, the Supreme

Court ruled that AMU was not a minority institution as it was set up by the British legislature, and not by Muslims. However In 1981, Parliament passed an AMU Amendment Act, which accepted that AMU was set up by Muslims but later the Allahabad High Court ruled in 2005 that the 1981 Act was Ultra-virus of the Constitution and that AMU was not a minority institution. AMU's appeal against the single-judge order was dismissed, but the Supreme Court stayed the Allahabad High Court decision, so effectively, AMU remained a Minority Institution.

- The fact remains and history has proven that the minority character and reservations on communal lines are not in the interest of National unity and Integrity. It starts a chain reaction of demands amongst religious groups and it may open up a Pandora's Box.
- Dr. Zakir Hussain, who founded JMI in 1920, could have made it a minority institution if, he had wanted to. But, he did not want the institution to be linked with any one community.
- Due to minority character given to these universities, They do not reserve 50% seats for SC/ST and OBC,s ,which violates Social Justice as these universities are also funded by Central Government.
- No one is saying that, abolish the privilege given to minorities to establish institution for the welfare of their community, the issue is that both JMI and AMU are run mostly through Government- Grant and they are given Central University status and a university cannot be at the same time both Central university and Minority institution.

#### Conclusion:

Article 30(1) of Indian constitution allows each minority to establish and administer educational institution of their own choice, however, in this case, the issue is not about article 30(1), it is about, whether a central university could claim minority institution status? Thus, even if we scrap minority status for these 2 central universities, it would not amount to violation of article 30(1) as alleged by the critics. Instead retaining minority status could open Pandora box i.e. other Institutions could start demanding the same, which could further politicize our already politicized higher educational institution in long run. Thus, Government should scrap minority status of these institutions, however it should also give detailed explanation behind this decision, so that the alleged fear and misconception of some members of the minority community about the decision could be resolved.

#### Zero-tolerance policy on Graft released by DGFT

The Director General of Foreign Trade (DGFT) has issued guidelines towards decreasing practices of corruption in the Department by announcing zero-tolerance policy on graft and some other highlights which are as follows:

- The DGFT has directed that, all queries/submissions must be made by email to the officer/staff member concerned. If physical submission of documents is necessary, the same should be done through speed post. In exceptional situations, the documents may be submitted at the receipt counter against a computerized acknowledgement. When absolutely necessary, meeting with the head of office or any Joint DGFT can be sought by the applicant.
- Barring some exceptions, no outsider will be allowed to enter the offices of the DGFT.
- The DGFT has instructed his offices to reply to all emails or other queries within 48 hours and dispose of all matters within the time limits laid down. The heads of offices must review all email replies to ensure timely disposal of the matter. All regional offices of the DGFT should put up online a list of all pending applications in all functional areas giving time duration of pendency.
- Emphasizing zero tolerance to corruption, the DGFT has reiterated highest standards of integrity must be maintained by all Government servants in discharge of their official duties.
- Officers and staff with dubious reputation must be identified and placed on a watch list and closely monitored and kept in non-sensitive positions. Work rotation to avoid long tenures in sensitive positions must be ensured. Touts and middlemen who operate in the offices must be identified and reported so as to make them 'persona non-grata' in the offices.
- The DGFT has sought the cooperation of the entire importer-exporter community to bring any improper activity to the knowledge of senior offices, including the DGFT and the vigilance apparatus.

#### Will It Be Effective?

Though, the determination to weed out corruption deserves to be welcomed as a good start in the present scenario but the outcome of this decision is still to be seen in the longer term. It is necessary that the DGFT devises a way to find out how well these instructions play out in letter and spirit and take necessary action. It is essential to institute necessary mechanisms to build necessary confidence that legitimate claims will not be delayed or denied on flimsy grounds.

Otherwise, the claim about zero tolerance to corruption will sound hollow.

#### About DGFT

Directorate General of Foreign Trade (DGFT) organisation is an attached office of the Ministry of Commerce and Industry and is headed by Director General of Foreign Trade. Right from its inception till 1991, when liberalization in the economic policies of the Government

took place, this organization has been essentially involved in the regulation and promotion of foreign trade through regulation. Keeping in line with liberalization and globalization and the overall objective of increasing of exports, DGFT has since been assigned the role of "facilitator". The shift was from prohibition and control of imports/exports to promotion and facilitation of exports/imports, keeping in view the interests of the country.

#### Organizational Set-up

This Directorate, with headquarters at New Delhi, is headed by the Director General of Foreign Trade. It is responsible for formulating and implementing the Foreign Trade Policy with the main objective of promoting India's exports. The DGFT also issues scrips/authorisation to exporters and monitors their corresponding obligations through a network of 36 regional offices

### Regulatory hurdles and urban transport

India's Transport System caters to the need of a large number of people. So, despite the increasing levels of urban mobility in Indian cities, access to places, activities and services is becoming increasingly difficult in terms of convenience, cost and time. In fact, present levels of urban mobility are already generating a crisis situation characterized by high levels of congestion, environmental pollution, traffic fatalities and inequity eventually leading to a situation of undesired accessibility crisis. The other big problem with urban transport system is the delay in the urban projects for which many reasons are there ranging from multiple body clearance, lack of availability of finances and clearance and other hurdles. Of these, regulatory hurdles pose a big problem and seem to be coming in the way of fast implementation of new mass public transport projects, including metro rail systems and mass transit system.

#### Urban Transport Issues:

The various transport problems in case of India can be discussed as:

- a) Road congestion
- b) Parking problems
- c) Air pollution
- d) Deteriorating road safety
- e) Lack of regulatory clearances
- f) Lack of finance

#### Challenges in urban transport:

- a) Gaps in Laws and Regulations: Presently, there is no legislation at central, state or local level that comprehensively covers urban transport requirements of Indian cities. The current systems

of laws, regulations and governance for urban transport are the legacy of British era. Fragmentation or overlap of legislations poses 2 challenges that constrain the ability to effectively manage the problems of urban transport. Firstly, it leads to incoherence in the policy framework given the many different goals for which laws are enacted. And, secondly, it reflects in the timing, coordination and treatment of how states and cities approach a particular problem.

- b) **Fragmented Institutional Frameworks:** Urban transport systems require several functions to be performed in a well-coordinated manner. Unfortunately, these are performed by multiple agencies under the central, state and city governments which do not necessarily work together. There is a lack of horizontal and vertical coordination among these agencies at central, state and local levels, making accountability very difficult. Apparently, there is an absence of any effective coordinating agency where urban transport and land use plans can be formulated and integrated keeping an overall goal in mind. Another weakness is the limited authority delegated at the local city level which needs to be looked into.
- c) **Distorted land markets affecting transport infrastructure development:** Very high costs of land acquisition along with arduous and time-consuming processes are a major barrier for planning integrated urban transport infrastructure.
- d) **Lack of comprehensive design standards for transport infrastructure:** Common standards for design, operation and maintenance of transport infrastructure and rolling stock are relatively absent in India. Even if there are existing standards for road construction or metro systems, they are not mandatorily applied during design and construction. Except for road and conventional rail infrastructure systems, the design, operation and maintenance standards for mass transit technologies such as metro, light rail, mono rail or Bus Rapid Transport Systems are non-existent.
- e) **Human Resource challenges:** Most of the state and city level agencies dealing with urban transport planning and provision have typically suffered from overstaffing of untrained, unskilled manpower on the one hand and shortage of qualified technical staff and managerial supervisors on the other which also is a big challenge for urban transport sector.
- f) **Finance:** The low availability of funds with agencies is another challenge. Due to lack of funds the projects are delayed which further adds to the problem of congestion and poor maintainance of the roads.
- g) **Lack of coordination:** Another key reason for the enormous delays in building public transport is the lack of coordination among the various agencies implementing the projects and those according

approvals. There are multiple agencies in each city, which handle project-related work or award approvals which act as an obstacle in the projects.

#### **Proposed Policy Reforms:**

The problem lies in identifying, implementing and monitoring policy measures that are effective in addressing specific issues in a synchronised and coordinated way by the various agencies involved in urban transport. So in the context of various problems faced by the transport sector, proposed policy reforms can be discussed as:

- a) **Re-aligning legal and regulatory instruments:** A comprehensive urban transport act should be enacted by each state defining the roles and responsibilities of the multiple city and state level authorities with regard to public transport, land use and public transport integration, safety etc. For this purpose, a model law could be developed by the central government which could be adapted by state governments for their state.
- b) **Institutional Restructuring:** Innovative ideas and integrated policies towards sustainable transport need strong supporting institutional and governance structures. Political will, sound leadership, transparency, adequate resources and accountability are essential in timely implementation of effective policy interventions that eventually ensure public trust.
- c) **Coordination between various agencies:** it is necessary to make the various processes simple and the regulatory mechanisms should be simplified so that the process becomes easy and transparent.

If these measures are taken and effectively implemented then the various problems in urban transport could be solved. These steps are necessary to cater to the needs of large number of people and to make mobility in urban areas an easy and convenient process.

### **Union Government launches 'Sahaj Scheme for online booking of LPG cylinders'**

Union Government has launched Sahaj Scheme for online booking of LPG cylinders.

#### **Features of the scheme:**

- Consumers can book LPG cylinders online through the unified web portal [www.mylpg.in](http://www.mylpg.in) which is available in 13 languages.
- People can apply online for new LPG connection and they need not visit to the LPG distributors for it.

- This facility is available around the clock and with online or offline payment options. LPG cylinders will be delivered at home even in their absence.

The government has planned to ease the process of refilling and new connections. Some other measures are:

- Installations of touch screen devices at airports, railway stations etc. where customers can book their refills.
- The new gas connections will be provided on EMI basis. The amount will be around 3400 Rupees on this basis and the number of installations may spread to 24 installments.

## NSSO 70th round (January - December 2013)- Released in January 2016

### Major Findings :

- On an average, rural and urban households own assets worth Rs.10 lakh and Rs.23 lakh respectively.
- The average asset holding of the bottom 10% of urban Indian households is around Rs. 291.

**The National Sample Survey Organisation (NSSO)**, is an organization under the Ministry of Statistics of the Government of India. It is the largest organisation in India conducting regular socio-economic surveys. It was established in 1950.

### Brief Analysis

The bottom 10% (in terms of total assets) of rural households had assets worth Rs.25,071 on an average, largely as a result of the value of land, while the figure for their urban counterparts was just Rs.291, implying that the urban poor hardly own any assets.

Experts say that, New migrants to cities leave their assets behind in villages. Hence, the urban poor have negligible household assets.

**THE INEQUALITY IN ASSET DISTRIBUTION IS MORE VISIBLE IN URBAN INDIA, WHERE THE TOP 10% OWN 63% OF TOTAL ASSETS, WHILE IN RURAL AREAS, THE SAME CLASS OWNS 48%.**

Haryana and Punjab had the highest average assets per household in rural areas, while Maharashtra and Kerala were on top in urban areas. Odisha lay at the bottom in both rural and urban India.

Land and buildings held the dominant share in asset holdings, as was the case in the previous decade, comprising of more than 90% of all asset worth in both urban and rural areas.

Financial assets - That includes shares in Companies and cooperative societies, National Saving Certificates, Deposits in companies, Banks etc. - were just 2% of total assets in rural areas, compared to 5% in urban areas.

The share of land as a proportion of total assets has increased with time, possibly due to price escalation of land, says the NSS report.

### Significant Changes in the Procedure Compared To the Previous Survey

Some of the procedural changes include the following.

- The value of land/buildings in the present round was recorded based on guideline values where as the values in the 2003 survey was based on the values reported by the informants.
- Household durables including Gold, Ornaments were not considered as assets in this round. The NSSO felt that the valuation of durable is difficult to obtain. Majority value of the assets in this round was found to be from Land & buildings.

### How Indebted are people in India?

The data also shows that 31% rural households and 22 % urban households were under debt. The average amount of debt per household in rural areas was Rs. 32,522, lesser compared to urban figure of Rs. 84,625.

Experts say Urban poor have higher debt because they are investing in future; for instance, borrowing money to send their children to schools. All debt is not bad debt. The one that relates to investment is not bad like the consumption related debt, which is borrowed for survival, to pay for healthcare etc.

The debt-asset ratio - total debt as percentage of total assets owned by households, which gives an indication of the burden of debt experienced by a household - is between three and 4% at the national level. However for the bottom 10% in urban India, the ratio is a crippling 19-20%, while the same class in rural India had a 39% ratio.

Average Value of Assets in Urban India is more than twice the value of Rural India

According to the report, the 93.5% of the households in Urban India hold assets while the corresponding percentage for Rural India is 98.3%. These percentages are significantly lesser than the corresponding percentages in the previous round, possibly because of the exclusion of Gold and other durable items.

Asset Holding: Haryana leads in the Rural Areas

The other states in the top five are Punjab (42.95 lakh), Kerala (27.3 lakh), Gujarat (18.43 lakh) and Maharashtra (11.23 lakh).

Asset Holding: Maharashtra leads in Urban Areas

The other states in the top 5 are Kerala (40.24 lakh), Haryana (36.78 lakh), Assam (28.48 lakh) and Punjab (26.38 lakh).

### Huge Difference in the Top & Bottom 10%

In Rural, the average value of assets of the bottom 10% is Rs 25071 while the corresponding value for the top 10% is Rs 56.89 lakh rupees. The average asset holding of the top 10% is almost 228 times the average asset holding of the bottom 10%.

In Urban, this difference is even starker. The average value of assets of the bottom 10% is just Rs. 291 while the corresponding value for the top 10% is 1.45 crore rupees. The average asset holding of the top 10% is almost 50000 times the bottom 10%. This could be because of the large number of poor people who migrate to the urban areas with no asset after migration.

### Causes of Inequality Of Income In India (Key Points)

1. Inequality in the Ownership of land.
2. Private Ownership of Property in Urban Areas.
3. Law of Inheritance.
4. Inequality of Professional Training .
5. Inflation.
6. Credit Policy of Financial Institutions.
7. More Burden of Indirect Taxes.
8. Corruption and Smuggling.
9. Unemployment.
10. Tax-Evasion

### OECD REPORT ON REDUCING INCOME INEQUALITY WHILE BOOSTING ECONOMIC GROWTH:

Although technological change and globalisation have played a role in widening the distribution of labour income, the marked cross-country variation is likely due to differences in policies and institutions. This leads to the following conclusions about policies and institutions:

- Education policies matter. Policies that increase graduation rates from upper secondary and tertiary education and that also promote equal access to education help reduce inequality.
- Well-designed labour market policies and institutions can reduce inequality. A relatively high minimum wage narrows the distribution of labour income, but if set too high it may reduce employment, which dampens its inequality-reducing effect. Arrangements that strengthen trade unions also tend to reduce labour earnings inequality by ensuring a more equal distribution of earnings.

