

# Abhimanu

## Weekly current affairs Series

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**Week: II, May 2017**

**Abhimanu's IAS Study Group**

**Chandigarh**

## NATIONAL ECONOMIC AFFAIRS

### Reasons of failure to curb NPAs

- Loss recognition: The Asset Quality Review was meant to force banks to recognise the true state of their balance sheets. However banks still continue to evergreen loans
- Coordination: The Joint Lenders Forum encouraged by the RBI takes decisions by 75% of creditor's value and 60 % by numbers. However reaching agreement in these forums has proved difficult.
- The S4A scheme recognises large debt reductions will be needed to restore viability in many cases. However the Public Sector Banks are reluctant to grant write-downs, because of lack of incentives. On the contrary major write downs have an inherent threat of punishment and attract investigation.
- Under the Indradhanush Scheme, The government has pledged close to 70,000 crore Rupees capital infusion in Public sector Bank by 2018-19, however it is far from sufficient.
- The bulk of the NPA problem is not located in ordinary cases, rather stressed assets are concentrated in a remarkably few borrowers, (a mere 50 companies account for 71 % if the debt owned by IC1 companies). These large debtors have many creditors and so a well defined strategy has to be forged for writing off such loans.

### External Sector: Economic survey 2016-17

- The current account deficit has declined to reach about 0.3 percent of GDP in the first half of FY2017
- The trade deficit declined by 23.5 per cent in April-December 2016 over corresponding period of previous year.
- The main factor was the contraction in imports, which was far steeper than the fall in exports.
- The improvement in exports appears to be linked to improvements in the world economy, led by better growth in the US and Germany.
- The net services surplus declined in the first half, as software service exports slowed and financial service exports declined.
- FCNR DEPOSITS- an FCNR (Foreign Currency Non-Resident) account is a term deposit account that can be maintained by NRIs and PIOs in foreign currency. Thus, FCNRs are not savings accounts but fixed deposit accounts.
- Foreign exchange reserves are at comfortable levels, having have risen from around US\$350 billion at end-January 2016 to US\$ 360 billion at end-December 2016 and are well above standard norms for reserve adequacy.
- In part, surging net FDI inflows, which grew from 1.7 percent of GDP in FY2016 to 3.2 percent of GDP in the second quarter of FY2017, helped the balance-of-payments.
- The trade deficit declined by 23.5 per cent in April-December 2016

### Improvements in MGNREGA: Economic Survey 2016-17

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is the largest social security scheme in the world that guarantees 100 days of unskilled manual work to all rural households in India giving rural

households the right to work. It makes obligatory for the State to give them work on demand. MGNREGA creates livelihood opportunities for our fellow citizens and sets a minimum wage threshold for low income earners. About one in two jobs created under the scheme is for women and about 40 per cent for SC/ST.

- The MGNREGA program has evolved over the last two years to increase its focus on creation of durable assets, diversification of livelihood opportunities, selection of public works in congruence with other infrastructure programs such as Pradhan Mantri Gram Sadak Yojana and Pradhan Mantri Awas Yojana-Grameen and a greater thrust on natural resource management and agriculture & allied activities.
- The programme is self-targeted. The program also provides a higher number of days of employment (150 days instead of 100 days) in drought affected areas. Technological and programmatic improvements have been made in the last two years.

#### **Improvements in MGNREGA**

- Digitization of Job cards
- Workers have been brought under the Aadhaar Payment bridge
- Public Geo-tagging of assets to improve transparency and accountability
- Direct benefits transfer into accounts of beneficiaries
- Verification and updating of Job cards.
- Participation of Women has increased to 56% in 2016-17.
- Majority of the works have been under Agriculture and Allied Activities.

### **Monetary Management**

- The Government amended the Reserve Bank of India Act, 1934 to provide for inflation targeting once in every Five years and provide for a statutory constitution of an empowered Monetary Policy Committee (MPC). As per the revised monetary policy framework, the Government has fixed the inflation target of 4 per cent with tolerance level of +/- 2 per cent for the period from 2016 to 2021.
- Measures to strengthen corporate bond The RBI has taken a number of measures to strengthen the corporate bond market in India.

