COVER STORY

SECURITY THREATS
in India

Realities & Challenges

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NATIONAL	INTERNATIONAL RELATIONS	SOCIAL ISSUES	ECONOMY	SCIENCE	ENVIRONMENT	INTERNAL SECURITY

Objective

With the changing pattern of IAS and preparation methodology, now the aspirant is facing the issue of information overload. The proper articulation of information is important for penning down one's thoughts in the Mains answer.

Thus GSSCORE is coming up with "CURRENT ANALYST" – a magazine that provides material on contemporary issues with complete analysis.
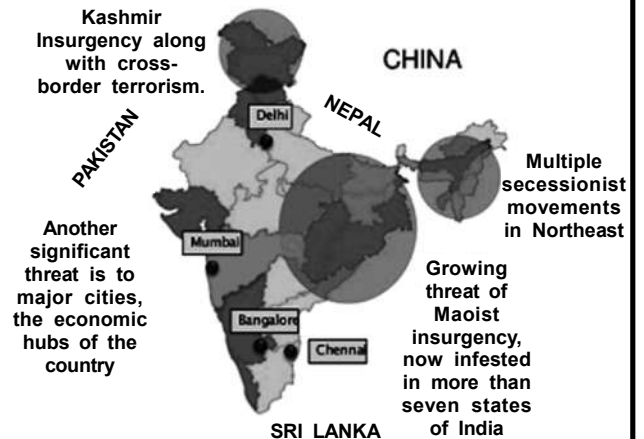
The material has been designed in lucid and QnA format so that an aspirant can develop thinking process from Basic to Advance while reading the topic.

This will enhance the informative and analytical knowledge of aspirants.

All the best !!!

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SECURITY THREAT IN INDIA: REALITIES AND CHALLENGES

Context

Terrorists have killed 17 Army soldiers and injured 19 in a suicide attack on an Army camp in Kashmir. Four terrorists struck the camp close to the headquarter of the 12th Brigade at Uri in Baramulla District. This makes it one of the deadliest terrorist strikes on security forces in recent times and raises serious concerns over internal security of India.

In the cover story we are analyzing different internal security threats and intelligence mechanism in India.

Introduction

Internal security is the security of a country within its borders. This basically implies maintenance of peace, law and order, and upholding sovereignty of the country within its territory.

India is a country, which has faced both an external aggression as well as internal disturbances from the day of its birth. Kautilya wrote in 'Arthashastra' that a state can be at risk from four kinds of threats: Internal, External, Internally aided external, Externally aided internal. India's internal security threat perceptions are a mix of all four shades of these threats.

The domestic dynamics of India's internal security are reflected in its socio-political milieu, the main feature of which is its diversity.

India's **'unity in diversity'** is perhaps the reason for an infinite spectrum of internal security challenges that it has been facing since independence.

The core issue that is leading to violence and anarchy is the disproportionate increase in population, resulting in unethical scrambling for the finite resources which are fast diminishing.

The trust levels between communities and towards the government are getting eroded owing to self-centric mindsets and an insatiable greed to own the turf. The law enforcement agencies at the grass root level are ill equipped, ill trained and have limited motivation. The policies and organisations to counter terrorism, both, at centre and state levels need major reforms to make them more effective in their mission.

Fig. 1

What are the different threats to India's Internal Security?

Threat for India's internal security has many faces such as -

► **Terrorism/Militancy:** Terrorism is the calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological. Within this definition, there are three key elements-violence, fear, and intimidation and each element produces terror in its victims.

► **Left wing Extremism:** Left-wing extremists adapt their political activities to revolutionary Marxist or anarchist ideas, and they endeavor to replace the existing political and social order with a socialist or communist system or an anarchist society "free of rule". To this end, they participate in social protests, and they attempt to instrumentalize them for their purposes. Their forms of action range from open agitation to clandestine, partly serious acts of violence, with isolated autonomous groups also accepting individuals to be injured.

► **Communal divide:** Islamist fundamentalist organizations rooted in religious obscurantism have long been prone to sudden bursts of irrational violence at the slightest provocation. These organizations initiate communal violence.

► **Organized crimes:** Organized crime is defined as "those involved, normally working with others, in continuing serious criminal activities for substantial profit, elsewhere". The core organized crime activity is the supply of illegal goods and services to countless numbers of citizen customers. It employs illegitimate methods-monopolization, terrorism, extortion and tax-evasion to drive out or control lawful ownership and leadership, and to extract illegal profits from the public.

► **Border Security:** Border security is aimed at securing nation's borders against interests hostile to the nation by putting in place processes to interdict them and facilitate legitimate trade. The external forces utilize the border dispute for infiltration and posses challenge for internal security.

► **Cyber crime:** Cyber-crime encompasses any criminal act dealing with computers and networks. These include cyber harassment, cyber stalking, cyber terrorism, cyber warfare, etc.

► **Illegal Immigration:** It is not easy for the people to obtain valid travel documents and jobs abroad, they fall into the trap of unscrupulous travel agents and employment agencies. These agencies promise to give them valid travel documents and employment abroad on the payment of huge amounts. Often the travel documents are not valid, and sometimes they are simply dumped into foreign lands without giving them the promised employment

► **Narcotics trade-smuggling and trafficking-unproductive lifestyle of people:** It is perhaps the most serious organized crime affecting the country and is truly transnational in character. India is geographically situated between the countries of Golden Triangle and Golden Crescent and is a transit point for narcotic drugs produced in these regions to the West. India also produces a considerable amount of licit opium, part of which also finds place in the illicit market in different forms.

► **Hawala transfers (illegal money transfers):** Illegal currency transfers via non banking channels are called Hawala. It is an underground banking system. Secret flows of money can take place in free currency areas as well as in areas where currency conversion restrictions are practiced due to the shortage of foreign exchange. This leads to tax evasion.
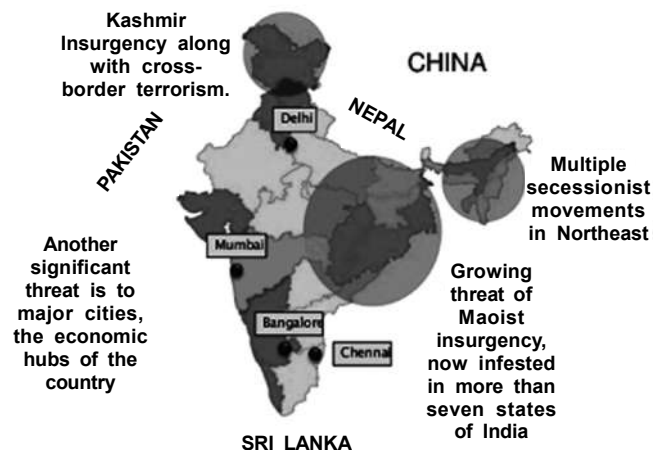
Fig. 2

The above stated factors are posing the most serious threat to India's security. Many legal and judicial steps have been taken to fight all these threats but at the same time threats are changing their faces with the time.

What are the factors responsible for internal security problems and the solutions for that?

Factors responsible for threats can be classified as:

► *Political reasons* such as the threat can be secessionist, separatist or even regional in nature. The causative factors of various types

of movements should be analyzed and see whether the demands are within the constitutional framework or not.

➤ *Socio-economic factors* are also at the back of many movements which are big threats to the internal security of the country. Equitable growth and development is the spirit of our constitution. Therefore, we have to ensure that development reaches all sections of the society and there are no regional disparities.

➤ *Lack of good governance* also provides a tool in the hands of anti-establishment elements, who pose a challenge to the internal security of the country. Such elements take advantage of mismanagement and corruption in government schemes, poor implementation of laws and absence of government machinery in the remote areas.

➤ *Lack of reforms in Police & Security forces.* Police needs to be sensitized so that is becomes people friendly. Other security forces aiding state police should coordinate with them and help achieve overall goal of maintaining the internal security.

➤ *Limited Police Capacity -* The capability of the state police is limited as far training and equipment are concerned. Central government agencies have started capacity building over the last 7 years but still there is scope for improvement. As of now, for operations, IB plays the role of the coordinator with the police of different states but if operations need to be carried out simultaneously in many states, there is no unified command. Also some states do not have a desirable capability. Therefore there is need for central agency to coordinate operations to all over the country, but this agency should work in coordination with the state police and not independently.

➤ *Lack of centre state coordination* also leads to many problems related to internal security. This coordination problem exists in all areas from intelligence to operations. We need to develop an institutional framework which resolves all these centre-state coordination problems and ensure synergy at all levels.

➤ *Criminal justice system is very sluggish* and a lot of time is spent in procedural aspects. There should be a time bound justice system. Special fast track courts should be established for quick disposal of terrorist cases. There is need to improve a lot in this direction.

What is the significance of INTELLI-GENCE SERVICES in National Security?

The five components of national security management presently relate to diplomacy, economy, military, internal security, and intelligence. In the US, the Hoover Commission report of 1953 defined intelligence as the collection, collation, analysis and assessment of information pertaining to national security or having a bearing on formulation of national strategies.

Intelligence services the world over have faced difficulties in meeting these tasks due to the constant emergence of newer conventional and non-conventional threats to security. Conventional threats are defined as "offensive armed postures by hostile powers, subversion, nuclear, biological and chemical threats, as also terrorism" while, "non-conventional threats could extend to include migration, epidemics, natural disasters, human trafficking, trans-national crimes (e.g. drug smuggling or trade in counterfeit currency) and environmental security".

Response mechanism in India

The Intelligence Mechanism in India consists of following institutions.

➤ **Ministry of Home Affairs -** The principle national level organisation to enforce and maintain law and order is the Ministry of Home Affairs. It has the Police Forces that execute law enforcement and the Central Bureau of Investigation (CBI) that investigates where ever any breach of law or infringement in the laid down procedures has taken place.

➤ **National Security Council (NSC)** was set up in 1998 and a National Security Advisor (NSA) was appointed to coordinate security policy design and integrate intelligence pertaining to security issues.

➤ **National Investigation Agency (NIA)** is the federal agency of India to combat terrorism in the country. It was raised in 2008, after the Mumbai attack, when the effectiveness of the existing NSC system was found lacking. Similarly, at the state level the state police forces are deployed during all exigencies, which are often augmented by central forces on requisition by the state government to the Ministry of Home Affairs.
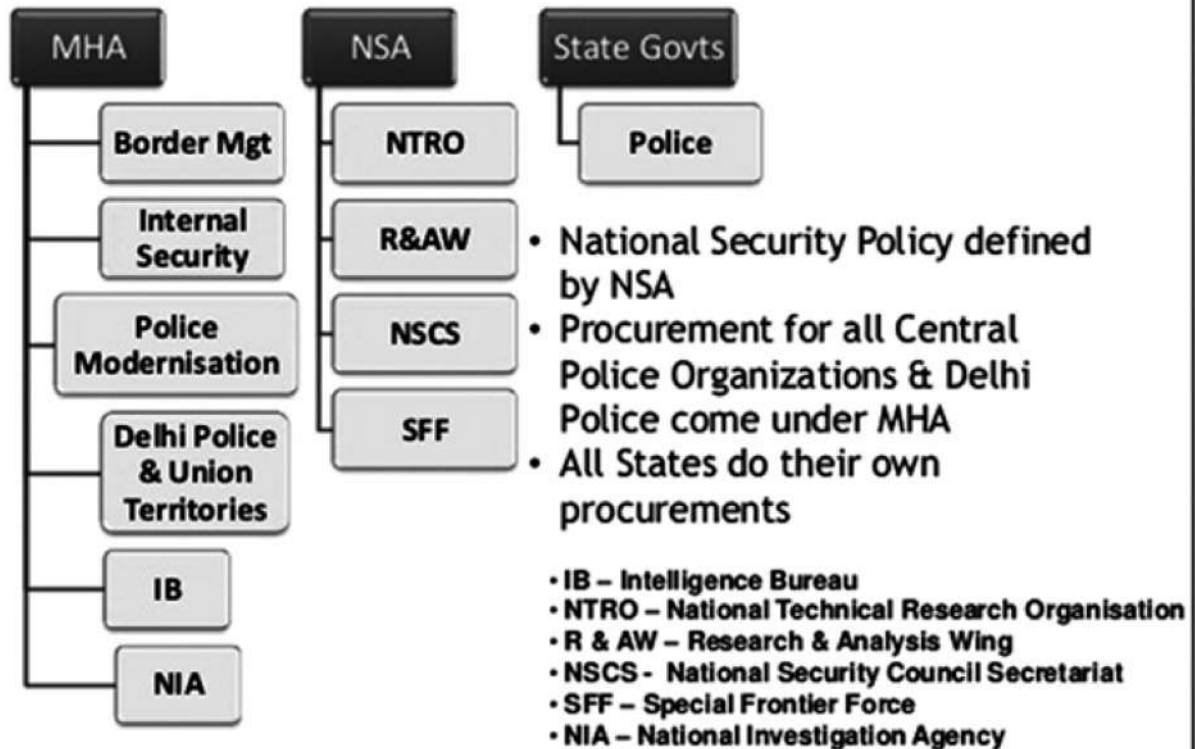
Fig. 3

➤ **The Central Armed Police Force (CAPF),** includes, Border Security Force (BSF), Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF), Indo-Tibetan Border Police (ITBP), National Security Guards (NSG), Railway Protection Force (RPF), Special Protection Group (SPG), Sahastra Sema Bal (SSB). There are basically two types of central security forces, viz., CAPF and CPMF. CAPFs stand for Central Armed Police Forces. This new terminology was introduced in 2011 on the request of the Army. Presently the CAPF comprises the namely 8 police forces of the Union government- BSF, CRPF, ITBP, CISF, SSB, NSG, SPG, and RPF.

◘ The first six, BSF, CRPF, ITBP, CISF, SSB and NSG are under the administrative control of the Ministry of Home Affairs (MHA), while the SPG (Special Protection Group) is under the Cabinet Secretariat and the RPF is under the Ministry of Railways.

◘ CISF provides security to major critical installation of the country. NSG is the commando force meant for counter terrorism but also looks after high risk VIP security. SPG is for proximate security of PM and ex- PM while RPF guards railway property and ensures passenger safety.

◘ Central Para military forces (CPMF)-Assam rifles and coast guard are the main CPMFs after reclassifications. Assam rifle is fondly known for 'friends of the north east people'. It deployed in the north east and guarding the Indo-Myanmar border. It is under the administrative control of the MHA but operated under Army.

◘ Indian coast guard- Its mission is the protection of India's maritime interests and enforcement of maritime law, with jurisdiction over the territorial waters of India, including its contiguous zone and exclusive economic zone. After the 2008 Mumbai attack, the government initiated a programme to expand the ICG force, assets and infrastructure. The force is expected to be tripled between 2010 and 2019 in manpower, vessels and aircraft.

➤ **Intelligence Bureau:** IB is India's internal intelligence agency and reputedly the world's oldest intelligence agency. It was recast as the Central Intelligence Bureau in 1947 under the Ministry of Home Affairs.

�«ª In accordance to the domestic intelligent responsibilities, the IB is particularly entrusted with intelligence collection in border areas. All spheres of human activity within India and in the neighborhood are allocated to the charter of the duties of the Intelligence Bureau. The IB is used to garner intelligence from within India and also execute counter-intelligence and counter terrorism tasks.

�«ª It is the main coordinating agency regarding counter terrorism. It coordinate with various states police all over the country. The IB has had mixed success in counter terrorism. It was reports in 2008 that the IB had been successful in busting terror modules. It alerts the police before the Hyderabad blast and gave repeated warnings of a possible attack on Mumbai through the sea before the November 2008 Mumbai attack.

➤ **National Intelligence Grid:** NATGRID is an intelligence grid that will link the databases of several departments and ministers of the government of India so as to collect comprehensive patterns of intelligence that can be readily accessed by intelligence agencies.

�«ª It is a counter terrorism measures which collects collects data from the standalone database of various agencies and ministries of the Indian government which includes tax and bank account details, credit card transactions, visa and immigration records and itineraries of rail and air travel. This combined data will be made available to 11 central agencies-research and analysis wing, the intelligence bureau, central bureau of investigation, financial intelligence unit, central board of direct taxes, directorate of revenue intelligence, enforcement directorate, narcotics control bureau, central board of excise and customs an the directorate general of central excise intelligence.

�«ª Unlike the NCTC and the NIA which are central organizations, the NATGRID is essentially a tool that will enable security agencies to locate and obtain relevant information on terror suspects from pooled data of various organizations and services in the country. It will help identify, capture and prosecute terrorists and help pre- empt terrorist plots.

➤ **List of other Indian Intelligence Agencies:**
�«ª RAW - Research and Analysis Wing
◙ NCB - Narcotics Control Bureau
◙ Defence Bureau

CASE STUDY – URI & PATHANKOT ATTACK
(due to flaws in Intelligence)

On September 18, 2016, the perimeter of the Uri Army Base was breached by terrorists. The terrorists were neutralized, but the price was hefty – 18 Indian soldiers dead and 19 wounded. The event was shockingly similar to another attack that happened on January 2, 2016 at the Pathankot Air Force Base.

India was grappling with the specter of proxy war and terrorist attacks well before the Western world was exposed to it. This protracted exposure to terrorism should have made India more resilient to attacks over time, but sadly this isn't so, and India's military installations are ill-prepared to deal with this threat. The recent terrorist attack at an army camp in Uri and the Pathankot Air Force Base attack in January 2016 are both cases in point. The high fatality rates of these attacks have been attributed to many reasons, from the lack of capability of intelligence agencies to the absence of a clear-cut command structure in dealing with terrorist attacks.

Terrorists usually employ either bomb/IED attacks or direct frontal attacks on civilians, law enforcement, paramilitary, or military establishments. An analysis of the terrorist attacks in the past decade finds that just about 30 per cent of the total attacks were frontal strikes. However, the alarming fact is that over 70 per cent of these "frontal strikes" have happened in the last three years, pointing to a change in the preferred modus operandi of the attackers. India can no longer afford to be complacent and must initiate immediate action to secure military assets and the soldiers charged with their protection.

Seven security personnel died in that encounter. Apart from the death toll, these events leave a bad taste as it seems like the terrorists had to do very little to penetrate these high-security installations, some of which (like Pathankot) house equipment worth hundreds of millions of dollars. In Uri, the terrorists merely had to cut through a wire fence and in Pathankot the attack group only needed to secure a rope to the wall and climb over it.

India spends about $40 billion a year on defense, but the contribution toward improving base security through smart technology is insufficient.

India's preparedness regarding technology adoption and training should be high enough to thwart a frontal strike with minimal casualties. Empathy toward the Indian soldier and faith in Indian SMEs is the need of the hour in developing a permanent solution to stopping these attacks. Government should work on improving intelligence system.

What are the major INTELLIGENCE challenges?

Intelligence is a major component of internal security. We need to be alert against external as well as internal enemies posing a threat to the nation. Most of the big operations have the back up support of intelligence. We need to have defensive as well as offensive intelligence to forewarn, neutralize the impending threats and take proactive steps wherever required. We also need to have regular institutional framework to compile, collate and act on intelligence received from various agencies multi agency centre (MAC) has made a good beginning in this direction

Intelligence gathering - This is presently being done by both the state police and the central government agencies. NATGRID and MAC, created after 26/11, have been vital additions. However, information and vital inputs from other government departments and non-government agencies, like financial transactions, passport and visa related crimes, cross border infiltration, information relating to recovery of fake currencies,etc. still need to streamlined, co-opted and factored in to facilitate the unveiling and investigation of a larger terror plot.

India also need to educate and train the civil society, media, corporate houses, hotels etc. which can provide further aid in the task of intelligence gathering, peoples participation in preventing terrorist attacks in a vital area which needs careful thoughts and handling. A system to enable individuals of all age groups and sex to report information, including suspicious men or material, irrespective of how trivial they may be without any fear of harassment need to be put in place. The police need to be trained to act as partners of the public to control internal security challenges. There is need for a sustained campaign to educate people in this regard.

What can be done to tackle the flaws?

➤ **Political system needs readjustment** and changes. People are no longer satisfied with representation only; they also want participation and real empowerment.

➤ **Self rule and autonomy** need to be given to the diverse elements of the society in their local affairs and their cultural and social identities recognized by adoption of indigenous models suited to their genius and traditions.

➤ **Agenda for change** must ensure stability at the centre, states and lower levels based on consensus and governance decentralized and people oriented. The political process needs to be rejuvenated with reforms in the electoral system and the Peoples Representation Act. The charter of fundamental rights and duties needs to be reoriented and reinforced with primary aim of establishing a civil society in tune with our cultural and traditional values. This will require creation of a new law enforcement apparatus responsible to the people from the grass root level with primary aim to serve the society and be also responsible to it at each level. Religion must be an affair of individual and the community and not to be a part of the political system or process. State must remain neutral and not interfere in its practice. Use of religion for political purposes and political parties with religious orientation should be banned.

➤ **Planning process for economic development** should have clear orientation of infrastructure creation at the national and central level and local orientation at the state and lower levels. Employment generation should be part of economic planning, which will require re-orientation of education to science and technology, vocational training and community work. Rural development and employment assurance schemes need to be of local origin, to meet local requirements and to be implemented by the community.

➤ **Governance Cost** needs to be brought down and government's role in the economic, social and cultural fields needs to be reduced. In the economic field, government's role should be to mediate and adjudicate between varying interests and most economic activities should be left to entrepreneurs, corporations and individuals within the laid down policy. Government's role in cultural and social fields should be reduced to the minimum.

➤ **NCTC (Nation Counter Terrorism Centre)** should be formed as an umbrella organisation

under which other organisations like the NIA(National Investigation Agency), NTRO (National Technical Research Organisation), JIC(Joint Intelligence Agency), NCRB (National Crime Record Bureau) and the NSG (National Security Guards) should work. NCTC will be able to collect, collate and timely disseminate actionable intelligence, mobilise resources, coordinate effective training and incrementally augment resources and force level to ensure economy of effort. However, the proposal of forming the NCTC, should be in tune with the principle of cooperative federalism.

➤ **Police Reforms** are essential to make the force more dynamic and effective. Indian Police Forces are still being governed under the archaic colonial Police Act of 1861. The Police Model Act was ordered to be drafted by a Drafting Committee in 2005, and the draft prepared by the Drafting Committee in 2006 has still not been approved and promulgated. State forces should be made more effective through better training, equipment, motivation and incentivizing their deeds.

➤ **Improving the efficacy of National Disaster Management Authority (NDMA)** through training, provision of state of art equipment and better selection process of manpower for National Disaster Relief Force (NDRF).

➤ **Pre-positioning of Recourses** for quick disbursement and conduct of frequent rehearsals to ensure that the drills and procedures are clear to all. This is the problem being faced by rescue workers in the J&K floods and many lives were lost due to non-availability to requisite wherewithal at the place where it was required.

➤ **Threat and Vulnerability Assessment** must be carried out by the professionals in the field to take pro-active steps rather than being reactive to prevent and mitigate losses.

➤ **Systemic Reforms** to provide better governance and ensure proper delivery system to the target group which may result in gaining public trust. Like direct cash transfer schemes and linking of UID with PDS, etc.

➤ **Greater transparency and accountability** in all public dealings is also essential to prevent rumors mongering. Also, blame must be pinpointed in case of misappropriations, so as to initiate prompt & exemplary prosecution of non performing public servants.

➤ **Ensure Better Civil Rights** by way of effective judiciary to safeguard the interests and dignity of all citizens of the country, through proper and prompt implementation of legislations and laws like the, Land Acquisition Act, Whistle Blower's Act, Domestic Violence Act, etc.

➤ **Ensuring Inclusive Growth** to arrest mass migration of rural poor to urban centres which are getting clogged, thus resulting in clash of interests and disturbances.

➤ **Building National Character** by understanding the value of responsibility by all citizens, especially, by eminent persons of the society like, politicians, media, judiciary, police and workers of the civil society. Internal security issues have been and will always be a part and parcel of all civilizations. This menace has to be tackled proactively, through long term planning and policy making by an effective national internal security organisation. It is hoped that the Modi Government will give it the priority that it deserves, so that we are not caught napping again, as it has happened on many previous occasions.

What are the probable measures to improve Intelligence Services in India?

A broad consensus shared by a wide section of Indian intelligence professionals presently, underlines the need for the following:

➤ A focus on *"Improvement of capabilities,* or removal of deficiencies, within the agencies themselves, whether in terms of manpower or quality of assessments".

➤ *"Co-ordination amongst various agencies-* there must be proper communication channel for reporting to the Prime Minister frequently", i.e. a "Minister for National Intelligence".

➤ *"Manage the Parliamentary oversight* in a better way". There has been concerned about the nature and extent of supervision over intelligence agencies by the political executive and the possibility and scope of misuse of these agencies by that authority. There has also been the issue of accountability and oversight. Clearly, the time has come for the political executive to confront these issues head on and not skirt around them.

How to Create these Capabilities?

➤ *Clarity of Challenges -* Intelligence agencies must be clear about the challenges to the security of the state.

➤ *Expansion of Functional Ambit -* Their ambit will perforce need to extend to the entire gamut of collecting intelligence on internal

security, external security, military intelligence – both tactical and strategic, economic and commercial intelligence as well as new data in science and technology related issues.

➤ *Structural Improvements -* The creation of a world-class intelligence set-up to meet these requirements will necessarily have to be taken up over the long-term, with the short term and medium term objectives clearly identified.

➤ *Efficiency and Effectiveness -* While the main role of intelligence collection should remain focused on collection of inputs (operations), compilation and assessment (analysis) is equally important but the kind of intelligence needed and the speed in obtaining it would be crucial.

Conclusion and Way Forward

69 years after independence there is widespread unrest, discontent and conflicts among a large section of the population. There are threats emanating from regional and social imbalances, which have given rise to and fuel insurgencies, terrorism, sub nationalism, new and emerging concept of the ultra-nationalism and communalism. Economic disparities have created social tensions, urban unrest, rural upsurge and youth disenchantment. Problems of deprivation, unemployment, poverty, hunger and food shortage, lack of housing, overcrowding, and degradation of basic amenities have given rise to anger and crime.

The problem is getting worse as rise of population added to the pressure on demand without corresponding increase in supply. 201 of 535 districts in India are affected with one form of violence or the other. Thus, the concept of the Internal Security, threats and laws related to thereto are in immediate need to be addressed.