- Tax and transfer systems play a key role in lowering overall income inequality. 3 quarters of the average reduction in inequality they achieve across the OECD is due to transfers. However, the redistributive impact of cash transfers varies widely across countries, reflecting both the size and progressivity of these transfers.
- Of the various types of taxes, the personal income tax tends to be progressive, while social security contributions, consumption taxes and real estate taxes tend to be regressive. But progressivity could be strengthened by cutting back tax expenditures that benefit mainly high-income groups (e.g. tax relief on mortgage interest)

## Digital India Effect: e-Governance Ttransactions double in 2015

### WHY IN NEWS:

Electronic transactions related to e-Governance projects in the country have almost doubled in 2015, owing to the Digital India Programme, Telecom Minister said.

According to government website, electronic transaction aggregation and analysis layer (eTaal), 3.53 billion transactions took place in 2014, which almost doubled in 2015 to 6.95 billion.

### BRIEF OF THE ISSUE

eTaal is a portal under Communications and IT Ministry which disseminates e-transaction statistics of national and state level e-Governance projects, including mission mode projects.

eTaal receives transaction statistics from web-based applications periodically on near real time basis and presents an analysis of transaction counts to give a quick view of transactions done by various e-Governance projects.

### HIGHLIGHTS OF THE PROGRESS OF DIGITAL INDIA:

More than 12,000 rural post office branches have been linked digitally and soon payment banking would also become a reality for them.

The Government also plans to make 'digital village' across the country, by linking all schemes with technology. The 'digital village' would be powered by LED lighting, solar energy, skill development centres and e-services like e-education and e-health.

The progressive policies and aggressive focus on 'Make in India' have played a significant role in the resurgence of the electronics manufacturing sector.

### IMPACTS OF DIGITAL INDIA

A digitally connected India can help in improving social and economic condition of people living in rural areas

through development of non-agricultural economic activities apart from providing access to education, health and financial services. However, it is important to note that ICT alone cannot directly lead to overall development of the nation. The overall growth and development can be realized through supporting and enhancing elements such as literacy, basic infrastructure, overall business environment, regulatory environment, etc.

**Economic impact:**

According to analysts, the Digital India plan could boost GDP up to \$1 trillion by 2025.7 it can play a key role in macro-economic factors such as GDP growth, employment generation, labor productivity, growth in number of businesses and revenue leakages for the Government.

**Social impact:**

Social sectors such as Education, Healthcare, and Banking are unable to reach out to the citizens due to obstructions and limitations such as middleman, illiteracy, ignorance, poverty, lack of funds, information and investments. These challenges have led to an imbalanced growth in the rural and urban areas with marked differences in the economic and social status of the people in these areas.

Modern ICT makes it easier for people to obtain access to services and resources. The penetration of mobile devices may be highly useful as a complementary channel to public service delivery apart from creation of entirely new services which may have an enormous impact on the quality of life of the users and lead to social modernization.

According to estimates, the digital literacy in India is just 6.5% and the internet penetration is 20.83 out of 100 population.13 The digital India project will be helpful in providing real-time education and partly address the challenge of lack of teachers in education system through smart and virtual classrooms.

Mobile and internet banking can improve the financial inclusion in the country and can create win-win situation for all parties in the value-chain by creating an interoperable ecosystem and revenue sharing business models.

Digital platforms can help farmers in know-how (crop choice, seed variety), context (weather, plant protection, cultivation best practices) and market information (market prices, market demand, logistics).

**Environmental impact:**

The major changes in the technology space have not only brought changes to the economic system but are also contributing to the environmental changes.

The next generation technologies are helping in lowering the carbon footprint by reducing fuel consumption, waste management, greener workplaces and thus leading to a greener ecosystem. The ICT sector helps in efficient management and usage of scarce and non-renewable resources.

Telepresence in work environment as well as home helps in creating a virtual environment for face to face conversations and minimizes the need for travel.

M2M enabled devices and technologies like smart meter, smart grid, smart logistics and smart building help in many different ways by efficient energy management.

Cloud computing technology minimizes carbon emissions by improving mobility and flexibility Digital media for paper intensive services such as governance, ticketing, newspaper, etc. could not only result in efficient delivery of services but at the same time would lower the use of paper, thus preventing deforestation.

**19th National e-Governance Conference**

The 19th National e-Governance Conference with the title 'Transforming India' was held during January in Nagpur, Maharashtra. The 19th National conference was focused on strategies like

- GATI-Governance with Accountability Transparency & Innovation for citizen -centric services, financial inclusion-JAM & DBT,
- Urban Governance in smart cities plenary,
- Cyber security framework for citizen centric,
- Decade of eGovernance-Way ahead,
- Technology enabled education.

It is being jointly organized by the Department of Administrative Reforms and Public Grievances (DARPG) under Union Ministry of Personnel, Public Grievances and Pensions and Department of Electronics and Information Technology (DeitY) every year in partnership with one State Government since 1997.

During the conference awards were given to states for their e-governance projects. Some of the important projects that were given award were:

COSMOS - Chhattisgarh Online School Monitoring System Balrampur	Gold	Chhattisgarh	Education
TrackChild -Online Tracking System for Missing Children	Gold	West Bengal	Women and Child Development
Universal Account Number (UAN) Programme of EPFO	Gold	Delhi	Finance and Banking

eXtended Green Node (XGN)	Gold	Gujarat	Environment regulation
MAHA-GEOMIN - Maharashtra Geology, Minerals & Mining Information System	Gold	Maharashtra	Environment and Natural Resources
Bhamashah Yojana/Financial Inclusion	Gold	Rajasthan	Finance
Delhi Traffic Police Mobile Application	Gold	Delhi	Home Affairs/Governance and Administration
Village Profile and taluka planning atlas	Silver	Gujarat	Rural Development

## Giriputhrika Kalyana Pathakam for Tribal Brides

Schedule Tribes (ST's) are Indian population groups that are explicitly recognized by the constitution of India order 1950. The order lists 744 tribes across 22 states in its 1st schedule. In Andhra Pradesh 33 types of Schedule Tribes are living in 8 districts. ST's are 6.6% in total population of Andhra Pradesh. From the 1850 ST community is referred to as the depressed class due to their social and economic status.

The Government of Andhra Pradesh on the eve of "World Adivasi Day" has launched Giriputhrika Kalyana Pathakam Scheme to provide one time financial assistance of Rs.50,000 (Rupees Fifty Thousand Only) to tribal girls at the time of their marriage with a view to alleviate financial difficulties to celebrate marriage in the families of Schedule Tribes in the state. The amount will be disbursed through District Tribal Welfare Office directly to the bank accounts of the beneficiary. This is in tune with the Tribal Empowerment Policy-2010-15, especially for empowering tribal women.

The initiative has been taken in tune with the Andhra Pradesh Government's enactment of "The Andhra Pradesh Scheduled Castes Sub-Plan and Tribal Sub-Plan (Planning, Allocation and Utilization of Financial Resources) Act, 2013" with an objective to accelerate the development and welfare of SCs and STs with emphasis of achieving equality in the next 10 years, focusing on economic, education and human development along with ensuring security, social dignity of Scheduled Castes and Scheduled Tribes.

Each beneficiary would have to fulfill some mandatory conditions like submission of marriage certificate, income certificate etc. to avail benefits of the scheme.

### Eligibility Criteria:

- The girl should belong to Schedule Tribe and should be unmarried.
- The unmarried girl should exclusively belong to Andhra Pradesh.
- The unmarried girl should have completed 18 years of age at the time of marriage.

- The wedding of the ST girl shall take place on or after 01-04-2015.

### Income Criteria:

The combined income of the parents shall not exceed Rs. 2,50,000/- per annum.

### Procedure for application and processing:

There will be online submission of Application by the website <http://epasswebsite.cgg.gov.in> through any MeeSeva Center.

### Attachment Required:

- Date of Birth, Certificate for the proof of cast, Income Certificate (family), Aadhaar Card (of both Bride and Groom) Issued by the competent Authority through MeeSeva Center.
- A scanned copy of the 1st page of the Bank Passbook (Saving Account) containing the photo of the bride and the account detail in the name of the bride.
- Wedding Card
- Wedding Photograph
- Letter by the Gram Panchayat/Church/Mosque or any other institution which has performed the marriage as a marriage proof should be produced.
- The scheme cannot be subsumed with any other scheme such as the incentive award for inter-caste marriage.
- It can be availed by the ST girls only once in a lifetime.
- The Director, Tribal Welfare shall ensure wide publicity to create awareness among the STs for availing the benefit of the scheme.
- The Director shall also ensure that an appropriate head of account is created for the scheme to charge the expenditure under the Tribal Sub Plan (TSP).

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# 3. IR + SECURITY + DEFENCE

## AIIB Bank Formally opened in Beijing

China-led Asian Infrastructure Investment Bank officially opened for business recently after a formal ceremony led by Chinese President Xi Jinping.

Representatives from 57 member countries attended the opening ceremony, where China announced it would pledge \$50 million to a special fund to prepare less developed countries for infrastructure projects.

Beijing has pledged to put up most of the bank's initial \$50 billion in capital and says that, total will rise to \$100 billion. Chinese official Jin Liqun has been named the bank's 1st president.

The large infrastructure requirement in Asia, coupled with the inability of Asian countries to meet these requirements themselves, has driven the emergence of the AIIB

### Key AIIB Facts

- USD 100 bn** → Agreed Founding Capital
- 58** → Members Currently
- 70%** → Asia's Share of Founding Capital
- 70%** → Share of Non-Chinese Employees
- RMB** → Settlement Currency for the AIIB

### Key Reasons for the AIIB

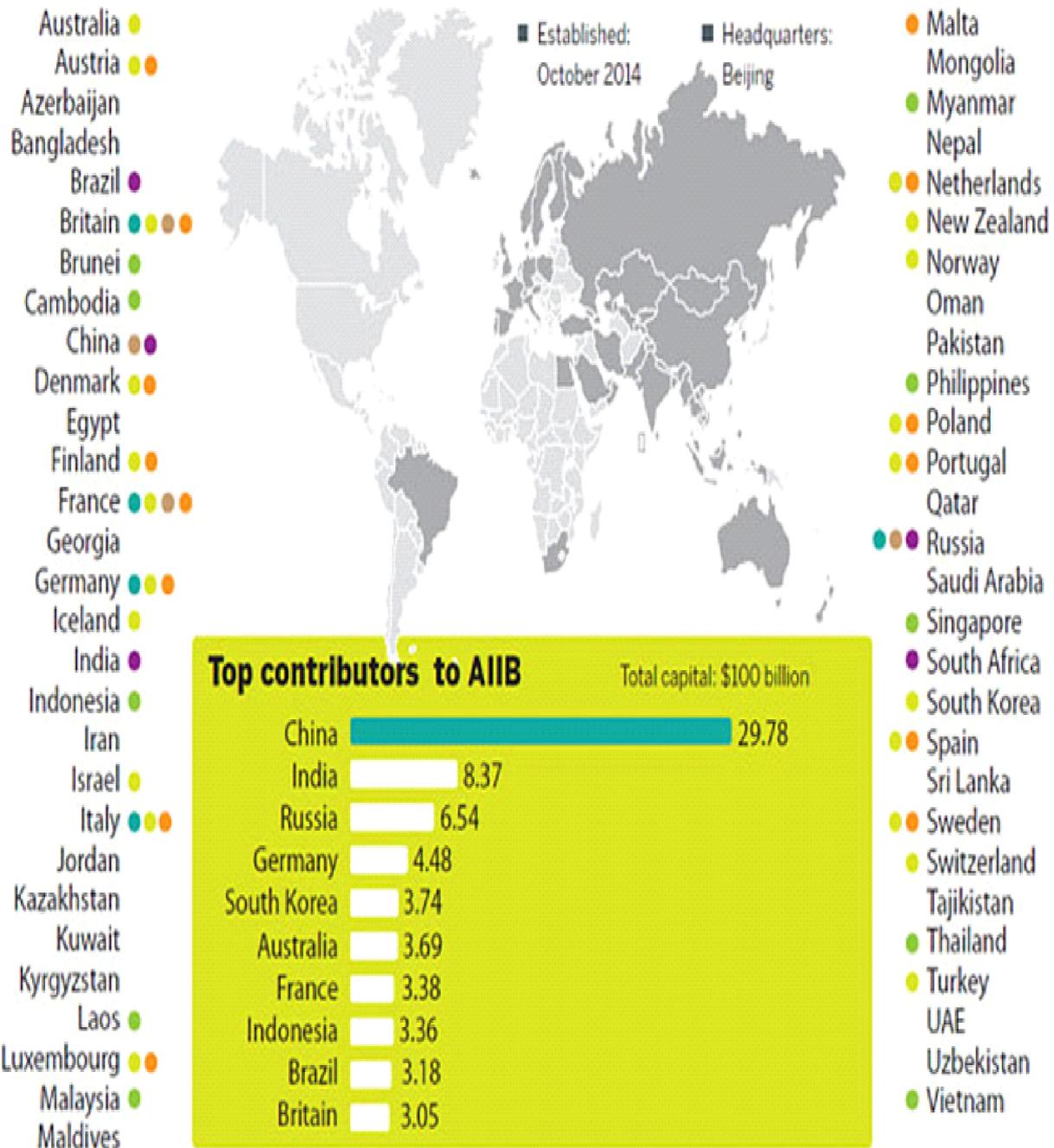
- 1 Emerging Asia requires USD 11 tn in infra investments through to 2030 – few governments can fund this
- 2 Countries such as China can also provide engineering and construction expertise
- 3 Demographic pressure in countries such as India and Indonesia reduces the ability to spend on infrastructure
- 4 Existing institutions such as the World Bank and ADB are more focused on development rather than on infrastructure
- 5 The AIIB will address this problem by using capital resources to focus on the implementation of infrastructure development

Source: Bloomberg BNP, The Beijing Axis Analysis

# Asian Infrastructure Investment Bank

57 founding members of the China-led multinational lender

- G8 member
- OECD member
- UN Security Council permanent member
- ASEAN member
- BRICS
- EU



Source : AIIB/China Finance Ministry/Governments

AFP / CHINA DAILY

### What is AIIB?

The Asian Infrastructure Investment Bank (AIIB) is an international financial institution that aims to support the building of infrastructure in the Asia-Pacific region. The bank was proposed as an initiative by the government of China, supported by 37 regional and 20 non-regional Prospective Founding Members (PFM), all of which have signed the Articles of Agreement that form the legal basis for the proposed bank.