**It accepted many of the recommendations of the Khan Committee to boost investor participation and market liquidity in the corporate bond market, major ones are:**

- Commercial banks are permitted to issue rupee-denominated bonds overseas (masala bonds) for their capital requirements and for financing infrastructure and affordable housing
- Brokers registered with the Securities and Exchange Board of India (SEBI) and authorized as market makers in corporate bond market permitted to undertake repo reverse repo contracts in corporate debt securities. This move will make corporate bonds fungible and thus boost turnover in the secondary market
- Banks are allowed to increase the partial credit enhancement they provide for corporate bonds to 50 per cent from 20 per cent. This move will help lower-rated corporates to access the bond market
- Permitting primary dealers to act as market makers for government bonds, to give further boost to government securities by making them more accessible to retail investors.

### **Urban Local Bodies (ULBs)**

The 74th Constitutional Amendment Act of India lays the foundation for a sustainable Urban Governance System in the Country.

It has led to the formation Urban Local Bodies as the administrative units, who provides basic infrastructure and services in urban areas i.e. cities and towns.

There are roughly 3255 urban local bodies (ULBs) in the country classified into the four major categories :

1. Municipal corporation (Nagar Nigam)
2. Municipality (municipal council, municipal board, municipal committee)
3. Town area committee
4. Notified area committee

With India traditionally focusing on the need to foster Competitive federalism, time has come to promote competitive sub-federalism as well. Competition between states is becoming a powerful dynamic of change and progress. This dynamic needs to be extended to competition 'between states and cities' and 'between cities' for India to grow sustainably. Competitive sub-federalism means that local governments compete with other regional local governments.

It has been observed that while most of the countries more or less follow the **Zipf's Law**, India is not adhering to it. The major reasons for this anomaly are:

- a) The infrastructure in the cities is overburdened.
- b) India is land-scarce relative to other countries discouraging migration
- c) Indian cities suffer from distorted land markets rendering rents unaffordable.
- d) Mobility in India is limited by strong place-based preference embedded in deep social networks

## The Role Of Apparel And Leather In Low Skill Manufacturing

- India needs to generate jobs that are formal , productive, have the potential for broader social transformations and can generate exports and growth. The apparel and leather & Footwear sectors meet most of these criteria.

### Apparel and Leather sector

- These sectors offer tremendous opportunities for creation of jobs especially for women. The apparel sector is the most labor-intensive followed by footwear. Apparel sector is more labor intensive than Auto and Steel. A high Labor intensity indicates an industry that requires a large amount of labor to produce its goods or services. The degree of labor intensity is typically measured in proportion to the amount of capital required to produce the goods or services; the higher the proportion of labor costs required, the more labor intensive the industry.
- The sectors if encouraged can prove to be the vehicles of Social Transformation. For instance, in Bangladesh, female education, education and women's labour force participation rate moved positively due to the expansion of apparel sector.

### Opportunity for India

- India has a historic opportunity to promote apparel, leather and footwear sectors because rising wage levels in China has resulted in China stabilizing and so losing market share.
- India is well positioned to take advantage of China's deteriorating competitiveness as wages in most Indian states are quite low.
- However, India need to act fast as the space vacated by China is being filled by other countries. In case of apparels by Bangladesh and Vietnam; in case of leather and footwear by Vietnam and Indonesia.
- Indian apparel and leather firms are relocating to Bangladesh, Vietnam, Myanmar and Ethiopia, highlighting the need to act urgently. Employment Elasticity is a measure of the percentage change in employment associated with a 1 percentage point change in economic growth. The employment elasticity indicates the ability of an economy to generate employment opportunities for its population as per cent of its growth (development) process.