India is being repeatedly subjected to terror and cyber attacks and hostile groups have also established front organizations in cities. As India's counter-terror effort is yet far removed from the global sophistication levels, it has been estimated that by 2020, a significant 6 percent of the global procurement in homeland security (HLS) will be from India.

Terrorism in India has assumed different dimensions and is significantly different from its form a decade back. Many terrorist incidents in the last few years all over the world point to the ever increasing possibility of use of Chemical, Biological, Radiological, and Nuclear (CBRN) materials by non-state actors.

These are new dimensions of the threats India faces which require very agile security governance. Our state responses are gearing up to match the speed with which things are changing.

In spite of our failures and derailment of the democratic system, India has survived and made progress due to the resilience of its people. The situation can be redeemed by enlightenment of the society and state functioning in a just and credible fashion.

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INDUS WATER TREATY

Context

The Indus Waters Treaty 1960, which settled the sharing of the Indus waters, is internationally regarded as an example of successful conflict-resolution between two countries otherwise locked in a bad relationship. Recently India has said to review the Indus Waters Treaty after the Uri terror attack.

Introduction

Government held a meeting on the Indus Waters Treaty and on MFN (Most Favored Nation) status to Pakistan, signaling his intent to examine all the non-military options before the government for a strong response to the Uri attack. Later Government decided to hold IWT for the moment and drew up a list of measures to optimize use of the Indus waters that India has so far failed to do.

The River Indus rises in Tibet, near Lake Mansarowar. Flowing west, it enters India in the Ladakh district of Jammu and Kashmir. Several tributaries, the Zaskar, the Nubra, the Shyok and the Hunza, join it in the Kashmir region. The Indus flows through Baltistan and Gilgit and emerges from the mountains at Attock. The Satluj, the Beas, the Ravi, the Chenab and the Jhelum joins together to enter the Indus near Mithankot in Pakistan. Beyond this, the Indus flows southwards eventually reaching the Arabian Sea, east of Karachi.
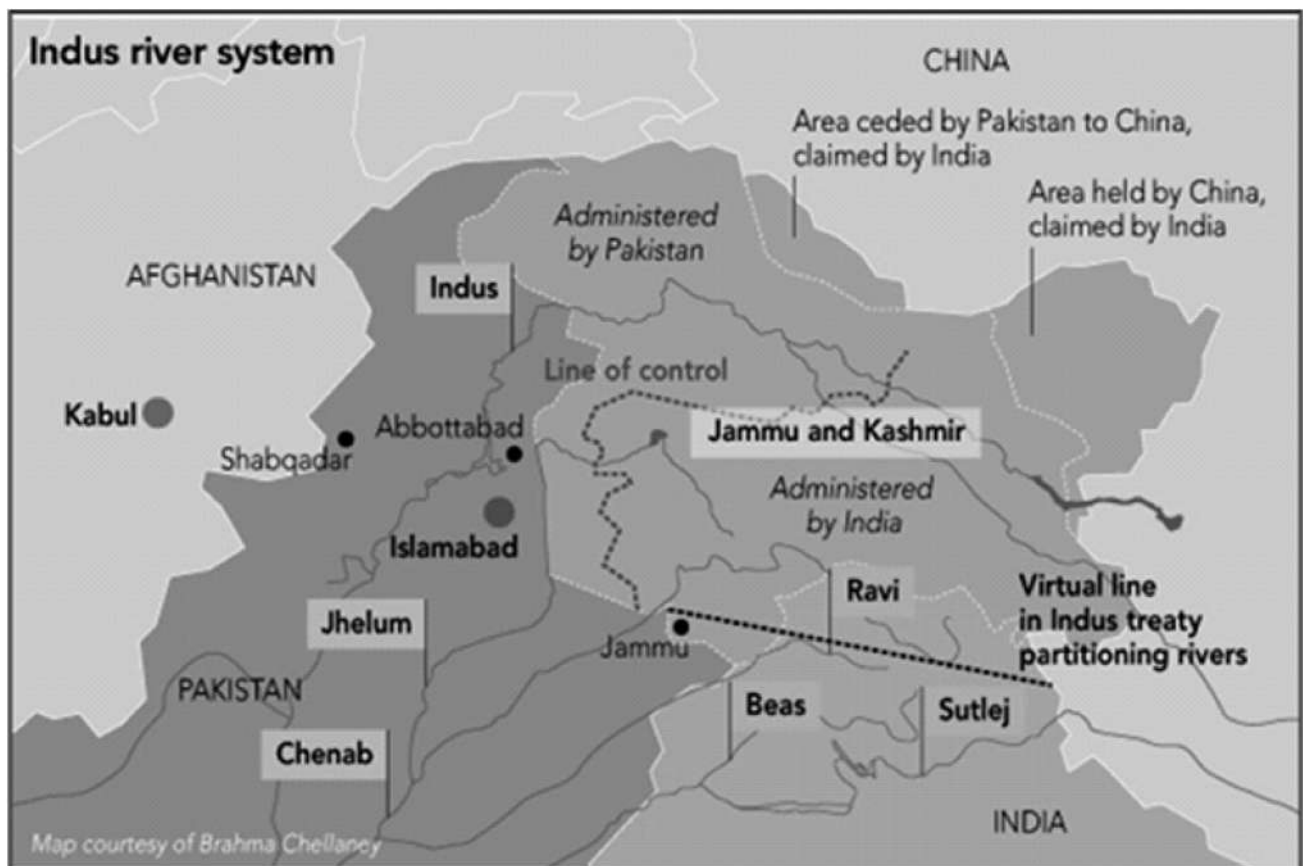

Fig. 4

History of Indus Water Treaty

After Independence the newly formed states were at odds over how to share and manage water which was essentially a cohesive and unitary network of irrigation. The source and the upper head stream being at the Indian side, Pakistan felt its livelihood threatened by the prospects of Indian control over the tributaries that fed water into the Pakistani portion of the basin.

Thus, the development on both sides over diverting the water raised a dispute regarding the utilization of irrigation water from existing facilities.

In December 1954, the two sides came to the negotiating table. The World Bank proposal was transformed from a basis of settlement to a basis for negotiation and the talks continued, stop and go, for the next six years.

Finally with the various odds and even, the treaty was signed by the Prime Ministers of both countries in 1960.

Under the Treaty, all the waters of the Eastern Rivers - Sutlej, Beas, and Ravi - were allocated to India for unrestricted use, except during the transition period of 1 April 1960 to 31 March 1970, during which water had to be supplied to Pakistan so that Pakistan might construct replacement works (two storage dams, eight inter-river link canals and six barrages) for water that was being received earlier from the Eastern Rivers. India agreed to make a fixed contribution of 62 million towards the cost of the replacement works. Pakistan received unrestricted use of the Western Rivers - Indus, Jhelum, and Chenab - which India is "under obligation to let flow" and "shall not permit any interference with these waters," except for irrigating existing areas and to develop a further 701,000 acres of irrigation from these rivers subject to certain specific conditions. Specific provisions were made for regular exchange of river and canal data between the two countries

The treaty also provides for the partitioning of the rivers by drawing a virtual line on the map of India to split the Indus Basin into upper and lower parts, limiting India's full sovereignty rights to the lower section (the eastern flowing rivers) and reserving for Pakistan the upper rivers of J & K the so called western flowing rivers.

A Permanent Indus Commission was established to implement the Treaty. Each country has an Indus Commissioner, and they meet regularly - every six months these days - to exchange information and data, and to settle minor disputes. Meetings of the Indus Commissioners have never been suspended - more than 110 rounds of meetings, held alternately in India and Pakistan, have taken place so far.

Fig. 5

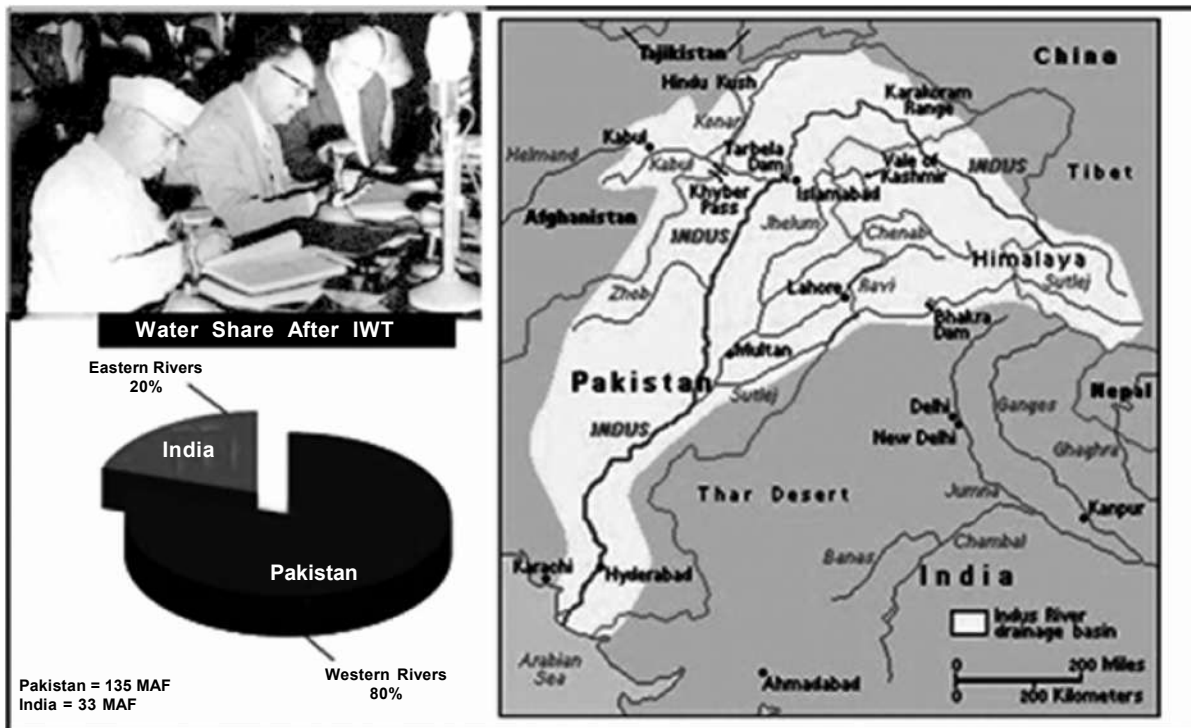### Why IWT does reflect India's generous stand towards Pakistan?

The Indus treaty stands out as the world's most generous water-sharing arrangement by far, in terms of both the sharing ratio (80.52 per cent of the aggregate water flows in the Indus system reserved for Pakistan) and the total volume of basin waters for the downstream state. It is the only treaty that goes beyond water sharing to partitioning rivers. It

drew a virtual line on the map of India to split the Indus Basin into upper and lower parts, limiting India's rights to the lower section and Pakistani rights to the upper rivers of J&K.

Today, it remains the only inter-country water agreement in the world embodying the doctrine of restricted sovereignty, which seeks to compel an upstream state to defer to the interests of a downstream state.

Given that water is J&K's main natural resource and essential for economic development, the gifting of its river waters to Pakistan by treaty has fostered popular grievance there. The J&K government in 2011 hired an international consultant to assess the State's cumulative economic losses, estimated to be hundreds of millions of dollars annually, from the treaty-imposed fetters on water utilisation.

Demands in the J&K legislature for revision or abrogation of the IWT are growing since 2003 when a resolution seeking a treaty review was passed. The backlash from underdevelopment has prompted New Delhi to embark on several modestly sized, run-of-the-river hydropower projects in J&K to address chronic electricity shortages.

What are the Pakistan's obstructionist tactics?

Run-of-the-river projects are permitted by the Indus treaty within defined limits. But Pakistan wants no Indian works on the three "western rivers" and seeks international intercession by invoking the treaty's dispute-settlement provisions, which permit a neutral-expert assessment or the constitution of a seven-member arbitral tribunal. By aiming to deny J&K the limited benefits permissible under the treaty, Pakistan wishes to further its strategy to foment discontent and violence there.

This Pakistani strategy was exemplified in 2010 when it instituted international arbitration proceedings over India's 330-megawatt hydropower project on a small Indus tributary, the Kishenganga (known as Neelum in Pakistan). It persuaded the arbitral tribunal in 2011 to order India to suspend work on the project. With Indian work suspended, Pakistan ramped up construction of its own three-times-larger, Chinese-aided hydropower plant on the same river so as to stake a priority right on river-water use.

The tribunal's final ruling in late 2013 represented a setback for India. It allowed India to resume work on the Kishenganga project but with a stiff condition that India ensures a minimum flow of 9 cumecs of water for Pakistan. Prescribing such a minimum flow went beyond the treaty's terms and the laws of nature.

More importantly, the arbitrators separately delivered a general prohibition against drawdown flushing in all new Indian hydropower projects. In a 2007 decision on the earlier Baglihar case instituted by Pakistan, an international neutral expert held that gated spillways to help flush out silt were consistent with the treaty's provisions. Yet the arbitrators, disregarding the Baglihar decision and the common international practice of constructing spillway outlets to control silt build-up, issued a prohibition that potentially affects the commercial viability of all future run-of-the-river projects in J&K.

Pakistan's move to institute new arbitration proceedings over the Kishenganga and Rattle projects is a fresh reminder as to how India's unparalleled water generosity has engendered unending trouble for it. In 1960, India thought it was trading water for peace by signing the treaty. Within five years of the treaty's entry into force, Pakistan launched a war to grab the Indian part of J&K in 1965.

Can India Revoke the ITW Unilaterally?

India cannot unilaterally revoke or alter the Indus Waters Treaty. The Indus Waters Treaty (IWT) is not time-barred and was never intended to be time or event-specific. It is binding on both India and Pakistan and has no exit provision.

The Ministry of External Affairs (MEA) indicated that differences have arisen between India and Pakistan on the Treaty, and cooperative arrangements vis-a-vis the Treaty like the PIWC are likely to be affected because of lack of trust.

GOI is reportedly contemplating the suspension of the mechanism of the Permanent Indus Waters Commission (PIWC) set up under Article VIII of the Treaty. The PIWC is intended to act as a first-tier bilateral review platform for the two signatories to monitor its implementation, exchange and evaluate data on water usage, works impinging on the water flows, drainage, storage, etc. of the Indus system and deliberate on issues which may arise incidental to the Treaty's functioning.

The Indus Commissioners constitute the PIWC. The PIWC meets at least once a year. The last meeting was held on 16 July 2016.

If the GOI were to implements its latest decision on deactivating its representation in the PIWC that may be construed as a violation of the Treaty. It would in all probability make Pakistan invoke the dispute resolution mechanism which would involve a neutral expert to consider issues.

Pakistan has raised many issues against India in the past relating to the so-called excess storage proposed to be created by the latter under the Tulbul navigation project on the Jhelum river and adequacy of water discharge through the western rivers, among others.

If India were to shut off an institutionalised mechanism for mutual communication like the PIWC, Pakistan will further malign India on the bona fide activities the latter undertakes within the scope of its obligations and legitimate benefits accruable under the Treaty.

Conclusion and Way Forward

It would be wise if India proceeds with a sense of pragmatic caution in making further stands on Pakistan — for instance, revoking the MFN status will hardly punish Pakistan's economy given the low levels of bilateral trade. Terrorist attacks such as the one at Uri require a combination of measured but firm responses, rather than weighing every option in full public view.

India cannot also ignore the fact that the Uri attack has exposed the need to shore up its defenses. As India has realized time and again, its response to provocation must carry the message that the country is dependable and not given to irrational, irresponsible actions that its neighbor is often prone to.

The water distribution treaty brokered by the World Bank in 1960 said that India has control over three eastern rivers — Beas, Ravi and Sutlej — all flowing from Punjab, while Pakistan, as per the treaty, controls the western rivers of Indus, Chenab and Jhelum that flow from Jammu and Kashmir.

Today, Pakistan's water relationship with India is becoming murkier due to China's construction of dams in Pakistan-held Kashmir. While railing against India's small-sized projects, Pakistan is pursuing mega-dams, such as the 7,000-megawatt Bunji Dam and the 4,500-megawatt Bhasha Dam. By way of comparison, the biggest dam India has built since Independence is the 2,000-megawatt Tehri project in Uttarakhand.

If Pakistan wishes to preserve the Indus treaty, despite its diminishing returns for India, it will have to strike a balance between its right to keep utilizing the bulk of the river system's waters and a corresponding obligation (enshrined in international law) not to cause "palpable harm" to its co-riparian state by exporting terror.

For any such treaty to work, it is important there must be mutual trust and cooperation. It can't be a one-sided affair.

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WHO REPORT ON AIR POLLUTION

Context

WHO conducted a study on Air Quality and found that Fine particulate matter from industries, cars and biomass are causing premature mortality. It is estimated that Air pollution could have killed at least 600,000 Indians in 2012.

Introduction

Air pollution is an important determinant of health. WHO estimates that in 2012 around 1 in 8 deaths were attributed to exposure to air pollution, making it the largest environmental risk factor for ill health.

WHO is leading a collaborative effort with other international and national organizations to strengthen the capacity of the health and other sectors to develop, implement and monitor air pollution abatement strategies that protect health with the establishment of a Global Platform on Air Quality and Health.

Why was it in the news recently?

A new study based on WHO air quality model confirms that 92% of the world's population lives in places where air quality levels exceed WHO limits. Study came out with some of the hard hitting facts concerning India -

➤ Fine particulates from industries, cars and biomass causing chronic illnesses and premature mortality.

➤ Air pollution could have killed at least 600,000 Indians in 2012. That is about a fifth of the 3 million who died worldwide because they were exposed to fine particulate matter (PM2.5) that may have aggravated or been directly responsible for cardiovascular diseases and lung cancer.

➤ India comes just behind China – which witnessed an estimated 800,000 deaths. It is second among all countries in the absolute number of deaths caused due to exposure to air pollution.

➤ About 2,49,388 Indians died of Ischemic heart disease; 1,95,001 of stroke; 1,10,500 of Chronic Obstructive Pulmonary Disease (COPD) and 26,334 of lung cancer.

Is Right to healthy Environment our basic right?

A healthy environment is an essential aspect of the right to life, not only for human beings but also for other animals on the planet because Environmental deterioration could eventually endanger life of present and future generations. Therefore, the right to life has been used in a diversified manner in India. It includes, inter alia, the right to survive as a species, quality of life, the right to live with dignity and the right to livelihood. In India, this has been expressly recognized as a constitutional right.

Article 21 of the Indian Constitution states: 'No person shall be deprived of his life or personal liberty except according to procedures established by law.' The Supreme Court expanded this negative right in two ways. Firstly, any law affecting personal liberty should be reasonable, fair and just. Secondly, the Court recognized several unarticulated liberties that were implied by article 21. It is by this second method that the Supreme Court interpreted the right to life and personal liberty to include the right to a clean environment.

What is Air Pollution?

Air pollution occurs when the environment is contaminated by any chemical, physical and biological agent that modifies the natural characteristics of the atmosphere.

What is particulate matter - PM2.5 and PM10?

Particulate matter, or PM, is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Large concentrations of particulate matter are typically emitted by sources such as diesel vehicles and coal-fired power plants. Particles less than 10 micrometers in diameter (PM10) pose a health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter (PM2.5) are referred to as "fine" particles and pose the greatest health

risks. Because of their small size (approximately 1/30th the average width of a human hair), fine particles can lodge deeply into the lungs.

What is ambient air pollution versus urban outdoor air pollution?

Ambient air pollution is a broader term used to describe air pollution in outdoor environments. Poor ambient air quality occurs when pollutants reach high enough concentrations to affect human health and/or the environment.

Urban outdoor air pollution is a more specific term referring to the ambient air pollution experienced by populations living in urban areas, typically in or around cities.

What are the health consequences of ambient air pollution?

Exposure to high levels of air pollution can cause a variety of adverse health outcomes.

➤ It increases the risk of respiratory infections, heart disease, stroke and lung cancer.

➤ Both short and long term exposure to air pollutants have been associated with health impacts.

➤ More severe impacts affect people who are already III.

➤ Children, the elderly and poor people are more susceptible.

➤ The most health-harmful pollutants – closely associated with excessive premature mortality – are fine PM2.5 particles that penetrate deep into lung passageways.

Although air quality in developed countries has been generally improved over the last decades, the adverse health effects of particulate air pollution, even at relatively low levels, remain a global public health concern.

Air pollution is an invisible killer.

We may not always see it, but air pollution is the cause of some of our most common illnesses.

36% of deaths from lung cancer

35% of deaths from COPD (Pulmonary disease)

34% of deaths from stroke

27% of deaths from heart disease
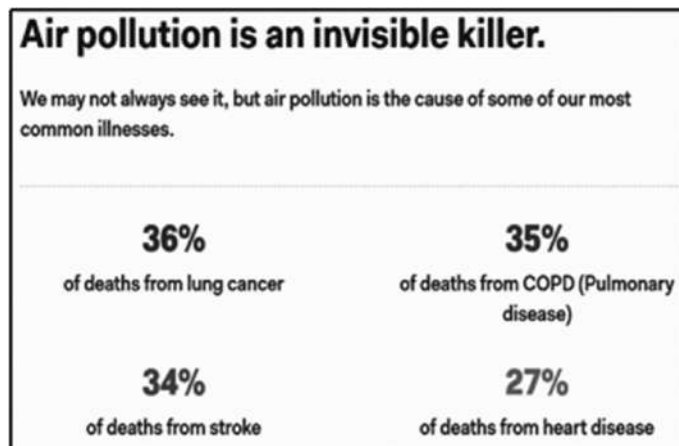
Fig. 6

How large is the disease burden associated with ambient air pollution?

Worldwide 3.7 million premature deaths are attributable to ambient air pollution in 2012. About 88% of these deaths occurs in low and middle income countries.

Regional breakdown (low and middle income countries)

The Western Pacific: 1,670,000 deaths

South East Asians regions: 936,000 deaths.

Eastern Mediterranean region: 236,000 deaths

Europe 203,000 deaths

Africa 176,000 deaths

Americas 58,000 deaths

Regional breakdown (high income countries)

Europe 279,000 deaths

Americas 94,000 deaths

Western Pacific 68,000 deaths

Eastern Mediterranean countries 14,000 deaths

Outdoor pollution

More than 3 million estimated premature deaths each year.

- Vehicles
- Waste burning
- Livestock production
- Power Plants
- Landfill emissions

Indoor pollution

More than 4.3 million estimated premature deaths each year.

- Dirty cookstoves
- Kerosene & diesel fuels
- Unprocessed coal

Fig. 7

What is household air pollution?

Household air pollution (HAP) from the inefficient combustion of solid fuels (i.e. wood, coal, charcoal, crop waste, dung) is the leading environmental risk factor for death and disability in the world. It was previously described as indoor air pollution (IAP), but acknowledging that human exposure from the air pollution created by the household combustion of solid fuels is not limited to the indoor environment, this risk factor has recently been renamed HAP to more fully capture the health-based risks associated with it.

Health Impacts from exposure to household air pollution

Exposure to household air pollution is associated with a wide range of child and adult disease outcomes:

➤ Including respiratory conditions such as acute lower respiratory infections in children under 5 yrs;

➤ Chronic obstructive pulmonary disease (COPD);

➤ Lung cancer; and

➤ Stroke and cardiovascular diseases in adults.

Exposure has been linked with other health outcomes including other cancers (e.g. cervical), adverse pregnancy outcomes, cataract (especially among women) and tuberculosis.

Household air pollution is world's largest environmental-health risk, estimated to be responsible for 4.3 million deaths in 2012 (7,7% of total mortality).

Sources of Household air pollution

The incomplete combustion of solid fuels (i.e. wood, coal, charcoal, crop waste, dung) from the use of open fires or in poorly vented simple stoves for cooking and heating is one of the major sources of household air pollution. The use of kerosene lamps for lighting and kerosene stoves for cooking is another important contributor to pollution in the home as demonstrated by more recent evidence.

The amount and relative proportion of toxic air pollutants generated by incomplete combustion of solid fuels are dependent on a number of factors, including fuel type and moisture content, household ventilation, the behavior of the people using the stoves, and the stove technology. The emitted toxic pollutants include particles of varying sizes, carbon monoxide, volatile and semi-volatile organic compounds, and several others. Combustion of coal, in addition to the above pollutants, releases sulfur oxides, heavy metals such as arsenic, and fluorine which also have very negative consequences on health.

National Pollution Data by WHO Report

Air pollution could have killed at least 600,000 Indians in 2012. That is about a fifth of the 3 million who died worldwide because they were exposed to fine particulate matter (PM2.5) that may have aggravated or been directly responsible for cardiovascular diseases and lung cancer. India comes just behind China – which witnessed an estimated 800,000 deaths.

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>
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>
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>
> 26,334 of lung cancer

Fine particulates causing chronic illnesses

➤ Of all of pollutants, fine particulate matter has the greatest impact on health.

➤ Industries, households, cars and trucks emit complex air pollutants, including invisible PM2.5 particulates.

➤ The impact of fine particulate matter (PM2.5) highlighted by the World Health Organisation (WHO) study is felt through a broad spectrum of acute and chronic illnesses that cause premature death.

➤ These include lung cancer, chronic obstructive pulmonary disease (COPD) and cardiovascular diseases. Worldwide, it is estimated to cause about 16 per cent of lung cancer deaths, 11 per cent of COPD deaths, and more than 20 per cent of ischaemic heart disease and stroke.

➤ Particulate matter pollution is an environmental health problem that affects people worldwide, but low- and middle-income countries disproportionately experience the burden.

➤ A WHO South East Asian Region (SEAR) statement said, "Air pollution is the world's biggest environmental risk to health and must be addressed on a priority basis as it continues to rise, causing long lasting disease and illness."

➤ It notes that more than 80 per cent of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed the World Health Organization (WHO) limits.

➤ Earlier this year too, the WHO had warned that nearly 1.4 million Indians may have succumbed to diseases caused by indoor air pollution.

What are public policies that can reduce the health impacts of ambient air pollution?

Reducing the public health impacts of ambient air pollution requires addressing the main sources of the air pollution, including inefficient fossil fuel combustion from motor vehicle transport, power

generation and improving energy efficiency in homes, buildings and manufacturing factories.

It requires action by public authorities at the national, regional and even international levels. Individuals can contribute to improving air quality by choosing cleaner options for transport or energy production.

The public health sector can play a leading role in instigating a multisectoral approach to prevention of exposure to ambient air pollution, by engaging with and supporting the work of other sectors (i.e. transport, housing, energy, industry) to develop and implement long-term policies and programs aimed to reduce air pollution and improve health.