The capital of the bank is \$100 billion, equivalent to 2/3 of the capital of the Asian Development Bank and about half that of the World Bank. China Holds 30% of its total share, while India is the second largest share holder in it.

AIIB is the 1st multilateral bank that does not have the United States and Japan as partners.

### US lifts nuclear sanctions on Iran

The United States recently removed a wide range of sanctions against Iran after International Atomic Energy Agency (IAEA) confirmed that, Tehran has met its commitments to roll back its nuclear programme, under an agreement with China, France, Russia, the United Kingdom, the U.S and Germany on July 14, 2015.

#### Why Sanctions were imposed on Iran?

Following the Iranian Revolution of 1979, the United States imposed sanctions against Iran and expanded them in 1995, to include firms dealing with the Iranian Government. Since Iran's nuclear programme became public in 2002, the UN, EU and several individual countries have imposed sanctions in an attempt to prevent it from developing military nuclear capability. Iran insists its nuclear activities are exclusively peaceful, but the world's nuclear watchdog has been unable to verify this. In 2006, the UN Security Council passed Resolution 1696 and imposed sanctions after Iran refused to suspend its uranium enrichment program.

#### What are these sanctions & their effects?

These include economic, trade, scientific and military sanctions against Iran, which have been imposed by the U.S. Office of Foreign Assets Control, or by the international community under U.S. pressure through the United Nations Security Council. Currently, the sanctions include an embargo on dealings with Iran by the United States, and a ban on selling aircraft and repair parts to Iranian aviation companies. Nearly 100 billion dollars assets of Iran have been frozen. Sanctions on Iran's key energy and financial sectors have crippled its economy.

The loss of oil revenue as oil export shrunk by half, which accounted for a half of government expenditure, and isolation from the international banking system, had caused Iran's currency, the rial, to lose 2/3RD of its value against the US dollar and caused inflation to rise to more than 40%, with prices of basic foodstuffs and fuel soaring.

### What is the deal?

A deal named the Joint Comprehensive Plan of Action (JCPOA) was finalized between "P5+1" group (US, UK, France, Russia, China plus Germany) & Iran. As per deal Iran has to reduce its centrifuges which were numbered 20000. Iran has removed two third of the machines. Iran had accumulated a stockpile of enriched uranium enough for 10 nuclear bombs. Now more than 98% of the stock has been moved out of Iran. In turn sanctions against Iran would be removed after verification by IAEA.

However, Primary sanctions that bar U.S citizens and companies from business with Iran will remain.

#### Impact of removal of sanctions:

This will hugely benefit the Iran's crippling economy & allow it to reenter the global market. Iran would have access to its huge cash accumulated abroad especially in China, India, Japan, Turkey etc.

Iran would be able to able to sale crude oil in global market, however depressing scenario in global oil market may further become worse with extra supply from Iran. Removal of economic sanctions would enable the access of Iran to capital goods & new technologies which would support the Iran's dilapidated manufacturing capacity.

MNCs are viewing the Iran as a potential market & countries like India & China are eyeing energy resource of Iran to secure their energy needs.

India's plan in Iran like Chabahar port & proposed Iran-Pakistan-India (IPI) gas pipeline may get the required push.

#### Challenges in Iran's integrations in Global Economy:

In USA, Republicans are not happy with the deal. They are arguing the Democrats have given the undue attention to Iran. Seeing the election in USA this year, if republicans comes in power then it may threaten the deal.

USA allies in Middle East like Israel & Saudi Arabia are also not happy with the deal as they perceive Iran as a threat in the region.

#### Way Forward:

In the deal diplomacy has won the war which may erupt anytime in near future & a threat of one more country to become destabilise in West Asia may be eliminated. These talks have opened the channels to resolve the other issues like current swap of prisoners between Iran & US. There is a need to further strengthen these channels to completely stabilise the peace in the region.

Such diplomacy can be worked out to deal with other countries like North Korea & even in talks with hardliners in Afghanistan.

## Cabinet approves MoU between India and UK in the field of Public administration and governance reforms

The Union Cabinet has given its approval for the Memorandum of Understanding (MoU) between India and United Kingdom in the field of public administration and on cooperation in governance reforms recently. The MoU is a part of India's effort in seeking international collaboration for initiatives in improving governance and administrative reforms in the country.

### Features of the MoU

- Cooperation such as sharing good governance practices in public administration, user led service design, reducing bureaucracy in service delivery and Government process re-engineering.
- Strengthening of social security.
- Collaboration between Government and Industry on staff management, crisis and disaster Management.
- Digital transformation of government.
- Understanding the system of customer oriented public service delivery in UK with reference to rapidly changing environments in public service management and adapting some of the best practices in the Indian Public Service Delivery System.
- Joint Working Group on Public Governance and Administration will be responsible for MoU implementation.

### How will it help?

The MoU will help understand the system of customer-oriented public service delivery in the U.K. with reference to rapidly changing environments in the area of public service management and enable in replicating, adapting and innovating some of the best practices and processes in the Indian Public Service Delivery System, leading to improved public service delivery in India. This aims to further government's efforts at revamping of public administration system, public grievance redress mechanism, ushering in e-Governance, Digital India, etc., more so in the context of the goal of 'minimum government with maximum governance' through e-governance based citizen centric end-to-end on-line services. This will be in line with country's efforts in seeking international collaboration for initiatives in good governance and administrative reforms. The Department of Administrative Reforms and Public Grievances has so far entered into such bilateral MoU with China, Malaysia, Singapore and with Brazil, South Africa (trilateral).

## 4th India Africa Hydrocarbons conference

The 4th India Africa Hydrocarbons Conference concluded in New Delhi with a resolve to strengthen the relations between India and Africa in all its dimensions, particularly in the Hydrocarbons sector. The theme of this Conference was "Energizing the bottom of the pyramid - Together towards tomorrow".

The conference aimed to give a renewed thrust to India's engagement with African nations in the hydrocarbon space and carried forward the vision of a multidimensional, comprehensive India-Africa partnership. The participating African countries made crisp presentations highlighting opportunities in their hydrocarbon sector. The conference also afforded an opportunity for India to showcase its accomplishments and techno-commercial capabilities spanning across upstream, midstream and downstream sectors as also India's unique value proposition for the rapid development of the African hydrocarbon industry. The panel discussions on "Emerging challenges and mitigating measures in hydrocarbon sector and beyond" and "Regulatory and Fiscal Regime challenges and potential solutions to stimulate investment in Upstream and Downstream sectors" were held during the conference.

### Significance:

The partnership would enable India to enhance its energy security while nurturing Africa's Hydrocarbon's sector growth on several fronts like capacity building, environmental sustainability, human resource development and employment generation. It aims to explore opportunities, bridge boundaries and boost bilateral trade between India and Africa. It will provide a global forum to chart out the road map for extended energy cooperation in the coming days and bring together leaders in the worlds of energy to network with other influential peers, gaining new perspective by hearing distinguished CEOs from India and abroad, exchange expert insights and develop strategies for the next big steps towards enhanced energy cooperation.

## 1st ministerial meeting of Arab-India Forum cooperation held in Manama

The 1st Ministerial Meeting of Arab-India Cooperation Forum was held on recently in the Bahraini capital Manama. Important highlights of the meeting can be listed as:

- The Declaration called for enhanced cooperation on bilateral, regional and global issues including terrorism, Palestine, Syria, Arab-Israeli conflict and reforms in the UNSC by expanding its permanent and non-permanent membership.
- The forum seeks to provide platform for India's bid

to reach out to West Asian nations (22 Arab League nations) to further strengthen the economic, trade and financial cooperation.

- It further emphasized the importance that cooperative relations between Arab States and the Islamic Republic of Iran be based on the principles of good neighbourliness, non-interference in internal affairs, and resolution of disputes through peaceful means.
- The meeting reviewed the achievements of the Arab-Indian cooperation since the establishment of the Arab-Indian Co-operation Forum in New Delhi in 2008 and adopted the Manama Declaration.
- The two sides destined terrorism in all its forms and manifestations and rejected associating it with any religion. They will swear to combat terrorism and termed for developing a collective strategy to eliminate its sources and its funding.
- It confirmed respect to the freedom, dominion, unity and territorial integrity of Iraq and non-interference in its internal affairs in tackling with IS. The forum discussed regional and global issues of mutual concern, including developments in the Arab region and in South Asia, counter-terrorism, United Nations Security Council (UNSC) reforms, Palestinian issue and nuclear disarmament.

## SC Upholds No Open Tender Policy

Supreme Court upheld the Government policy of 'no open tenders' for key Defense products. The judgment reversed the decision of Delhi High Court in a case filed by HBL NIFE Powers System Ltd. In the case the HBL Power Systems Ltd. has claimed that it had developed heavy duty batteries for submarines and its product must be tested by government. Delhi High Court had delivered its judgment in 2005.

### Why the policy was upheld:

Supreme Court gave credence to the government argument that for critical components of strategic importance there is no need to invite open tender. As life of the security personnel and the strategic capacity of the forces depends on such equipments, these should be sources through DGQA (Director General of Quality Assurance) registered firms.

### The process of Defense Procurement:

The Defense procurement is classified in to broad categories: 'common use' items and 'mission critical' strategic defense products. 'Common use' items like car batteries, spare parts of various vehicles etc. have generic or commercial specifications and these are available in open market. These items are procured by the Ministry of Defense by Open Tender Enquiry (OTE) i.e. by advertisements in the press and website.

'Mission critical' Strategic Defense products are those materials which do not fall within the 'common use' category. These spares are 'mission critical' strategic defense products, which are procured only from those firms which are registered with Director General of Quality Assurance (DGQA) which functions under the Ministry of Defense. The registration process followed is very stringent. Officials of the DGQA are posted at the factory of the supplier to ensure that the goods produced are absolutely in order. The DGQA inspectors examine every stage of production right from the sourcing of the raw materials by the vendor, as it is quite possible that the "vendor may purchase inferior quality material which may be difficult to detect in the final product".

Therefore, such 'critical components' cannot be procured through open tenders. It will put the life of defense personnel and India's defense capabilities at risk as the quality and standards have not been tested by the Government.

### Implications:

The decision is going to speed up the modernization process of Indian defense services. The Delhi High Court judgment had put a break on the procurement of batteries for Indian submarine fleet. After 9 years of legal battle the Government policy has been upheld and brought clarity regarding the procurement procedure of critical defense material.

## Marshall islands sue Britain, India and Pakistan over nuclear weapons

The tiny Marshall Islands has persuaded the UN's highest court to take up a lawsuit against India, Pakistan and Britain which they accuse of failing to halt the nuclear arms race.

In 2014, the Marshall Islands - a Pacific Ocean territory with 55,000 people - accused 9 countries of "not fulfilling their obligations with respect to the cessation of the nuclear arms race at an early date and to nuclear disarmament". They included China, Britain, France, India, Israel, North Korea, Pakistan, Russia and the United States. It said by not stopping the nuclear arms race, the countries continued to breach their obligations under the Nuclear Non-Proliferation Treaty (NPT) - even if the treaty has not been signed by countries such as India and Pakistan.

The court has admitted 3 cases brought against Britain, India and Pakistan because they already recognised the ICJ's authority.

### About ICJ:

The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN). It was established in June 1945 by the Charter of the United Nations and began work in April 1946.

The seat of the Court is at the Peace Palace in The Hague (Netherlands). Of the 6 principal organs of the United Nations, it is the only one not located in New York (United States of America).

The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.

## Signing of Memorandum of Understandings between Indian Computer Emergency Response Team with

- (i) Cyber Security, Malaysia;
- (ii) Cyber Security Agency of the Republic of Singapore
- (iii) Japan Computer Emergency Response Team Coordination Center on Cooperation in Cyber Security

Three MoUs have been signed on cooperation in Cyber Security and the details are follows:-

The MoUs related to Cyber Security will

- Promote closer cooperation for exchange of knowledge and experience in detection, resolution and prevention of security related incidents between India and respective country.
- Each signatory country will share knowledge and experience in resolution, detection and prevention of security related incidents between India and the respective country.

### Indian Computer Emergency Response Team (CERT-In)

CERT-In is nodal department under the agency of Union Ministry of Communications and Information Technology that deals with Cyber Security Threats like hacking and phishing in India.

#### Objective:

- To protect Indian cyberspace and software infrastructure against destructive and hacking activities.
- Strengthen security-related defence of the Indian Internet domain.
- Issue guidelines, vulnerability notes, advisories, and whitepapers regarding to information security practices, prevention, procedures, response and reporting of cyber security incidents.

### ANALYSIS

#### Why Cyber warfare?

- Being considered as a legitimate mode of attrition between nations, a new spectrum of operations has opened up with the full panoply of instruments.
- With cyberspace all set to become the 5th dimension of warfare, countries around the world are busy preparing to face the threat of cyber war where attackers remain incognito.
- Anonymity is perhaps the biggest advantage associated with cyber-attack.
- A cyber weapon is an Intellectual Property (IP) which can be used in peace time and during war time. These weapons largely depend upon Zero Day exploits and vulnerabilities, and have limited shelf life.

#### Data

As per a report by Indian Computer Emergency Response Team (CERT-In), Cyber attacks on India increased from about 13,000 in 2011 to 62,000 till mid-2014, with most originating from cyber space of a number of countries including the US, Europe, Brazil, Turkey, China, Pakistan, Bangladesh, Algeria and the UAE.

#### Factors contributing/aggravating Rise of Cyber Attack:

- The rapid evolution of threats, from non-state actors and at the behest or in some cases directly by state actors, has resulted in a global cyber pandemonium.
- The scenario is further aggravated by the global incoherence of domestic and international cyber laws in relation to law enforcement model
- Attribution issues
- International disharmony on cyber issues
- Most importantly non-availability of a global treaty, especially for issues relating to law of war model.
- At present, there are no formal rules of engagement in cyber warfare at either international or multi-lateral levels. As it is, the detection of a threat or a potential threat plays a major role in ensuring cyber security.
- The ability to come out with cyber weapons cheaply and quickly is the most striking advantage of cyber war.
- The vast majority of cyber attacks can be categorized into only a handful of types (root kits, Trojan horses, etc.), therefore, it is difficult to keep up with all the various devices defense personnel are using to access military networks.
- Factoring in the extreme variability in cyber training and awareness that millions of network users exhibit, it's hard to imagine that determined adversaries can be kept out of the networks.