### Challenges

- **Logistics:** India lags behind relative to competitors. The costs and time involved in getting goods from factory to destination are greater in India. Also, very few Very Large Capacity Containers (VLCC) come to India to take cargo making it necessary for exports to be shipped through Colombo instead. This increases the cost of India's exports and reduces flexibility for manufacturers.
- **Labor regulations:** Regulations on minimum overtime pay, onerous mandatory contribution that in many ways becomes a form of tax for the low paid workers in small firms, lack of flexibility in part-time work and high minimum wages lead to lack of competitiveness in the sectors. Indian firms are smaller compared to firms in China and Vietnam ( 78 percent of Indian firms in India employ less than 50 workers )

- Tax and Tariff policies create distortions that impede India gaining export competitiveness.
- Discrimination in Export markets as India's competitors enjoy a better market access in the two major importing markets of USA and EU. In the EU, Bangladesh's and Ethiopia's goods enter duty free being a Less Developed Country. On the other hand Vietnam enjoys zero tariff because of its Free Trade Agreement.
- Leather and Footwear sector suffer from certain sector specific challenges. The industry uses raw hides and skins of animals like cattle, buffalo, goat, sheep and other smaller animals. The leather made out of cattle has greater global demand because of its strength, durability and superior quality. Despite having a large cattle population, India's share of its exports is very low because of lower availability of cattle for slaughter.

## Special Category Status

- The concept for first introduced in 1969 to provide disadvantaged states with preferential in the form of central assistance and tax breaks. The states of Assam, Nagaland, Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tripura, Uttarakhand and Jammu and Kashmir have been given Special Category status.

The Major factor that determine the grant for special Status are:

- 1. Hilly and difficult terrain
- 2. Low population density/sizeable share of tribal population
- 3. Strategic location along international Borders
- 4. Economic and infrastructural backwardness
- 5. Non-viable state finances.

Benefits of Special Category Status(SCS)

- Assistance to Centrally Sponsored Schemes for SCS States is given with 90% Central share and 10% State share. (Compared to 70 : 30 generally). Following the constitution of the NITI Aayog (after the dissolution of the Planning Commission) and the recommendations of the Fourteenth Finance Commission (FFC), Central plan assistance to SCS States has been subsumed in an increased devolution of the divisible pool to all States (from 32% in the 13th FC recommendations to 42%) and do not any longer appear in plan expenditure.

## NATIONAL POLITY

### Doctrine of "SAMADHAN"

- The Home Minister has enunciated an operational strategy 'SAMADHAN' to fight Left Wing Extremism.
- The elements of this strategy are S for Smart Leadership, A for Aggressive Strategy, M for Motivation and Training, A for Actionable Intelligence, D for Dashboard-based Key Result Areas and Key Performance Indicators, H for Harnessing Technology, A for Action Plan for Each Theatre and N for No access to Financing.

**Analysis:**

- Naxal problem can't be resolved through 'silver bullets' or through any shortcut, but through short-term, medium-term and long-term solutions.
- Residential camps of security forces should be well equipped with power, water facility and better connectivity. There is need to depute shadow intelligence officers to track prominent targets associated with Left Wing Extremism (LWE)
- Forces will be equipped with smart guns featuring triggers activated by biometrics. Analysis of attacks, intelligence from surrendered Naxals, inspiring leadership should be developed

- Ministry of Home Affairs has assisted the States through various schemes for Capacity Building. Under the SRE(Security Related Expenditure) Scheme, reimbursement of security-related expenses, such as exgratia, transportation, training, honorarium for SPOs etc, was done by the Central Government in 106 districts of 10 States. In the financial year 2016-17, the Home Ministry has reimbursed Rs 210 crore.
- Under the Special Infrastructure Scheme, 122.13 crores was given to strengthen the special forces of 6 States. Apart from this, a sum of 24 crores was provided for setting up 16 CIAT schools in 6 States. More than 4000 police personnel are being trained every year by Army and Greyhounds.
- Similarly, under the Fortified Police Station Scheme, the Central Government has made available Rs. 624 crores to the States for the construction of 400 Fortified Police Stations in 10 States.
- LWE Affected States have been sanctioned 56 IRB(Indian Reserve batallion) and 10 SIRB(Special Indian Reserve batallion). States have been given these sanctions to increase their force resources. The SIRB is a major step towards providing security for the State's infrastructure projects, especially in these sensitive areas.
- Alongside aggressive operations, road construction works, setting up of telecommunication, power and railway facilities in the remote areas will be expedited. Government has also stressed for befitting strategies during the security operations and enhanced intelligence in tackling the Maoists.
- Economic resources play an important role in any war — only when money is available is it possible to buy, eat, drink and possess ammunition and weapons. Therefore, choking the financial resources of the left wing extremists is the most basic mantra in this fight.