How do the WHO Air Quality Guidelines support Member States?

The WHO Air Quality Guidelines (AQGs) inform policy-makers about the health impacts of air pollutants, and provide appropriate targets for air quality that is safe for health. Countries can select among a broad range of policy options for the most appropriate to improve air quality and achieve a better protection of people's health.

What are the prescribed solutions to contain Air pollution globally?

➤ Sustainable transportation

➤ Industrial emission reduction

➤ Solid Waste Management

➤ Clean cook stoves and fuel

➤ Solar lighting and electricity

➤ Renewable power

➤ Energy efficient homes

What are the steps taken in India?

➤ Reduction of sulphur in Diesel.

➤ Use of Cleaner Fuel such as CNG in Delhi and Mumbai and LPG in Hyderabad, Lucknow Bangalore etc.

➤ Bharat Stage IV emission norms for new passenger cars and Bharat stage 3 for two wheelers in metro cities commensurate with improved fuel quality.

➤ Decision has also been taken to implement BS IV by April 2017 across the country and BSVI by April 2020.

➤ There has been a change in domestic fuel used in Kitchen.

➤ Coal to LPG and CNG which may have contributed to reduction in ambient levels of SO_2.

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FUNDING CRISIS PUTS INDIA'S AIDS PROGRAMME AND LIVES AT RISK

Context

National AIDS Control Organization (NACO) launched the Prevention of Parent-to-Child Transmission Programme (PPCT) in 2007. Recently the program was abruptly ended citing lack of funds, rendering the outreach workers jobless. HIV-positive patients themselves are now left running from pillar to post.

What is HIV?

HIV is the short form of three separate words. Human Immunodeficiency Virus.

➤ **Human:** A person like you or me who belong to our family, neighbours and friends.

➤ **Immunodeficiency:** This long word means a reduced capacity of the body to fight against infections.

➤ **Virus:** Virus is a disease-causing micro-organism. In this case we refer to the virus as HIV.

When does HIV become AIDS?

AIDS is the short form for **Acquired Immuno Deficiency Syndrome**. AIDS is the last stage of the infection when the body loses its strength to fight infections. In other words, the person is in a condition which impairs his/her immune system. As a result, the person becomes prone to all kinds of Opportunistic Infections (OIs) eg. TB, Candidiasis, Pneumocystis jiroveci Pneumonia (PCP), Herpes etc.

How do people get infected with HIV?

HIV spreads through four main routes:

➤ By having unprotected sex
➤ By receiving HIV infected blood or blood products
➤ By using unsterilized needles, syringes or lancets
➤ From an HIV infected mother to her baby (Parent to Child Transmission)

What is Anti Retro Viral (ARV) drugs?

ARVs are not a cure. More and more HIV-positive people are using antiretrovirals (ARVs) and living longer. While ARVs help improve the lives of people living with HIV, these drugs are NOT a cure for HIV/AIDS.

Overview of HIV Epidemic in India

As per the recently released, India HIV Estimation 2015 report, National adult (15–49 years) HIV prevalence in India is estimated at 0.26% (0.22%– 0.32%) in 2015. In 2015, adult HIV prevalence is estimated at 0.30% among males and at 0.22% among females.

The total number of People Living with HIV (PLHIV) in India is estimated at 21.17 lakhs (17.11 lakhs–26.49 lakhs) in 2015 compared with 22.26 lakhs (18.00 lakhs - 27.85 lakhs) in 2007. Children (< 15 years) account for 6.54%.

India is estimated to have around 86 (56–129) thousand new HIV infections in 2015, showing 66% decline in new infections from 2000 and 32% decline from 2007, the year set as baseline in the NACP-IV. Children (<15 years) accounted for 12% (10.4 thousand) of total new while the remaining (75.9 thousand) new infections were among adults (15+years).

Since 2007, when the number of AIDS Related Deaths (ARD) started to show a declining trend, the annual number of AIDS related deaths has declined by 54%. In 2015 an estimated 67.6 (46.4– 106.0) thousand people died of AIDS related causes nationally.

The highest prevalence was recorded in Nagaland (1.29%), followed by Mizoram (0.81%), Manipur (0.60%), Gujarat (0.56%) and Chhattisgarh (0.41%). Telangana (0.39%), Bihar (0.37%), Karnataka (0.36%) and Andhra Pradesh (0.35%) were other States which recorded HIV prevalence of more than the national average.

With about 2.1 million people infected with HIV in 2013, India has the most cases in the Asia-Pacific, according to the WHO, but new infections have fallen more than 20 percent over the past 14 years.

Despite the progress, India accounted for most of the estimated 340,000 new infections in the Asia-Pacific in 2015 and any cut-back to prevention programmes risks seeing rates rise.
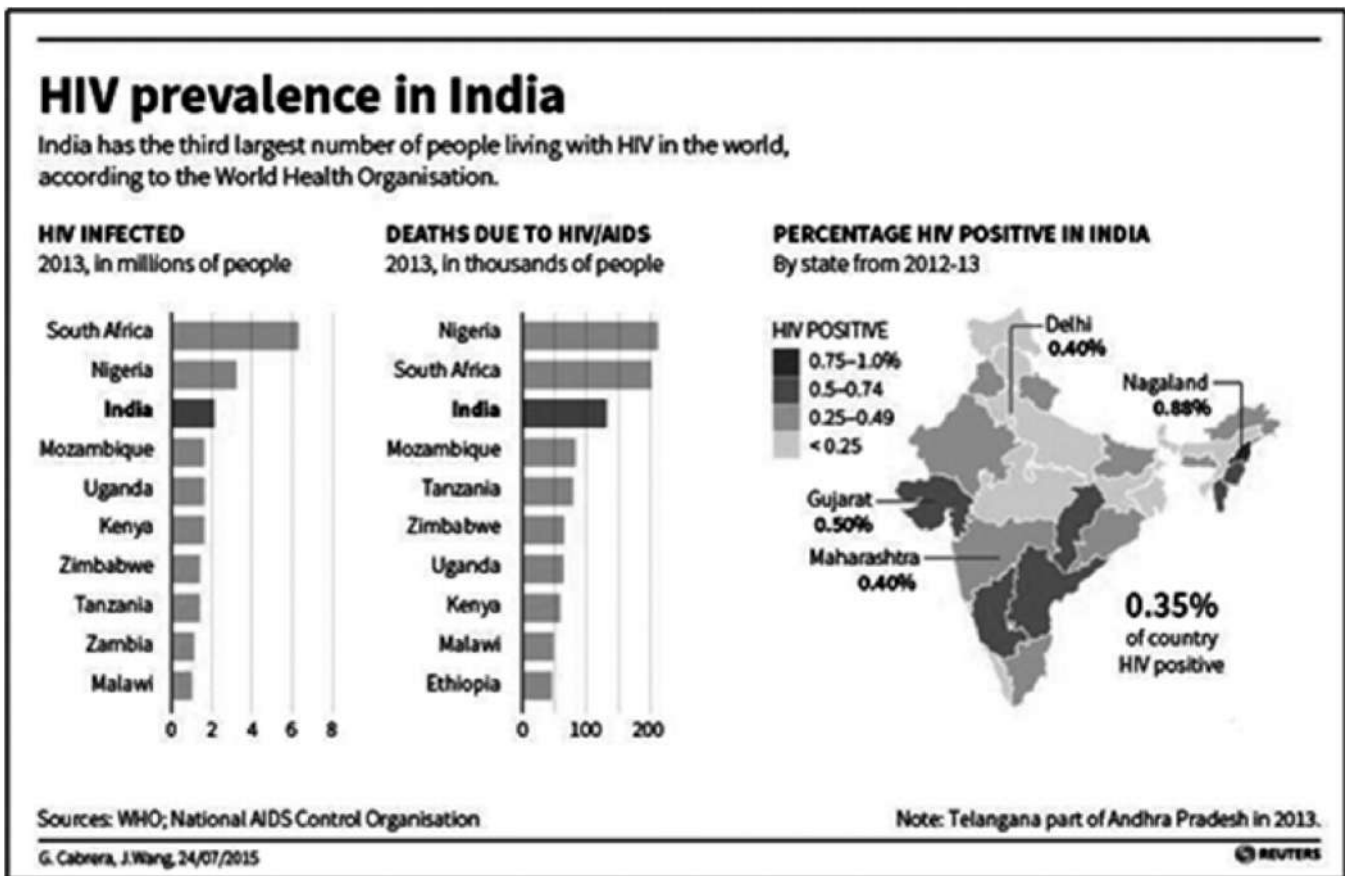
HIV prevalence in India

India has the third largest number of people living with HIV in the world, according to the World Health Organisation.

Fig. 8

What is Prevention of Parent-to-Child Transmission Programme?

The NACO Technical Estimate Report (2015) estimated that out of 29 million annual pregnancies in India, 35,255 occur in HIV positive pregnant women. In the absence of any intervention, an estimated 10,361 infected babies will be born annually.

In 2008, the National AIDS Control Organization (NACO) launched the Prevention of Parent-to-Child Transmission Programme (PPCT) to contain the spread of HIV across generation.

What are the measures taken by Government to contain Parent to Child Transmission?

With effect from 1st January 2014, pregnant women who are found to be HIV positive are initiated on lifelong Anti Retroviral Therapy (ART) and WHO clinical Staging. Their newborn (HIV exposed) babies are initiated on 6 weeks of Syrup Nevirapine immediately after birth so as to prevent transmission of HIV from mother to child and is extended to 12 weeks of Syrup Nevirapine if the duration of the ART of mother is less than 24 weeks.

The HIV exposed baby is initiated on Cotrimoxazole prophylaxis at 6 weeks and is tested for HIV DNAPCR an early detection test at 6 weeks by DBS (Dry Blood Spot) collection. If the DBS sample is positive for HIV DNA PCR, then a repeat DBS sample is tested for HIV DNA PCR. The HIV exposed baby is then initiated on lifelong ART at the earliest if confirmed HIV positive through 2 DNA PCR test.

The PPTCT services cover about 47 percent annual estimated pregnancies in the country. In the year 2015-16, 12.7 million pregnant women accessed this service. Of these, 11,918 pregnant women were HIV positive.

In order to provide universal access to these services further scale up is planned up to the level of Community Health Centre and the Primary Health Centre through NHM integration, as well as private sector by forging public-private partnerships.

National Aids Control Organisation (NACO) – (MoHFW)

NACO envisions an India where every person living with HIV has access to quality care and is treated with dignity. Effective prevention,

care and support for HIV/AIDS is possible in an environment where human rights are respected and where those infected or affected by HIV/AIDS live a life without stigma and discrimination is also envisioned.

NACO has taken measures to ensure that people living with HIV have equal access to quality health services. By fostering close collaboration with NGOs, women's self-help groups, faith-based organizations, positive people's networks and communities, NACO hopes to improve access and accountability of the services. It aims at building an enabling environment wherein those infected and affected by HIV play a central role in all responses to the epidemic – at state, district and grassroot level.

It has endeavored that people need to be aware, motivated, equipped and empowered with knowledge so that they can protect themselves from the impact of HIV.

What is the recent issue?

India's fight against AIDS is being jeopardised by a cut in social spending by the current government, with health workers being laid off and programmes to prevent the spread of the deadly disease curtailed.

In March 2016, HIV/AIDS-related research in India became a casualty of similar budget cuts with the Health Ministry pulling the plug on 18 donor-funded projects and 14 operational research projects financed by the National AIDS Control Organisation.

Under the Prevention of Parent-to-Child Transmission Programme (PPCT), the volunteers are enlisted with an NGO as outreach workers for the HIV awareness initiative. Their job was to help HIV-positive pregnant women with their medication and monitor newborn babies.

As the scheme has been abruptly ended citing lack of funds, rendering the outreach workers jobless. These workers themselves are HIV-positive and on antiretroviral therapy (ART).

In order to effectively carry out their roles as outreach workers, these individuals were asked to disclose their condition to the community and their families at the risk of social marginalisation. With people around them knowing about their HIV status, these workers are now struggling to get alternative employment.

Why Government did slash the funds?

The world's highest number of women dying in childbirth, the world's highest deaths of children under the age of five, a health system that ranks 112 among 190 countries, one doctor for 1,700 people, 21% of the world's burden of disease, worsened by poor basic health and sanitation. While India has the fastest growing population, and an ambitious growth aspiration, it has always had a disproportionately small health budget. In 2015, this shrank further to 1.2% of the GDP.

As part of a major overhaul to boost infrastructure spending and give regions more autonomy, Govt in 2016 asked states to contribute more for public welfare in return for a larger share of federal taxes.

States have been slow to respond, and to make things worse, have fallen behind in disbursing the smaller amounts they have received. With thousands of workers unpaid for months, the National AIDS Control Organisation (NACO) warned of the damage to programmes.

But state governments are not obliged to spend the extra tax revenue on social programmes. Four months after the reform was introduced, AIDS prevention units in Delhi, Maharashtra and Gujarat have said their governments have not started contributing.

The policy of Disclosure of Health Status

In order to effectively carry out their roles as outreach workers, these Health workers were asked to disclose their condition to the community and their families at the risk of social marginalisation. With people around them knowing about their HIV status, these workers are now not only struggling to get alternative employment but have had to move house.

Fig. 9

Implications

▶ **Loss of Health Workers** Loss of trained staff is a serious blow for due functioning of

the HIV control programme. Three AIDS prevention units in states with high rates of HIV have ordered that up to 25 percent of prevention workers be laid off and have curtailed projects and service.

➤ The number of community workers promoting safe sex will be reduced by 80 percent in Delhi from August.

➤ **Outreach and awareness activities curtailed**

➤ **Less Identification of HIV Cases -** The cuts is health workers would mean fewer infections being detected. People will be less aware.

➤ **Discrimination and Social Marginalisation –** HIV affected outreach workers with no money and neighbours boycotting them are now living in the same localities to help each other.

Case Study of fund cutting in other areas also

Government tells CSIR labs to fund research by yourself

Recently, the Cash-strapped Ministry of Science and Technology has mandated organisations involved in scientific research to start 'self-financing' projects and ensure that research stays in sync with the Central government's 'social and economic objectives.'

The Council of Scientific and Industrial Research (CSIR) has been directed to generate half of its funds and start sending report cards to the Centre on how "each of the laboratory is focusing its resources on developing specific lines of inventions which would contribute to the social and economic objectives of the government for the poor and the common man". The idea was also to ensure 'indigenous science' was promoted.

For now, funding for the Bhabha Atomic Research Centre (BARC) & Tata Institute of Fundamental Research (TIFR) — both under the Department of Atomic Energy (DAE) — have not been affected.

While DAE institutions are spared for the moment, institutes under the CSIR are badly hit by the government's budget slash.

This year's notification for Senior Research Fellowships granted by CSIR has not been issued so far. Last year fewer people have been granted SRFs. These measures fundamentally contradict Govt's flagship initiatives like the 'Make In India' campaign.

Conclusion

Good health is significant enough to be a national goal in itself, but economic growth hinges on a healthy population that spends less on mere survival and more on productive pursuits like education and entrepreneurship. At present, India loses 6% of its annual GDP to preventable illnesses and premature deaths. Proactively addressing poor health will need more commitment, and judicious public investment

While public health efforts are on, they lack scale, funds, human resources and training, making progress achingly slow. India has made progress in reducing maternal and child mortality, HIV infections cases but we are not reaching the last mile.

However, the recent funds curtailed for NACO PPCT programme has affected the vulnerable HIV affected population adversely. NACO is unable to give salaries, organise capacity building, training programmes and workshops all over India and the overall HIV/AIDS control programme had been hit.

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GLOBAL COMPETITIVENESS INDEX 2016-2017

Context

The World Economic Forum has recently released the *Global Competitiveness Report* (GCR).

The Global Competitiveness Report 2016-2017 assesses the competitiveness landscape of 138 economies, providing insight into the drivers of their productivity and prosperity.

Since 2004, the report ranks the world's nations according to the Global Competitiveness Index. It is based on the latest theoretical and empirical research. It is made up of over 110 variables, of which 2/3rd comes from the Executive Opinion Survey, and one third comes from publicly available sources such as the United Nations. The variables are organized into twelve pillars, with each pillar representing an area considered as an important determinant of competitiveness.

One part of the report is the Executive Opinion Survey which is a survey of a representative sample of business leaders in their respective countries. Respondent numbers have increased every year.

What are the parameters (pillars) involved in computing the Index?

1st pillar: Institutions- The institutional environment of a country depends on the efficiency and the behavior of both public and private stakeholders.

2nd pillar: Infrastructure- Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy.

3rd pillar: Macroeconomic environment- The stability of the macroeconomic environment is important for business and, therefore, is significant for the overall competitiveness of a country.

4th pillar: Health and primary education- A healthy workforce is vital to a country's competitiveness and productivity.

5th pillar: Higher education and training- Quality higher education and training is crucial for economies that want to move up the value chain beyond simple production processes and products. In particular, today's globalizing economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the production system. Secondary and tertiary enrollment rates, quality of education, staff training - vocational and continuous on-the-job training etc. are included in it.

6th pillar: Goods market efficiency- Countries with efficient goods markets are well positioned to produce the right mix of products and services given their particular supply-and-demand conditions, as well as to ensure that these goods can be most effectively traded in the economy.

7th pillar: Labor market efficiency- The efficiency and flexibility of the labor market are critical for ensuring that workers are allocated to their most effective use in the economy and provided with incentives to give their best effort in their jobs.

8th pillar: Financial market development- An efficient financial sector allocates the resources saved by a nation's population, as well as those entering the economy from abroad, to the entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected. The banking sector needs to be trustworthy and transparent.

9th pillar: Technological readiness- The technological readiness pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICTs) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness.

10th pillar: Market size- The size of the market affects productivity since large markets allow firms to exploit economies of scale.

11th pillar: Business sophistication- Business sophistication concerns two elements that are intricately linked: the quality of a country's overall business networks and the quality of individual firms' operations and strategies.

12th pillar: Innovation- The last pillar focuses on innovation. Innovation is particularly important for economies as they approach the

frontiers of knowledge, and the possibility of generating more value by merely integrating and adapting exogenous technologies tends to disappear.

The interrelation of the 12 pillars is important to keep in mind that they are not independent: they tend to reinforce each other, and a weakness in one area often has a negative impact on others.

The top 30 of the 2016–2017 report

1.	Switzerland 5.81 (—)	16.	United Arab Emirates 5.26 (+1)
2.	Singapore 5.72 (—)	17.	Belgium 5.25 (+2)
3.	United States 5.7 (—)	18.	Qatar 5.23 (-4)
4.	Netherlands 5.57 (+1)	19.	Austria 5.22 (+4)
5.	Germany 5.57 (-1)	20.	Luxembourg 5.2 (—)
6.	Sweden 5.53 (+3)	21.	France 5.2 (+1)
7.	United Kingdom 5.49 (+3)	22.	Australia 5.19 (-1)
8.	Japan 5.48 (-2)	23.	Ireland 5.18 (+1)
9.	Hong Kong 5.48 (-2)	24.	Israel 5.18 (+3)
10.	Finland 5.44 (-2)	25.	Malaysia 5.16 (-7)
11.	Norway 5.44 (—)	26.	South Korea 5.03 (—)
12.	Denmark 5.35 (—)	27.	Iceland 4.96 (+2)
13.	New Zealand 5.31 (+3)	28.	China 4.95 (—)
14.	Taiwan 5.28 (+1)	29.	Saudi Arabia 4.84 (-4)
15.	Canada 5.27 (-2)	30.	Estonia 4.78 (—)

Fig. 10

Current Global Scenario

According to the Report, many of the competitiveness challenges stem from the aftermath of the financial crisis. Today, productivity and growth are not picking up in advanced economies, and the consequences of low and even negative productivity growth in many emerging economies are now evident. The great recession led many advanced economies to implement very loose monetary policy, which in turn fueled a global commodities boom that masked many of the competitiveness challenges of commodity-exporting emerging markets. Vulnerability to commodity price fluctuations in emerging economies and the promises of the Fourth Industrial Revolution underscore the importance of innovation as a source of competitiveness and economic diversification to reignite growth.

Future growth prospects are constrained by longer-term trends. Many economies around the world struggle with the double challenges of slowing productivity growth and rising income inequality, often exacerbated by rapidly aging societies. Stagnating and unequally distributed income growth in turn has opened the door to more inward-looking policies, mounting protectionist pressures, and a general questioning of the premises underlying globalization in many economies.

At the same time, in emerging markets, the end of the commodity super cycle has led to an abrupt economic slowdown that has exposed the slow pace or lack of competitiveness enhancing reforms in recent years, which could increase polarization and threaten social cohesion.

Against this background, it is clear that:

➤ Monetary stimulus is not enough to reignite growth if economies are not competitive,

➤ An increasingly important element of competitiveness is creating an enabling environment for innovation, and

➤ Innovation in turn goes hand in hand with openness and economic integration.

On the bright side, **tremendous promise for higher economic growth and societal progress dawns with the Fourth Industrial Revolution.** Based on digital platforms, the Fourth Industrial Revolution is characterized by a convergence of technologies that is blurring the lines between the physical, digital, and biological spheres.

Findings of the Report

The report notes that as a nation develops, wages tend to increase, and that in order to sustain this higher income, labor productivity must improve for the nation to be competitive. Thus, the GCI separates countries into three specific stages: factor-driven, efficiency-driven, and innovation-driven, each implying a growing degree of complexity in the operation of the economy.

In the factor-driven stage countries compete based on their factor endowments, primarily unskilled labor and natural resources. Thus, the impact of each pillar on competitiveness varies across countries, in function of their stages of economic development. Therefore, in the calculation of the GCI, pillars are given different weights depending on the per capita income of the nation. The weights used are the values that best explain growth in recent years. For example, the sophistication and innovation factors contribute 10% to the final score in factor and efficiency-driven economies, but 30% in innovation-driven economies. Intermediate values are used for economies in transition between stages.

How the India enhancing its ranking?

India's GDP per capita in PPP terms almost doubled between 2007 and 2016, from US$3,587 to US$6,599. Growth slowed after the 2008 crisis, hitting a decade's low in 2012–13. This experience triggered India to rethink its policies and engage more firmly in the reforms necessary to improve its competitiveness. Growth rebounded in 2014 and last year surpassed that of China, making it the fastest-growing large emerging market in 2015.

India's competitiveness score stagnated between 2007 and 2014, and the economy slipped down the GCI rankings. Since the new government took office in 2014, India climbed back up the rankings to 39th in this edition of the Report, from 48th in 2007–2008.

What has made India so successful in recent years?

The overall trend masked some diversity over the years on the different pillars, for example, health and basic education improved throughout the decade. Improvement in infrastructure, by contrast, was small and faltering during most of the period, but picked up after 2014 when the government increased public investment and sped up approval procedures to attract private resources. The institutional environment deteriorated until 2014, as mounting governance scandals and seemingly unmanageable inefficiencies saw businesses lose trust in government and public administration, but this trend was also reversed after 2014.

Macroeconomic conditions followed a similar path, as India managed only in recent years to the drop in commodity prices to keep inflation below the target of 5 percent while rebalancing its current account and decreasing public deficit. Financial market development has also improved since 2014, but unlike the case of institutions and the microeconomics environment is not enough to recover to 2007 level.

The 2015 and 2016 rebound, India's overall competitiveness scores in this period increased by 0.19 points. The two most significant improvements are in infrastructure and in health and primary education.

India's competitiveness score stagnated between 2007 and 2014, and the economy slipped down the GCI rankings. Since the new government took office in 2014, India climbed back up the rankings to 39th in this edition of the Report, from 48th in 2007–2008.

Conclusion

"Declining openness in the global economy is harming competitiveness and making it harder for leaders to drive sustainable, inclusive growth." Leveraging the opportunities of the Fourth Industrial Revolution will require not only businesses willing and able to innovate, but also sound institutions, both public and private; basic infrastructure, health, and education; macroeconomic stability; and well-functioning labor, financial, and human capital markets.

This year's edition highlights that declining openness is threatening growth and prosperity. It also highlights that monetary stimulus measures such as quantitative easing are not enough to sustain growth and must be accompanied by competitiveness reforms. Final key finding points to the fact that updated business practices and investment in innovation are now as important as infrastructure, skills and efficient markets.

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QUARRYING AND ENVIRONMENT

Context

In Tamil Nadu, Indiscriminate sand quarrying on the Vaigai river bed, and granite quarrying in many parts of Madurai, have spelt disaster for many raptor species. Quarrying destroyed Laggar Falcon habitat in Madurai. Once numerous, only two birds of the species survive on the rock cliffs of Arittapatti near Melur in the district.

Introduction

In last two decades, large scale granite sand quarrying in the Madurai District of Tamil Nadu has posed a great threat to local fauna and environment at large. Indiscriminate sand quarrying on the Vaigai river bed, and granite quarrying in many parts of Madurai, have spelt disaster for many raptor species like Laggar Falcon in Arittapatti near Melur in the district.

Stone quarrying in the region destroyed the habitat and nesting spots of raptors Laggar Falcon and other birds, including eagles and owls. Felling of palm trees, which is a nesting spot of many raptor species, is also one of the reasons for the disappearance of the birds.

What is Quarrying?

Quarrying is the process of removing rock, sand, gravel or other minerals from the ground in order to use them to produce materials for construction or other uses. So, a quarry is any such working on the surface of the earth where minerals are extracted but quarries are also known by other names around the world: 'surface mine', 'pit', 'open pit' or 'open-cast mine'.

The term 'quarrying' is often associated with a place where natural stone is extracted to produce building stone or dimension stone and the name is thought to be derived from the latin 'quadraria' which described such a place.

The term 'mining' was similarly associated with places where minerals were extracted to produce metals or coal.

Why do we need quarries?

The materials produces by quarrying are essential to our everyday lives, providing the construction materials to build roads and buildings, delivering vital minerals to agriculture and supporting the generation of electricity.

Process of quarrying

Two of the oldest methods for quarrying are channel cutting and drilling and broaching. A channeling machine cuts a channel in the rock using multiple chiseledged cutting bars that cut with a chopping action. In drilling and broaching, a drilling tool first drills numerous holes in an aligned pattern. The broaching tool then chisels and chops the web between the drill holes, freeing the block. Both channel cutting and drilling and broaching are slow and the cutting tool requires frequent sharpening. Both methods have generally been replaced with other more efficient methods. Line drilling and sawing are more modern techniques for quarrying. Line drilling (also called slot drilling) consists of drilling a series of overlapping holes using a drill that is mounted on a quarry bar or frame that aligns the holes and holds the drill in position. Sawing can be accomplished with a variety of saws including wire saws, belt saws, and chain saws. The introduction of synthetic diamond tools during the 1960's revolutionized stone working. A variety of explosive techniques may also be used to quarry dimension stone, but explosives generally are used in very small amounts, if at all, to avoid fracturing the stone block.