### Nature of Threats through Cyber Warfare

Defence minister Manohar Parrikar stated that, the future wars might be fought in the cyberspace, He also cited the example of the terrorist organisation ISIS, which he said, was "one of the best users of internet technology" for promoting their cause.

By all means, the stunning and crippling effect of cyber invasion could be a nightmare for security agencies and military establishments as cyberspace remains a "borderless and impersonal entity".

Clearly and apparently, Cyber spies have no physical boundaries to negotiate while giving a practical shape to their "evil designs".

Satellites designed for communications, navigation, earth observation and many other end-uses could be paralysed and put out of commission through manipulation and degradation of their software.

### Case study of China.

The Chinese feel that getting information dominance is a key component for attaining victory in a war. As part of its offensive approach, China is busy building the capability to combine computer network attacks, electronic warfare and kinetic warfare strategy with a view to paralyze communications systems and information systems of the targeted adversary and create vulnerable blind spots that can be exploited to stay at the winning edge of the battlefield.

### Initiatives in Tackling Cyber Warfare

Defence Research and Development Organisation (DRDO) has been developing capabilities to produce robust high grade cryptographic devices based on indigenously developed cryptographic algorithms and indigenously architected high assurance platforms; and capabilities to develop advanced architectures for LAN and WAN security to safeguard information systems to counter external and internal threats has been developed. For the near term risk mitigation, DRDO works on the approach of development of software-based security systems running on COTS computing platforms.

**Signing of Memorandum of Understandings between Indian Computer Emergency Response Team with Malaysia, Singapore and Japan**

### Union Cabinet approves Raising of 17 Indian Reserve Battalions

The Union Cabinet has approved the raising of 17 India Reserve Battalions (IR Battalions) by Jammu & Kashmir and Left Wing Extremism (LWE) affected States. It includes 5 IR Battalions in the state of J&K, 4 IR Battalions in Chhattisgarh, 3 IR Battalions in Jharkhand, 3 IR Battalions in Odisha and 2 IR Battalions in Maharashtra.

The major thrust in raising these 17 Battalions is as follows:

- Local youths will be recruited. To achieve this, the States will relax the age and educational criteria, if required.
- In respect of the 05 IR Battalions to be raised by J&K, 60% of the vacancies will be filled from the border districts of J&K.
- For LWE states, 75% of the vacancies of constables will be filled up from 27 core districts under Security Related Expenditure (SRE) Scheme.

### About Indian Reserve Battalions

The Government of India introduced the scheme of Indian Reserve Battalions in 1971. The primary role of this force is to combat terrorism in whatever form it may assume in areas where activity of LWE assume serious proportion and local police forces cannot cope up with the situation. The IRBn is a force specially equipped and trained to deal with specific situation and has, therefore, to be used only in exceptional situation. The force is not designed to supplant the functions of normal armed police. It was modelled on the pattern of Central Police Force CPF.

### Tasks:

- i) Neutralization of LWE threat in any specific area
- ii) Engaging LWE in a specific situation in order to neutralize them
- iii) Raid on a hostile hideouts
- iv) Cordoning and search operations
- v) Rescue of hostages
- vi) Combing operations
- vii) Ambush and counter ambush operations
- viii) Convoy protection
- ix) Reinforcing a patrol
- x) Special operations
- xi) Act as Reserve.

### International Solar Alliance headquartered in India with United Nations as strategic partner

The International Solar Alliance was recently inaugurated by the Indian Prime Minister and French President in National Institute of Solar Energy (NISE) in Gwalpahari, Gurgaon along with the interim Secretariat of the ISA. It has been set up with UN as strategic partner.

It will be a new beginning for accelerating development and deployment of solar energy for achieving universal energy access and energy security of the present and future generations.

### About International Solar Alliance

- It was jointly launched in Paris by India and France on 30 November 2015 during the United Nations climate change conference (COP21).
- It is the India's 1ST international and inter-governmental organization of 121 Countries to have headquarters in India with United Nations as Strategic Partner.
- It creates a collaborative platform for increased deployment of solar energy technologies to enhance energy security and sustainable development.
- It improves access to energy and opportunities for better livelihoods in rural and remote areas and to increase the standard of living.
- It will work with partner countries to formulate projects and programmes to accelerate development and deployment of existing clean solar energy technologies, the potential for which largely remaining untapped.
- It develops innovative financial mechanisms to reduce cost of capital and builds a common knowledge e-Portal.
- It also facilitates capacity building for promotion and absorption of solar technologies and Research and Development among member countries.
- It will encourage multilateral bodies like IRENA, REEEP, IEA, REN21, UN bodies, bilateral organizations, corporates, industry, and other stakeholders to contribute towards the goal of increasing utilization of solar energy in the member countries.

### India and Armenia sign protocol amending the 'Double Taxation Avoidance Convention'

A Protocol to amend the existing Double Taxation Avoidance Convention was signed by the Government of India and the Government of Armenia recently.

The Protocol will enable the 2 countries to exchange information related to financial and banking transactions under the Double Taxation Avoidance Convention, and thereby facilitate them in addressing tax evasion. It is also expected to further strengthen the efforts of Government of India in curbing generation of black money.

#### About DTAA:

Double Taxation Avoidance Agreement (DTAA) also referred as Tax Treaty is a bilateral economic agreement between 2 nations that, aims to avoid or eliminate double taxation of the same income in 2 countries.

The double taxation avoidance agreement is an agreement which helps the taxpayer to get relief from double taxation on the same income. If India has signed any double taxation agreement with any foreign country; it's meant that the taxpayer of those countries does not have to pay the tax on the same income in both the countries. So, double taxation avoidance agreement is a useful tool which helps the taxpayer to avoid "double taxation".

### Sushma Swaraj Isreal Visit: Key Take Aways

- India 's External Affairs minister visited Isreal Recently.Her visit comes after President Mukherjee visited Israel and Palestine few months back.
- India-Israel relations have improved significantly under the incumbent Government, Which could be seen from the Indian PM meeting Israeli PM Benjamin Netyanhu in New York in and 1ST ever visit of Indian President to Israel.
- The warming of ties has come at a time when Israel has been losing support in Europe and even in the US over its military offensives against the Palestinians.
- Previous Governments have followed a more nuanced stance to ensure that ties with Palestine remain at the same level while making efforts to build relations with Israel. The Modi government's new-found warmth looked to displace Palestine from the favoured position it had traditionally held in India's foreign policy for West Asia.

#### Importance of Israel for India

- Defense-Israel is India's 5TH largest source of arms, over the years Israel has supplied India with drones, Missiles and Radars at a very economic price, also along with arms it has also transferred technology in most of the items. Israel's mossad have also been at forefront in providing intelligence information to Indian agencies and the most glaring example of it could be seen during the 2008 Mumbai Attack.
- Agriculture-India has benefited from Israel's expertise in the sector, evident from the number of bilateral agreements, signed between the 2 nations. While Indian agriculture is largely dependent on rain and an erratic monsoon, Israel, a global leader in drip irrigation, has pioneered desert agriculture with sparse supplies of water. India has benefitted from Israeli technologies in horticulture mechanization, protected cultivation, orchard and canopy management, nursery management, micro-irrigation and post-harvest management, particularly in Haryana and Maharashtra.
- Water management-Technologically adept Israel has developed water-management technologies, as it

is located in a semi-arid region with limited sources of fresh drinking water.

- Israel has expertise in recycling waste water and desalination. A water scarce India could greatly benefit from Israel's expertise. Indian companies and official delegations regularly visit the biannual Water Technology & Environment Control Exhibition & Conference, which showcases Israel's water and energy technologies.
- Israel is a country of startups and thus, its expertise and advice on Start up India Programme could definitely give a boost to this programme.

#### Key issues discussed in the Visit:

- During Her visit, Swaraj met with top Israeli leadership and discussed various fields of cooperation between both the nations
- In Her meeting with Prime Minister Benjamin Netanyahu, both leaders discussed bilateral cooperation on a broad range of issues like security and cyber, science and technology, research and innovation, education, agriculture and water.
- They also discussed the intention to increase cooperation via the business sector in both countries, and not only by means of the two governments.

## Nepalese Constitution Amendments rejected by Madhesis

Nepalese Parliament amended its Constitution but Madhesis rejected the amendments saying that it is 'incomplete' and does not completely fulfill the aspirations of Madhesis people. The amendment fulfilled the 2 key demands of proportional representation in government institutions and allocation of seats in Parliament in proportion to populations. The other demands related to redrawing of the federal boundaries and citizenship has not been addressed.

#### Background:

Nepal passed its new Constitution in September 2015. Passage led to protest by Madhesis and Tharus because they claimed it to be discriminatory against them because:

- The federal boundaries were divided in a way to reduce people inhabiting Terai region to minority in each province.
- Parliamentary seats were disproportionately allocated. Terai region constituting 50% of population was allocated only 65 seats out of 165.
- Citizenship provisions discriminated against naturalized citizens and children born to Nepalese women - who were not granted citizenship through descent - in high Constitutional post like that of President, Prime Minister.

In response Madhesis started protest under United Democratic Madhesi Front and even blocked India - Nepal border trading point at Birgunj across Friendship Bridge. This strained the India - Nepal relations as Nepal accused India of abating the protests and making life difficult for Nepal as supply of daily need items were blocked. Apprehensions of relations deteriorating further, possibility of increasing Chinese influence and recognition by the Nepal Parliament that there were genuine grievances led to calming down of the tempers both sides.

#### Why Madhesis rejected Amendments:

In this background the amendments were passed by the Parliament. Regarding the other provisions the government said the issues of citizenship would be resolved through negotiations and consensus, proposed solution to provincial boundaries within 3 months of the formation of political mechanism for the purpose.

Madhesis wanted credible guarantee on the mandate and constitutional validity of the political mechanism for redrawing of the boundaries.

Regarding proportional representation in lower house there is no clear words regarding how the weightage will be apportioned to population and geography. Also the provision is made to ensure one seat from each district, this will again go against the people in Terai region because here 20 out of country's 75 districts house 50% of population. The upper house continues to have equal representation from each province. All these go against the element of proportional representation in parliament.

15 groups will be eligible for the proposed affirmative action, introduced through amendment to ensure proportional representation in governance. This may dilute the essence and meaning for those who need it most and may again fragment Madhesis.

#### What are the implications for India - Nepal ties?

- China in recent has emerged as major factor in South Asia and especially in Nepal. It has improved its investment in infrastructure, foreign investment and trade in Nepal. The alleged blockade by India has created a wedge between India and Nepal and given an opportunity to Nepal to justify its recent tilt towards China.
- Nepal wishing to sign an agreement for fuel supply with China is an indication of the new dynamics in the region.

Also the crisis has divided the people of Nepal. There has been growing anger among the people in the hill region,

#### What is the present situation:

In recent the blockade has been removed and the Madhesis have blinked from their hardline approach. It has been as a result of recognition by both India and

Nepal that there is a problem and its solution lies in political sphere. Any hardline approach will affect people-to-people ties. Any support to Madhesis blockade would have tantamount to interfering in the matters of Nepal. Also how can India demand states on the basis of ethnicity when it does not have this provision. Nepal also understands that playing China card will not yield results because the cultural, historical and economical relations with India can't be supplanted by China.

With the ending of the blockade the political establishments in Nepal must realize that only blockade has been removed but the issues remains. Unless the root causes are dealt with Madhesis will feel de-alienated and tensions will keep simmering. The ownership of the Constitution and faith in government are must for peace, stability and prosperity of Nepal.

### How India should handle the situation?

There is a need to have consultative and inclusive approach in dealing with political issues. South Asia is a homogeneous identity, any instability in any part may have spillover effects in neighboring regions. With the idea of 'continentalism' gaining currency around the world the issues having cross-boundary ramifications must be dealt through interactions and dialogues rather than interference. Such an approach will have long term benefits and will built trust.

The proposed visit of Nepalese Prime Minister will be important in the regard that how the problem is solved in future.

## India Gets more Voting Rights in IMF Reforms

### Key Points of the Reforms

Emerging and developing economies gained more influence in the governance architecture of the International Monetary Fund (IMF). India's voting rights increase to 2.6% from the current 2.3%, and China's, to 6% from 3.8, as per the new division. Russia and Brazil are the other 2 countries that gain from the reforms. More than 6% of the quota shares will shift to emerging and developing countries from the U.S. and European countries.

The reforms represent a major step toward better reflecting in the institution's governance structure the increasing role of dynamic emerging market and developing countries. The entry into force of these reforms will reinforce the credibility, effectiveness and legitimacy of the IMF. For the 1st time four emerging market countries (Brazil, China, India, and Russia) will be among the 10 largest members of the IMF. The reforms also increase the financial strength of the IMF, by doubling its permanent capital resources to SDR 477 billion (about US\$659 billion).

These reforms will ensure that the Fund is able to better meet and represent the needs of its members in

a rapidly changing global environment. It marks a crucial step forward and it is not the end of change as the efforts to strengthen the IMF's governance will continue.

### IMF QUOTAS : WHAT AND WHY ?

When a country joins the IMF, it is assigned an initial quota in the same range as the quotas of existing members of broadly comparable economic size and characteristics. The IMF uses a quota formula to help assess a member's relative position.

The current quota formula is a weighted average of GDP (weight of 50%), openness (30%), economic variability (15%), and international reserves (5%). For this purpose, GDP is measured through a blend of GDP-based on market exchange rates (weight of 60%) and on PPP exchange rates (40%). The formula also includes a "compression factor" that reduces the dispersion in calculated quota shares across members.

Quotas are denominated in Special Drawing Rights (SDRs), Special Drawing Rights (SDRs), the IMF's unit of account. The largest member of the IMF is the United States, with a current quota (as of January 25, 2016) of SDR 42.1 billion (about \$58 billion), and the smallest member is Tuvalu, with a current quota of SDR 1.8 million (about \$2.5 million).

The conditions for implementing the quota increases agreed under the 14th General Quota Review were met on January 26, 2016. As a result, the quotas of each of the IMF's 188 members will increase to a combined SDR 477 billion (about US\$659 billion) from about SDR 238.5 billion (about US\$329 billion).

### QUOTAS PLAY SEVERAL KEY ROLES IN THE IMF

A member's quota determines that country's financial and organizational relationship with the IMF, including:

**Subscriptions.** A member's quota subscription determines the maximum amount of financial resources the member is obliged to provide to the IMF. A member must pay its subscription in full upon joining the Fund: up to 25% must be paid in SDRs or widely accepted currencies (such as the U.S. dollar, the euro, the yen, or the pound sterling), while the rest is paid in the member's own currency.