## Panel on Consumption of Fat, Sugar and Salt (FSS)

- An expert panel set up by food regulator FSSAI has recommended additional tax on highly processed food items and sugar-laced beverages as well as a ban on advertising of junk foods on children's channels or during kid's shows on TV.
- The report by the 11-member panel on Consumption of Fat, Sugar and Salt (FSS) and its health effects on Indian population suggests ways to cut consumption of unhealthy food products and reduce rising burden of chronic diseases like cancer and diabetes.

### Recommendation of the report:

- The report recommended having balanced diet which should provide around 60-70 per cent of total calories from carbohydrate, 10-12 per cent from protein and 20-30 per cent from fat.
- The panel recommended "additional tax on highly processed commodities and sugar sweetened beverages".
- The nutrition-related programmes of the government can be supported through profit from taxing unhealthy food products.
- Advertisement ban for foods high in FSS during children TV shows or kids TV channels is urged. In fact, we should progress towards a total ban law as being done in a few other countries like Chile.
- Celebrity endorsements of such foods need to be discouraged, adding that online social media websites should also comply with advertising ban for unhealthy foods.
- The panel also pitched for reliable monitoring systems to examine FSS intake periodically at the national level.
- Information like total calories, amount of carbohydrates, sugar, fat, protein, sodium, dietary fibre, amount of trans-fat added in food should be mandatory for labelling in food products.
- Consumption of unsaturated fatty acids, especially the long chain mono- and poly unsaturated-fatty acids, should be encouraged in everyday diets was among the recommendations.
- Imposition of excise tax on unhealthy eating products would lead to positive health effects among population. The nutrition-related programmes of the government can be supported through profit from taxing unhealthy food products.

### Analysis:

- In India, the rising burden of mortality and morbidity due to chronic diseases such as cardiovascular, respiratory diseases, diabetes and cancers is alarming. In the next 25 years, the burden of chronic diseases

will tend to increase continuously as a ramification of the rapidly transitioning food intakes, changing dietary patterns and other lifestyle factors

- A total of 10 per cent of total energy is allowed as added sugars in our daily diet. Simple sugars and refined carbohydrates should be reduced. These come largely from sugar sweetened beverages and processed snacks with high added sugar content.
- A salient finding was that Low Income Groups (LIG) reportedly consumed more fried snacks and sweets than High Income Groups (HIG) and, the highest consumption of bakery items was in slums, said a study on urban populations.
- Imposing additional tax on the purchase of commodities such as pre-packaged foods with high salt and fat content, sugar sweetened beverages, etc can be a pragmatic approach to reduce their intake

## **Integrated Case Management Information System (ICMIS)**

- Supreme Court's Integrated Case Management Information System (ICMIS) was recently launched Indian Prime minister.

### **About Integrated-Case-Management-Information-System**

- The Integrated Case Management Information System or ICMIS is described as the next generation hybrid database which is used to better enable litigants to access and retrieve information online.
- This will help usher transparency, reduce manipulation and help the litigant know about the progress of the case on a real time basis. It will help the bar and not increase its workload.

### **ICMIS will provide information on:**

- Next tentative date of listing generated through e-process
- Categories and Acts & Section
- Objections in Defective matters
- Interlocutory Application/Documents
- Office Reports
- Listing dates
- Judgement/Orders
- Appearance information of accused.
- Tracking of file movement
- Status of the notice issued
- Along with this, there will also be an online court fee calculator and an online limitation calculator, apart from an online court fee payment gateway according to barandbench.com.
- With the help of a new software, High Court will be able to access the case records and it will reduce the repetition of case data entries in the Supreme Court.

## **Local Treatment of Urban Sewage Streams for Healthy Reuse**

- Department of Biotechnology and Netherlands Science Agency have announced a joint call for proposals for cleaning the Barapullah drain under the Project "Local Treatment of Urban Sewage Streams for Healthy Reuse (LOTUS HR).