The positive benefits of quarrying should be considered alongside any adverse effects. Positive effects include:

➤ the contribution to the economic and social development of an area through the provision of raw materials to maintain and enhance community facilities, services and infrastructure such as water treatment plants, hospitals, schools, airports, new roads, bridges, motorways and new buildings

➤ the provision of direct and indirect employment opportunities

> ➤ diversification of the local economy and support of ancillary services such as engineering, mechanic and construction businesses
>
> ➤ the reduced social and economic costs of having aggregate resources closer to demand
>
> ➤ opportunity for the end use of quarries, for example, recreational or habitat opportunities
>
> ➤ other flow-on regional benefits, including complementary businesses or services.

However, like many other man-made activities, quarrying causes a significant impact on the environment. In particular, it is often necessary to blast rocks with explosives in order to extract material for processing but this method of extraction gives rise to various problems including noise pollution, air pollution, damage to biodiversity and habitat destruction.

Sensitivity of Select Ecosystems to Quarrying and Mining

Mining and oil development may pose risks to some environments due to the sensitivity and/or rarity of these ecosystems. These include the following:

Forests

Forests are the most biologically diverse terrestrial ecosystems. Tropical forests are particularly diverse and provide the greatest source of endemic plant species in the world. The key direct impact of mining on forest ecosystems is the removal of vegetation and canopy cover. Indirect impacts include road-building and pipeline development, which may result in habitat fragmentation and increased access to remote areas. While larger intact forest ecosystems may withstand the impacts of mining and oil development, smaller fragments are likely to be particularly sensitive to clearing.

Wetlands and Mangroves

Wetlands (including estuaries, mangroves, and floodplains) act as natural pollution filters, as well as provide unique habitat for aquatic species. Mangroves act as an important interface between terrestrial and marine ecosystems, often providing food for marine organisms. Wetlands may be destroyed through direct habitat elimination or by pollution from heavy metals and oil spills upstream. Mining and oil development can also contribute to the destruction of mangroves and wetlands through altering upstream watersheds and increased sedimentation. The United States has lost at least 54 percent of its wetlands and European countries have lost up to 90 percent of their wetland ecosystems.

Mountain and Arctic Environments

Extreme northern ecosystems are characterized by cold temperatures and short growing seasons. Arctic ecosystems exhibit far fewer plant and animal species than in the tropics, but they are often highly sensitive to disturbance and the loss of one or two species has a far greater impact. Lichens and mosses are often among the first species to disappear due to pollution and human disturbance. Permafrost degradation associated with mining and oil development may extend far beyond the initial area of disturbance, due to melting of ice, soil degradation, and impoundment of water. The arctic environment often takes longer to recover from pollution due to the slow speed of biological processes. In addition, the lack of sunlight throughout the winter months makes management of some mining wastes (e.g., cyanide-laced tailings) more difficult.

Arid Environments

Water scarcity is the primary constraint in arid environments. Vegetation is limited, but biodiversity is high among insects, rodents, and other invertebrates, especially in semi-arid regions. The main impact of mining and oil development on these ecosystems is the alteration of the water regime, especially lowering of the water table and depletion of groundwater. These impacts may result in increased salinization of the soil and erosion, which eventually lead to a decline in vegetation and wildlife species. In densely populated areas, the competition for scarce water resources makes these ecosystems fragile.

Coral Reefs

Coral reefs harbor the most biodiversity of any marine ecosystem. Located primarily in the Indo-Western Pacific and Caribbean regions, coral reefs are important links in maintaining healthy fisheries. Reef systems are highly sensitive to human disturbance. Sedimentation from upstream land-uses and pollution are among the greatest threats to coral reefs. Mining directly impacts coral reefs through increased sedimentation, especially in cases where wastes are dumped directly in rivers and oceans, as well as through increased pollution of heavy metals.

Why should we Protect Environment?

It is important to protect the environment because man-made disruptions to ecosystems can cause extinction, because pollution creates dangers for both animals and people, and because mankind owes the natural world a moral obligation.

Impact of Quarrying and Mining on Environment

Environmental Impacts due to mining manifest as:

➤ Land Degradation

➤ Degradation of Forest and Loss of Biodiversity

➤ Air and Noise Pollution

➤ Surface Water pollution

➤ Ground Water Pollution

➤ Land subsidence and Landslides

➤ Environmental Degradation due to abandoned and closed mines

➤ Increase in health related problems

Impacts of mining projects on Wildlife and Biodiversity

Wildlife is a broad term that refers to all plants and animal (or other organisms) that are not domesticated. Mining affects the environment and associated biota through the removal of vegetation and topsoil, the displacement of fauna, the release of pollutants, and the generation of noise.

➤ **Habitat loss:** Wildlife species live in communities that depend on each other. Survival of these species can depend on soil conditions, local climate, altitude, and other features of the local habitat. Mining causes direct and indirect damage to wildlife. The impacts stem primarily from disturbing, removing, and redistributing the land surface.

➤ **Habitat fragmentation:** Habitat fragmentation occurs when large areas of land are broken up into smaller and smaller patches, making dispersal by native species from one patch to another difficult or impossible, and cutting off migratory routes. Isolation may lead to local decline of species, or genetic effects such as inbreeding. Species that require large patches of forest simply disappear.

Mining and Quarrying destroys landscape and forest ecosystem. The waste material that remain after the extraction of usable ores are dumped on the surrounding land, thus causing loss of topsoil, nutrients and supportive, micro flora and vegetation. Abandoned mines areas show paucity or near absence of Plant and animal species. Only a few species of animals are found in that area. This indicates the loss of habitat.

Habitat fragmentation is the key problem which affects the ecosystem of any area. Human activities obstruct the free movement of birds and animals thus lead to man –animal conflict.

Case Study - Paradise lost for Laggar Falcon in Madurai

Fig. 11

Laggar Falcons are an indigenous raptor species with white and grey plumage, which can hunt and fly at speeds of up to 180 kmph. Ornithologists have been eagerly waiting for the birds to breed for the last two years in the Melur area of Madurai District.

Arittapatti, situated between Alagarmalai and Perumal Malai reserve forests, is a historic site with 2,000-year-old Jain rock beds and inscriptions. Madurai was once a paradise for 17 species of raptors, which could feed on the then plentifully available reptiles.

Birds are the greatest indicators of climate change, and of loss of habitat and biodiversity. Due to sand quarrying, Madurai lost its Vaigai-based biodiversity, including hundreds of Brahminy Kites, Black Kites and native fishes.

Stone quarrying destroyed the habitat and nesting spots of raptors and other birds, including eagles, falcons and owls. Felling of palm trees, which is a nesting spot of many raptor species, is also one of the reasons for the disappearance of the birds.

Large scale sand and granite quarrying began in the 1990s and the use of explosives contributed to the decline of the birds.

Lagger Falcon – Facts

Description - The laggar falcon is a medium sized bird of prey, measuring 40 to 45 cm in length

and weighing 500 to 850 grams. The wingspan is 90 to 110 cm.

Habitat - These species of birds inhabit arid open areas, dry woodland, cultivated areas and open country with scattered trees near human habitations.

Distribution - These falcon species are distributed in India, Iran, Afghanistan, Pakistan, Nepal, Bhutan, Bangladesh and Myanmar. They are conspicuously absent in south India.

Status and conservation - The Laggar falcon global population was estimated at 15,000 to 30,000 individual birds. There is rapid decline in the population and these species of falcons are considered near threatened. The *spread of agriculture and use of pesticides, trapping and capture for falconry and habitat destruction* are the main threats to the survival of these species of birds.

IUCN Status - The IUCN (International Union for Conservation of Nature) has categorized and evaluated these falcon species and has listed them as *"Near Threatened"*.

Indirect Impact of Quarrying and Mining

In addition of environmental impact, large-scale impacts occur from indirect effects such as displacement of people, colonization, poverty, unemployment, etc.

The other major issue related to mining is displacement of people. As in the case of India, the main concentration of mineral wealth happens to fall in the ecologically thick, tribal inhabited areas of south, central and north-eastern India. According to the 2001 Census, there are more than 90 million tribal people in India concentrated in Orissa, Jharkhand, Madhya Pradesh, Chhattisgarh, etc.

The displacement of people due to mining has only multiplied the exploitation and degradation of women's rights with regard to land and livelihoods.

Women displaced by mining, have lost the rights to cultivate their traditional crops, and forests being cut down for mining, they are unable to collect forest produce for consumption (food, fodder, medicines or ceremonial needs) or for sale. The cash flow that tribal and rural women have access to, by sale of forest produce and by breeding livestock, has disappeared. They are forced to walk miles away from their villages leaving behind their children, either to collect forest produce or find wage labour and have had to sell away all their cattle. In many situations there is seasonal migration leading to work insecurity, breaking up of family relations and exposing them to various social hazards.

Mining activities also affect quality of life and the physical, mental, and social well-being of local communities.

Biodiversity Management in Mining and Quarrying Sector

Biodiversity management in mining and quarrying sector is often seen as two opposing initiates – incompatible and mutually exclusive.

At the core of the biodiversity and mining challenge is the fundamental truth that mining is by its nature destructive. Mining takes a natural resource and extracts it from the earth, either through open cast pits, or through underground operations. Where there was something, there remains nothing, in term of the mineral being extracted.

But that does not mean that mining necessarily needs to be destructive in terms of the other natural resources within which it operates. *Innovation and mining has long been friends,* and there are few challenges which mining professionals cannot overcome. And many mining companies do innovate around the area of environmental management in general, and biodiversity management in particular.

There are opportunities which exist for public and private sector cooperation in terms of biodiversity management. Government should encourage more co-operation and innovation in the mining sector as a whole.

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SUPREME COURT BANNED WOMEN STERILIZATION IN INDIA

Context

Supreme Court in its recent judgment has asked Centre to end mass sterilization camps.

Population growth is a big challenge for India, and family planning has always been highly prioritized by the Government of India.

In 1951, India launched the national family welfare program in order to "reduce the birth rate to the extent necessary to stabilize the population at a level consistent with the requirement of the National economy."

Fertility control was seen as a sole aim of population programmes, and sterilization was chosen as the easiest way of achieving it. The focus was clearly articulated on incentive based, target oriented & sterilization focused family planning.

During emergency in 1976, government went out for a massive drive for compulsory sterilization. It led to widespread misuse of power to round up people for mass vasectomy camps.

Thus, the government has changed its population policy from family planning to family welfare. The family welfare programme worked on voluntary methods for solving population problem and integrated family planning services with those of health, maternity, child care and nutrition. This led to paradigm change that addressed the population issue through an integrated lens of social and economic development and not just as a means to lower fertility.

Further in tune with human development approach, the framework for the Reproductive and Child Health programme was developed which spoke of a women's right to quality services for safe delivery as well as information and access to family planning services. The programme linked maternal health services with immunization and public health interventions. It planned responsible parenthood, with a two child norm, through an independent choice of the family planning method best suited to the acceptor based on economic limits of the family.

Currently family welfare programme places more thrust on spacing methods (especially PPIUCD and IUCD) which encompasses the maternal and child health, adolescent health along with Family Panning.

The change in population policies highlighted the importance of the overall goal of raising individuals' well being and quality of their lives and to identity such issues as population size, the national population growth rate, gender equality as instrument & interventions to promote individual welfare.

However, even today also sterilization camps have been used as the most frequent methodology adopted by the government to fulfill the goal of family planning.

The irresponsible and target driven practice of 'sterilization camps' in India have resulted into an incident which completely violated the women's right to life as in the case, Devika Biswas v. Union of India & Ors. It was the case of 2012 in which a sterilization camp was conducted in the Arharia district of Bihar sterilising 53 women within 2 hours in unhygienic and cruel conditions. This camp was organized in a government school by Jai Ambe Welfare Society and authorised by Bihar state. The recent petition highlights the wrong practices employed by the state to achieve sterilization targets, which is discouraged by the SC and the National Population Policy 2000. It also brings about how sterilisation is viewed as a 'population control and stabilisation measure' by the healthcare personnel rather a way of safeguarding a woman's reproductive rights. The petition sought monetary compensation, directions for safety of patients, guidelines for terms of operations etc.

What is sterlisation?

Sterilization is the most common voluntary contraceptive method in India and has for many years been performed in camps.

The most used sterilization method is laparoscopy, mostly due to the fact that it can be

performed in an outpatients setting were patient experience a rapid recovery. Different methods to block the fallopian tube are in use. The most common are Hulka clips, The Falope ring and electrocoagulation.

Complications to sterilization: A study from India reveals a mortality rate of 4.8 per 100 000. Mortality is mostly due to anaesthetic complications. Complications such as infections, haematomas, perforation of uterus, bladder or bowel occurs in 0.4 to 1% of all sterilizations. Pregnancy is uncommon after tubal sterilization. The risk depends of the age of the women and type of method that has been used.

Although the surgery is voluntary, however the programme often leads to coercing of women into sterilisation. Many women are forced by their husbands to undergo sterilisation for government incentives and benefits.

"Targets are set - like cricket scores - to impress the authorities or funding agencies. But care for the patient is inadequate. Sometimes surgeons are not even properly qualified and there's no proper post-surgical care." Also, most women who come to these camps are poor and have little education and hence are unable to give "informed consent".

Sterilization procedures are often hastily conducted. It has been reported that some surgeons to spend less than five minutes with each patient and provide little or no follow-up care.

Unsanitary conditions and the use of inadequate equipment have been documented at some sterilization facilities.

Further sterilizations at the camps are often coerced. Many state governments set annual and monthly targets or quotas for sterilizations and, in some states, the best performing districts are awarded for their achievement. Community health workers are also paid by of the number of women they bring into the camps or government clinics for sterilization.

Recent judgment of Supreme Court

The Supreme Court of India has directed the central government to ensure the state governments close the camps "as early as possible."

The time frame given to state governments to accomplish this, however, is unacceptably wide. State governments have been given as long as three years to close their camps, opening the

possibility for abuses and coercion, which have been endemic to the camps for decades, to continue in the interim.

The Court also urged state governments to substantially increase compensation paid to women and their families for botched sterilization procedures.

The Court further directed the India central government to take an active role to assure that the standards and guidelines concerning the proper protocol for sterilization procedures be strictly followed. In the past, state governments have been responsible for enforcing the policy standards with limited success.

The ruling also requires that all women undergoing sterilization must first have the possible risks, side effects, and consequences of the procedure read to them in their own language. This is an important proviso given that there are no fewer than 122 major languages spoken in India.

For transparency purposes, the ruling also requires states to display on their government websites the number of sterilizations that take place every year as well as the number of sterilization-related complications and deaths. The ruling further requires state governments to post online information on doctors who are legally authorized to perform sterilizations and to report and make public the number of claims filed for malpractice, reasons for when claims are denied, inquiries into sterilization-related deaths, and steps taken address cases of abuse as well as the amount of compensation paid to victims.

Challenges in implementation

Coercion for women to undergo sterilization has not been confined to the sterilization camps and state governments will continue to set and enforce sterilization quotas as they have for decades. The system of bribes and incentives that drives the sterilization campaigns to be as repressive as they are has remained untouched by the Court. Furthermore, the challenge of tackling coerced sterilization is part and parcel a challenge of addressing widespread corruption that plagues India's vastly underfunded health care system.

The Supreme Court's recent ruling is not the first major policy change from the Indian central government in an attempt to stop coerced sterilization either. For years the central government has put forth guidelines and protocols for

sterilization procedures; yet, in many states, doctors are not held accountable for adhering to them. The central government did away with targets many years ago with the expectation that state governments would follow. However, many state governments continue to set annual targets.

In 2005, the Supreme Court of India instituted a number of sweeping reforms including mandating compensation for victims of botched sterilization procedures, punishment for violations of the sterilization guidelines issued by the central government, use of a uniform, standardized patient consent form, and the implementation of a checklist for doctors prior to performing the operation. States were also required to set-up Quality Assurance Committees and to report annually the number of sterilizations and sterilization-related complications and deaths. Despite the expectations that these wide ranging reforms would curb the number of deaths and complications from botched sterilization procedures, the number of women who die from sterilization today remains as high as ever.

Aside from the directive to close the camps, many of the Supreme Court's reforms in the case handed down this month are merely reiterations of the 2005 court order. The only difference now is that much of the information that the states were required to report is now required to be posted on government websites with the hopes that this will increase compliance.

Conclusion

Banning these camps, **the Supreme Court** judgment restores the dignity of the women, and puts their right over contraception and health care back on the national agenda in a rights-driven approach rather than a one-size fits all mass solution approach. In doing so, the Supreme Court's decision has far reaching consequences that can weld the dialogue on India's family planning programs towards more substantive and robust measures that work without hampering health or rights.

But in order for India to adequately safeguard its people against coerced sterilization, the central government of the Union of India must eliminate the system of bribes and incentives that drive the program.

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LANCET SERIES ON MATERNAL HEALTH

Context

The latest Lancet series on maternal health reveals that nearly one quarter of babies worldwide are still delivered in the absence of a skilled birth attendant. Further, one-third of the total maternal deaths in 2015 happened in two countries: India and Nigeria. 45,000 mothers (15 per cent) died during pregnancy or childbirth in India while Nigeria shouldered the maximum burden of 58,000 (19 per cent) maternal deaths.

Hereby, analyzing the issue of maternal mortality with respect to India.

MMR is defined as death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by pregnancy or its management but not from accidental or incidental causes.

Key highlights of the report

► In 2015, 216 women died of maternal causes per 100 000 live births—down 44% from 385 per 100 000 in 1990—but still far short of the MDG 5a target of a 75% reduction. The global target for 2030 is 70 per 100 000, requiring a 68% reduction

► In 1990, the pooled maternal mortality ratio for the 10 countries with the highest levels was 100 times greater than the pooled maternal mortality ratio for the 10 countries with the lowest levels; by 2013, the gap had doubled to 200 times greater.

► The significant burden of maternal morbidity has become more apparent, with an estimated 27 million episodes from the five main direct obstetric causes alone in 2015

► Three-quarters of women now deliver with assistance from a skilled birth attendant and two-thirds receive at least four antenatal care visits. Nearly 53 million women, concentrated in the poorest countries or among the poorest women within countries, receive no skilled assistance at birth

► There are 51 high quality evidence-based guidelines available for maternity care services, developed by both government and non-governmental organisations from a variety of countries, but none developed by low-income countries. Within these guidelines there are 78 single interventions or groups of interventions recommended for use, and 37 recommended against use

► In seven sub-Saharan African countries studied, five had more than a quarter of their facility births in sites without capability to provide care for uncomplicated childbirth. In four countries, more than two-thirds of facility births were in sites that lacked three elements of basic infrastructure, such as water, and more than half of facility births were in sites unable to provide basic emergency obstetric care

► Modelled estimates point to the need for more than 18 million additional health workers by 2030 to meet the SDGs targets. Sub-Saharan African countries with the largest numbers of births (eg Democratic Republic of Congo, Tanzania, Kenya, and Ethiopia) have some of the lowest densities of midwives and obstetricians.

► A review of 14 high-income countries showed average costs for vaginal births in the US were more than seven times higher than in Norway, and more than four times higher for caesarean sections. Costs for medical liability were high, but half of these 14 countries had no-fault systems to mitigate such costs, and three had partial systems.

Facts related to Maternal Mortality in India

The present situation of India has been described as below:

► India has recorded a decline in maternal mortality rates, 45,000 mothers (15 per cent) died during pregnancy or childbirth in India while Nigeria shouldered the maximum burden of 58,000 (19 per cent) maternal deaths.

► The MMR in India has dropped from 212 per 100,000 live births in the period 2007-09 to 167 per 100,000 live births in the period 2011-13, as per the latest report of the registrar general of India, sample registration system (RGI-SRS).

➤ The MMR in southern states fell 17% from 127 to 105, closer to the MDGs. Assam and Uttar Pradesh/Uttarakhand were the worst performing states, with an MMR of 328 and 292, respectively. Kerala and Tamil Nadu have surpassed the MDG with an MMR of 66 and 90, respectively.

Causes of high MMR worldwide

There are two broad scenarios that describe the landscape of poor maternal health care — the absence of timely access to quality care (defined as 'too little, too late') and the over-medicalisation of normal and postnatal care (defined as 'too much, too soon'). The problem of over-medicalisation has historically been associated with high-income countries, but it is rapidly becoming more common in low and middle-income countries, increasing health costs and the risk of harm. For instance, 40.5% of all births are now by caesarean section in Latin America and the Caribbean.

While facility and skilled birth attendant deliveries are increasing in many low-income countries, but 'unskilled birth attendant' and 'lack of emergency obstetric care' can mask poor quality care. Additionally, many birth facilities lack basic resources such as water, sanitation and electricity. The authors warn that measuring progress via the current indicator of skilled birth attendant coverage is insufficient and fails to reflect the complexity of circumstances. "It is unethical to encourage women to give birth in places with low facility capability, no referral mechanism, with unskilled providers, or where content of care is not evidence-based. This failing should be remedied as a matter of priority.

In high-income countries, rates of maternal mortality are decreasing but there is still wide variation at national and international level. For instance, in the U.S., the maternal mortality ratio is 14 per 1,00,000 live births compared to 4 per 1,00,000 in Sweden. The sub-Saharan African region accounted for an estimated 66% (2,01,000) of global maternal deaths, followed by southern Asia at 22% (66,000 deaths). However, the authors warn that not all care is evidence-based, and improved surveillance is needed to understand the causes of maternal deaths when they do occur. Additionally, they point to new challenges in delivering high quality care, including the increasing age of pregnancy, and higher rates of obesity.

Causes of high MMR in India

➤ The most common direct medical causes of maternal death around the world are hemorrhage, obstructed labor, infection (sepsis) and hypertensive disorders related to pregnancy, such as eclampsia. These conditions are largely preventable and once detected, they are treatable.

➤ Complications from unsafe abortion are another common and preventable direct cause of maternal death. The NFHS-3 and other studies confirm the widespread prevalence of these causes of maternal mortality in India.

➤ A higher incidence of mortality and morbidity is found to occur among woman and girls who are poor or low-income, less educated and belong to socially disadvantaged castes and tribes.

➤ Child marriage puts young girls and adolescents at significant risk of pregnancy-related complications and mortality.

➤ Pregnant women living with HIV/AIDS experience an increased risk of pregnancy-related fatalities due to outright discrimination.

➤ The affordability of reproductive health services for women is a major concern. The burden of high out-of-pocket expenses for reproductive health care has been identified as a leading cause of poor reproductive health outcomes among low-income women in South Asian countries, including India. This trend may be attributed to the fact that the government spends less than 1% of its Gross Domestic Product (GDP) on health which in turn has led to insufficient access to health care services and poor quality of care. Consequently, hospitalization is frequently a cause of debt among the poor, which in turn leads to increased poverty.

➤ Education level has been noted by experts as one of the most important indicators of women's status related to maternal mortality, in light of its affects on fertility rates and access to employment and health care. Female education and female literacy rates are strongly correlated to high rates of maternal mortality around the world. Some national-level comparisons show that literacy is a stronger predictor of maternal health than economic wealth. Lack of education adversely affects women's health by limiting their knowledge about nutrition, birth spacing and contraception.

➤ Essential reproductive health services are not available to the majority of women in India. The National Human Rights Commission (NHRC) reports that a mere 30% of the population receives services through the public health

system. The unavailability of basic reproductive health services including contraceptives, pre- and postnatal care and emergency obstetric care, as well as delays in seeking institutional care and the poor quality of care provided in government hospitals, have contributed dramatically to maternal deaths.

➤ High maternal mortality rates correlate strongly with inadequate access to family planning information and services. Unwanted pregnancies expose women to significant risks to their maternal health, including complications from unsafe abortions and high-risk pregnancies. Studies show that women facing unwanted pregnancies are far more likely to seek induced abortions, including illegal abortions, and are much less likely to receive adequate prenatal care.

➤ Most maternal deaths are attributable to the 'three delays': the delay in deciding to seek care, the delay in reaching the appropriate health facility, and the delay in receiving quality care once inside an institution.

Steps taken by Government

The right to survive pregnancy and childbirth is a basic human right. Under international law, the government of India bears a legal obligation to ensure that women do not die or suffer complications as a result of preventable pregnancy-related causes. The staggering scale and continuing occurrence of maternal deaths and morbidity in India reveals the government's failure to protect women's reproductive rights, and comply with international law.

Some of the initiatives are:

➤ **Janani Suraksha Yojana** (JSY), a cash benefit scheme to promote Institutional Delivery with a special focus on Below Poverty Line (BPL) and SC/ST pregnant women;

➤ **Provision of Ante-natal and Post Natal Care** services including prevention and treatment of Anaemia by supplementation with Iron and Folic Acid tablets during pregnancy and lactation

➤ **Organizing Village Health and Nutrition Days** (VHNDs) at anganwadi Centres to impart health and nutrition education to pregnant and lactating mothers.

➤ **Regular home visit by Accredited Social Health Activist** (ASHA) and sensitizing mothers about the need of taking one extra meal, eight hours sleep at night and two hours rest at daytime, early detection of complication of pregnancy etc. ASHAs educate the mothers about the need of institutional delivery and delivery by skilled birth attendant.

➤ Provision of arrangement of **mothers' meeting** every month at Anganwadi center.

➤ The process of **maternal death review** (MDR) has been implemented & institutionalized by all the States as a policy since 2010. Guidelines and tools for conducting community based MDR and Facility based MDR have been provided to the States. The States are reporting deaths along with its analysis for causes of death.

➤ **Establishment of First Referral Units** (FRUs) at block level having provision of normal delivery, caesarian section and assisted vaginal delivery. FRUs are equipped with gynecologists, pediatricians, anesthetists and blood transfusion facility.

➤ Under **Vande Mataram scheme** gynecologists who are not in Governmental service, if treat pregnant ladies atGovernment facilities free of cost, then they receive a particular amount of incentive from the Government and also get Vande Mataram certificate.

➤ Some **NGOs are working for pregnant ladies** in hard to reach area like hilly areas and delta islands like Sundarban.