**Voting power.** The quota largely determines a member's voting power in IMF decisions. Each IMF member's votes are comprised of basic votes plus one additional vote for each SDR 100,000 of quota. The 2008 reform fixed the number of basic votes at 5.502% of total votes. The current number of basic votes represents close to a tripling of the number prior to the implementation of the 2008 reforms.

**Access to financing.** The amount of financing a member can obtain from the IMF (its access limit) is based on its quota. For example, under Stand-By and Extended Arrangements, a member can borrow up to 200% of its quota annually and 600 percent cumulatively. However, access may be higher in exceptional circumstances.

## DOUBLING OF QUOTAS AND MAJOR REALIGNMENT OF QUOTA SHARES

On December 15, 2010, the Board of Governors, the Fund's highest decision-making body, completed the 14th General Review of Quotas, which involved a package of far-reaching reforms of the Fund's quotas and governance. This reform package, which became effective on January 26, 2016, delivers an unprecedented 100% increase in total quotas and a major realignment of quota shares. This will better reflect the changing relative weights of the IMF's member countries in the global economy.

The reform package builds on earlier reforms from 2008, which became effective on March 3, 2011. These strengthened the representation of dynamic economies—many of which are emerging market countries—through ad hoc quota increases for 54 member countries. They also enhanced the voice and participation of low-income countries through a near tripling of basic votes.

### Building on the 2008 reforms, the 14th General Review of Quotas will:

- Double quotas from approximately SDR 238.5 billion to approximately SDR 477 billion (about \$659 billion at current exchange rates),
- Shift more than 6% of quota shares from over-represented to under-represented member countries,
- Shift more than 6% of quota shares to dynamic emerging market and developing countries (EMDCs),
- Significantly realign quota shares. China will become the third largest member country in the IMF, and there will be four EMDCs (Brazil, China, India, and Russia) among the 10 largest shareholders in the Fund, and
- Preserve the quota and voting share of the poorest member countries. This group of countries is defined as those eligible for the low-income Poverty Reduction and Growth Trust (PRGT) and whose per capita income fell below \$1,135 in 2008 (the threshold set by the International Development Association) or twice that amount for small countries.

These reforms, which become effective on January 26, 2016 represent a major realignment in the ranking of quota shares that better reflects global economic realities, and a strengthening in the Fund's legitimacy and effectiveness. The elements of the reform include

- **A quota increase and shift in shares.** The 14th General Review of Quotas will result in an unprecedented doubling of quotas and a major realignment of quota and voting shares to emerging and developing countries (with a more than 6% quota shift to dynamic emerging market and

developing countries and under-represented countries).

- **Protecting the voting power of the poorest.** The quota shares and voting power of the poorest members will be preserved.
- **Quota formula and next review.** A comprehensive review of the current quota formula and bringing forward the completion of the 15th General Review of Quotas to January 2014.<sup>1</sup>
- **A new composition and more representative Board.** The 2010 reforms also include an Amendment to the Articles of Agreement that would facilitate a move to a more representative, all-elected Executive Board. Once the quota and governance reforms are in effect, there will be 2 fewer Board members from advanced European countries and all Executive Directors will be elected rather than appointed, as some are now. The size of the Board will remain at 24, and its composition will be reviewed every 8 years.

The implementation of the governance reforms makes the Fund an even more effective and representative institution.

## WEF Davos annual meeting discusses major challenges faced by World

WEF annual summit discussed various themes concerning world. The main issues were

1. **Latest Technologies and 4th Industrial Revolution:**
  - a. In the area of technology new technological developments like robotics, automation and Artificial Intelligence will lead to 4th Industrial revolution.
  - b. These developments will change the global labour markets and it will be challenge for the governments to cop up with the ensuing changes.
  - c. Redundancy of jobs and associated skills will lead to net loss of jobs to the tune of 5 million and put a challenge before governments to provide future ready skills, control unemployment and inequality.
2. **Rising inequalities:**
  - a. Anti-poverty charity Oxfam has in the past said that 1% of world own more than 99%.
  - b. Rising inequalities are resulting into rise of left wing forces, political populism as seen in France and Hungary in recent was highlighted.

**3. Gender Gap:**

- a. There are some positive movements like In the past decade, the gender gap across health, education, economic opportunity and politics has closed by only 4%.
- b. It will take another 118 years until the global pay gap between men and women is finally closed.
- c. Since 2006, an extra quarter of a billion women have entered the labour force - and yet the annual pay for women only now equals the amount men were earning 10 years ago.

**4. Market Turmoil:**

- a. The impact market turmoil is going to have on society and polity, apart from economy is going to be huge.
- b. It may lead to social breakdown and trust in political leadership may evaporate, it will result into people questioning the credibility of the institutions, rise of extreme forces.

**5. Climate Change:**

- a. Economic development around the world will be undermined if the targets on climate change are not met.
- b. The achievement of 16 SDG is undermined by the one SDG of addressing climate change.

**6. Security Threats:**

- a. Tackling it through curbing terror funding and use of force.
- b. The focus was on propagating the humanistic values that bind the people together across religions, having a cultural understanding of the crisis like sectarianism, dictatorship, corruption, injustice etc and how these help terrorism.

World Economic Forum provides a good platform for all the influential persons to come together and discuss the issues. But the main problem is that there are too many discussions and too few actions to walk the talk. Everyone realizes that there is a need to work in a co-ordinated manner in the globalised world to tackle all issues ranging from economic, security to migrant crisis. But there is no institutional mechanism to ensure that coordination. There is a need to rise above the concept of nationalism and move towards globalism which include our environment.

**4th Industrial Revolution**

At the World Economic Forum (WEF) held in Davos this year, an important topic in light is about the 'Fourth Industrial Revolution', described by the founder and executive chairman of WEF, Klaus Schwab, as a "technological revolution that will fundamentally alter the way we live, work and relate to one another". It is

seen as an important opportunity in altering the state of the world in present scenario.

**What is 'Fourth Industrial Revolution'?**

The fourth industrial revolution is conceptualised as an upgrade on the third revolution and is marked by a fusion of technologies straddling the physical, digital and biological worlds. It will mark out as a new phase rather than a prolongation of the current revolution - velocity, scope, and systems impact and lead to the transformation of entire systems of production, management, and governance. In simple words, the new revolution can be said to be the advent of cyber-physical systems which, while being "reliant on the technologies and infrastructure of the third industrial revolution represent entirely new ways in which technology becomes embedded within societies and even our human bodies".

**Background:**

- The 1st Industrial Revolution which occurred in 18th century in Britain used water and steam power to mechanize production, harnessing of steam power and birth of modern factory.
- The 2nd Industrial Revolution, from the last 3rd of the 19th century to the outbreak of World War I, was powered by developments in electricity, transportation, chemicals, steel, and mass production and consumption.
- Now a 4th Industrial Revolution is building on the 3rd, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.

**How will it be different from 3rd revolution?**

There are 3 reasons why today's transformations represent not merely a prolongation of the 3rd Industrial Revolution but rather the arrival of a 4th and distinct one: velocity, scope, and systems impact. The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the 4th is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country. And the breadth and depth of these changes herald the transformation of entire systems of production, management, and governance.

**Impacts of fourth industrial revolution:****On Business:**

- The Technologies that underpin the 4th Industrial Revolution will have a major impact on businesses. On the supply side, many industries are seeing the introduction of new technologies that create entirely new ways of serving existing needs and significantly disrupt existing industry value chains.

It will improve the quality, speed, or price at which value is delivered.

- It will also lead to major shifts on the demand side as growing transparency, consumer engagement, and new patterns of consumer behaviour (increasingly built upon access to mobile networks and data) force companies to adapt the way they design, market, and deliver products and services.
- IT will enable development of technology-enabled platforms that combine both demand and supply to disrupt existing industry structures of sharing or on demand economy. These technology platforms will create entirely new ways of consuming goods and services in the process.
- It will lower the barriers for businesses and individuals to create wealth, altering the personal and professional environments of workers.
- The main effects that the 4th Industrial Revolution has on business are on customer expectations, on product enhancement, on collaborative innovation, and on organizational forms.

#### on Government:

- New technologies and platforms will increasingly enable citizens to engage with governments, voice their opinions, coordinate their efforts, and even circumvent the supervision of public authorities.
- Though the governments will gain new technological powers to increase their control over populations, based on pervasive surveillance systems and the ability to control digital infrastructure. But they will increasingly face pressure to change their current approach to public engagement and policymaking.

#### On Security:

- The 4th Industrial Revolution will profoundly impact the nature of national and international security, affecting both the probability and the nature of conflict.
- The advances in technology will create the potential to reduce the scale or impact of violence, through the development of new modes of protection, for example, or greater precision in targeting.

#### Impact on people:

- The 4th Industrial Revolution will change not only what people do but also who they are. It will affect identity and all the issues associated with it: sense of privacy, notions of ownership, consumption patterns, the time people devote to work and

leisure, and how they develop careers, cultivate skills, meet people, and nurture relationships.

- Constant connection may deprive people of one of life's most important assets: the time to pause, reflect, and engage in meaningful conversation.

#### Opportunities and challenges:

The 4th industrial revolution presents both new opportunities for global world along with the challenges. They can be discussed as:

- It has the potential to raise global income levels and improve the quality of life for populations around the world.
- It will make possible new products and services that increase the efficiency and pleasure of personal lives. Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game-any of these can now be done remotely.
- In the future, technological innovation may lead to a supply-side miracle, with long-term gains in efficiency and productivity. Transportation and communication costs will drop, logistics and global supply chains will become more effective and the cost of trade will diminish, all of which will open new markets and drive economic growth.
- The revolution could yield greater inequality, particularly in its potential to disrupt labour markets. The net displacement of workers by machines might exacerbate the gap between returns to capital and returns to labour.
- It is also possible that in the future, talent, more than capital, will represent the critical factor of production. This will give rise to a job market increasingly segregated into "low-skill/low-pay" and "high-skill/high-pay" segments.
- Inequality represents the greatest societal concern associated with the 4th Industrial Revolution.

It is essential to grasp the opportunity and power to shape the 4th Industrial Revolution and direct it toward a future that reflects common objectives and values.

It is important to shape a future that works for all of us by putting people first and empowering them. In its most pessimistic, dehumanized form, the 4th Industrial Revolution may indeed have the potential to "robotize" humanity. But as a complement to the best parts of human nature-creativity, empathy, stewardship-it can also lift humanity into a new collective and moral consciousness based on a shared sense of destiny. For this world must develop a comprehensive and globally shared view of how technology is affecting our lives and reshaping our economic, social, cultural, and human environments.

## Government agencies launched a massive National Risk Assessment exercise

Government agencies have launched a massive National Risk Assessment (NRA) exercise to identify the sectors that are susceptible to money laundering and terror funding and plug the loopholes.

This exercise is in line with the Financial Action Task Force (FATF) recommendations. It focusses on all vital aspects of money laundering, including terror financing risks, and helps identify threats and vulnerabilities in different sectors.

The NRA exercise generally takes about a year. It begins with the collection of data on sectors that are prone to money laundering in high, medium and lower categories at the national level. The country then has to prepare an action plan based on the level of risk.

### About FATF:

The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 on the initiative of the G7. It is a "policy-making body" which works to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.

The FATF monitors the progress of its members in implementing necessary measures, reviews money laundering and terrorist financing techniques and counter-measures and promotes the adoption and implementation of appropriate measures globally.

FATF consists of 34 member jurisdictions and 2 regional organisations, the EU and the Gulf Co-operation Council. The FATF also works in close co-operation with a number of international and regional bodies involved in combating money laundering and terrorism financing. It also has 8 associate members and 25 observer members.

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## 4. GEOGRAPHY + ENVIRONMENT

### Union Government notified stricter standards for Sugar industry to minimise Water Pollution

Union Ministry of environment, Forest and Climate Change has notified stricter environment rules for sugar industries in various states of the country to minimize water pollution. The revised norms will lead to improved operational performance of Sugar industry through accomplishment of wastewater discharge and conservation standards and pollution control management protocol. The proposed changes can be discussed as:

- The specific wastewater discharge standards have been made stricter by limiting the discharge to '200 litre per tonne of cane crushed' against the earlier limit of '400 litre per tonne cane crushed'. This will ultimately result in less consumption of raw water at operational level.
- The final treated effluent discharge has been restricted to 100 litres per tonne of cane crushed and waste water from spray pond overflow or cooling tower blow down to be restricted to 100 litres per tonne of cane crushed.
- Only single outlet point from unit has been allowed to encourage operational efficiency and treated effluent recycling practices. Further, only one outlet or discharge point will be allowed, which will be covered as per the '24x7 online monitoring' protocol.
- The ministry has also increased the number of effluent quality parameters which is to be monitored for ascertaining compliance to six namely pH, biochemical oxygen demand (BOD), chemical oxygen demand (COD), total suspended solids (TSS), total dissolved solids (TDS) and oil and grease (O&G). Earlier, the notified parameters were only BOD and TSS.
- The notified standards also contain a protocol for 'Treated Effluent Irrigation' and 'Wastewater conservation and pollution control management', wherein treated effluent loading rates (in cubic meter per hectare per day) have been mentioned for different soil textures.
- The industrial units have been permitted to store treated effluent in a seepage proof lined pond, having 15 days holding capacity. It will also help the CPCB and State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs) in implementing specific measures to be adopted in

sugar industries, with the aim of reducing consumption of fresh water usage, checking operational efficiency and enhancing compliance.

### India inks Loan agreement with World Bank for Bihar- Kosi Basin Development Project

The Financing Agreement for World Bank (IDA) assistance of US\$ 250 million for Bihar- Kosi Basin Development Project has been signed between Government of India and the World Bank.

The objective of the project is to enhance resilience to floods and increase agricultural production and productivity in the targeted districts in the Kosi River Basin, and to enhance Bihar's capacity to respond promptly and effectively to an eligible crisis or emergency.

The primary beneficiaries will be rural producers and households in the Kosi River Basin who are regularly exposed to floods. It is a loan for an implementation period of 5 years. Government of Bihar is the implementing agency.

The project has 5 components:

- Improving Flood Risk Management
- Enhancing Agricultural Productivity and Competitiveness
- Augmenting Connectivity

Contingent Emergency Response; and Implementation Support.