### **Local Treatment of Urban Sewage Streams for Healthy Reuse (LOTUS HR)**

- The project Local Treatment of Urban Sewage Streams for Healthy Reuse (LOTUS HR) is an Indo-Netherlands joint project funded by Department of Biotechnology(DBT), Govt of India and NWO/STW, The Govt of Netherlands.
- The project has stakeholders from both Academia and Industry from India and Netherlands.
- The project aims to demonstrate a novel holistic water management approach, that will produce clean water that can be reused for various purposes (e.g. industry, agriculture, construction etc.), while simultaneously

recovering nutrients and energy from the urban waste water, thus converting drain into profitable mines. Special attention will be paid to pathogen removal and removing conventional and emerging pollutants.

- The project will develop an innovative pilot scale plant, suitable to cope with Indian conditions in a location specific manner. The final design of the pilot plant will be scalable and modular, to fit into the highly populated urban terrain.
- The participation of end-users in the project will ensure that the demonstration site becomes a self-sustaining initiative that will not finish at the end of the project and will be taken up by the end-users. From the early start of the project, end-users (municipality, DDA, DJB, NGO's, and companies like Shell, Hydorrock, Nijhuis, Berson, etc.) will be engaged in design at the pilot location as well as in formulation of specific research sub-questions. This will facilitate rapid adoption of the Water Resuse safety plan and the newly developed products.
- Dutch and Indian companies will contribute to the project by sharing their existing technologies, which may need adjustments for becoming functional in the pilot plant. Architects like Schulte Holding will advise on incorporating these water treatment units in urban mega cities. Engineers from DDA will help in site preparation and civil construction of the pilot plant.

## INTERNATIONAL AFFAIRS

### Chabahar port

- The port of Chabahar is located in southeastern Iran in the Gulf of Oman. It is the only Iranian port with direct access to the ocean.

#### Analysis:

- It will bolster trade by gaining access to Afghanistan, Central Asia and other parts of west Asia and even Europe. India is presently dependent on Pakistan for accessing Afghanistan through Afghanistan-Pakistan Trade and Transit Agreement which is not cost effective.
- Further Afghanistan is rich in resources like Iron, Copper, Gold and rare metals which can be tapped by India once easy access is achieved.
- Given its proximity to the Strait of Hormuz will boost oil trade.
- The distance between Kandla and the Chabahar port is less than the distance between New Delhi and Mumbai.
- This agreement enables India to do quick movement of goods first to Iran and then onwards to Afghanistan and Russia through rail & road links and INSTC.
- Over Rs 1 lakh crore investments will happen in Chabahar free trade zone. It will encourage reciprocal ties in other areas amongst participant countries (especially energy and mineral resources of Iran and Afghanistan).
- This will also give momentum to the International North-South Transport Corridor of which India and Iran are initial signatories along with Russia. Iran is the key gateway in this project. It entails the ship, rail, and road routes for moving freight between India, Russia, Iran, Europe and Central Asia. Compared to current Indian Ocean-European transport route via Red Sea, Suez Canal and Mediterranean, Chabahar-based INSTC is estimated to be 40% shorter and will reduce cost of Indian trade by 30%.
- India has traditionally attached great importance to its relations with Central Asia. But, unfortunately, the relationship despite close historical & cultural contacts has not progressed to the desired extent. The key



constraint India faces is the lack of direct access to Central Asia. The unstable situation in Afghanistan and a highly problematic India-Pakistan relation have deprived India from the benefit of relations with Central Asia.

- India's traditional old ties with Iran and substantial investment in Chabahar port also provide India with an opportunity to become an important player in Middle East
- However, there are some challenges to this port also. There is need to ensure healthy dialogue with China and Pakistan to avoid any suspicion. Today, the watch-words of international ties are trust not suspicion; cooperation not dominance; inclusivity not exclusion. This is also the guiding philosophy and driving spirit of the Chabahar Agreement.
- This will be a corridor of peace and prosperity for our peoples. Motives of economic growth, and empowerment would drive it. It will build our security without making others vulnerable. It would break barriers among our nations and encourage new benchmarks of people-to-people contacts. And, help us to eventually build what we all desire and deserve - a friendly and healthy neighborhood.

## India Skipped One Belt One Road (OBOR) Summit

- India has skipped One Belt One Road (OBOR) project summit as a part of it passes through the Pakistan-Occupied Kashmir. India categorically stated that connectivity projects must "respect sovereignty and territorial integrity".
- All the South Asian countries barring India have already signed up for OBOR.