➤ Government of India has launched **Janani Shishu Suraksha Karyakaram** (JSSK). The initiative entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section. The entitlements include free drugs and consumables, free diet up to 3 days during normal delivery and up to 7 days for C-section, free diagnostics, and free blood wherever required. This initiative also provides for free transport from home to institution, between facilities in case of a referral and drop back home. Similar entitlements have been put in place for all sick newborns accessing public health institutions for treatment till 30 days after birth. This has now been expanded to cover sick infants.

➤ **Kilkari & Mobile Academy scheme launched** to create proper awareness among pregnant women, parents of children and field workers about the importance of Anti Natal Care (ANC), institutional delivery, Post-Natal Care (PNC) and immunization, it was decided to implement the Kilkari and Mobile Academy services in pan India in phased manner. In the first phase Kilkari would be launched in 6 states viz. Uttrakhand, Jharkhand, Uttar Pradesh, Odisha, Rajasthan (HPDs) & Madhya Pradesh (HPDs). The Mobile Academy would be launched in 4 states viz. Uttrakhand, Jharkhand, Rajasthan & Madhya Pradesh.

➤ **Name Based Tracking of Pregnant Women and Children** has been initiated by Government of India as a policy decision to track every pregnant woman, infant & child upto 3 yrs, by name for provision of timely ANC, Institutional Delivery, and PNC along-with immunization & other related services.

Issues in Implementation

➤ Corruption is widespread is providing health care facilities. The inability of pregnant woman to pay the informal demands for money in exchange for services has been identified as a leading cause of maternal mortality. It appears that JSY is wrongly being seen as a scheme to cover out-of-pocket costs for institutional delivery, which is supposed to be free, rather than as a cash assistance program for nutritional and other support. There also have been reports of ANMs selling state-provided medicines illegally and pocketing the earnings.

➤ Many institutions are increasing promotion of institutional delivery without first addressing or improving the quality of care, which has led to poor services and medical care. Often institutions are not fully staffed or do not offer services for evening births, leading to women being turned away or being sent to private hospitals where they may incur huge medical costs. Health centers also have a lack of workable toilets and basic sanitation facilities. Further, referral systems are weak or nonexistent, leading women to be shuttled back and forth between providers with no continuity of care.

➤ Health workers are not adequately trained, which leads to mismanagement of delivery cases, such as the widespread, unsupervised use of oxytocin injections before delivery.

Recommendations by the committee

The Series concludes with a five-point agenda for change: good quality care for every woman, every newborn, everywhere; equity through Universal Health Coverage; health system resilience, strength and responsiveness; sustainable financing for maternal and newborn health; and better evidence, advocacy, and accountability for progress.

➤ **Quality:** Partners must prioritise good quality, evidence-based maternal health services that respond to local needs and are capable of meeting emerging challenges. It is essential that maternal health services start with prevention (eg, family planning, and safe abortion where legal), are context-appropriate, interlinked along the continuum of care, and capable of addressing the increasing diversity in the burden of poor maternal health.

➤ **Equity:** Partners must promote equity, for example through investments in Universal Health Coverage—a mechanism for achieving the SDGs—that should include a strong maternal health service core that reaches every woman, everywhere with good quality care, and without causing financial hardship and pushing families into poverty.

➤ **Health systems:** Partners must invest in strengthening entire health systems, including data and surveillance systems, facility capability, linked emergency medical services, and a skilled health workforce—so that they can respond to the changing contexts of women's lives and are made resilient in the face of shocks and environmental threats to maternal and newborn health.

➤ **Financing:** Sustainable financing for maternal health is necessary to maintaining maternal health gains and accelerating progress. With recent economic growth in low- and middle-income countries, the case for investing in health as a catalyst to both social development and economic growth is crucial to securing political attention and support.

➤ **Better evidence:** Better local evidence from routine audits and strengthened health management information systems is essential to improving quality of care locally—at the very frontline where women receive care. Smarter metrics are needed to capture the true burden of poor maternal health, to inform evidence-based maternal care and policy, and improve the ability of health systems to provide good quality maternal care for all. Better evidence from research will also help build a platform upon which all partners—local and global, public and private—can advocate for the mobilisation of resources, learn from programmatic successes and failures, strengthen laws and policies, and promote mutual accountability.

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ROLE OF LOCAL PEOPLE IN BORDER SECURITY MANAGEMENT

Context

The recent Jammu and Kashmir issue and cross border terrorism has placed importance on the participation of local citizens for border security management.

Today, excellent base defense cannot be achieved by just increasing the number of physical barriers or doubling the number of security personnel patrolling the area. One cannot beat asymmetric warfare by increasing the quantity; local people participation is volatile in this context. As a result, with this concern, repetitive nature of attacks has been experiencing on September 18, 2016, the perimeter of the Uri Army Base was breached by terrorists. The terrorists were neutralized, but the price was hefty – 18 Indian soldiers dead and 19 wounded. The event was shockingly similar to another attack that happened on January 2, 2016 at the Pathankot Air Force Base.
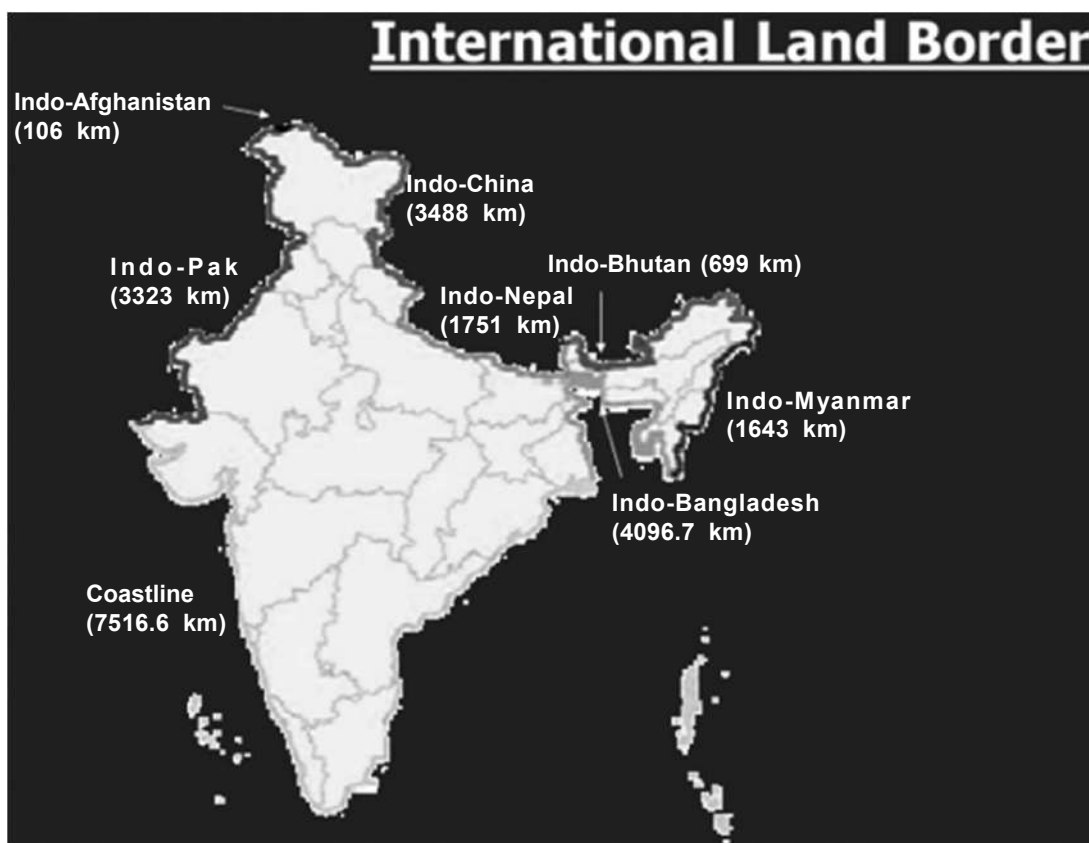
Fig. 12

Introduction

India has 15,106.7 Km. of land border and a coastline of 7,516.6 Km. including island territories. The length of our land borders with neighbouring countries is: Bangladesh 4,096.7, China 3,488, Pakistan 3,323, Nepal 1,751, Myanmar 1,643, Bhutan 699, Afghanistan 106; Total 15,106.7. The issues relating to management of international land and coastal borders, strengthening of border policing & guarding, creation of infrastructure like roads, fencing & flood lighting on the borders and implementation of Border Area development programme is an hour's need.

Like all boundaries in South Asia, India's boundaries are also man-made. India's boundary with each of its neighbours runs through a variety of ecological milieus, each with its own unique setting and associated problems. For example, India-Pakistan border areas are spread across extreme climatic conditions given that the boundary runs from the hot 'Thar Desert' in Rajasthan to the cold Himalayas in Jammu and Kashmir. Similarly, in

the north, the India-China boundary runs along one of the loftiest mountain ranges covered with snow all through the year. The India- Myanmar boundary is draped with lush tropical forests with its myriad undergrowths. The Indo-Bangladesh boundary has to cope up with the ever-shifting riverbeds in the region. These diverse ecological and climatic conditions create immense hurdles for extending the security and administrative reach in these border areas. Coupled with this, the man-made nature of these boundaries also throws up serious issues such as border disputes, porous borders, continuance of trans-border ethnic and social ties, etc. Together, they pose a serious challenge to the effective management of the borders.

Following Issues must be address in the exemplary manner:

➤ Matters relating to management of land borders.

➤ Coastal border including island territories of Andaman & Nicobar and Lakshadweep, etc. must be redefine.

➤ Matters relating to fencing and floodlighting of Indo-Bangladesh and Indo-Pak borders.

➤ Strengthening of border policing, surveillance and patrolling in all land and coastal borders.

➤ Creation of infrastructure including construction of motorable roads, provision of communication facilities, etc. in the border belt.

➤ Creation of infrastructure in coastal belt.

➤ Analysis of intelligence reports and sharing of actionable intelligence with concerned agencies relating to international borders

➤ MHA's input in regard to demarcation of international borders.

➤ Composite strategy defining complementary roles of State Governments and of the Centre in border management.

➤ All matters relating to implementation of Border Area Development Programme.

➤ Development of Integrated Check Posts (ICPs) on the land borders of the country including setting up of Land Ports Authority of India (LPAI).

India's Counter-Terrorism Set-Up

➤ **The State Police and Its Intelligence Set-up:** Under India's federal Constitution, the responsibility for policing and maintenance of law and order is that of the individual states. The central government in New Delhi can only give them advice, financial help, training and other assistance to strengthen their professional capabilities and share with them the intelligence collected by it. The responsibility for follow-up action lies with the state police.

➤ **The National Intelligence Community:** This consists of the internal intelligence agency (Intelligence Bureau), the external intelligence agency (Research and Analysis Wing), the Defence Intelligence Agency that was set up a year ago, and the intelligence directorates general of the armed forces. The IB collects terrorism-related intelligence inside the country and RAW does it outside. The DIA and the intelligence directorates general of the armed forces essentially collect tactical intelligence during their counter-terrorism operations in areas such as Jammu and Kashmir, Nagaland, etc, where they are deployed.

➤ **Physical Security Agencies:** These include the Central Industrial Security Force, responsible for physical security at airports and sensitive establishments; the National Security Guards, a specially trained intervention force to terminate terrorist situations such as hijacking, hostage-taking, etc; and the Special Protection Group, responsible for the security of the prime minister and former prime ministers.

➤ **Paramilitary Forces:** These include the Central Reserve Police Force and the Border Security Force, which assist the police in counter-terrorism operations when called upon to do so.

➤ **The Army:** Their assistance is sought as a last resort when the police and paramilitary forces are not able to cope with a terrorist situation. But in view of Pakistan's large-scale infiltration in Jammu and Kashmir and the presence and activities of a large number of Pakistani mercenaries, many of them ex-servicemen, the army has a more active, permanent and leadership role in counter-terrorism operations here.

In Recent Months, there have been Two Additions to the Counter-Terrorism set-up:

➤ A multi-disciplinary centre on counter-terrorism, headed by a senior IB officer, within the IB, expected to be patterned on the CIA's counter-terrorism centre. Officers of various agencies responsible for intelligence collection and counter-terrorism operations will work under a common umbrella and be responsible for joint analysis of the intelligence flowing in from different agencies and co-ordinate follow-up action.

➤ A counter-terrorism division in the ministry of external affairs, expected to be patterned after the counter-terrorism division of the US state department. It will be responsible for co-

coordinating the diplomatic aspects of counter-terrorism, such as briefing other countries on Pakistan's sponsorship of terrorism against India, processing requests for extradition and mutual legal assistance, servicing the work of various joint working groups on counter-terrorism which India has set up with a number of countries, etc.

Government Response

➤ Development of Border Areas

Border areas remain inaccessible and underdeveloped due to difficult terrain and lack of facilities like proper roads, educational institutions, and hospitals. Lack of economic opportunities makes the border population more susceptible to take up smuggling and trafficking. Keeping in mind these problems, the union government initiated the Border Area Development Programme (BADP) in 1987 to provide adequate social and economic infrastructure, promotion of participation in development, eliminate sense of alienation, and instilling a sense of security among the border people. BADP schemes comprise of development of community-based infrastructure like forestry, pasture land, fishery ponds, floriculture parks, community centres, mobile dispensaries, mini marketing yards, etc. Over the years, the nature of the programme has changed from a schematic one with emphasis on education to a state-level programme with emphasis on balanced development of border areas. Grass root level institutions such as Panchayati Raj Institutions, District Councils/Traditional Councils are encouraged to participate in deciding the priority schemes for their areas.

Security related schemes are also taken up under the BADP. However, expenditure on such schemes does not exceed ten per cent of the total allocation. Schemes like construction of BOPs, building link roads to BOPs, construction of offices/residential complexes for the border guarding forces are taken up. The Annual Report of Home Ministry states that an amount of Rs. 635 crores has been released under the BADP by March, 31 2009. The funds are allocated according to the length of the border, population of the border block, and area of the block. Department of Border Management under the Ministry of Home Affairs monitors the implementation of the BADP along with the respective state governments.

Northeast India, which shares 98 per cent of its borders with Bhutan, China, Myanmar and Bangladesh, has been plagued by insurgency and under development. Its strategic location as a gateway to South East Asia has propelled the government to undertake various developmental programmes in recent years. To study the situation of the Northeast region and suggest suitable projects for its development, the Government constituted the L.C. Jain Committee and the High level Commission under the chairmanship of S. P. Shukla in the 1990s. The High level Commission in its report titled Transforming the Northeast noted the inadequate infrastructure in the region and strongly advocated the need to develop them, especially road networks. Consequently, a series of schemes were initiated to develop the road network in the region. Among these, the three most important schemes are National Highway Development Programme-Phase II, National Highway Development Programme-Phase III B and Special Accelerated Road Development Programme for the Northeast Region (SARDP-NE). The 2007-08 Annual Report of Ministry of Surface Transport and Highways in a separate chapter on development of national highways in the Northeastern region lists various projects that are being implemented.

Importance of Community Participation for Border Management

Challenges in border management are peculiar like; some stretches of border are porous and easily negotiable; some stretches of border are un-demarcated etc. Border is physically unguarded at many places due to terrain constraints and lack of approachability. Also, these border regions have their own ethnic, cultural, religious and racial configurations distinct from the mainland and in some areas depicting an unmistakable affinity with those of across the borders. The remoteness of local administration, its low visibility, illegal immigration, smuggling of arms ammunition and narcotic substances require number of measures from the point of view of national security. Hence, 'the proper management of borders is vitally important for national security.' Besides border guarding forces and other Central Government agencies, States' Civil Administration, the border population is the most important ingredient in border management.

The Border Population has many other Disadvantages as under

➤ Vulnerability to actions of border criminals.

➤ Restriction/control over movement by forces.

➤ Fear of unknown-threat of aggression by enemy, cross border shelling, firing etc.

➤ Lack of industrialization/economic progress, neglect by Government being frontier areas.

➤ Lack of infrastructure, means of communication, education, medical, water and remoteness.

One of the most important challenges of border management is integration of local community in border management. Preventing alienation of border population, winning their hearts and minds by formulating people inclusive border management policies is of paramount importance. There is need to recognize the local bordering community as a prime stakeholder in border management.

Such attitude of population is owing to the restrictive and preventing nature of tasks performed by forces, which is generally against the interest of local population like; restriction in movement, economic interest, etc. Some other causes are:

➤ Prevention of Smuggling Activities which is a Means of Livelihood to Border Population: Smuggling is means of livelihood for many people in bordering areas. Prevention of smuggling activities by BSF lead to a perceived feeling that, they unnecessarily interfere in the means of livelihood of local populace.

➤ Lack of Knowledge of Local Language: There is often a lack of communication between the local people and the BSF causing conflict/distrust.

➤ A Sense of Distrust between the BSF and the Local Community: In many areas, BSF personnel have little communication with the local people to prevent connivance with smugglers and other criminals. The BSF field leadership keeps minimum contact with the local villagers. Hence, a communication gap exists which is detrimental to a congenial working environment.

➤ Border Fencing and Connected Problems: The construction of the fencing has also generated many differences between the local villagers and the BSF. Access to the farmland across the fencing is regulated.

Frequent frisking and timely gate opening are irritants to farmers. The BSF have however their own constraints.

Often, the criminals with vested interests work against BSF personnel and exploit the situation to their disadvantage. Local population because of various reasons including hidden economic benefits, local social pressure comes in support of such vested interests. Hence, BSF sometimes face gheraos, demonstrations etc, quite often, when they make any seizure/apprehension. Sometimes force personnel have been even lynched. Criminals often ensure that such incidents result in a confrontation between the BSF and the public.

➤ **Operational annoyances:** Quite often, the BSF are called upon to take tough measures for combating terrorism and insurgency. These measures sometimes, cause inconvenience and annoyance to the local people. Such sense of discontent is exploited by hostile elements to create feeling of ill will against the BSF.

➤ **Inherent limitations:** The concept of community relationship, if not alien, is still not given due importance by BSF. Border guarding does not merely mean placing a sentry on a vantage point for preventing any threat to territorial sovereignty and sanctity.

Some limitations of BSF are:

➤ **Overstretched Deployment:** The manpower on border is limited. Only 60 per cent of authorised strength in a deployed coy is available for the border duties as remaining 40 per cent are away on leave attachments etc. Force multipliers-in terms of electronic and other surveillance measures are also inadequate. Hence, they cannot curb the trans-border crimes effectively. Sometimes, the numerically thin and capacity deficient forces on the border adopt the attitude of live and let live. Thus, the faith of the law-abiding people towards forces goes down. Also, there is no time left for the limited available strength for community participative border management in view of paucity of time and hard duties.

➤ **Statistical Theory to Adjudge Performance of Units:** A serious thought is required to review the yardsticks for performance either on the 'body count' or the 'booty count'. This practice blinds the vision and breeds a competition, in which public support is sought for marking catches, whereas it should, in fact, be used for stemming the menace itself. In past, there have been cases of indirectly allowing more smuggling, to achieve the targeted seizure figure. So, unwittingly the situation is allowed to erode and the confidence and goodwill is tarnished. However, there is visible change in this approach with the coming up of border fencing where there is shift towards zero-crime approach.

➤ **Inherent Disadvantage of the Border Population:** Lack of favourable attitude of border guarding forces towards border population like making a villager stand at BOP gate for hours together who has come with a genuine problem and wants to meet the Company Commander and thus giving a feeling that there is no one from the Government's side who can be approached. BSF think that every villager residing next to the border is a smuggler thus doubting the integrity of each and every villager in the border belt which spoils the relations with the locals. GoM has also recommended promoting the socioeconomic development of the border population.

Integrating Local Population in Border Management

The people living in the border areas are the most important ingredients towards a secure and safe border. Village Defence and Development Committees at the base level with cooperation of the local populace would go a long way in enhancing security and development of the borders besides providing a sense of belonging to these people. There would be a requirement of training the locals as well as motivating and providing incentives for engaging the locals in the task of border management. Once this is done, they will prove more than useful tool to manage localised border problems.

The locals could well perform the following tasks by forming Village Defence Committees (VDC) etc:

➤ Reporting of any illegal activities and infiltration along the border.

➤ Keeping allotted areas under surveillance.

➤ Reporting of any abnormal activity especially in rugged terrain.

➤ Reporting of subversive activity being carried out by the enemy.

➤ Employed in construction of roads, tracks and maintenance of border fencing.

➤ In times of peace as well as hostilities, local population can provide invaluable information regarding enemy build-up and activities.

➤ Protection of villages against criminals/dacoits etc from across the border.

➤ Provide guides to the Armed Forces whenever required.

In the difficult riverine areas, fishermen watch groups can be formed. This would fill in large gaps existing in the surveillance cover on a regular basis in the general area of territorial waters and the EEZ.

Recommendations to Improve the Community Participation in Border Management

Following steps may increase the level of trust between the border population and the security force to achieve the people inclusive border management:

➤ Attitudinal change - develop empathy towards population.

➤ Identification and development of projects.

➤ Educating border population about the constraints of BGF and rationale of the operations carried out by BGF. Develop positive image at local levels and also through media.

➤ Explaining rationale of the restrictions imposed.

➤ Develop understanding with locals of the problems faced by BGF.

➤ Permanent communication leading to better understanding; border coordination meetings, etc.

➤ Respect for the local customs and habits.

➤ Above board dealings-strict adherence to code of conduct, ethical standards and integrity-win trust.

➤ Assistance to population in times of need/ emergencies, health assistance.

➤ Carrying out civic action programmes, sports activities, judicious utilisation of border population grant, etc. No misbehaviour/ maltreatment, no forced labour, no damage to crops, no favouritism.

➤ Pay for what you buy.

➤ Keep watch over bad characters, identify ex-servicemen and seek cooperation.

➤ Learn local language, respect women folk, elderly persons. Respect the religion and local customs.

Conclusion

Seven security personnel died in recent encounter. Apart from the death toll, these events leave a bad taste as it seems like the terrorists had to do very little to penetrate these high-security installations, some of which (like Pathankot) house equipment worth hundreds of millions of dollars. In Uri, the terrorists merely had to cut through a wire fence and in Pathankot the attack group only needed to secure a rope to the wall and climb over it.

India spends about $40 billion a year on defense, but the contribution toward improving base security through smart technology is insufficient. If India had routed a fraction of the amount spent on defense procurement to adopting smart and cost-effective security solutions in these bases the attackers would've been neutralized long before they closed in. Also Indian security forces would have been in a tactically advantageous position to engage them. Self encouragement for the whistle blower and need of local people participation in this issue can formulate the upmost awakening level of patriotism in its sense.

RAFALE DEAL AND MAKE IN INDIA

Context

India, France ink €7.87 billion agreement for 36 Rafales. The deal includes aircraft in fly-away condition, weapons, simulators, spares, maintenance, and Performance Based Logistics support for five years.

Fig. 13

Union cabinet committee has given its approval for the purchase of 36 fighter jets from France's Dassault, as the country looks to counter China's growing military clout.

What is Rafael aircraft?

Rafales are twin-engine Medium Multi-Role Combat Aircraft (MMRCA) manufactured by Dassault Aviation, a French firm. Rafale fighter jets are positioned as 'omnirole' aircrafts that capable to perform a wide-range of combat roles such as air supremacy, interdiction, aerial reconnaissance, ground support, in-depth strike, anti-ship strike and nuclear deterrence. Rafale is a potent aircraft and will add to the capability of the Indian Air Force.

Fig. 14

Brief history

IAF sought additional fighter jets in 2001. The current IAF fleet largely consists of heavy and light-weight combat aircraft. So the Defence Ministry considered bringing in intermediate medium-weight fighter jets. Though the idea has been around since 2001, the actual process began in 2007. The Defence Acquisition Council, headed by then Defence Minister A.K. Antony, approved the "Request for Proposal" to buy 126 aircraft in August 2007. This kick-started the bidding process.

After Rafael won the contract, the Indian side and Dassault started negotiations in 2012. While it is usual for such negotiations to stretch to several months, the Rafael negotiations has been on for almost four years now. The agreement was signed only in January this year.

Why there was years of delay?

Both India and France witnessed national elections and a change in government while the negotiations were under way. Pricing was another factor. Even during the signing of the purchase agreement, both the sides couldn't reach a conclusion on the financial aspects. The price of an aircraft it about Rs.740 crores and India wants them for at least 20 per cent lesser cost. Though the initial plan was to buy 126 jets, India scaled it down to 36, that too in ready condition.

How important is this deal to both India and France?

France: Rafael jets are currently being used mostly by France and also by Egypt and Qatar. Dassault is hoping that export of Rafael jets will help the company meet its revenue targets. India was the first country that agreed to buy Rafale, after it was used in Libyan airstrikes. If India inducts these jets in its military fold, other nations could express its willingness to buy Rafael.

India: India chose Dassault over its traditional partner Russia's MiG. It also ignored U.S.' Lockheed, at a time when India and U.S. were

THE MEGA DEAL

India and France are expected to sign the agreement for purchase of 36 Rafale fighters on Friday in presence of the Defence Ministers of both the countries

Worth Rs. 60,000 crore, (7.8 billion Euros), Rafale is one of the biggest defence deals India has ever signed

● Among the most advanced fighters in operation in the world

● Key features are an Israeli helmet mounted display, **air-to-air beyond visual range** missiles; and other missile systems

Rafale is a strategic weapon in the hands of the IAF due to its beyond visual range Meteor air-to-air missile, with a range in excess of 150 km

● A very expensive acquisition

● Will further add to the logistics challenge for the Air Force, **which operates several kinds of Russian and NATO fighters**

KEY QUESTIONS

Average fighter would cost over **Rs 1,600 crore,** three times a Sukhoi-30 fighter

● Given the high cost, more **Rafale fighters** may not be acquired

● Air Force has a need for at least **42 fighter squadrons**; it now has only **33**

SERVICE SUPPORT
● France will carry out performance -based logistics support — at all times, at least **75 per cent fighters** will be airworthy

75%

● With Rafale's BVR air-to-air missile, IAF can hit targets inside Pakistan from India's territory

● Rafale deal comes with a net saving of nearly 750 million Euros compared with the one struck during the previous government, which was scrapped by the NDA, besides a 50 per cent offset clause

Fig. 15

aiming for closer ties. Procurement of combat aircraft is long overdue for the Indian Air Force.

What are the different issues in this landmark Defence Deal?