### Sikkim becomes the 1st fully organic state of India

Sikkim is now the 1st fully organic state of India .It has been officially given this status by the government. This means that all produce cultivated in the state of Sikkim is free of chemical pesticides, chemical fertilizers, and has been grown in a way to ensure a more harmonious ecosystem.

#### Benefits of adopting organic practices:

- Organic cultivation is free of chemical pesticides and chemical fertilisers as it tries to strike a harmonious balance with a complex series of ecosystems.
- In the long term, organic farming leads in subsistence of agriculture, bio-diversity

conservation and environmental protection, agriculture.

- Sustainable farming will also help in building the soil health resulting in sustainable increased crop production.
- It will boost the Tourism industry in the state.
- Through organic farming, markets can deliver completely organic and fresh organic food.

## Cabinet approves policy on Promotion of City Compost

- Under the policy, a provision has been made for Market development assistance of Rs. 1500 per tonne of city compost for scaling up production and consumption of the product.
- Market development assistance would lower MRP of city compost for farmers.
- Compost from city garbage would provide carbon and primary/secondary nutrients to soil.
- Eco-Mark standard for City Compost would ensure that environment friendly quality product reaches the farmers.
- Composting can reduce the volume of waste to landfill/dumpsite by converting the waste into useful by-products thus, preventing production of harmful Greenhouse gases (especially methane) and toxic material that pollutes groundwater apart from polluting the environment.
- Fertilizer companies and marketing entities will also co-market City Compost with chemical fertilizers through their dealers' network.
- Agriculture Universities and KVKs will also take up field demonstration activities using City compost for which D/o Agriculture, Cooperation and Farmers Welfare will assign targets to them.

## Shift in winter season: Is it long-term phenomena

Winter set in late this year. For all of December and the 1st two weeks of January, temperatures in most parts of India were substantially higher than normal. In some places, the departures were as much as 5-8 degrees more than normal. Besides, the small amount of rainfall that takes place in late December and early January, which brings the chill in the air, was almost absent. Winter rainfall in the country as a whole at the start of the year was about 85% below normal.

### Reasons of delayed winter:

Factors responsible for warmer than usual temperatures in December and January include:

- The prevailing El Niño in the equatorial Pacific Ocean that is now being counted amongst the

strongest in the last 60 years. El Niño, which refers to an unusual warming of sea waters in the equatorial Pacific Ocean, off the coast of Ecuador and Peru in South America, influences weather patterns across the world. In India, it is generally associated with suppressed rainfall in the monsoon season. But past data also show that the winter in India following an El Niño is slightly warmer than usual. Since the current El Niño has been exceptionally long and strong, scientists were seeing this as one of the reasons for the warmer winter in India.

- The abnormal location of 2 wind systems - a sub-tropical anti-cyclonic formation and the Jet streams. These wind systems were both located north of their normal positions for this time of the year, and were in effect blocking the entry of the cold Westerlies from Europe into the Indian region. The Westerlies move in the mid-latitudes, between 30 and 60 degrees, in the northern hemisphere in the west to east direction. These winds move slightly southward during winter, and flow across most of northern and central India, bringing in not just chill, but also rainfall.

While this winter has been unusually warm, however, this is not the first time that it has set in so late. The blocking of the Westerlies by anti-cyclonic winds and Jet streams has happened on earlier occasions as well. Both these wind systems, otherwise independent phenomena, are influenced by the thermal gradient that exists between the equator and the northern latitudes.

The temperature difference over two latitudes is more pronounced in winter than in summer. The temperature difference between Delhi and Moscow, for example, is higher in winter than in summer. This thermal gradient influences wind patterns across the globe. A weaker thermal gradient, as was the case this year, leads to northward movement of the sub-tropical anti-cyclonic wind system that is generally located south of the Indian peninsula around December-January. It also gives rise to a shift in the location of the Jet streams. The movement of these 2 systems away from their abnormal positions has coincided with the strengthening of the thermal gradient.

## Ganga Action Plan and Namami Gange

Water pollution problem, especially of river water, has been rising continuously because of industrialization along the river stretches, open defecation and many other issues. This problem is manifested in dire state of Ganga river. Efforts have been made in this regard since 1985 with the launch of Ganga Action Plan. In 2014 the present government started Namami Gange Mission to ensure clean Ganga.

The main focus areas of Namami Gange are:

- Expanding coverage of sewerage infrastructure in 118 urban habitations on banks of Ganga.
- Making ZLD (Zero Liquid Discharge) mandatory
- Rationalized water tariff to encourage reuse
- Real time water quality monitoring
- Enforcing River Regulatory Zones on Ganga Banks
- Rational agricultural practices, efficient irrigation methods
- Restoration and conservation of wetlands
- Ensuring ecological rejuvenation by conservation of aquatic life and biodiversity
- Promotion of Tourism and Shipping in a rational and sustainable manner
- Knowledge Management on Ganga through Ganga Knowledge Centre

Recognizing the scale of the problem Government of India is constantly trying to find out new mechanisms for the success of Namami Gange programme which aims to ensure 'nirmal and aviral Gnaga' by curbing flow of industrial pollutants, solid waste and sewage water, promoting organic farming in Ganga Basin region and many other activities. These new initiatives are:

**'Swachh Ganga- Gramin Sahbhagita'** initiative. Plan is to involve Panchayats in ensuring Nirmal and Aviral Ganga in 5 years. Initially 1600 hundred villages will be covered, later on all the villages will be covered. Promotion of medicinal plants and livelihood, treatment of rural solid waste and rural sanitation etc are some of the activities which are to be implemented through active participation of Panchayats.

MOU has been signed between 8 ministries to ensure co-ordinated implementation of 21 action plans under Namami Gange through multi sectoral activities. Some of the activities that will be taken up are:

- HRD ministry to facilitate IITs for developing and undertake pilot projects for implementing Zero Liquid Discharge (ZLD) system for four types of industrial pollution covering tanneries, chemical, pharma and textile industries,
- Under 'Unnat Bharat Abhiyaan' encourage IITs and NITs to adopt villages to implement the projects for solid/liquid waste management and open defecation free status.
- support it in spreading necessary awareness/ environmental literacy to common masses about environment/natural resources conservation, river rejuvenation, sanitation and hygiene and conservation of biodiversity in various 'Gram Panchayats' of the districts covered under 'Saakshar Bharat' programme.

- The ministry of AYUSH will take up promotion of medicinal plants in the Ganga catchment areas
- Ministry of Youth Affairs will involve sports persons to form young group to take up activities related to Ganga cleaning.
- Development of eco-tourism around Ganga by the tourism ministry by providing suitable amenities and transport facilities to avoid unwarranted pollution from tourism activities.
- The Rural Development Ministry to develop clusters of villages under 'Shyama Prasad Mukherjee Rural Mission' (SPMRM) along the banks of Ganga by dovetailing other ongoing programmes.
- Ministry of shipping will take initiative and necessary efforts for sustainable shipping/river transport infrastructure in River Ganga without damaging the eco-system and biodiversity.
- The ministry of drinking water and sanitation will prioritise initiatives in establishing Open Defecation Free (ODF) 'gram panchayats' along the banks of Ganga.

**Earlier initiatives:**

Agreement between Ministry of Railway and Water Resource Ministry to use treated waste water from the Sewage Treatment Plants (STPs) and Effluent Treatment Plants (ETPs) located in Ganga and Yamuna river zones for the non-potable purpose of railways.

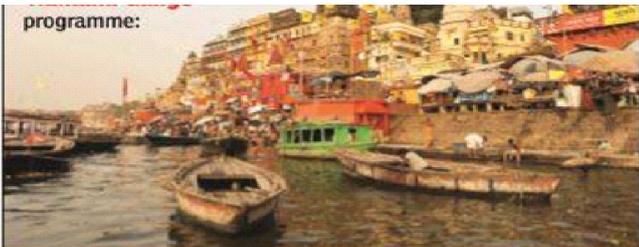
Such initiatives will ensure participation of all the stakeholders and thus better synergies in implementation. But these steps need to be complemented with steps that try to engrain the sustainable development as part of our life and livelihood so that in future we don't need such a humongous initiative to restore the pristine purity of our holy rivers.

**ACTION PLAN**

Eight ministries to work on specific issues for three years to carry forward these 21 action points under the 'Namami Gange' programme:

<ul style="list-style-type: none"> <li>➤ Taking up comprehensive measures to determine and maintain environmental flow of Ganga round the year</li> <li>➤ Rehabilitation and upgradation of existing sewage treatment facilities and taking up new projects of sewage infrastructure</li> <li>➤ Treatment of sewage and other effluents flowing directly</li> </ul>	<ul style="list-style-type: none"> <li>of select village panchayats as model panchayats to be christened as 'Ganga grams'</li> <li>➤ Tackling pollution coming from use of chemical fertilisers and pesticides</li> <li>➤ Tackling religious refuse entering into the river, including cleaning of river surface and ghats</li> <li>➤ Creating model cremation</li> </ul>	<ul style="list-style-type: none"> <li>and at Ganga Sag</li> <li>➤ Engagement c Force</li> <li>➤ Providing sup for preparation o Project Reports</li> <li>➤ Coordination I various ministrie: central governme concerned state ; capacity building governments, urt bodies and panch institutions</li> <li>➤ GIS and spatia Ganga Basin</li> <li>➤ Research proje including Ganga l Management Pla</li> <li>➤ Establishment Ganga Monitorin</li> <li>➤ Establishment Institute of River suitable location</li> <li>➤ Afforestation i</li> </ul>
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programme:



<ul style="list-style-type: none"> <li>➤ Taking up comprehensive measures to determine and maintain <b>environmental flow</b> of Ganga round the year</li> <li>➤ Rehabilitation and upgradation of existing <b>sewage treatment facilities</b> and taking up new projects of sewage infrastructure</li> <li>➤ Treatment of sewage and other <b>effluents flowing directly</b> into the river through various drains by adoption of suitable technology and financial models</li> <li>➤ Tackling <b>industrial pollution</b></li> <li>➤ Promoting sanitation in rural areas on the banks of the river Ganga and development</li> </ul>	<ul style="list-style-type: none"> <li>of select village panchayats as model panchayats to be christened as '<b>Ganga grams</b>'</li> <li>➤ Tackling pollution coming from use of <b>chemical fertilisers and pesticides</b></li> <li>➤ Tackling <b>religious refuse</b> entering into the river, including cleaning of river surface and ghats</li> <li>➤ Creating <b>model cremation ghats</b> on the banks of the river</li> <li>➤ <b>River-front development and ghats</b> at selected seven places and also at other places of cultural significance</li> <li>➤ Development of public amenities in Char Dham Yatra</li> </ul>
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## Revised standards for CETPs to minimise water pollution

The Ministry of Environment, Forest & Climate Change has notified the revised standards for Common Effluent Treatment Plants (CETPs) operating at various industrial clusters in the country.

### Aim of the new standards:

The primary aim of the revised standards is to minimize water pollution.

These standards were finalized after extensive consultations with industries and other stakeholders and detailed deliberations with the Central Pollution Control Board (CPCB).

### Significance of Revised Standards:

The revised standards will help in significantly improving the performance of CETPs through implementation of design inlet quality, addressing the problems of the coastal pollution due to industrial discharges and keeping a close watch on the impact of discharge of industrial effluent on soil and ground water quality.

### New Standards:

- A provision of soil and groundwater quality monitoring twice a year (pre- and post-monsoon) has been introduced to study the impact of disposal of treated effluent on land, in case of mode of disposal as 'on land for irrigation'. This monitoring will be carried out by the respective CETP management.
- The mode of 'Discharge into sea' (marine outfalls) providing very high dilution will qualify for a relaxed maximum permissible concentration of Chemical Oxygen Demand (COD).

### and at Ganga Sagar

#### ➤ Engagement of Ganga Task Force

#### ➤ Providing support to states for preparation of Detailed Project Reports

#### ➤ Coordination between various ministries of the central government and concerned state governments; capacity building of state governments, urban local bodies and panchayati raj institutions

#### ➤ GIS and spatial mapping of Ganga Basin

#### ➤ Research projects including Ganga River Basin Management Plan

#### ➤ Establishment of National Ganga Monitoring Centre

various ministries of the central government and concerned state governments: capacity building of state governments, urban local bodies and panchayati raj institutions

#### ➤ GIS and spatial mapping of Ganga Basin

#### ➤ Research projects including Ganga River Basin Management Plan

#### ➤ Establishment of National Ganga Monitoring Centre

#### ➤ Establishment of Ganga Institute of River Sciences at a suitable location along Ganga

#### ➤ Afforestation drive for medicinal plants and native tree species

#### ➤ Conserving diversity of Gangetic aquatic life

#### ➤ Creation of Ganga Vahini

#### ➤ Communication and public outreach activities

- The maximum permissible concentration of Fixed Dissolved Solids (FDS) by constituent units to CETP has been specified in terms of maximum allowable contribution value.

The State Pollution Control Boards are empowered to prescribe standards for Inlet quality of effluent in respect of Bio-chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS) and Total Dissolved Solids (TDS) considering CETP design and local needs & conditions. This provision will help in enforcing the norms for treated effluent quality for the CETP constituent industrial units.

### Related Concepts:

**Bio-chemical Oxygen Demand (BOD):** It is the amount of dissolved oxygen needed (i. e., demanded) by aerobic biological organisms to break down organic material present in a given water sample at certain temperature over a specific time period. BOD indicates the amount of putrescible organic matter present in water. Therefore, a low BOD is an indicator of good quality water, while a high BOD indicates polluted water. BOD can be used as a gauge of the effectiveness of wastewater treatment plants.

**Chemical Oxygen Demand (COD):** COD analysis is a measurement of the oxygen-depletion capacity of a water sample contaminated with organic waste matter. Specifically, it measures the equivalent amount of oxygen required to chemically oxidize organic compounds in water. COD is used as a general indicator of water quality and is an integral part of all water quality management programs. The higher the chemical oxygen demand, the higher the amount of pollution in the test sample.

**Central Pollution Control Board:** It is a statutory organization was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act; 1981. It serves as a field formation and also provides technical services to the Ministry of Environment and Forests of the provisions of the Environment (Protection) Act, 1986.

Principal Functions of the CPCB, as spelt out in the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, (i) to promote cleanliness of streams and wells in different areas of the States by prevention, control and abatement of water pollution, and (ii) to improve the quality of air and to prevent, control or abate air pollution in the country.