### What is OBOR?

- One Belt One Road initiative focuses on improving connectivity and cooperation among Asian countries, Africa, China and Europe.
- The emphasis is on enhancing land as well as maritime routes. The policy is significant for China since it aims to boost domestic growth in the country.

### Analysis:

- India's primary objection to the OBOR that it sees as a 'unilateral' or 'national' initiative of China is that one of its subsets – China-Pakistan Economic Corridor traverse through Gilgit-Baltistan that India considers to be its territory.
- China did not take Delhi in confidence when it unilaterally decided to introduce and implement projects in many of the South Asian countries. Such projects in their current form not only have the potential to push the countries into financial crisis having direct bearing on India but also have strategic implications for Delhi during times of conflict.
- India is pursuing the Trilateral Highway project under the 'Act East' policy; developing multimodal linkages with Myanmar and Bangladesh under 'Neighbourhood First' policy; engaged with Iran on Chabahar Port and with Iran and other partners in Central Asia on International North South Transport Corridor under the 'Go West' strategy; and the BBIN initiative is aimed at enhancing logistics efficiencies in South Asian region.

## India elected President of UN-Habitat

- India has been elected as the President of the UN-Habitat. UN-Habitat is an organ of the United Nations Organisation (UNO), which reports to the United Nations General Assembly.
- India has been designated as the President of the UN-Habitat after a break of 10 years.
- This is the third time that India has been elected as the President after 1988 and 2007.
- India will be represented by the Union Minister of Housing & Urban Poverty Alleviation.

### About UN Habitat:

- UN-Habitat is established in 1978.
- UN-Habitat is the United Nations programme working towards a better urban future. Its mission is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all.

- Cities are facing unprecedented demographic, environmental, economic, social and spatial challenges. There has been a phenomenal shift towards urbanization, with 6 out of every 10 people in the world expected to reside in urban areas by 2030. Over 90 per cent of this growth will take place in Africa, Asia, Latin America, and the Caribbean. In the absence of effective urban planning, the consequences of this rapid urbanization will be dramatic.
- Mindsets, policies, and approaches towards urbanization need to change in order for the growth of cities and urban areas to be turned into opportunities that will leave nobody behind. UN-Habitat, the United Nations programme for human settlements, is at the helm of that change, assuming a natural leadership and catalytic role in urban matters.
- In October 2016, at the UN Conference on Housing and Sustainable Urban Development – Habitat III – member states signed the New Urban Agenda. This is an action-oriented document which sets global standards of achievement in sustainable urban development, rethinking the way we build, manage, and live in cities. Through drawing together cooperation with committed partners, relevant stakeholders, and urban actors, including at all levels of government as well as the private sector, UN-Habitat is applying its technical expertise, normative work and capacity development to implement the New Urban Agenda and Sustainable Development Goal 11 – to make cities inclusive, safe, resilient and sustainable.
- Cities need to be green and manageable in a sustainable way, as well as future-proof and in tune with the environment. Furthermore, cities must ultimately become blooming places for the self-fulfillment of all residents. UN-Habitat has therefore developed a holistic and global approach towards urbanization that embraces much more than just technical considerations. Beyond its traditional core areas — such as city planning, infrastructure development, and participatory slum upgrading — UN-Habitat, today, also focuses on urban legislation and risk management, as well as gender, youth and capacity building for all actors involved in the urbanization process.

## SCIENCE AND TECHNOLOGY

### A way to use water to convert methane into methanol

- Scientists have developed a one-step process that uses water to convert methane to methanol.
- This new way to turn methane into methanol using only water could help to significantly cut carbon emissions by ending gas flaring at oil fields and create a useful chemical feedstock at the same time.
- Water is used to oxidize methane over a bed of copper containing zeolite—the unique structure of the mineral lets the water behave as an oxidant.
- This process is 97 percent efficient, emitting only methanol and hydrogen.
- This method is simple and easy enough that it could be used at drilling sites and the resulting methanol could be used as a liquid fuel or as an ingredient in making resins or plastics. The hydrogen could be used in any number of ways, including in fuel cells.