A. Procurement volume shrunk

➤ IAF currently has 30-32 squadrons of fighters, with each squadron consisting of anywhere between 18-21 aircraft. The country needs anywhere between 40-42 squadrons to adequately protect its borders against Pakistan and China.

➤ As per IAF, 126 aircrafts was the minimum requirement for their urgent operational requirements. It was planned to purchase 18 from France and remaining 108 to be produced in India by HAL. Manufacturing of 108 aircrafts by the Indian public sector has been removed from the agreement. This will cost us very heavily and hurt the Make in India campaign too.

➤ It has also directly and indirectly upset a long-standing demand from India's defence companies: a well-defined product-procurement road-map that would allow them to invest in specific areas and scale up appropriately.

➤ Government also suggested that the Rafale order could be scaled down without worry because future gaps in the IAF's fleet could be plugged with indigenous light combat aircraft. This line of thinking has been vehemently opposed by large sections of the IAF stating that the indigenous LCA fighter (Tejas) would have a different role and should not be confused with the requirements of a medium multi-role fighter like the Rafael fighter jets.

B. Offsets and technology transfer Issue

➤ The Indian defence ministry delegation spent most of January-May arguing for a higher offset clause (a percentage of the acquisition amount that France would agree to invest in the Indian defence ecosystem). France finally agreed to a 50% offset clause – it had been arguing for 30% which will see 3 billion euros flowing into India.

➤ A good amount of of the 3 billion euros (roughly 1 billion euros) is specifically earmarked to revitalise India's stalled combat engine jet project.

➤ There is a 50 percent offset clause under which French industry will invest half the contract value back in the country which is expected to develop some expertise domestically in the aerospace sector.

➤ Further, 74 percent of the 50 percent offset value should be exported from India. This is expected to result in Euro 3 billion over the next 7 years. There is also a six percent technology sharing component, which is being discussed with the Defence Research and Development Organisation (DRDO).

➤ Earlier there was a provision for compulsory technology transfer. But now the final deal has a certain amount of technology transfer that will help scale up the production of the indigenous Tejas aircraft.

C. Production Centres Issues

➤ The Rafael deal also deeply emphasises the problems in securing Indian production centres and the pricing issues associated with defence imports. As of now, the Rafael gap is a stop-measure. It is great technology, no doubt. But much of the back-and-forth over the last two years was how much production could be done in India, specifically the setting of a third production line in India.

➤ The companies that were in talks with Dassault and the Indian government in early 2015 were Bharat Electronics, Noida-based Samtel and Anil Ambani's fledgling Reliance Defence Systems.

➤ Until around June 2015, many of the discussions were on whether a production centre would be set up in India for future orders and for export. By the middle of the year, this was shelved and by the end of the year talks mainly focused on what else could be gained from the off-the-shelf purchase such as technology transfer and how big the offset clause should be.

➤ The inability to secure an India production centre underscores the difficulties of the 'Make in India' defence initiative to this date – although as talks got delayed and the order was scaled down heavily it was clear that an off-the-shelf purchase would be the only option.

➤ Even if India exercises its option to purchase more Rafael aircraft it is unlikely they will be produced in India.

D. Pricing Issues

➤ From late 2015 to April 2016, the issues of pricing dominated discussions. It was clear that the French side had deliberately kept pricing on the higher side, far beyond what would have been offered elsewhere. A large part of this aggressive pricing was fuelled by India reducing the order. Even though the eventual price reportedly dropped from $10-12 billion to the current $8 billion, the year-long negotiation still didn't ensure that the price came "on our own terms".

➤ While the order of 126 aircraft worked out to around Rs 715 crore per fighter (after adding all costs), the 36-aircraft purchase works out to around Rs. 1,600 crore. Though we need to acknowledge that the current contract includes elements not in the original 126-fighter tender, it still works out to around Rs. 1,000 crore per aircraft — which is roughly the cost of two-and-a-half Sukhoi-30 MKI fighters.

Is it contradictory to Make in India concept?

"Make in India" is the Government's flagship campaign, launched in September 2014, intended to boost the domestic manufacturing industry and attract foreign investors to invest into the Indian economy and to develop India as a hub for manufacturing, design and innovation.

The aim of this campaign is to grow this to a 25% contribution by 2025. In the process, the government expects to generate jobs, attract much foreign direct investment, and transform India into a manufacturing hub preferred around the globe. India's manufacturing sector has the potential to touch to 90 million domestic jobs by 2025.

In 2015, Government announed that India will stop being the world's number one defence importer over the next five year and nearly 70% of the country's military needs would come from domestic production.

But the Rafael's deal's twists and turns over the last two years indicate how much work the Government has ahead of itself. In particular, it shows how much work needs to be done in overhauling the Government's onerous acquisition processes, in setting up solid product road-maps and in ensuring 'Make-in-India' and co-production.

Conclusion

Rafael Aircraft deal is the first serious aircraft purchase in almost 20 years. It is a sign that things are moving. These fighters take the total number

of squadrons in the Indian air force from 33 to 35. But that remains well short of the 42 sanctioned by the government — and even further short of the 45 requested by air force chiefs.

Heads of Indian companies, however, indicated that the defence ministry needed to kick matters of domestic production centres. The drawn-out nature of the pricing negotiations, and how it may have ended up being quite expensive, underscores government mission to reduce defence imports. The Rafael deal in this regard is a very costly acquisition that not only fulfil all of our requirements but also shows that India need to boost indigenous defence production.

Despite all these issues, however, there are a number of silver linings in the Rafael deal. A higher offset clause and the final deal has a certain amount of technology transfer that will help scale up the production of the indigenous Tejas aircraft.

At least the deal is now done as it has dominated the thinking of the ministry of defence for a very long time, to the detriment of other programmes. It is certainly a time for celebration.

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FIFTH ANNUAL EMPLOYMENT-UNEMPLOYMENT SURVEY BY LABOUR BUREAU

Context

Labour Bureau released fifth annual employment-unemployment survey at all-India level, Report says about 77 per cent of the households were reported to be having no regular wage/salaried person. The figures could be an alarm bell for Government at the Centre, which has taken a series of steps such as 'Make in India' to create jobs for inclusive growth in the country.

Employment: Why does it matter?

The experience of countries that succeeded in reducing poverty significantly indicates the importance of high rates of economic growth in achieving this. High growth, however, is not a sufficient condition for poverty reduction. The pattern and sources of growth as well as the manner in which its benefits are distributed are equally important from the point of view of achieving the goal of poverty reduction.

In this context, employment plays a key role in all developing countries. Indeed, countries which attained high rates of employment growth alongside high rates of economic growth are also the ones who succeeded in reducing poverty significantly.

Employment generation is the key channel through which economic growth translates into prosperity for the population. In a growing economy, employment growth with rising productivity is the most effective mechanism available to the poor to participate in the growth process and raise their standard of living. High economic growth, therefore, unless accompanied by quality employment opportunities will raise inequalities and is therefore undesirable.

Thus, gainful employment generation is the bedrock of attaining growth with equity and to alleviate poverty.

Fig. 16

Employment Generation in India

Rapid employment generation assumes even greater importance for India which is projected to be the youngest nation in the world in terms of size by the year 2020. As the Economic Survey 2015-164 puts it –

"To exploit its demographic dividend, India must create millions of "good"— safe, productive, well-paying—jobs."

Thus, employment matters to achieve growth with equity and to successfully meet the challenge of the impending demographic dividend.

The challenges related to employment generation that India facing are:

➤ **Addressing youth unemployment and skill development**

India has a unique proposition in terms of the youth population which constitutes the largest portion of its workforce. India will have about 63 per cent of its population in the working age group by 2022. However, our youth unemployment rate is 6.6% which is well above overall unemployment rate which is 2.2%. Every year almost 10 million people enter labour force in India. 58% of our population is below 29 years. Converting this into demographic dividend involves formulating a comprehensive policy for creating employment avenues at a massive scale with builtin tenets of decent work. Skill development initiative rooted in the well-developed demand supply skill matrix is the challenge that is being addressed by the policy planners in India.

➤ **Addressing underemployment, seasonal unemployment and low earnings**

Indian labour market is characterized by large unorganized sector. The policy challenge therefore is increasing productivity in farming as well as promoting labour reallocation from rural to urban areas. Rural economy is characterized by incidence

of informality and underemployment. The integrated policy intervention to translate rural economic growth into employment and decent work opportunities requires to focus on creating effective local job strategies to off-load the excess burden from agriculture, developing allied industries especially SMEs according to local market conditions and linking them effectively to external demand and supply chains. On the other hand targeted skill development initiatives need to be taken to enhance productivity and employability including entrepreneurship of workforce. The approach aims towards expansion of off farm employment opportunities which are in turn an important driver of poverty reduction. Creating Conditions for labour intensive micro manufacturing is therefore critical for meeting job challenges especially in urban centers.

➤ **Developing social protection for unorganised sector**

Transition from unorganized to organized economy involves a combination of policy initiatives including labour regulations as well as access to decent working conditions. Extending social protection to those in unorganized sector is a way of bringing them in the realm of decent work and a way forward to transition from unorganized to organized sector. Challenge is therefore to develop policy mix with maximum outreach as well as ensuring ease of accessibility and operation.

Labour Bureau employment-unemployment survey

In India, Labour Statistics are collected, compiled and disseminated by several agencies. Ministry of Labour and Employment is one of the most important sources of labour statistics in India. It collects labour statistics through the offices of Labour Bureau.

Labour Bureau has been conducting quarterly employment surveys since January, 2009 to study the impact of global economic slowdown on employment in selected sectors

Labour Bureau has also been entrusted with the task of conducting Annual Employment-Unemployment Survey in the country. The first annual survey was conducted in 28 States/UTs by covering 300 districts in the country during the year 2010.

Labour Bureau released 5th Annual Employment- Unemployment Report 2015-16 recently. The survey was conducted across all states and union territories during April 2015 to December 2015. (Labour Bureau did not bring out any such report for 2014-15)

A total sample of 1, 56,563 households were covered in the survey – 88,783 households in the rural sector and 67,780 in the urban sector.

All the Labour Force Estimates have been derived for persons aged 15 years and above only.

The survey results are presented under four heads namely –

➤ Employment-Unemployment Scenario
➤ Youth Employment-Unemployment Scenario
➤ Education, Skill and Labour Force
➤ Employment-Unemployment Scenario among different Social Groups

The **Labour Force Surveys** primarily provide estimates of 3 key indicators of the labour market situation.

➤ Labour Force Participation Rate
➤ Worker Population Ratio
➤ Unemployment Rate.

Besides, they also provide descriptive data by social groups, sex, age, education, rural/urban sector, industry, occupation and type of activity. These indicators are fundamental to our understanding of the prevailing situation of

➤ Labour supply
➤ Labour demand
➤ Structure of employment in the country.

The current Employment & Unemployment Survey is the fifth in the series providing annual results of the status of labour market in India.

Summary of the 5th Annual Survey

➤ About 40.4 per cent of the households belong to Other Backward Classes category followed by 29.9 per cent under the others category, 20.3 per cent under the Scheduled Castes category and the rest 9.4 per cent households belong to the Scheduled Tribes category.

➤ About 24 percent households benefitted from employment generating schemes like MGNREGA, PMEGP, SGSY and SJSRY etc.

➤ Only three North Eastern States, namely Tripura, Manipur and Mizoram have more than 70 percent of the households benefited from MGNREGA.

➤ In case of number of employed persons in the households, it is found that 48.4 per cent of the households had only 1 employed person followed by 30.6 per cent households with 2 employed persons. Households with 3 employed persons constituted 10.7 per cent and households with 4 & above persons constituted only 5.2 per cent. Remaining 5.1 per cent of

the households did not have even a single employed person/earner.

➤ About 77 per cent of the households were reported to be having no regular wage/salaried person.

➤ A little more than 67 per cent of the surveyed households had average Monthly Earnings not exceeding 10,000 only. In Rural sector such households constituted about 77 per cent whereas the corresponding proportion was about 45 per cent among urban households.

➤ The state of Madhya Pradesh recorded the highest proportion (35.8) percentage of households with average monthly earnings not exceeding to Rs.5,000 followed by West Bengal (34.5 per cent), Uttar Pradesh (30.1 per cent) and Odisha (29.8 per cent).

➤ 94.4 per cent of the households had saving bank accounts for both rural and urban sector.

➤ In Daman & Diu and Lakshadweep, all of the households surveyed had saving bank accounts.

➤ Union Territory of Chandigarh had 99 per cent of the households with saving bank accounts. Across all States/UT's among the households with saving bank accounts, Chandigarh had the highest proportion of (4.1 per cent) households having average monthly earnings above Rs. 1, 00,000 which is much higher than at All India Level.

➤ Nagaland state had minimum i.e. 79.2 per cent households having saving bank accounts and out of these the highest proportion (30.2 per cent) of the households had average monthly household earnings of Rs. 20,001 to Rs. 50,000.

➤ Lakshadweep had maximum (13.8 per cent) households with no earner followed by Kerala (13.2 per cent) and Chandigarh (12.4 per cent).

Labour Force and Worker-Population Ratio

➤ Labour Force Participation Rate (LFPR) was estimated to be 50.3 per cent, in other words 50.3 per cent of the persons aged 15 years and above were either working or seeking work during the reference period.

➤ In the rural sector, the LFPR was estimated to be 53 per cent whereas in the urban sector the LFPR was 43.5 per cent.

➤ Female LFPR was significantly lower as compared to LFPR among males. At the All India level, female LFPR was estimated to be 23.7 per cent as compared to 75 per cent for males and 48 per cent for transgenders.

➤ LFPR for different categories is as below:

				All India (in per cent)
Sector	**Male**	**Female**	**Transgender**	**Person**
Rural	77.3	26.7	51.1	53.0
Urban	69.1	16.2	41.2	43.5
Rural + Urban	75.0	23.7	48.0	50.3

➤ The Worker Population Ratio (WPR) was estimated to be 47.8 per cent or in other words 47.8 per cent of the persons aged 15 years & above were reported to be employed under the reference period.

➤ In rural sector, the WPR was estimated to be 50.4 per cent under the UPS approach as compared to 41.4 per cent in the urban sector.

➤ The female WPR was estimated to be 21.7 per cent as compared to the male WPR of 72.1 per cent and 45.9 per cent for transgenders.

The Employment-Unemployment Situation

➤ The unemployment rate was estimated to be 5.0 per cent or in other words 5.0 per cent of the persons aged 15 years and above who were available for work could not get work during the reference period.

➤ In rural sector, unemployment rate was 5.1 per cent whereas in urban sector, the unemployment rate was 4.9 per cent.

➤ The unemployment rate was significantly higher among females as compared to males. The female unemployment rate was estimated to be 8.7 per cent, whereas for males it was 4.0 per cent .

➤ In urban areas, the female unemployment rate was estimated to be 12.1 per cent as compared to 3.3 per cent for males and 10.3 per cent for transgenders.

➤ The unemployment rate for different categories is given below.

				All India (in per cent)
Sector	**Male**	**Female**	**Transgender**	**Person**
Rural	4.2	7.8	2.1	5.1
Urban	3.3	12.1	10.3	4.9
Rural + Urban	4.0	8.7	4.3	5.0

To get a better picture about the Employment situation, it will be useful to look at the distribution of workers or employed persons according to the nature of their employment

➤ 46.6 per cent of the workers were found to be self employed under the Usual Principal Status Approach followed by 32.8 per cent as casual labour. Only 17 per cent of the employed persons were wage/salary earners and the rest 3.7 per cent were contract workers.

➤ The survey results show that majority of the persons were employed in the primary sector. 46.1 per cent of the persons were estimated to be employed under Agriculture, Forestry and Fishing sector, followed by 32 percent in tertiary sector and 21.8 percent in the secondary sector.

Fifth round of Annual Employment Unemployment survey also apart some important estimates for the under-employment, considering only the duration of work available to participants in the Labour Force.

➤ 60.6 per cent of the persons aged 15 years and above who were available for work for all the 12 months during the reference period were able to get work throughout the year, at the All India level. In rural areas, 52.7 per cent of the persons aged 15 years and above who were available for work for all the 12 months during the reference period were able to get work throughout the year at the All India level, whereas the corresponding figure for urban areas was 82.1 per cent.

➤ The present survey has also collected data on parameters like methods adopted to seek work by the unemployed, reasons for unemployment among graduates and post graduates, type of job contract, availability of paid leave & social security benefits and social security benefits by different schemes.

➤ At the All India level, a majority 67.5 per cent of the self employed workers had average monthly earnings up to Rs 7500. Only 0.1 per cent of the self employed were estimated to have earnings above Rs 1 lakh.

➤ Similarly, 57.2 per cent i.e. more than half of the regular wage/salaried workers had monthly average earnings up to Rs 10,000. At the All India level 38.5 per cent of the contract workers and 59.3 per cent of the casual workers had monthly earnings of up to Rs 5000.

➤ At the All India level, majority of unemployed persons (33.5 per cent) used more than two methods to seek work, followed by, through friends & relatives (24.1 per cent), application made in response to advertisement (23.7 per cent) and through employment exchange (4.3 per cent).

➤ At the All India level, 58.3 per cent of unemployed graduates and 62.4 per cent of unemployed post graduates cited non availability of jobs matching with education/skill and experience as the main reason for unemployment followed by non availability of

adequate remuneration cited by 22.8 per cent of graduates and 21.5 per cent of post graduates.

➤ At the All India level, 64.9 per cent of the regular wage/ salaried workers, 67.8 per cent of the contract workers and 95.3 per cent of the casual workers do not have a written job contract. 27 per cent of the regular wage/ salaried workers and 11.5 per cent of the contract workers had written job contract of more than three years.

➤ At the All India level, just 20.6 per cent of workers except self employed received paid leave and 21.6 per cent availed social security benefits. A majority 71.2 per cent of workers were not eligible for social security benefits.

The Government has undertaken numerous initiatives to boost the youth employment scenario in the country.

Noteworthy among these initiatives are:

➤ The 'Start-up India' initiative seeks to unleash the entrepreneurial potential of young entrepreneurs and turn them from job seekers to job creators.

➤ The Government is also targeting growth of the employment intensive manufacturing sector through 'Make in India' initiative which will generate employment and self employment opportunities for the growing young population.

➤ Government has launched Skill India Mission to fuel innovation, increase productivity, development of enterprise, technological change, investment, diversification of the economy, and competitiveness.

Conclusion and Way Forward

The Government has been making constant efforts for reducing unemployment through normal growth process and implementing various employment generation programmes

But country with a good base of elementary education may be able to achieve economic growth up to a certain level and yet face constraints arising from the shortage of skilled workers at a higher level of development. If that is the case, countries would need to keep upgrading the level of their human capital as they achieve higher levels of economic development. There is also a need to avoid a 'supply-side bias'. Simply increasing the pool of workers through the education and training system in an undifferentiated way is unlikely to respond to the changing requirements of the labour market. The net outcome is likely to be unemployed

and underemployed educated workers representing a waste of human resources. Hence, human capital can play its due role in the development process provided a framework is in place that entails an appropriate utilization of the skills and talents embodied in the work-force and tailors policy interventions to anticipated changes in patterns of labour demand.

Many programs for development cooperation tend to focus attention on agricultural farm development without considering that more than 50% of household income in rural areas is derived from off-farm and non-farm employment. Similarly, most programs for enterprise development still disregard the fact that almost 80% of small-scale businesses are informal services based on self-employment. Poverty is strongly present in both categories, but market-based policies and public institutions largely bypass these people.

Inclusive development requires massive generation of employment for poor people that fail to get basic education and lack resources to invest in asset creation. In the countryside, people of advanced age are still responsible for major agricultural operations. Many young people look for a better destiny in the cities. Thus escaping this poverty trap asks for decisive public policies and market incentives that recognize the dynamics of local labour markets.

First, attention should be given to actions for improving labour productivity of rural workers, through education and practical training for jobs outside the agricultural sector, or for better jobs in more advanced agricultural processes. Progress in rural mechanization asks for tractor drivers and technicians, rural towns offer opportunities for shopkeepers and taxi drivers. Also in urban areas, new professions are emerging in the telecom, retail and transport sector that require basic skills. Investing in secondary education and vocational training for business skills and financial literacy have a high pay-off for the people and the society.

Second, emerging micro- and family-firms need to strengthen market linkages in order reduce the currently high costs for input purchase and output marketing. This will enable them to recruit additional labour force and to offer more stable employment positions. Employment effects of most microfinance programs are still disappointing, since they focus too much on working capital and neglect fixed capital investments. Vouchers that permit microfirms access to improved inputs show more effects for stabilizing employment.

Third, informal job protection ('better jobs') is of critical importance to improve decent working conditions. Respecting labour hours and wage agreements are part of the business climate. Programs that provide voice to workers and that enable worker organization show to deliver also positive enterprise effects, since greater job identification pays off with higher labour productivity.

Fourth, targeting women for rural and urban employment is proven to be a highly effective strategy for guaranteeing pro-poor development. Female employment in public infrastructure rehabilitation programs as well as for the promotion social protection and environmental services yield high returns in terms of improved child care and family nutrition.

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DEBATE OVER RBI AUTONOMY

Context

In recent months, the country has witnessed a raging debate over the independence of the RBI. The central bank should be independent and should be able to say 'no' to seemingly attractive proposals is an issue to ponder.

A central bank is an apex institution in the banking and financial structure of the country. It plays a crucial role in organizing, running, supervising, regulating and developing the banking and financial structure of the economy.

The science of central banking is still evolving. The evolution, as always, has not been easy and has had its share of challenges. In 1900, there were hardly a dozen central banks and each had been initially created to dispense some specific function of the government, mainly to issue currency and coinage or manage foreign exchange reserves.

Regulation and supervision of banks came later, and later still inflation targeting and fixation of interest rates. The concept of an independent central bank evolved in advanced economies and finds its roots in the successful anti-inflationary policy of Paul Volcker in the U.S. between 1979 and 82.

According to economic literature that developed thereafter, and which was extended to other countries including developing countries, the most independent central banks are those of Latvia, Hungary, Armenia, and Bosnia. India, Saudi Arabia, Singapore, and the U.S. are the countries with the least independent central banks.

What are the variable factors and challenges to the functioning of central banks?

The need is to recognize that there is a clear distinction in the functioning of central banks in advanced and emerging market economies (EMEs).

In advanced countries:

In advanced countries, financial markets are not only developed but seamlessly integrated, and financial institutions, established a long time ago, are mature, which ensures that the transmission mechanism is efficient.

Therefore, central banks can focus on a single objective to be pursued by a single instrument, and hence the quick adoption of inflation targeting by many central banks.

However, even in advanced economies, because of global spillovers, the challenge is of how to define independence of a central bank.

Except in a few countries like Germany, the U.S. and Switzerland, the government directed monetary policy function until a few decades ago.

In the U.K., independence evolved over a period of time and the Bank of England, set up in 1694, was offered operational independence only in 1997, implying that the interest rate was fixed by the Treasury until then. Even in case of the U.S. Federal Reserve, as is well known, independence is within the overall authority of Congress.

In emerging economies:

In EMEs, characterized by underdeveloped financial markets, with inefficient transmission mechanism and government ownership of financial institutions, independence could rather be harmful.

Consequent to ineffective transmission of monetary signals, central banks of EMEs have to intervene in different isolated markets. In practice, central banks of EMEs have to pursue very diverse activities — diverse not only from advanced economies but also from other EMEs.

Illustratively, central banks in emerging markets have to ensure development of financial markets and carry out financial sector reforms. They have also to ensure that the financial system, including banks, is robust and stable.

In many EMEs, especially those transitioning from socialist economies, banks and financial institutions are owned by the government. The government-owned banks lend extensively to other government-owned companies, compromising standard commercial viability criteria.

The central banks of EMEs also have to focus on macroeconomic variables like capital inflows and balance of payments because most of them follow a managed exchange rate system. And simply to ensure that banking penetration is extensive, financial inclusion also becomes an important objective.

How Independence of Central Bank and government ownership is related?

If the central bank has a single objective, independence is understandable for a focussed approach, but if the central bank has multiple objectives, then there is an increased need for coordination with the government to jointly face challenges.

In fact, government ownership of many financial institutions and public sector enterprises and extensive financial interaction, supervisory and regulatory authority vested in central banks cannot operate independently. In addition, it is difficult to practise independence in one activity and not in another.

When interest rates are zero or near zero in advanced economies, then distributional and allocational issues related to monetary policy arise which necessitate coordination with the government. In a situation, globally, where the main objective of macro policy is GDP growth, financial stability, financial inclusion and trade-off between inflation and employment, then critically high coordination is necessary between different apex institutions, not independence.

In any democratic system, government institutions and government policies have to strike a compromising balance between diverse interests and be sensitive to the use of public resources.

Seeking independence from the elected representatives is rather difficult in any democracy. Therefore, joint and consultative effort, despite some differences, as illustrated in the monetary history of the U.S., the U.K., and Canada, should be the norm.

Debate over RBI Autonomy

The Reserve Bank of India Act of 1934 established the Reserve Bank as the banker to the central government and set in motion a series of actions culminating in the start of operations on April 1, 1935.

Role of RBI

➤ Issue of Bank Notes
➤ Banker to Government
➤ Custodian of Cash Reserves of Commercial Banks
➤ Custodian of Country's Foreign Currency Reserves
➤ Lender of Last Resort
➤ Central Clearance and Accounts Settlement
➤ Controller of Credit

The Centre and the RBI have entered into an agreement to bring down inflation to 4 per cent over the medium term. Some politicians had criticised the central bank for not doing enough to support growth, including making timely interest rate reductions. Criticism of the central bank is widespread. In response RBI governor said it is important that governments look beyond "motivated public criticism and protect the independence of their central bank to act."

An independent central bank is essential for ensuring stable and sustainable growth in any economy. Without any political pushback as inflation rises, it is necessary to build institutions to ensure macroeconomic stability. This is why successive governments, in their wisdom, have given the RBI a measure of independence.

Independence of a central bank has to be contextual, and has four main dimensions:

➤ Statutory independence from the state with respect to nomination, tenure and termination of the Governor;

➤ Independence of monetary policy instruments, implying managing of the interest rate or liquidity;

➤ Independence of monetary policy objectives — inflation targeting, credit control, priority sector lending or any other objective which is stipulated by the government; and

➤ Financing of government deficit. If the central bank has to ensure a responsible policy formulation, then to whom is the accountability?

What happens in Practice?