## IMD launches a system to monitor aerosols and black carbon in atmosphere

- IMD has dedicated to the nation the System of Aerosol Monitoring and Research (SAMAR) which is a network of 16 Aethalometers, 12 Sky radiometers and 12 Nephelometers to characterize aerosol radioactive properties & climate impacts.
- It will help the country in studying concentration of black carbon in atmosphere due to air pollution and its impact on climate.
- Aerosols are a subset of air pollution that contains gases, fumes and dust in harmful proportion.
- Aerosols particles can be both solid and liquid which also affects environmental visibility.
- **SAMAR** equipped with many sophisticated equipments including 12 sky radiometers, will study aerosols' different properties and determine how it impact the climate over a longer period of time. At present, country has to depend on other countries' research for this purpose.

## Environment Ministry Holds 1st National Stakeholder Consultation on the Biodiversity Finance Initiative.

- The National Stakeholder meeting has been organized to understand ( BIOFIN ) The Biodiversity Finance Initiative project and to seek professional inputs from experts of various fields in strengthening the biodiversity conservation efforts in the country to analyses the integration of biodiversity and ecosystem services in sectoral and development policy, Planning and Budgeting.

- To enumerate the programmes/activities being undertaken by different organizations in the context of India's 12 National Biodiversity Targets developed in line with 20 global Aichi biodiversity targets.
- To assess the expenditure being made by different organizations for activities related to biodiversity conservation.
- This national meet would serve as a forum on the implementation of the Biodiversity Finance Initiative at national, state and local levels - to ultimately bridge the gap between available and required funding for biodiversity conservation in India.

### Biodiversity Finance Initiative - BIOFIN

- Launched by UNDP in October 2012.
- As a new Global partnership seeking to address the biodiversity finance challenge in a comprehensive manner - building a sound business case for increased investment in the management of ecosystems and biodiversity.
- BIOFIN is managed by the UNDP Ecosystems and Biodiversity Programme, in partnership with the European Union and the Governments of Germany and Switzerland.
- The Global Environment Facility is a further partner financing parallel in-country projects in support of the revision of National Biodiversity Strategies and Action Plans (NBSAPs).

BIOFIN works along two main axes:

1. Globally-led development of a new methodological framework.

### Adaptation and implementation of this new methodological framework at national level.

## Birds species Himalayan forest thrush found in North-east

Researchers have discovered a new species of bird in north-eastern India and have named it after renowned Indian ornithologist Salim Ali. The Himalayan Forest Thrush, scientifically named as *Zoothera salimalii*, is only the 4TH species of bird discovered in India since independence.

The Himalayan Forest Thrush, till recently, had been mistaken for the Plain-backed Thrush (now called Alpine Thrush), because of the similarity in appearance.

The species differs in its song from that of the alpine thrush. The Himalayan forest thrush has a more musical call while that of the Alpine thrush is raspy and grating

The 3 dwelling species has shorter legs, tail and wings but a longer bill than its Alpine counterpart, and uses the shorter legs and tails to help it manoeuvre around in the forest.

## Increase in renewable energy use to boost global GDP by \$1.3 trillion

A recent report by Abu Dhabi based International Renewable Energy Agency (IRENA) says that doubling the share of renewable energy in global energy mix by 2030 could increase the world GDP by 1.1% or \$1.3 trillion. The study shows that there exists no trade-offs between development and environment sustainability, as has been believed till now. Study will give a boost to the efforts outlined in Paris Climate Deal and NIDCs pledged by countries to de-carbonize the global economy and will give direction to the future studies in the field. The finding will also pave way for energized efforts in the direction of achieving the SDG of ensuring clean and sustainable energy to all and improving the quality of life of the people.

### How renewable is going to help global GDP?

Report titled "Renewable Energy Benefits: Measuring the Economics" says that positive impacts of doubling the share of renewables by 2030 will be increase in GDP up to 1.1%, improvement of global welfare by 3.7 % and over 24 million people working in the renewable energy sector creating ripple effects throughout the economy.

- Investments made affect the GDP most and especially in the renewable sector which is more capital intensive. Most of the investment in renewable is done on capital assets rather than fuel supply. It will reduce the outflow of capital for countries like India through imports, make areas like desert region of Rajasthan, which were hitherto considered unsuitable for any kind of economic investment, economically prosperous and will result into better use of land resource.
- If the renewable share is doubled by electrification of final energy users, who remain without electricity, It will help in improving the quality of life of the individuals through education, health and spurt in local economic activities, poverty reduction.
- It will also entail less expenditure on health problems resulting from air pollution caused by coal or oil based energy use.
- By 2030, some renewable technologies are expected to have lower generation costs than conventional ones because of economies of scale and R&D induced cost reduction, contributing to decrease in electricity prices as the share of renewable energy grows.
- Lower electricity prices can decrease inflation, increase real incomes and household consumption, and boost economic activity in electricity-intensive sectors.
- Renewable energy jobs will increase across the renewable sectors like bio-energy, wind, solar, small hydro spread across the value chain like R&D, fuel supply (especially in case of bio-energy)

equipments and component manufacturing, deployment and installations.

- It will affect trade in energy related equipments and services like fossil fuels. Though the present energy suppliers like Gulf countries may suffer because of trade displacement but they themselves can emerge as frontrunners in the renewable with huge capital resources and abundance of solar energy.
- Renewable energy deployment will help in diversification of energy mix and will bring energy security for the fossil fuel importing countries.

### Analysis and Challenges:

- The rosy picture painted by the report has to be seen in the perspective of global economic headwinds which have caused sharp decline in crude oil prices and projections are that recovery in prices will be modest. These are going to affect investment in renewables.
- Global power politics and past behavior of the countries like USA in case of Kyoto commitments raises the doubts about the willingness of the countries. Oil rich countries are going to resist the move because of their entrenched interests. Developing countries which will be more willing are short of funds.
- Other issues like non-availability of round the clock supply, evacuation infrastructure, land acquisition problems faced by hydroelectricity plants etc still remains and desist investors.

### How to push for investments into the sector?

There is no denial of the fact that the renewable sector offers solution nearly to every problem related to sustainable and inclusive development but in light of the challenges faced combination of pragmatic and ambitious approach is required.

- Political commitment at the highest level is needed. Efforts like that by Indian to increase solar capacity to 1GW by 2022 are needed.
- Public funding need to be the initial source of investments but later has to be taken over by private sector. Some kind of financial instruments like 'environment tax' needs to be devised to bring investment in the sector and make fossil fuel based energy costly.
- New mechanisms like International Solar Alliance under India's leadership role should be created to propel the sector.
- Global financial agencies like World Bank, Asian Development Bank, AIIB etc should contribute from their kitty for this laudable idea which will bring equitably shared prosperity.

- New and old mechanism like Renewable Generation Obligation (RGO) by India, RPO (Renewable Purchase Agreements) at national level and Global Renewable Energy Fund can be established to mobilize funds at global level.

economic terms and similarly any desirability of any investment should not be measured only in terms of economic returns it provides. Ethical, environmental concerns and rights of future generations to an inclusive growth legacy must be kept in mind. Any such approach will entail greater share of renewable energy.

While planning our future growth trajectory it must be kept in mind that development cannot be limited to

**Share of renewable in energy mix:**

- Globally at present 19% of Global energy and 22% of electricity is produced from renewables.
- India has 12% renewable and 18% hydro electricity as percentage of total installed capacity.
- In India the target is to have 40% share of renewables in power sector by 2030.
- JNNSM (Jawahar Lal Nehru National Solar Mission) has the target of creating 175GW of power using renewable sources by 2022. (100 GW from Solar, 60 GW of wind and 15GW from other sources).

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## 5. SCIENCE & TECHNOLOGY

### India successfully test fired Akash missile at Chandipur

'Akash Missile' was test fired as part of a user trial mission in which 3 rounds of tests were carried out by Indian Air Force (IAF) aiming at Para-barrel targets.

#### Details about ' Akash Missile'

- Indigenously-developed by DRDO under the Integrated Guided-Missile Development Programme (IGMDP).
- It is a medium range, surface-to-air missile.
- The missile has supersonic speeds ranging from Mach 2.8 to 3.5.
- The maximum range of this missile is 25 kilometers and can neutralise targets at a maximum altitude of 20 kilometers.
- An Anti-aircraft defence system
- It is meant for neutralising medium range air targets flying at low or medium height
- Compared with the American MIM-104 Patriot, Akash has the capability to neutralise aerial targets like fighter jets, cruise missiles and air-to-surface missiles.

#### Significance

- The asset of this missile system is its capability to neutralise multiple aerial targets coming from different directions at the same time.
- This defence system consists of surveillance and tracking radars, control centers and ground support systems. This all weather missile system can work from both static and mobile platforms.
- The Akash Missile will replace the Russian weaponry system that is currently being used by the Army Air Defence Corps.

### 4th Industrial Revolution

At the World Economic Forum (WEF) held in Davos this year, an important topic in light is about the 'Fourth Industrial Revolution', described by the founder and executive chairman of WEF, Klaus Schwab, as a "technological revolution that will fundamentally alter the way we live, work and relate to one another". It is seen as an important opportunity in altering the state of the world in present scenario.

#### What is 'Fourth Industrial Revolution'?

The fourth industrial revolution is conceptualised as an upgrade on the third revolution and is marked by a fusion of technologies straddling the physical, digital and biological worlds. It will mark out as a new phase rather than a prolongation of the current revolution - velocity, scope, and systems impact and lead to the transformation of entire systems of production, management, and governance. In simple words, the new revolution can be said to be the advent of cyber-physical systems which, while being "reliant on the technologies and infrastructure of the 3RD industrial revolution represent entirely new ways in which technology becomes embedded within societies and even our human bodies".

#### Background:

- The 1st Industrial Revolution which occurred in 18th century in Britain used water and steam power to mechanize production, harnessing of steam power and birth of modern factory.
- The Second Industrial Revolution, from the last 3RD of the 19th century to the outbreak of World War I, was powered by developments in electricity, transportation, chemicals, steel, and mass production and consumption.
- Now a 4th Industrial Revolution is building on the Third, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.

#### How will it be different from 3rd Revolution?

There are 3 reasons why today's transformations represent not merely a prolongation of the 3rd Industrial Revolution but rather the arrival of a 4th and distinct one: velocity, scope, and systems impact. The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country. And the breadth and depth of these changes herald the transformation of entire systems of production, management, and governance.

#### Impacts of fourth industrial revolution:

##### On Business:

- The technologies that underpin the 4th Industrial Revolution will have a major impact on businesses.

On the supply side, many industries are seeing the introduction of new technologies that create entirely new ways of serving existing needs and significantly disrupt existing industry value chains. It will improve the quality, speed, or price at which value is delivered.

- It will also lead to major shifts on the demand side as growing transparency, consumer engagement, and new patterns of consumer behaviour (increasingly built upon access to mobile networks and data) force companies to adapt the way they design, market, and deliver products and services.
- IT will enable development of technology-enabled platforms that combine both demand and supply to disrupt existing industry structures of sharing or on demand economy. These technology platforms will create entirely new ways of consuming goods and services in the process.
- It will lower the barriers for businesses and individuals to create wealth, altering the personal and professional environments of workers.
- The main effects that the 4th Industrial Revolution has on business are on customer expectations, on product enhancement, on collaborative innovation, and on organizational forms.

#### On Government Scenario:

- New technologies and platforms will increasingly enable citizens to engage with Governments, voice their opinions, coordinate their efforts, and even circumvent the supervision of public authorities.
- Though the Governments will gain new technological powers to increase their control over populations, based on pervasive surveillance systems and the ability to control digital infrastructure. But they will increasingly face pressure to change their current approach to public engagement and policymaking.

#### On Security:

- The 4th Industrial Revolution will profoundly impact the nature of national and international security, affecting both the probability and the nature of conflict.
- The advances in technology will create the potential to reduce the scale or impact of violence, through the development of new modes of protection, for example, or greater precision in targeting.

#### Impact on People:

- The 4th Industrial Revolution will change not only what people do but also who they are. It will affect identity and all the issues associated with it: sense of privacy, notions of ownership, consumption patterns, the time people devote to work and

leisure, and how they develop careers, cultivate skills, meet people, and nurture relationships.

- Constant connection may deprive people of one of life's most important assets: the time to pause, reflect, and engage in meaningful conversation.

#### Opportunities and challenges:

The 4TH industrial revolution presents both new opportunities for global world along with the challenges. They can be discussed as:

- It has the potential to raise global income levels and improve the quality of life for populations around the world.
- It will make possible new products and services that increase the efficiency and pleasure of personal lives. Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game-any of these can now be done remotely.
- In the future, technological innovation may lead to a supply-side miracle, with long-term gains in efficiency and productivity. Transportation and communication costs will drop, logistics and global supply chains will become more effective, and the cost of trade will diminish, all of which will open new markets and drive economic growth.
- The revolution could yield greater inequality, particularly in its potential to disrupt labour markets. The net displacement of workers by machines might exacerbate the gap between returns to capital and returns to labour.
- It is also possible that in the future, talent, more than capital, will represent the critical factor of production. This will give rise to a job market increasingly segregated into "low-skill/low-pay" and "high-skill/high-pay" segments.
- Inequality represents the greatest societal concern associated with the 4th Industrial Revolution.

It is essential to grasp the opportunity and power to shape the 4th Industrial Revolution and direct it toward a future that reflects common objectives and values.

It is important to shape a future that works for all of us by putting people first and empowering them. In its most pessimistic, dehumanized form, the 4th Industrial Revolution may indeed have the potential to "robotize" humanity. But as a complement to the best parts of human nature-creativity, empathy, stewardship-it can also lift humanity into a new collective and moral consciousness based on a shared sense of destiny. For this world must develop a comprehensive and globally shared view of how technology is affecting our lives and reshaping our economic, social, cultural, and human environments.

## Copper-Titanium (CuTi) Alloy Technology

CuTi alloy was developed by DRDO's Defence Material Research Laboratory (DMRL) at Pune, which was granted its patent in 2004. It was lying hidden in the lab till DRDO and FICCI conceived the ATAC (Accelerated Technologies Assessment and Commercialization) programme in July 2008.

### How CuTi Technology developed:

DRDO works on products containing explosives and other inflammable material which cannot be worked upon with conventional tools. The heat produced by the last torque of the conventional spanner, and the slip of the tool creates an arc which renders these tools unsafe. DRDO was importing tools made of Copper-Beryllium (CuBe) alloy from abroad which needed to be replaced. But Beryllium is highly toxic and it is also not available in India. This led to development of CuTi alloy by DMRL which filed for a patent in 1999.