#### About Methanol:

- Methanol is a valuable source of industrial chemicals and over 30 million tonnes are consumed every year.
- The direct oxidation of methane to methanol would therefore be a highly attractive industrial process. However, commercial methanol production currently requires the endothermic conversion of methane to synthesis gas – a mixture of carbon monoxide and hydrogen – which is then converted to methanol.

- This is only feasible in huge facilities, so remote oil-extraction facilities often simply burn any methane produced.
- Mechanisms for direct oxidation of methane have required expensive, strong oxidants and been plagued by over-oxidation of the methanol, producing, for example, carbon monoxide and formates.
- Methane has been identified as a greenhouse gas, one that is perhaps more of a problem even than carbon dioxide because it traps more heat (some studies have suggested 25 times as much).
- It makes its way into the atmosphere due to animal flatulence and some industrial processes. It is also a by-product at gas wells, where it is generally burned.
- Methanol, on the other hand, has been considered a good alternative to gasoline for use in automobile engines. It is currently made using a variety of techniques and basic materials including coal, natural gas and even municipal waste. One approach is to use high-pressure and high-temperature oxidation of the gas, but most consider such methods too technically challenging to use in places such as drilling sites. In this new effort, the researchers describe a simpler way to make methanol using water (as an oxidant instead of oxygen) and methane.

## **Illegal, Unreported and Unregulated (IUU) Fishing**

- According to the National Policy on Marine Fisheries, 2017, Indian fishing fleet will not engage in 'Illegal, Unreported and Unregulated' (IUU) fishing.
- The Indian marine fisheries account for an economic wealth of about Rs. 65,000 crore.

### **Illegal, Unreported and Unregulated (IUU) Fishing**

- Illegal, unreported and unregulated (IUU) fishing is a major contributor to declining fish stocks and marine habitat destruction.
- It is estimated that IUU fishing accounts for about 30 per cent of all fishing activity worldwide.
- The worldwide value of IUU catches is somewhere between \$4 billion and \$9 billion per year. Approximately \$1.25 billion of this illegally captured fish is thought to be taken from the high seas, with the remainder fished illegally within 200-mile limits of coastal states.
- Illegal fishing is most prevalent where governance measures to manage fisheries are the weakest.
- An estimated \$1 billion in IUU fishing is happening in the coastal waters of sub-Saharan Africa each year.

### **Illegal fishing refers to:**

- Fishing by national or foreign vessels within a country's Exclusive Economic Zone without permission, or, undertaking fishing activities that contravene that country's laws or regulations.
- Fishing by a vessel flying the flag of a State party to a relevant Regional Fisheries Management Organization (RFMO) that contravenes conservation or management measures adopted by that organization or part of international law.
- Fishing that violates national laws or international obligations.

### **Unreported fishing refers to:**

- Fishing that has not been reported, or has been misreported, to the relevant national authority or RFMO.

### **Unregulated fishing refers to:**

- Fishing within the regulatory zone of a RFMO of a vessel without a nationality, or by a vessel flying the flag of a state not party to the organization (Flag of convenience), which contravenes the conservation and management measure set out by the RFMO.
- Fishing outside of regulated zones, which is inconsistent with efforts under international law to conserve living marine resources.

## **Multidrug-resistant TB will rise in India**

- Lancet Infectious Disease journal has forecast an increase in drug-resistant tuberculosis cases in the four high-burden countries, including India, and suggested that person-to-person transmission will become the engine that drives drug-resistant tuberculosis in these countries.

## Highlights of the study:

- By 2040, 12.4 per cent, or an eighth, of TB cases in India will be multi-drug-resistant, up from 7.9 per cent in 2000
- In the other three high-burden countries, multi-drug resistance will rise to 32.5 per cent of all cases in Russia, 8.9 per cent in the Philippines and 5.7 per cent in South Africa, respectively up from 24.8, 6 and 2.5 per cent in 2000.
- Nearly 40 per cent of all drug-resistant TB cases occur in these four countries, accounting for more than 2,30,000 cases in 2015.
- Globally, an estimated 10.4 million new cases of tuberculosis and 1.8 million deaths related to tuberculosis disease occurred that year.
- Multi-drug-resistant TB accounted for 480,000 cases, and 9.5% of these cases were estimated to be extremely drug resistant.
- Of the multi-drug-resistant cases, one in 10 are expected to be extensively drug-resistant by 2040 — 9% in Russia and the Philippines, 8.9% in India, and 8.5% in South Africa — according to the study, based on a mathematical model using WHO data.
- According to health ministry figures, India has 2.8 million cases of TB every year. Of these, 2.8 per cent are new cases of multi-drug resistance while another 11.2 are acquired cases of multi-drug resistance.