Over the last quarter century, the RBI has been seen to be more independent as India's economy has liberalized, although much consultation takes place between the central bank and the finance ministry, and the government has been known to exert its will, against the wishes of the RBI chief.

There is no legal act mandating autonomy of the RBI, but there is a growing convention that the RBI is allowed autonomy to do what it wants.

Consultations between the RBI and the finance ministry, described as "substantive," are not unusual in India.

What are the clashes in the past between Government and RBI?

The RBI and government have clashed over monetary policy in the past, notably during the tenure of the previous governor, Y.V. Reddy, and then finance minister P Chidambaram.

In 2007, global interest rates were softening but the central bank under Reddy maintained a hawkish stance, citing inflationary risks stemming from high oil prices. The government favoured lower interest rates to help sustain high growth and bring relief to borrowers.

The RBI's view prevailed and it hiked policy rates. In June of the following year, however, Reddy was prodded by the finance ministry to raise rates against his wishes.

But generally, the finance ministry and the RBI try to find common ground on issues concerning monetary policy.

So what governs the RBI's Independence?

Informally RBI independence is governed by Personalities to a very large extent. YV Reddy, for example, was "fiercely independent".

Subbarao is seen as more open to consultations with the finance ministry, although he has demonstrated independence with criticism of the government's fiscal deficit and early warnings on inflation.

Other ways by which government can influence RBI

Government can influence RBI through appointments too. The government appointed Dr D Subbarao, who was the top bureaucrat in the finance ministry, as central bank governor, bypassing Reddy's deputy Rakesh Mohan, who had been seen as a strong candidate. This was a rare instance where the top bureaucrat in the finance ministry was appointed to the top job at the Indian central bank immediately after serving out his stint as finance secretary.

The government can also issue directives on non-monetary policy matters such as foreign investment rules in the banks.

Conclusion

In India, the objective of macro policy is enhancing economic welfare, and any one wing of macro policy, monetary or fiscal, cannot independently work without active support of another.

In fact, the concept of an independent central bank has different implications for different EMEs and advanced economies, depending on the level of development of the economy and markets. This distinction has to be recognized and researched in economic literature as immediate priority.

In an emerging market economy like India's where the main objective of macro policy is economic welfare; the central bank cannot work independently of the government.

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INDO-NEPAL BILATERAL TALKS

Context

India and Nepal held wide-ranging talks and sealed three significant deals during the visit of Mr. Prachanda to India.

Introduction

India and Nepal share a unique relationship of friendship and cooperation characterized by open borders and deep-rooted people–to–people contacts of kinship and culture. There has been a long tradition of free movement of people across the borders.

After India had achieved independence in 1947, Nepalese-Indian relation continued to be based on the Treaty which had been signed with government of British India in 1925.

Beginning in 1950, however relations were based on the Treaty of Peace and Friendship, ratified in July 1950, where each government agreed to acknowledge and respect the other's sovereignty, territorial integrity, and independence; to continue diplomatic relations, and, on matters pertaining to industrial and economic development to grant rights equal to those of its own citizen to the nationals of the other residing in its territory. These accords cemented a 'special relationship' between India and Nepal that granted Nepal preferential economic treatment and provided Nepalese in India the same economic and educational opportunities as Indian citizens.

The India-Nepal Peace and Friendship Treaty of 1950 covers ten articles and includes the free movement of people and goods as well as the issuance of work permits. The treaty provides for an open border between the two countries and allows Nepali nationals to work in India without a work permit, to apply for government jobs and the civil services (except for the IFS, IAS, and IPS), to open bank accounts and buy property. Incidentally, India had waived its rights under reciprocity as a sign of goodwill. The provisions of the "secret" side letters to the Treaty, which required Nepal to consult India on its defence requirements, which Nepalis perceive as unfair and which are often used by politicians to whip up anti-India sentiment, are no longer secret or even observed. Today, the open border is used by Pakistan to infiltrate terrorists and pump in significant amounts of fake Indian currency.

Why was it in news recently?

Recently Nepalese PM Pushpa Kamal Dahal Visited India and held "extensive and productive dialogue" with Indian counterpart PM Narendra Modi. India and Nepal signed 3 significant deals during the 4 day visit between Sepember 15-18.

➤ MoUs signed are Dollar Credit line agreement.

➤ First Amendatory Dollar credit line agreement.

➤ MoU for Upgradation and Improvement of Road Infrastructure.

Fig. 17

What is the history of India Nepal Relations?

➤ The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal. Under the provisions of this Treaty, the Nepalese citizens have enjoyed unparalleled advantages in India, availing facilities and opportunities at par with Indian citizens. Nearly 6 million Nepali citizens live and work in India.

➤ 2005 - Beginning with the 12-Point understanding reached between the Seven Party Alliance and the Maoists at Delhi in November 2005, Government of India has welcomed the roadmap laid down by the historic Comprehensive Peace Agreement of November 2006 towards political stabilization in Nepal, through peaceful reconciliation and inclusive democratic processes.

- There are regular exchanges of high level visits and interactions between India and Nepal. In 2014, Prime Minister visited Nepal twice – in August for a bilateral visit and in November for the SAARC Summit – during which several bilateral agreements were signed. India and Nepal have several bilateral institutional dialogue mechanisms,

- Economic Relations
  - Since 1996, Nepal's exports to India have grown more than eleven times and bilateral trade more than seven times.
  - The main items of exports from India to Nepal are petroleum products, motor vehicles and spare parts, machinery and spares, medicines and chemicals.
  - The main items of exports from Nepal to India are polyester yarn, textiles, jute goods, threads, zinc sheet etc. Indian firms are the biggest investors in Nepal, accounting for about 38.3% of Nepal's total approved foreign direct investments.

- Water Resources
  - Development Authority was set up in 2014 to carry out the Pancheshwar Multipurpose project.
  - India and Nepal signed an agreement on "Electric Power Trade, Cross-Border Transmission Interconnection and Grid Connectivity" known as the Power Trade Agreement (PTA) in 2014.
  - An Agreement for Arun-III hydroelectric project and Upper Karnali hydroelectric project in 2014.

- India's Development Assistance to Nepal
  - Government of India provides substantial financial and technical development assistance to Nepal, which is a broad-based programme focusing on creation of infrastructure at the grass-root level, under which various projects have been implemented in the areas of infrastructure, health, water resources, education and rural & community development.
  - In recent years, India has been assisting Nepal in development of border infrastructure through upgradation of roads in the Terai areas; development of cross-border rail links at Jogbani.

Political developments in Nepal

- 2015 September - Parliament passed a landmark constitution, which defines Nepal as a secular country, despite calls to delay voting, more than 40 people are killed in protests.

- 2015 October - K.P. Prasad become the first prime minister to be elected under the new constitution.

- 2016 February - Government lifted fuel rationing after the ethnic minority Madhesi communities, partially backed by India, end a six-month border blockade in protest over the new constitution which they said to be discriminatory.

- 2016 July - Maoist party pulled out of the governing coalition. Prime Minister K.P. Oli resigned ahead of a no-confidence vote in parliament.

- 2016 August - Parliament elected former communist rebel leader and Maoist party leader Pushpa Kamal Dahal as Prime Minister for the second time.

Government's chief task is to restore political, economic and social stability at home and undo the damage his predecessor inflicted on relations with neighbours.

On the foreign policy front, Nepal needs to repair the relations with India. On this line, India has already invited the new government bilateral visit.

What is the current status of Indo-Nepal Relations?

India has significantly invested in Nepal's development through economic assistance since 1952. Despite deploying aid to win the hearts and minds of the people of Nepal, India has not entirely succeeded in doing so.

An analysis of Indian aid and gaps in the planning processes and perceptions of India's motivation shows that it has possibly contributed to the fuelling of anti-India sentiments among the Nepalese population.

Although Indian aid has not been refused, it has been resisted for one or the other reasons. India's lack of support to the Nepali Constitution was the key issue which drifted Nepal towards China.

Though India-Nepal relations are based on historical, cultural, geographical and economic linkages, both the countries have periodically acknowledged each other's value and importance, and have also described the relationship as 'special' on various occasions. However, the India-Nepal

bilateral relationship is currently at its lowest ebb due to anti-India sentiments in Nepal, in reaction to the perceived political interference by India. The Nepalese media, civil society groups and academicians have been very critical of what they call 'India's micro-management' in Nepal.

What are the significant deals in the Recent Indo-Nepal bilateral talks?

PM Modi held "extensive and productive dialogue" with his Nepalese counterpart Pushpa Kamal Dahal. However, differences over the Nepalese Constitution which led to domestic discord and disturbed ties with India persisted.

➤ India expressed the hope that the new Nepalese government would hold an "inclusive dialogue" while implementing the controversial Constitution of his country, accommodating the aspirations of all sections of their diverse society.

➤ India's stand is that Delhi would maintain dialogue with the Madhesi leaders who had demanded that PM Prachanda should address representational and territorial concerns of their community, within a short time span. The new Constitution was criticised by the Madhesi Morcha led by leaders from the plains of Nepal who led the movement for blockade of economic supply lines on the Nepal-India border.

➤ India and Nepal sealed *three significant deals*.

◻ *MoU for Dollar Credit line agreement:* India will provide new LoC agreement for US 750 million dollars for post-earthquake reconstruction projects in Nepal.

◻ *First Amendatory Dollar credit line agreement:* It was signed between Government of Nepal and EXIM Bank to US 1 billion dollar Line of Credit (LoC) agreement signed in November 2014 for enabling reapportioning of unutilised funds for post-earthquake reconstruction projects in Nepal.

◻ *MoU for Upgradation and Improvement of Road Infrastructure in Teral Area of Nepal:* It was signed between Department of Roads, Postal Highway Project of Nepal and National Highways & Infrastructure Development Corporation Limited (NHIDCL) for Project Management Consultancy Services.

Way Forward

With an apparent stand-off on the issue between India and Nepal, much will now depend on the sagacity and wisdom of the top Nepal's political parties.

Very few bilateral ties have seen the kind of personal investment of time, energy and resources by Indian Government as the one with Nepal.

India has consistently responded with a sense of urgency to the needs of the people and Government of Nepal in ensuring the success of the peace process and institutionalization of multi–party democracy through the framing of a new Constitution by a duly elected Constituent Assembly.

India has always believed that only an inclusive Constitution with the widest possible consensus by taking on board all stakeholders would result in durable peace and stability in Nepal. India's core interest in Nepal is a united Nepal's peace and stability which has a bearing on India as well because of the long and open border shared between India and Nepal.

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USA TO END 'DOLLAR VISA'

Context

Rich Indians worry as 'dollar' visa programme in US is set to end. A majority of Indians opt for this route of dollar visa to take the citizenship for their children's higher education.

Introduction

The United States of America's **Employment Based Fifth Visa (EB-5) Programme,** labeled in a lighter vein as the 'Green Card for greenback' scheme, has been attracting many Indians. However, many high net worth individuals the world over, including in India, are worried as the controversial immigrant visa programme for the wealthy is set to expire this month-end.

What is the United States of America's EB-5 Programme?

As per U.S. law, foreign investors who create at least 10 qualifying jobs with a minimum investment of $500,000 in a Targeted Employment Area can receive U.S. Green Cards *(or status of permanent residence) and Citizenship* for themselves, their spouses and all unmarried children under the age of 21. This amount is expected to go up to $1 million after September 2016.

The visa, given in exchange for investments, grants the holder a conditional permanent residence status.

After two years, the conditions may be removed, when it becomes permanent green card that can lead to citizenship, provided it has resulted in the creation of 10 jobs.

In order to be considered for permanent residency status in the U.S., the Programme mandates a qualified foreign investor to *invest at least $1 million — or a minimum of $500,000 if the investment is made in certain rural areas or regions with high unemployment — and show that ten or more full-time positions* were generated or preserved directly or indirectly as a result of that investment.

Why was the programme created?

The EB-5 programme was created in 1990 with the approval of the US Congress — America's highest law-making body.

➤ It aims to boost the American economy by attracting investment from foreign nationals and generating employment for locals.

➤ In 1992, its scope was widened through an Immigrant Investor Programme, or the Regional Centre Programme.

How this programme is different from Family based Visas and employment based Visas?

One needs to invest $500,000 to $1 million, depending on the U.S. government rules, in an employment-generating Regional Centre Program or have a direct investment to get a permanent residence Visa within 15 months under the EB-5 program. This is as compared to 7 to 10 years taken in employment-based and 15 to 20 years in family-based Green Cards.

What is the role of Regional Centers?

Regional Centre investment is the preferred investment route for EB-5 and 98.4 per cent of all EB-5 investment is through Regional Centers.

➤ *Regional Centers* are certain designated organisations permitted to collect money from overseas investors seeking the EB-5 visas, and then pump such foreign investment (which is usually much cheaper than other forms of funds including bank credit) into officially approved projects.

➤ These EB-5 investments can be stand-alone or made through Regional Centers, with the former (direct investments) carrying a greater risk than investments made through over *860 approved Regional Centers that have more on-the-ground knowledge.*

What is the data regarding Indians getting the visas?

➤ In 2015 the U.S. authorities issued *111 EB-5 visas to Indians* — that is 15 more than the previous year, and 74 more than the number of such immigrant visas issued in 2011.

➤ The *rapid rise in the number of EB-5 visas to Indians* in the last few years had led to the filing of over a thousand applications under that category from India this year.

Why there is debate in US on reconsidering the Programme?

In the backdrop of allegations of fraud and corruption — including against Indian-origin individuals — related to the programme, the U.S. Congress will soon have to consider whether to renew it or to pay heed to growing criticism and wind it up altogether.

If the EB-5 is given a new lease of life, it will most certainly be reformed through:

➤ Restrictions (such as a higher level for minimum investment).

➤ More stringent norms for fraud prevention.

➤ Steps to protect America's national security (through foolproof measures to prevent terror- and other illegal finance flowing into the programme).

There could also be new clauses *to ensure greater transparency* in the functioning of 'Regional Centers'.

Under the programme, around **10,000 EB-5 visas** are handed out every year to qualified investors.

According *to* **'Invest In the U.S.A.' (IIUSA)**, a not-for-profit association associated with the programme), there is a **yearly limit of 700 visas per nation**. However, if a country crosses that limit, there is a clause that allows U.S. authorities to make available the **"unused visa numbers"** to applicants from countries (such as China) that have crossed that limit.

What are the Statistics and Data on these Visas?

Interestingly, like in several aspects of global business, **the Chinese have been way ahead** of others in taking advantage of the EB-5 opportunities so far.

➤ According to U.S. government data, applicants **from mainland China** managed to get 8,156 such visas (or **83.5 per cent** of the 9,764 EB-5 visas issued in the year 2015.This was followed by Vietnam (280), China/Taiwan-born (139), South Korea (116), **India (111),** Russia (88), UK (84), Mexico (77) and Iran (62).

➤ Foreign Direct Investment **(FDI) from India into the U.S.** under the EB-5 programme was worth **only $161.5 million** during 1992-2014, an analysis by the IIUSA showed.

➤ **China,** however, outshone the rest *with* **$6.7 billion worth FDI** into U.S. during 1992-2014, as per the official US data.

What India needs to do to take advantage of the possible revised Programme?

According to a popular law firm specializing in immigration law:

➤ The Chinese have 'maxed out' the EB-5 programme, there is now **an effort to get more investors from India** — a fast-growing economy with an increasing number of high net-worth individuals.

➤ It was important for Indian investors **to obtain proper legal advice on choosing the right Regional Centre** especially since there have been cases of fraud and investment scams involving Regional Centres that have come to the notice of the U.S. Securities and Exchange Commission and U.S. Citizenship and Immigration Services (USCIS).

➤ Indians, who planned to take money out of India for EB-5 purposes, will *also* **need legal and tax-related advice on American and Indian tax** laws as well as on the Reserve Bank of India's Liberalized Remittance Scheme and India's Foreign Exchange Management Act.

➤ Besides, Indians applying for such visas should also note that the U.S. authorities were keen on finding out if the **source of funds is all "white money" backed by proper documents.**

What are the possible challenges to US Congress?

Meanwhile, the U.S. Congress will have a tough job on its hands when it takes up the EB-5 Programme for re-authorization this time.

➤ On the one hand, in the ongoing American Presidential election campaign, immigration has become a topic of heated debate especially with Republican nominee Donald Trump calling for measures including building a border wall and a more rigorous vetting process to prevent illegal immigration. There is also a general backlash against globalization.

➤ On the other hand, the U.S. Congress has to take in account the fact that the EB-5 programme has attracted huge amounts of FDI into the U.S. using the same globalization process.

What are the contributions of EB-5 to USA?

The IIUSA, citing data from USCIS that administers the programme, has showed that the EB-5 programme has so far attracted FDI worth around $16.8 billion.

The IIUSA has also highlighted that during FY2010-2013 the EB-5 programme had contributed $9.62 billion to the U.S. GDP, supported 29,300 jobs annually and generated $2.08 billion in tax revenue.

Conclusion

It remains to be seen how the U.S. Congress will do a balancing act especially since it is estimated that if the programme fails to get re-authorized, it could not only adversely impact over $20 billion worth of investments, but also lead to many court cases in addition to a loss of an estimated over three lakh jobs.

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INFRASTRUCTURE ISSUE IN AIR TRANSPORT

Context

India's air traffic is increasing thus India needs to build 50 new airports with investments of Rs. 2.72 lakh crore, to handle air traffic in the next 5-7 years.

The means of efficient transportation are an indispensable component of modern civilization. The economic development of a country depends largely on an efficient and adequate system of transport. They form a very important class of instrumental wealth.

Most of the Transport and Communication system in India is mostly owned by corporate bodies and the state, and rarely by single individuals. They help in the creation of what we call place utilities in production.

No country in the world today can build up its prosperity unless it has a highly developed system of communication and transport.

Development of an efficient transport system is a pre-condition of our economic development. Transportation and Communication have an important bearing on the development of exchange and markets.

Role of Airport Infrastructure in National Economy

Airports being nuclei of economic activity assume a significant role in the national economy. The quality of airport infrastructure, which is a vital component of the overall transportation network, contributes directly to a country's international competitiveness and the flow of foreign investment. While cargo carried by air in India weighs less than 1% of the total cargo exported, it accounts for 35% of the total value of exports. Better cargo handling facilities lead to enhanced levels of importation, especially of capital goods and high-value items. Likewise, 97% of the country's foreign tourists arrive by air and tourism is the nation's second largest foreign exchange earner.

Airports also represent a country's window to the world. Passengers form their first impressions about a nation from the state of its airports. They can be effectively used as symbols of national pride, if we pay sufficient attention to their quality and maintenance. In many remote, hilly and inaccessible areas of the country, air transport is the quickest and sometimes the only mode of travel available. This is especially true of sensitive regions on the borders with our neighbours in the west, north and north-east. Airports need to be integrated with other modes of transport like Railways and Highways, enabling seamless transportation to all parts of the country.

Air Traffic Scenario in India

For the last one-and-a-half years, India has been the fastest growing air traffic market in the world.

In July, domestic air travel in India grew 26.2 per cent with China being the second-fastest growing domestic market (10.2 per cent traffic growth), according to the International Air Transport Association (IATA).

Last year, the number of passengers travelling by air equaled the number of passengers that travelled in the air-conditioned coaches of the Indian Railways.

Projected Domestic Traffic Upto 2016-2017* :

Year	Domestic Passengers (In lakhs)	Percent increase	International Passengers (In lakhs)	Percent increase
1996-97 (Actual)	120.00	*10.5%	108.90	*7.0%
1997-1998	132.60		116.52	
1998-1999	146.52		124.68	
1999-2000	161.97		133.41	
2000-2001	175.67		141.41	
2001-2002	190.60	*8.5%	149.90	*6.0%
2002-2003	206.80		158.89	
2003-2004	224.38		168.42	

2005-2006	250.50	*7.0%	188.35	*5.5%
2006-2007	278.73		198.71	
2007-2008	298.24		209.64	
2008-2009	319.12		221.64	
2009-2010	341.46		233.33	
2010-2011	365.36		246.16	
2011-2012	390.93		259.70	
2012-2013	414.39	*6.0%	272.43	**4.9%
2013-2014	439.25		285.78	
2014-2015	465.61		299.78	
2015-2016	493.54		314.47	
2016-2017	523.16		329.88	

ICAO forecasts predict worldwide growth in air traffic at 5% a year or doubling in the volume of traffic once in 14 years. The Asia Pacific region is set for higher than average growth. According to an AUTC study, it might account for more than 50% of the world air traffic by the year 2010. It is imperative that our procedures improve and facilities grow to match the increase in volume of traffic. It is expected that adequate capacity will be deployed by the operators to meet the growth cargo traffic requirements in the years to come. Capacity induction in this sector is expected to be determined by market forces. The only aspect which needs to be planned and developed is the infrastructural facilities at the airports to handle various types of cargo traffic with efficiency and speed.

What are the Problems in Indian airports?

As India is set to become the third-largest aviation market in the world in the next five to seven years, according to consultancy firm CAPA, it needs to come up with a firm plan to build 50 new airports at an investment of Rs. 2.72 lakh crore to handle the growing air traffic.

Airport and air traffic control (ATC) infrastructure is insufficient to support growth. At present, out of 125 airports managed by Airports Authority of India (AAI), 69 airports receive commercial flights.

As in case of Airport infrastructure in Metro cities major runway upgrades need to be planned more efficiently with less impact on traffic disruption.

Around 66.5 per cent of India's total air traffic comes from Delhi, Mumbai, Bengaluru, Chennai, Kolkata and Hyderabad airports. These six cities would require new airports by 2025-26 and in some cases, much earlier.

At present, India has over 430 aircraft in service and the airlines are expected to add 100 aircraft in the next 18-24 months.

Airports like Mumbai, Chennai and Goa are fast approaching saturation. Other leading metro airports may reach saturation in the next 15-25 years. It's time for the government to start planning for second airports in metros.

The second airport for Mumbai, proposed to be developed at Navi Mumbai under the public-private partnership model, was approved by the Union Cabinet in July 2007.

However, it was only this year that the project has received all the major approvals required to commence the work on site. Now, it is highly unlikely that the airport will meet its operational deadline of December 2019.

What is the Proposal for Low-cost airports?

The Centre has proposed a **Regional Connectivity Scheme (RCS)** under which it plans to develop 50 un-served and under-served airstrips as low-cost airports in tier-II and tier-III cities. The cost of building each airport is estimated to be between Rs. 100 crore and Rs. 150 crore.

However, the work sanctioned for development of five no-frills airports in 2014 at Hubballi and Belagavi in Karnataka, Kishangarh in Rajasthan, Jharsuguda in Odisha and Tezu in Arunachal Pradesh is still under progress. AAI Chairman had recently said that 22 airports are ready to receive flight operations under the RCS.

The next phase of air traffic growth will come from India's interiors, many of whose customers will be highly cost-conscious, first-time flyers. Future airport projects therefore will have to be functional and cost-effective, with low-frills. Around 30-50 RCS airports may come up in the next 8-10 years.

Metro airports should remain the focus area for the success of its proposed scheme as people from smaller airports will fly to big cities. Airlines will connect smaller towns with cities following the hub-and-spoke model. For smaller airports to remain viable, capacity at metro airports needs to be sustainable.

Can privatization of Airports improve the situation?

The privatisation of airports, which began with Delhi and Mumbai in 2005, has helped improve AAI's revenue-flow over the years. It has received over Rs. 13,000 crore in the form of revenue share from the airport operators at Delhi and Mumbai in the last six years. The revenues from PPP airports constituted almost one-third of a record Rs. 10,824 crore revenues earned by AAI in 2015-16.

These funds have helped AAI in developing and modernising other tier-II and tier-III airports along with supporting large unviable airports managed by AAI. In 2014-15, 96 AAI airports registered losses of around Rs. 1,200 crore and it spent more than Rs. 14 crore in maintaining 32 airports where there was no aircraft movement.

However, it is unfortunate that the airport PPP program has been grounded after Delhi and Mumbai. Airport development and operations are a commercial activity and should not be in the government's domain. The top 10 AAI airports should be leased out to private operators through competitive bidding.

Government should take all possible steps to encourage such participation. An Airport Restructuring Committee in the Ministry of Civil Aviation should identify existing airports, in respect of which private sector involvement for development and upgradation of infrastructure is desired. It will also prepare a shelf of projects in respect of Greenfield airports.

The AAI should create separate profit centers for all individual airports and hive them off as subsidiary companies on a case to case basis, for the purpose of entering into commercial arrangements or joint ventures with private parties.

SWOT Analysis of Industry

Strengths:	Weakness:
* Growing tourism	* Under penetrated Market
* Rising income levels	* Untapped Air Cargo Market
* Liberal Environment	* Infrastructural constraints
* Modern Fleet	* Airport Infrastructure
* High Quality	* Airways Infrastructure
* Economic Growth	* National Carrier
* Political Stability	* Deep Pockets
	* High Cost Structure
	* Skilled Resources
Opportunities:	**Threats:**
* Expecting investments	* Shortage of trained Pilots
* Expected Market Size	* Shortage of Airports
* Market Growth	* High prices
* Geographic Location	* Middle East Aviation
* Lower Costs, Higher Quality	* Terrorism

Conclusion and Way Forward

Due to the rise in income levels, disposable income is increasing which enhanced the number of flyers. Indian tourism is also in the growing stage as a result there has been an increase in the number of international and domestic passengers as well. It will lead to the growth in airlines industry. Although currently there are many challenges which are being faced by the Indian Aviation Industry but the growth prospect is very much high. Government has to take an initiative to improve the Airport infrastructure and to pour in some investments as well.

Experts have called for infrastructure status for air routes, air navigation and airways – a move that will help players avail of cheaper financing. They have also advocated hiving off of the air navigation services, which handle the air traffic control operations, from the AAI.

Infrastructure status in India offers the following

➤ Access to Funding

➤ Ease access and higher limit on external commercial borrowing.

➤ Relaxation of lending norms, for example Lenient lending rates - availing long term loans for 10-15 years at 3-4 per cent interest, as against market borrowing rates of 12-13 per cent over a period of five to seven years higher debt equity ratio longer amortization period of up to 15 years

➤ Easy access to bank finance

➤ Ability to raise funds through tax free bonds

> ➤ Financial assistance from specialized agencies such as India Infrastructure Finance Co Ltd, IDFC, Infrastructure Debt Fund etc.
>
> ➤ Access to viability gap funding Tax Benefits
>
> ➤ Tax holiday under section 80-IA of the Income Tax Act and other tax concessions
>
> ➤ Lower import duties

The move would help create a corporate body to help generate its own revenue from air navigation charges in return for aeronautical services.