### Issues in existing CuBe Alloy technology:

CuBe is strongest known alloy of Copper and finds uses in many applications across industry sectors. Beryllium is a rare-earth material, hazardous to produce and causes fatal human disease called Chronic Beryllium Disease, when the exposure exceeds a certain limit. Many countries are restricting or banning use of alloys containing beryllium. Because of its rare earth nature and strategic use in high-end defence products, Beryllium is also prohibitively expensive.

### Properties & use of CuTi Technology:

Of the many alternatives developed globally, DRDO's CuTi comes closest to CuBe, in which Copper provides malleability and Titanium provides strength. The resulting alloy has high conductivity and thus produces no spark. Besides non-sparking hand tools, the start-up also intends to use the alloy for resistance welding products, MIG welding, electrical contacts, plunger tips, dies and moulds products, engine valve seats and for other special applications.

Pune-based start-up has been granted an exclusive license to manufacture CuTi products in India and sell them globally. DRDO will charge an upfront Transfer of Technology fee and a royalty that will be paid over 10 years.

### Accelerated Technologies Assessment and Commercialization programme:

The ATAC programme has been conceived to identify 'hidden treasures' in various DRDO labs and bring them to the market. Most of these products and technologies were closed activities but they have now been brought back to life under 'Make in India'.

The DRDO - FICCI ATAC programme aims to create a commercial pathway to deliver technologies developed

by DRDO for appropriate commercial markets for use in civilian products and services.

This programme is 1ST of its kind to be undertaken by DRDO in association with FICCI to actively spinout several of DRDO's technologies for appropriate commercial markets both nationally and internationally. In the very 1ST year of operation of the programme as many as 26 DRDO labs across India are participating and over 300 technologies are being assessed under this programme by FICCI. The technologies that are currently assessed are from sectors as diverse as electronics, robotics, advanced computing and simulation, Avionics, optronics, precision engineering, special materials, engineering systems, instrumentation, acoustic technologies, life sciences, disaster management technologies, information systems, etc. This will enable the participation of private sector & diversification.

### The programme process comprises the following steps:

#### Technology Assessment:

- High Level Quantitative and Qualitative Evaluations
- Extensive Interviews and Analysis
- Quick Look Scan

#### Business Development:

- Business Development Plan
- Identifying Business Partners
- Industry Interface via Visits, Calls and Follow-ups
- Licensing Agreement

## Chinese scientists develop New Bio-artificial Liver

- Chinese scientists have developed a new bio-artificial liver that can help liver failure patients survive long enough for an organ transplant.
- Designed to be attached outside a patient's body, the bio-artificial liver is based on human liver cells.
- A bioartificial liver can help recover patients' liver functions and prolong their lives so they can wait for suitable donor livers for a transplant, which is currently the only solution to critical cases.
- The new device is based on cells taken from human skin, fat or other tissues and reprogrammed into liver cells. It is safer and less likely to cause a rejection reaction.
- Tests on lab animals found pigs with acute liver failures had an average 80 % survival rate after they were treated with the new bioartificial liver.
- The 1st Inartificial liver device was developed by a US doctor, Kenneth Matsumara and was named

an invention of the year by Time magazine in 2001. Liver cells obtained from an animal were used instead of developing a piece of equipment for each function of the liver.

## Scientists breed high yield super Arhar variety.

Scientists at the Indian Agricultural Research Institute (IARI) have developed a new arhar (pigeon-pea) variety that matures in 120 days, gives the same 20 quintal-per-hectare yields of normal 160-180 day plants and is, moreover, amenable to mechanical combine harvesting.

### The traditional variety:

- Normal arhar plants are mostly 'indeterminate'; they keep growing and, left to themselves, can even become perennial trees.
- Here, the meristematic cells keep dividing and producing vegetative buds, giving rise to new leaves and shoots.
- The flowers produced from the axillaries and lateral branches do not set pods at the same time. So, even at the time of harvesting, not all the pods are mature.
- Cultivated in Bihar and eastern Uttar Pradesh, Maharashtra, Karnataka and Madhya Pradesh.

### The New Variety:

- Now bred is a 'determinate' pigeon-pea called PADT-16 (Pusa Arhar Determinate) where, the flowering and pod-setting is synchronous, with the crop maturing and ready for harvest in 120 days.
- Totally new plant-type, whose apical meristems (tissues at the tip of the main stem) only produce flowers, pods are set and growth is stopped.
- Unlike the indeterminate pigeon-pea plants, here the growth stops with production of flowers and setting of pods

### The Benefits :

- 1st Being a dwarf semi-erect plant makes pesticide spraying easier. The normal arhar plants rise to 6 feet levels, at which application is difficult and also tends to be non-uniform.
- Synchronous maturity and plodding happening only at the top - because of the compact canopy and no tertiary or quaternary branch growth - means the entire arhar crop can be harvested at one go using combine harvesters.

## NASA launched SpaceX Falcon 9 Rocket with Jason-3 Ocean-monitoring satellite.

'Falcon 9 is a two-stage rocket' designed and manufactured by SpaceX for the reliable and safe

transport of satellites and the Dragon spacecraft into orbit.

- It was designed from the ground up for maximum reliability.
- Its simple 2-stage configuration minimizes the number of separation .
- Falcon 9 made history in 2012 when it delivered Dragon into the correct orbit for rendezvous with the International Space Station, making SpaceX the first commercial company ever to visit the station.
- Falcon 9, along with the Dragon spacecraft, was designed from the outset to deliver humans into space and under an agreement with NASA, SpaceX is actively working toward that Goal.

**SpaceX** designs, manufactures and launches advanced rockets and spacecraft. The company was founded in 2002 to revolutionize space technology, with the ultimate goal of enabling people to live on other planets.

**Jason-3**, a U.S.-European oceanography satellite mission with NASA participation that will continue a nearly quarter-century record of tracking global sea level rise, lifted off aboard a SpaceX Falcon 9 rocket.

- It is an international mission led by the National Oceanic and Atmospheric Administration (NOAA) in partnership with NASA, the French space agency CNES, and the European Organization for the Exploitation of Meteorological Satellites.
- The mission will improve weather, climate and ocean forecasts, including helping NOAA's National Weather Service and other global weather and environmental forecast agencies more accurately forecast the strength of tropical cyclones.
- The measurements from Jason-3 will advance NASA's efforts to understand Earth as an integrated system by increasing our knowledge of sea level changes and the ocean's roles in climate.

## World Development Report: Digital Dividends

World Bank released its flagship World Development Report with the theme 'Digital Dividend'. It says that digital technologies have spread rapidly in much of the world. Digital dividends - the broader development benefits from using these technologies - have lagged behind. In many instances digital technologies have boosted growth, expanded opportunities, and improved service delivery. Yet their aggregate impact has fallen short and is unevenly distributed. For digital technologies to benefit everyone everywhere requires closing the remaining digital divide, especially in internet access. But greater digital adoption will not be enough. To get the most out of the digital revolution, countries also need to work on the "analog complements"-by

strengthening regulations that ensure competition among businesses, by adapting workers' skills to the demands of the new economy, and by ensuring that institutions are accountable.

### 1. Digital transformations-digital divides:

- a. Digital divides in the form of urban - rural, male -female, north -south, age divide remains and effect the equitable distribution of benefits.
- b. Less than 15% of the world's 7.4 billion people have access to high speed internet, although 5.2 billion have mobile phones.
- c. India has the highest number of offline people in the world, followed by China.
- d. Even some of the benefits are neutralized by new risks or losses. Like gain in employment for online streaming is lost by loss in CD industry.

### 2. How the internet promotes development?

- a. Internet promotes development through three main mechanisms: inclusion, efficiency and innovation. Innovations like M-Pesa (digital payment system) have brought financial inclusion. M-Pesa, Aadhaar are all examples of inclusion, efficiency and innovation.

### 3. The dividends: Growth, jobs, and service delivery

- a. For businesses, the internet promotes inclusion of firms in the world economy by expanding trade, raises the productivity of capital, and intensifies competition in the marketplace, which in turn induces innovation.
- b. It brings opportunities to households by creating jobs, leverages human capital, and produces consumer surplus.
- c. It enables citizens to access public services, strengthens government capability, and serves as a platform for citizens to tackle collective action problems.

### 4. The risks: Concentration, inequality, and control

- a. It says that nearly 60% of world population is offline and thus hampering their participation in the digital economy in any meaningful way.
- b. Polarization of labor markets because technologies replacing low skill jobs and augmenting high skill jobs, policy capture by elites because of public sector investment in digital technologies in the absence of accountable institutions and because the

economics of the internet favor natural monopolies.

- c. The absence of a competitive business environment can result in more concentrated markets, benefiting incumbent firms.
- d. The better educated, well connected, and more capable have received most of the benefits-circumscribing the gains from the digital revolution.

### 5. Making the internet universal, affordable, open, and safe

- a. The unfinished task of connecting everyone to the internet-one of the targets in the recently approved Sustainable Development Goals (SDGs)-can be achieved through a judicious mix of market competition, public-private partnerships, and effective regulation of the internet and telecom sector.
- b. Also the accessibility should be accompanied by affordability.
- c. Safety issues like privacy, cyber security and censorship and content filtering needs to settled through government led rules and regulations.

Access to the internet is critical, but not sufficient. The digital economy also requires strong analog components given below.

### 6. Analog complements for a digital economy:

- a. Regulations that promote competition and entry by lowering the barriers to digital adoption, increasing competition through effective regulation and enforcement and tailoring "new economy" regulations to ensure competition.
- b. Skills for the digital economy: Start early with foundational skills, rethink curricula and teaching methods and develop advanced technological skills and encourage lifelong learning.
- c. Institutions that are accountable to citizens : Improve informational services and monitoring, strengthen e-government delivery and citizen engagement, deepen collaboration and participatory policy making
- d. Digital safeguards and Developing privacy policies: Digital safeguards needs to be created to secure the large amount of data that has been collected. For example security of data collected through Aadhaar needs to be secured through laws and proper infrastructure.

## 7. Global cooperation to solve global problems

The internet is truly an international network. It can be better managed with coordination across nations and serve as a powerful platform to facilitate global cooperation. Three priority areas are

- Governing the internet,
- Creating a global digital market,
- Providing global public goods-including those that promote poverty reduction and environmental sustainability.

Digital technologies are transforming the world of business, making societies more productive and making service delivery more inclusive and efficient. But to make everyone reap the benefits of digital technologies just access to technology is not sufficient but needs to be complemented by improvements in areas that determine whether firms, people, and governments can make effective use of new digital tools. The analog foundation cannot be strengthened overnight. It requires overcoming some of the most protracted development challenges:

- How to create an environment for firms to thrive,
- How to build effective education and training systems,
- And how to make service providers more responsive to citizens.

The stakes are high, because the digital revolution leaves behind countries that do not make the necessary reforms. For those that do, technology investments will produce ample digital dividends, and these dividends will be widely shared among all stakeholders.

### Initiatives by India :

**Digital India** initiative is a comprehensive initiative by government of India to provide digital infrastructure, governance based on digital platforms and people empowerment.

**BharatNet** to provide digital connectivity in rural areas.

**Common service centers** as the one point service center for accessing government services.

**Cyber Security Policy 2013** to promote secure cyber space.

## German Measle Vaccine ready at hand, challenges in Rollout

### Rubella:

Rubella is an infectious disease caused by a virus. It is also known as German measles or 3 -day measles, but it is not the same disease as measles. Young children who get rubella usually have a mild illness, with symptoms that can include a low-grade fever, sore

throat, and a rash that starts on the face and spreads to the rest of the body. Older children and adults are more likely to have a headache, pink eye, and general discomfort before the rash appears.

Older children and adults are more likely to experience headache, pink eye, and general discomfort before the rash appears. Aching joints occur in many cases, especially among young women. The most serious complication from rubella infection is the harm it can cause to a pregnant woman's unborn baby. Rubella is usually spread to others through sneezing or coughing.

Rubella can be prevented through vaccination.

### Available Vaccines:

- MMR:** contains measles, mumps, and rubella combination vaccines.
- MMRV:** contains measles, mumps, rubella, and varicella (chickenpox) combination vaccines.

MMR vaccine is very safe and effective. MMR vaccine is the best way to protect children against rubella and to prevent them from spreading the disease to pregnant women and their unborn babies. Anyone born during or after 1957, which has never had rubella or has never been vaccinated, against rubella should receive at least one dose of MMR vaccine.

### Rubella Infection in India:

Every year, approximately 25,000 children with congenital rubella infection are born in India, say estimates available with the ministry. According to a study by the University College of Medical Sciences, Delhi, "1-15% of all infants suspected to have intra-uterine infection were found to have laboratory evidence of CRS (congenital rubella syndrome). About 3-10% of suspected CRS cases are ultimately proven to have confirmed CRS with the aid of laboratory tests. CRS accounts for 10-15% of pediatric cataract. 10-50% of children with congenital anomalies have laboratory evidence of CRS. 10-30% of adolescent females and 12-30% of women in the reproductive age-group are susceptible to rubella infection in India.

The National Advisory Body recommended in 2014 that a vaccine for measles-rubella, commonly known as German measles, be introduced in the universal immunization programme, however, Rubella vaccine MMR, available in private sector, is mandatory for pregnant women but optional for children. The manufacturer, Serum Institute, is ready with a stockpile of 400 million doses and has offered to sell these to the government at 1/5TH the price.

### Challenges in Rollout:

More than 18 months since recommendations, MMR does not figure anywhere in the government's vaccine priority. It is initial estimates that the publicity campaign for the vaccine could end up costing Rs. 1,500 crore

that, according to sources, is causing the government to drag its feet. The government has been sitting on a vaccination for measles.

## Green Cement

### Why in News?

An Indian company, Kiran Global Chems Ltd. has introduced its indigenously-developed eco-friendly Geo cement. It is claimed that it will cut carbon emission levels while being stronger than Portland cement.

### What Green cement contain?

The green cement comprises a range of products including geo-binder, geo-powder and geo-concrete (geocrete) in which the geo-binder and geo-powder will be mixed proportionately so as to arrive at the final

product, which is Geocrete. It would be completely recyclable, unlike polymer cement that's non-biodegradable.

The anti-bacterial properties of the cement can be used for construction of underground sewage pipes and toilets as well.

The most common construction cement, Portland cement is the most caustic, containing toxic ingredients like silica and chromium. It has environmental concerns on every level from the high energy consumption related for mining it to the release of a high volume of greenhouse gases.

Around 800 kgs. of carbon fumes is emitted by every ton of cement. If the polymer cement is replaced with geo-cement, it will help reducing carbon emissions by over 80%.

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