## What is multidrug-resistant tuberculosis?

- The bacteria that cause tuberculosis (TB) can develop resistance to the antimicrobial drugs used to cure the disease.
- Multidrug-resistant TB (MDR-TB) is TB that does not respond to at least isoniazid and rifampicin, the 2 most powerful anti-TB drugs.
- Most people with TB are cured by a strictly followed, 6-month drug regimen that is provided to patients with support and supervision. Inappropriate or incorrect use of antimicrobial drugs, or use of ineffective formulations of drugs (such as use of single drugs, poor quality medicines or bad storage conditions), and premature treatment interruption can cause drug resistance, which can then be transmitted, especially in crowded settings such as prisons and hospitals.

In some countries, it is becoming increasingly difficult to treat MDR-TB. Treatment options are limited and expensive, recommended medicines are not always available, and patients experience many adverse effects from the drugs. In some cases even more severe drug-resistant TB may develop. Extensively drug-resistant TB, XDR-TB, is a form of multidrug-resistant TB with additional resistance to more anti-TB drugs that therefore responds to even fewer available medicines. It has been reported in 117 countries worldwide

## Ebola

- The World Health Organization has declared an Ebola outbreak in the Democratic Republic of Congo (DRC), Africa.
- More than 11,000 people died in the Ebola outbreak in West Africa in 2014-2015, mainly in Guinea, Sierra Leone and Liberia.
- The last outbreak in the DRC was in 2014 and killed more than 40 people.
- The region affected lies 1,300 km north-east of Kinshasa, close to the border with the Central African Republic.

## About Ebola

- Ebola, previously known as Ebola hemorrhagic fever, is a rare and deadly disease caused by infection with one of the Ebola virus species.
- Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees).
- Ebola is caused by infection with a virus of the family Filoviridae, genus Ebolavirus.

- There are five identified Ebola virus species, four of which are known to cause disease in humans: Ebola virus (Zaire ebolavirus); Sudan virus (Sudan ebolavirus); Taï Forest virus (Taï Forest ebolavirus, formerly Côte d'Ivoire ebolavirus); and Bundibugyo virus (Bundibugyo ebolavirus).
- The fifth, Reston virus (Reston ebolavirus), has caused disease in nonhuman primates, but not in humans.
- Ebola viruses are found in several African countries. Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of the Congo. Since then, outbreaks have appeared sporadically in Africa.
- The natural reservoir host of Ebola virus remains unknown. However, on the basis of evidence and the nature of similar viruses, researchers believe that the virus is animal-borne and that bats are the most likely reservoir. Four of the five virus strains occur in an animal host native to Africa.

**People get Ebola through direct contact (through broken skin or mucous membranes in, for example, the eyes, nose, or mouth) with**

- Blood or body fluids of a person who is sick with or has died from Ebola.
- objects (like needles and syringes) that have been contaminated with body fluids from a person who is sick with Ebola or the body of a person who has died from Ebola,
- infected fruit bats or primates (apes and monkeys), and
- Sexual intercourse

## **QUICK FACTS**

- India's First city to get India's first electric radio cabs - **Nagpur**
- New sponsor of New Zealand cricket team for Champions trophy- **Amul**
- Hero - A biography of Sachin Ramesh Tendulkar is written by - By **Devendra Prabhudesai**
- International Nurses Day is observed on: **12 May**
- 19th Session of India-Italy Joint Commission for Economic Cooperation held in - **Rome**
- New base year of WPI, IIP - **2011-12**
- New WHO Goodwill Ambassador For Hepatitis- **Amitabh Bachchan**
- India's new ambassador to France - **Vinay Mohan Kwatra**
- World Migratory Bird Day is observed on - **10th May**
- World Red Cross and Red Crescent Day: **8 May**