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NATIONAL WATERWAYS PROJECT THREAT TO GANGETIC DOLPHINS

Context

Group of Scientists and wildlife conservationists has shown concern related to the impact of National Waterways Project on Endangered Gangetic River Dolphins.

About Gangetic Dolphins

The Gangetic River dolphin is primarily found in the Ganges and Brahmaputra Rivers and their tributaries in Bangladesh, India and Nepal. Ganga dolphins can live only in Fresh water. Gangetic Dolphins are blind and they also known as Susu and shushuk because of the sound it produces when breathing. Gangetic Dolphin has been recognised as the **National Aquatic Animal** by the Government of India.

Fig. 18

Laws for Protection of Gangetic Dolphins

These are protected under Schedule 1 of the Wildlife Protection Act, 1972 (endangered) and International trade is prohibited by the listing of the South Asian river dolphin on Appendix I of the CITES (convention on international trade in endangered species).

Importance of Gangetic Dolphin

These dolphins indicate the water pollution (river water as they thrive on fresh water only) as it plays a vital role in river food-chain.

Threats due to National waterways project and other reasons for their decline

➤ The development of the Ganga for shipping is seen by wildlife conservationists as the single-largest threat to the survival of the species, whose numbers are declining in most parts of their natural habitat, according to the scientists of Wildlife Institute of India. This is mainly due to construction of dams and barrages on the river.

➤ Anthropogenic threats include direct killing for oil or over fishing.

➤ High levels of pollution due to the industries and many other cultural events can directly kill prey species and dolphins, and completely destroy their habitat. As the top predator, river dolphins have been known to have high levels of persistent toxic chemicals in their bodies, which is likely to adversely affect their health.

➤ The dolphins also suffered due to depletion of prey base, accidental mortality in fishing nets and accidents with vessel propellers.

About National Waterways project

The Government is developing National Waterway-1 (NW-1) under the **Jal Marg Vikas Project**, with assistance from the World Bank. NW-1 refers to 1620 km Haldia-Allahabad stretch of River Ganga. The project would be completed over a period of six years at an estimated cost of Rs. 4,200 crore. Phase-I of the project covers the Haldia-Varanasi stretch. The project includes development of fairway, multi-modal terminals, strengthening of open river navigation technique, conservancy works, modern River Information System (RIS), Digital Global Positioning System (DGPS), night navigation facilities, modern methods of channel marking, construction of a new navigational lock at Farakka, etc.

The first phase of the project spanning 1300 km., now under implementation, is from Varanasi to Haldia. It envisages improving the navigability of the river as it passes through Uttar Pradesh, Bihar, Jharkhand and West Bengal. The NW1 is seen to have a potential to emerge as the logistics artery for northern India, while reducing the congestion on this high-traffic transport corridor, project documents. However, this stretch is also home to the endangered dolphin.

Government's response after IUCN expressing the concern

➤ The Union Ministry of Environment and Forest Conservation launched in 2016 the Endangered Species Recovery Plans.

➤ The West Bengal government decided to establish India's first Dolphin Community Reserve in the state at Hooghly River between Malda and Sundarbans.

➤ World Bank suggested that, by restricting the cargo vessels movement through the protected habitat areas threat can be minimized as these dolphins are blind and rely on bio-sonar method to move around and catch their prey.

➤ The Inland Waterways Authority of India (IWAI) stated that- nesting grounds, breeding and spawning grounds of dolphins would be identified and project activity minimized in those areas.

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CHANGES IN BUDGET PROCESS IN INDIA

Context

The Union Cabinet has approved for scrapping the nine-decade-old tradition of having a separate Railway Budget and removed classifications for expenditure to make the exercise simpler.

Merger of General and Railway Budget

Introduction

A committee headed by NITI Aayog member Bibek Debroy recommended that the two budgets should be merged as part of the restructuring of the Railways. Further, a five-member joint committee was constituted with joint secretary in-charge of the Union Budget in the ministry of finance and senior officials of the Ministry and the national transporter to work out the modalities for the merger.

Due to the above stated developments it has been proposed by the government that the railway Budget will be merged with the general Budget from 2017-18 onwards.

The Essence of Railway Budget

The Rail Budget was separated from the main Budget, following recommendation of a panel headed by British railway economist William Acworth in 1920-21. Every year, the rail Budget is presented in Parliament a few days ahead of the general Budget. The rail Budget had a separate existence from the general Budget since 1924.

The Railway Budget was separated from general Budget because:

➤ The Railways were in bad shape at the turn of the last century. The Railways failed to meet the demand from passengers as well as trade. The facilities were utterly inadequate.

➤ The main reason for such a state of affairs was: the non-availability of funds for expansion, development, and repairs and maintenance. Even though the railway revenue formed a major portion of the government revenue, the Railways were starved of adequate funds. In times of bad harvest and trade, when the revenue fell, the budget allotment to the Railways was the first casualty.

➤ The system was further battered by World War 1, leading to a clamour from the public — as represented in the Imperial Legislative Council urged through repeated resolutions moved in

1914, 1915, 1917, and 1918 — for the appointment of a committee to enquire into the desirability of adopting direct state management of the Railways and emancipating the utility from the finance department of the government.

➤ In November 1920, a ten-member (three Indians) committee was appointed with Sir William Acworth as chairman to "go into the whole question of railway policy, financial and administration". The committee collected evidence and came to the conclusion that Indian Railways "cannot be modernised, improved and enlarged so as to give to India the service of which it is in crying need at the moment until the financial methods are radically reformed" and the essence of that reform according to the committee was complete separation of the Railway Budget from the General Budget and its reconstruction in a form "which frees a great commercial business from the trammels of a system.

➤ This, then, was the beginning of the separation. The separation started with the Budget of 1925-26.

Why this re-merger formulated?

➤ Currently, the Indian Railways suffers from a massive revenue deficit; the burden of which will be transferred to the finance ministry after the merger.

➤ "The Railways has structural problems. It needs rapid modernization and reforms. The largest employer in the country with the largest rail network in the world now accounts for a meagre 15 per cent of the total Union Budget. The merger should happen in a way the Railways becomes a part of the overall Budget, and the capital expenditure, revenue deficit, etc.

➤ The Railways was overburdened with Rs. 60,000 crore worth of public service obligation, with the merger the obligation would also be merge with union.

➤ As a relief to the national transporter, which, until now, has been reeling under an additional

burden of Rs. 40,000 crore from higher salaries, following implementation of the 7th Pay Commission has manifested.

- ► It also has to bear close to Rs 35,000 crore of subsidy burdens. Besides, the delay in completion of projects resulted in cost overrun of Rs. 1.07 lakh crore and huge throw-forward of Rs. 1.86 lakh crore in respect of 442 ongoing rail projects. If the merger goes through, the Railways will get rid of the annual dividend it has to pay for gross budgetary support from the government.

- ► The Indian Railways has the potential to contribute around 2-2.5 per cent of the gross domestic product but it needs investment, with the merger it will have investments out of general budget.

- ► The merger move is significant as it is expected to have political implications, as almost every railway minister, particularly in coalition governments, has addressed his or her constituency by way of announcing new trains and projects leaving non-availability of funds for expansion, development, and repairs and maintenance. Railway Ministry is likely to lose much of its sheen if merger happens.

- ► It is in the long-term interest of national transporter as well as the country's economy.

Arguments against merger

A practice started 90 years ago should be reviewed but it may be relevant to recall as we are still lagging behind in investment in the sector, which was the basic cause for separation, therefore, reviewing the practice doesn't necessitates its merger. There is need of structural reforms without the merger.

Further politicization of the Railways has made it more a populist than a commercial exercise. The autonomy envisaged was fettered by not raising passenger fares in line with rising costs. Indeed, passengers are being subsidized by goods traffic.

The Budget has also become an instrument in the hands of several railway ministers to build their vote-bank. All this affected the finances as the Railways do not have adequate funds for expansion, development or replacement of worn-out tracks or rolling stock.

During all these years of independence, though major landmarks were achieved, Indian Railways still lagged behind in expanding and modernizing its network for want of adequate funds. In 1950, we had 54,600 km of track. To this we could add hardly 11,000 km in all these years. China had just 22,161 km in 1950. Today it has over 1 lakh km. Our 'Shatabadis and Rajdhanis' and even the latest 'Gatiman Express' run at a maximum speed of 160 kmph. China has already achieved a speed of 300 kmph with the Beijing-Guangzhou bullet train service.

It is not that our engineers are not capable of reaching those targets. It has always been the constraint of funds. Internal resources were never enough. The budgetary support from the general revenues was always limited. External borrowings through the Indian Railway Finance Corporation are also restricted. So the emancipation envisaged in the separation of railway finances from general finances was, to a great extent, diluted by inherent flaws in our political system.

After merger, the railway revenue will become part of the general revenue but so will the expenditure. In the event of shortfall in revenue or gross receipts in the general budget, will the finance ministry carry out the cuts in Railway expenditure?

There are some regular costs such as staff salaries, fuel, stores and equipment that cannot be guillotined. Due to this again the modernisation and expansion will get effected.

The merger will only make the Railways become one more government department; it will lose its commercial character.

There is also a contradiction in the approach of intellectuals who were engaged in studying the organisation. On the one hand, they talk of privatisation of the Railways and on the other; they suggest merging the entity fully into the system, subverting its commercial nature which requires separate treatment of its finances.

Moreover, the finance ministry will also have to suffer the constraints on raising passenger fares, as it is not considered a populist move. This may also slow the pace of privatisation plans of the Railways.

Conclusion

Although the Finance ministry and Railway ministry both are in favour of the merger as well as many experts, but there are chances of subversion of its commercial nature and privatization with merger. Therefore, it would be better to leave the current nature and character alone and concentrate on strengthening, modernising and expanding the Railways so that, it can meet the demands and challenges of transporting mind-boggling numbers of people and goods across the length and breadth of this country.

Elimination of the distinction of the plan and non-plan expenditure

Budget is a statement of estimated receipts and expenditures of the government in respect of every financial year. Budgeting is the process of estimating the availability of resources and then allocating them to various activities of an organization according to a pre-determined priority.

The annual exercise of budgeting therefore, Is a means for detailing the roadmap for efficient use of public resource staking into account the socio-economic and political priorities. Budgeting Involves determination of what is to be done and achieved, the manner in which it is to be done and the resources required for the same. It requires the broad objectives of the Government to be broken down into detailed schemes/projects and work plans for each unit of the Government organization. In this context, the budgetary classification of government expenditure is of immense significance in policy formulation and sectoral allocations. This classification is intended to allow the Parliament and the public to appretiate the allocation of resources and purposes of Government expenditure. It also lays down the basis of accountability for budgetary compliance and the assessment of the overall economic impact of government policies.

The budgetary classification system in a nutshell, provides a normative framework for both policy formulation and accountability.

How is government expenditure classified in the budget?

There are two different sets of classifications used – Plan vs. Non-plan

➤ *Plan Expenditure:*

Any expenditure that is incurred on programmes which are detailed under the current (Five Year) Plan of the centre or centre's advances to state for their plans is called plan expenditure. Provision of such expenditure in the budget is called Plan Expenditure.

Expressed alternatively, "plan expenditure is that public expenditure which represents current development and investment outlays (expenditure) that arise due to proposals in the current plan." Such expenditure is incurred on financing the Central plan relating to different sectors of the economy.

Items of plan expenditure are:

Expenditure on electricity generation, (ii) Irrigation and rural developments, (iii) Construction of roads, bridges, canals (iv) Science, technology, environment, etc. It includes both revenue expenditure and capital expenditure. Again, the assistance given by the Central Government for the plans of States and Union Territories (UTs) is also a part of plan expenditure.

➤ *Non-plan expenditure:*

These include interest payments on government debt, expenditure on organs of the state such as the judiciary and the police and even expenditure on the maintenance of existing government establishments such as schools and hospitals. Non-plan expenditure too, has revenue and capital components.

Why removal of distinction was proposed by experts?

The distinction between plan and non-plan expenditure in the budgetary system was brought in when the country adopted a plan model of economic growth. The decision to merge Plan and Non-plan expenditures in the budgetary classification needs to be seen in light of increasing irrelevance of the Plan-Non-Plan distinction on account of several loads including the changed administrative structure where the earlier Planning system needs to be replaced with alternative mechanisms. Since the Planning Commission has been replaced by the National Institution for Transforming India (NITI) and the allocative functions relating to schemes is being performed by the Ministry of Finance, there is a need for a revised framework of public expenditure budgeting.

Also the government control and micro-management of the plan model has led to excessive focus on so called 'plan expenditure' with an equivalent neglect of items such as maintenance which is classified as non-plan.

Expenditure management policies and strategies of the government should normally ensure that every rupee budgeted is well spent in such a way that it captures efficiency in expenditure, provides incentives to rationalize expenditure and is driven by need rather than by the spirit of incremental increases in allocation with regard to programme-year on year. The total expenditure irrespective of revenue or capital, or plan or non-plan must generate value for the public. The impressiori that more plan expenditure means more development and wellbeing for the public has turned out to be a misplaced assumption, in practice today.

Plan expenditure was expected to result in creation of income-generation opportunities in the future. With non-plan constituting 70-75% of the gross expenditure at the centre and the state levels and the plan revenue expenditure accounting for around 70% of the expenditure under plan head; keeping plan expenditure, under a separate accounting classification, has lost its relevance in this scenario and there is no relevance of a separate plan and non-plan classification in the budgetary system.

The Administrative Reforms Commission (ARC) Report has also pointed out that, the Plan and Non-Plan divide runs too deep to give a comprehensive idea about resource availability to the departments at an early stage of budget development. The dichotomy between plan and non-plan in expenditures has been commented upon as an unnecessary development that has adverse effects on the quality of public services.

The plan expenditure of the government is normally associated with productive expenditure, which helps increase the productive capacity of the economy. It includes outlays for different sectors such as rural development and education. Non-plan expenditure, on the other hand, includes expenses on heads such as interest payment on government debt, subsidies, defence, pensions and other establishment costs of the government. A large part of this is obligatory in nature. For example, the government may cut allocation towards rural development or education if it falls short of funds, but it cannot cut interest payments on borrowed funds.

At any point of time, the government has limited resources that it is able to generate through tax and non-tax revenue. Therefore, there is always a trade-off between spending on one head or another. However, what happens is that under pressure to contain expenditure, the government ends up cutting the plan expenditure since a part of the non-plan expenditure is either an obligation or a necessity for the state to function and, therefore, difficult to cut.

Since non-plan expenditure is considered wasteful insignificant amounts are allocated for it which leads to lack of maintenance of the asset created under plan budget which ultimately adversely effects the outcomes of the expenditure incurred on plan budget.

Hence experts have proposed elimination of the distinction to the finance ministry as it becomes an obstacle in outcome-based budgeting.

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MISCELLANEOUS NEWS

Context

Hereby compiling the important short notes of September (15 to 30), 2016.

A. Surgical Strike

A surgical strike is defined as a military attack intended to inflict damage on a specific target, with little or no collateral damage to surrounding structures, vehicles, buildings, or the general public infrastructure and utilities.

Fig. 19

How is it executed?

Surgical strike attacks can be carried out via air strike, air-dropping special operations teams or a swift ground operation or by sending special troops.

What is Precision bombing and Carpet Bombing?

Precision bombing is example of a surgical strike carried out by aircraft – it can be contrasted against carpet bombing, the latter which results in high collateral damage and a wide range of destruction over an affected area which may or may not include high civilian casualties.

How did the Indian Army conducted recent surgical strikes?

The strike across the LoC was carried out by Para Commandos and Ghatak platoons of the Indian Army. These are members of the Special Forces under the Parachute regiment who are trained specifically for such operations, and specialised teams part of infantry units. They are trained to parachute into enemy territory and conduct precise missions, or to sneak in quietly across enemy lines. Surgical strikes are the alternative to sending in troops and tanks, creating a situation that could escalate to full-blown war.

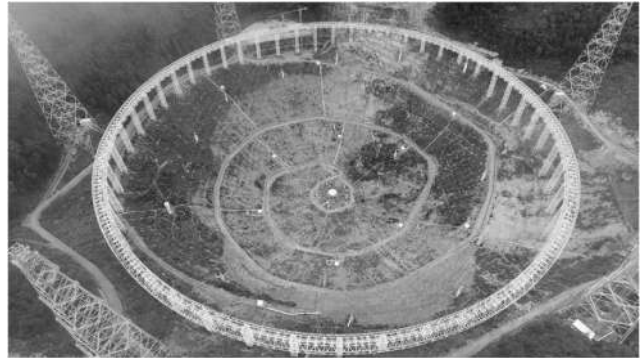## B. FAST - World's largest radio telescope begins operations

Fig. 20

What is FAST?

The Five-hundred-meter Aperture Spherical radio Telescope (FAST - nicknamed Tianyan) is a radio telescope, measuring 500-meters in diameter and located in the Dawodang depression, a natural basin in Guizhou Province, South China. Installation of the Tianyan, or the Eye of Heaven.

What will it do?

FAST aims at searching for signals from stars and galaxies and, perhaps, extraterrestrial life. The ultimate goal of FAST is to discover the laws of the development of the universe.

Why did China invest in FAST?

FAST demonstrates China's rising ambitions in space and its pursuit of international scientific prestige. China has poured billions into such ambitious scientific projects as well as its military-backed space programme, which saw the launch of China's second space station earlier this month. It took five years and $180 million to complete and surpasses that of the 300-meter Arecibo Observatory in Puerto Rico, a dish used in research on stars that led to a Nobel Prize.

How did its construction affect local population?

The telescope requires a radio silence within a five-km radius, resulting in the relocation of more than 8,000 people from their homes in eight villages to make way for the facility. Thus due to this local population get affected.

C. Indian ROV monitors the health of coral reefs

Fig. 21

What Is ROV?

ROV is remotely operated vehicle deployed by The National Institute of Ocean Technology (NIOT), Chennai, for studying the coral reefs of the Andaman and Nicobar Islands, which are facing survival threats due to global warming.

How is it helpful?

Scuba divers who take a plunge into ocean floors to study coral reefs can now take help from ROV. While it would take weeks together for a scuba diver to diagnose the health of corals, the ROV could map a larger area in a day. It has more efficiency and accuracy and it is expected to contribute significantly to the conservation and management of corals.

The images of corals recorded by the ROV are useful for studying the biodiversity of coral reefs and their evolution.

How was it developed?

NIOT had earlier developed a deep water work class Remotely Operated Vehicle (ROV) ROSUB 6000 which was suitable for exploration in deep waters. It was successfully operated at a maximum depth at 5,289 metres in the Central Indian Ocean Basin. It also contributed to the exploration of deep ocean minerals such as gas hydrates, polymetallic nodules and hydrothermal sulphides, which occur at water depths ranging between 1,000 and 6,000 metres.

A new miniaturised version of ROV, which could be effectively used for exploration and inspection up to 500-metre water depths, caters to the need of the research community and industry. It was also deployed for scientific research in Antarctica as a part of the 34th Indian Scientific Expedition to Antarctica during Jan-Apr 2015. It was deployed in the Lake Priyadarshini near the Indian permanent station Maitri and in the New Indian barrier ice shelf regions.

What Is the status of Corals In Andaman and Nicobar Islands?

The coral reef biodiversity at Andaman region, which spreads across an area of 11,000 sq km, was seriously affected during the 2004 tsunami. The increasing sea surface temperature added to the stress. There was no mechanism other than scuba diving to examine the corals and assess the extent of damage or rejuvenation.

The ecosystem needs to be monitored constantly to understand the impacts of raise in temperature.

D. INS Mormugao - Indian Navy's most advanced guided missile destroyer

Fig. 22

What Is INS Mormugao?

INS Mormugao is a naval warship with the latest weapon package and is based on the Visakhapatnam class of ships. It is a product of Project 15B. Mormugao has been named after the picturesque port in Goa.

Who built it?

Mormugao has been built by government-run Mazgaon Dock Shipbuilders Ltd. Four more such destroyers would be built and delivered by MDL during 2020-2024. Mazgaon Shipyard is also constructing six Scorpene class submarines for the Indian Navy.

What are its specifications?

Mormugao has a displacement of 7,300 tonne with maximum speed of over 30 knots. The warship is equipped with surface-to-surface missiles, surface-to-air missiles and anti-submarine rocket launchers. It is also capable of carrying two anti-submarine warfare helicopters. It is also Fitted with the Barak-8 long-range missiles. The vessel also has a multi-mission radar for surveillance along with medium range air/surface surveillance radar and other advanced electronic warfare and decoys.

What is the significance of this vessel?

Mormugao is the second ship of Project 15B and will be one of the most advanced warships of the Indian naval force. This ship serves "the Make in India drive of the country as it is indigenously built. In one year, the Indian Navy has inducted five ships into its fleet, including three warships. Indian Navy's target is to have 212 ships in its fleet by 2027.

E. Yatri Mitra Seva

What is Yatri Mitra?

Yatri Mitra is an initiative to improve the railway travel experience of elderly, differently-abled and ailing passengers. It will simplify access to wheelchairs, battery operated cars and porter services. It is launched by the Ministry of Railways and the scheme will be operational at all major railway stations.

Fig. 23

How can we avail this service?

The Indian Railway Catering and Tourism Corporation Ltd. has been entrusted with implementing services that can be availed at the time of booking tickets online, accessing an app to be developed by the Centre for Railway Information Systems, calling or messaging '139' IVRS, or by dialling a dedicated mobile phone number. 'Yatri Mitra' or 'Passenger Friend' can be an assistant or any other person nominated for the purpose.

What is the inspiration behind Yatri Mitra?

Yatri Mitra Seva is derived from the 'Sarathi Seva' introduced in the Konkan Railways.

What are the other services proposed by Ministry of Railways for the passenger benefit?

With a view to enhancing passenger comfort, Shri Suresh Prabhakar Prabhu proposed to re-imagine the design and layout of coaches to ensure higher carrying capacity and provision of new amenities including automatic doors, bar-code readers, bio-vacuum toilets, water-level indicators, accessible dustbins, ergonomic seating, improved aesthetics, vending machines, entertainment screens, LED lit boards for advertising and more. These new SMART (Specially Modified Aesthetic Refreshing Travel) coaches would cater to emerging needs of our customers and also ensure lower unit cost of operations due to higher carrying capacity.

F. BS VI target

What is BS VI?

Bharat stage emission standards are emission standards instituted by the Government of India to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles. The standards and the timeline for implementation are set by the Central Pollution Control Board under the Ministry of Environment & Forests and climate change.

Why was it news recently?

The Centre has notified the Bharat Stage (BS)-VI emission standards for two-wheelers and four-wheelers from April 2020 across the country. With this, the government has decided to skip the BS-V emission standards and move directly to BS-VI from the BS-IV norms currently being followed in various cities.

How did the emission standards evolve in India?

The emission standards, based on European regulations were first introduced in 2000. Progressively stringent norms have been rolled out since then. All new vehicles manufactured after the implementation of the norms have to be compliant with the regulations. Since October 2010, Bharat Stage (BS) III norms have been enforced across the country. In 13 major cities, Bharat Stage IV emission norms have been in place since April 2010. Recently, the Indian government announced that the country would skip the BS-V norms altogether and adopt BS-VI norms by 2020. At present, BS-IV norms are being followed in over 30 cities while the rest of the country follow BS-III norms.

Is there a need to upgrade Fuel standards to BS VI norms?

The Ministry of Road Transport and Highways, has given the Union Petroleum Ministry four years to make BS-VI fuels available to auto companies. Oil companies will be investing more than Rs.60,000 crore towards BS-VI fuels. BS-VI is the Indian equivalent of the Euro-VI norms.

G. Embraer Aircraft

What is Embraer?

Embraer is a Brazilian aerospace conglomerate that produces commercial, military, executive and agricultural aircraft and provides aeronautical services. It is headquartered in São Paulo State. The company competes internationally with Canadian rival Bombardier for the title of third-largest airplane maker after Airbus and Boeing.

How is it connected with India?

The DRDO had signed a $208-million deal with Embraer for three ERJ-145 aircraft for a project to build indigenous Airborne Early Warning and Control Systems for the Air Force.

Why was it in news recently?

There have been allegations that the Brazilian supplier had taken the services of middlemen, said to be based in the U.K. to strike deals for sale of aircraft in India and Saudi Arabia. A joint committee, set up the Air Force and the DRDO, had short-listed Embraer. The allegations of corruption in the deal surfaced in a Brazilian newspaper.

What is the status of CBI Inquiry?

The CBI institutes preliminary enquiry to determine whether there are prima facie grounds to register a regular case for further investigation and prosecution of the accused persons.

The Defence Ministry has handed over a set of key documents to the CBI, including minutes of the meetings where the decision to purchase of three Embraer aircraft was taken, to help the agency in its probe into allegations that kickbacks were paid in the deal.

The Defence Ministry has also written to the Ministry of External Affairs to pursue the matter with the respective countries through Indian missions.

H. Cabinet gives Clean Ganga Mission power to fine polluters

What is Clean Ganga Mission?

National Mission for Clean Ganga (NMCG) is a river cleaning project. It's among the flagship initiatives of the government. Mission Clean Ganga has a changed and comprehensive approach to champion the challenges posed to Ganga through four different sectors of wastewater management, solid waste management, industrial pollution and river front development.

Why was it in news recently?

The Union Cabinet has recently approved changes allowing the National Mission for Clean Ganga to fine those responsible for polluting the river. Earlier this power was vested solely with the Central Pollution Control Board. The power to fine the polluters is derived from the Environment Protection Act.

How will this check the pollution?

The bulk of the river cleaning projects involve setting up of sewage treatment plants, installing trash skimmers and beautifying the ghats. This recent step by Centre will help tackle 22 drains responsible for 90% of the pollution of the river.

What is the role of NMCG?

The NMCG has been a registered society since 2012 and its role is largely to fund projects to implement organisations. Its aim is to ensure good water quality and environmentally sustainable development.

It didn't have legal powers to "tackle various threats" or issue directions to polluters. The mission was grossly ill-equipped to handle the grave situations.

The NMCG now has the status of an Authority and its key focus would be maintaining required ecological flows in the Ganga, abate pollution through planning, financing and execution of programmes including that of –

► Augmentation of Sewerage Infrastructure
► Catchment Area Treatment
► Protection of Floodplains
► Creating Public Awareness

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