

Weekly Current Affairs

Collection of Articles

11th March 2017



Cochin | Trivandrum

TABLE OF CONTENTS

1. India & MR vaccine	3
Context	3
Measles.....	3
Cause	3
Treatment.....	3
Complications	3
Congenital rubella	4
2. Black Rhinos on brink of extinction	4
Biodiversity and Rhino population	5
3. India to fill gaps in aerial vigilance	5
AEW&C	6
AWACS.....	6
India and AWACS.....	6
4. GDP growth pegged at 7.1%, belying demonetisation drag	6
Industry-wise data.....	7
Informal economy	8
5. Montreal Protocol Stage-II in India	8
Montreal Protocol	9
6. Environment and Development - Western Ghats issue	9
Gadgil, Kasturirangan committees	9
7. Other national developments	10
8. Important articles in newspaper	10

1. India & MR vaccine

Context

- India has launched Measles-Rubella Vaccination campaign with the target of eliminating measles and controlling congenital rubella syndrome (CRS), caused by the rubella virus, by 2020. Under the campaign, children aged between nine months and 15 years will be administered the measles-rubella vaccine (MR-VAC).
- MR-VAC is being made by the Serum Institute of India, which is world's largest producer of the vaccine and provides it to most countries in Africa and Asia.
- The campaign will start from Karnataka, Tamil Nadu, Puducherry, Lakshadweep and Goa. It will be launched in Goa on February 7.
- Karnataka, Tamil Nadu, Puducherry, Goa and Lakshadweep are covered in the first phase. The entire country will be covered in four phases in 18 months.
- The vaccine eventually will be introduced in the Universal Immunisation Programme, replacing the currently given two doses of measles vaccine at 9-12 months and 16-24 months of age. UNICEF and WHO are providing technical support to the programme.
- Immunisation is carried out in a campaign mode by targeting 410 million children nationwide within 18 months.
- The MR vaccine campaign targets around 41 crore children across the country, the largest ever in any such campaign. All children aged between 9 months and less than 15 years will be given a single shot of Measles-Rubella (MR) vaccination irrespective of their previous measles/rubella vaccination status or measles/rubella disease status.
- UNICEF and WHO are providing technical support to the programme. According to the WHO, elimination of measles will help to achieve Sustainable Development Goal's target 3.2, which aims to end preventable deaths of children of age group less than 5 years by 2030.

Measles

Cause

- Measles is an infection caused by the rubella virus; its symptoms always include fever and at least one of the three C's - cough, coryza (runny nose), and conjunctivitis. Symptoms will appear about 9-11 days after initial infection.

Treatment

- There is no specific measles treatment. If there are no complications, the doctor will recommend plenty of rest and normal measures to control the fever and prevent dehydration (drink fluids).

Complications

Complications can include:

- Diarrhoea, Vomiting, Eye infection, Laryngitis and bronchitis - laryngitis is inflammation of the voice box; bronchitis is inflammation of the inner walls of airways. About 4 percent of people with measles have difficulties breathing.
- Otitis media - inner ear infection and inflammation.
- Febrile seizure - Occurs in 1 in 200 cases. They may be alarming, but children usually make a full recovery.
- Pneumonia, Hepatitis, Encephalitis, Thrombocytopenia (low platelet count). The blood's ability to clot is affected. The patient may bruise easily.
- Squint, Neuritis, Heart complications
- Sub-acute sclerosing pan encephalitis (SSPE) - Occurs in 2 in every 100,000 cases. SSPE is a brain disease which can occur months or years after measles infection and causes convulsions, motor abnormalities, mental retardation, and death.
- Other nervous system complications

Congenital rubella

- Congenital rubella occurs when the rubella virus in the mother affects the developing baby in the first 3 months of pregnancy. After the fourth month, if the mother has a rubella infection, it is less likely to harm the developing baby.
- Pregnant women who are not vaccinated for rubella and who have not had the disease in the past risk infecting themselves and their unborn babies.
- The result for a child with congenital rubella depends on how severe the baby's problems are. Heart defects can often be corrected. Damage to the nervous system is permanent.
- Of the 1, 10,000 children born with CRS every year globally, an estimated 40,000 cases occur in India alone.

2. Black Rhinos on brink of extinction

- European hunters are responsible for the early decline of black rhino populations. It was not uncommon for five or six rhinos to be killed in a day for food or simply for amusement.
- European settlers that arrived in Africa in the early 20th century to colonize and establish farms and plantations continued this senseless slaughter. Most people regarded rhinos as vermin and exterminated them at all costs.
- As the value of rhinoceros horn touches \$65,000 per kg, poaching has begun to drive the African black rhinoceros to the verge of extinction – not just by reducing its population size, but by erasing 70% of the species' genetic diversity - says a research paper published recently in Scientific Reports.
- Two centuries ago, the black rhinoceros – which roamed much of sub Saharan Africa – had 64 different genetic lineages. Today only 20 of these lineages remain, says the paper. The species is now restricted to five countries, South Africa, Namibia, Kenya, Zimbabwe and Tanzania.

- Genetically unique populations that once existed in Nigeria, Cameroon, Chad, Eritrea, Ethiopia, Somalia, Mozambique, Malawi and Angola have disappeared.
- The origins of the '**genetic erosion**' coincided with **colonial rule in Africa and the popularity of big game hunting**. From the second half of the 20th century, however, poaching for horns has dramatically depleted their population and genetic diversity, especially in Kenya and Tanzania.

Biodiversity and Rhino population

- Greater the genetic diversity, the better is the population's ability to respond to pressures such as climate change and diseases. Thus the loss of so much evolutionary potential in the black rhino is worrying for its future adaptability

	STATUS Critically Endangered
	POPULATION Fewer than 5,000
	SCIENTIFIC NAME <i>Diceros bicornis</i>
	HEIGHT 5.2 feet
	WEIGHT 1,760 -3,080 pounds
	HABITATS Tropical and Subtropical Grasslands, Savannas, Deserts and Xeric Shrublands

- At a recent, unique conference organised by the Pontifical Academy of Sciences at the Vatican involving nature and social scientists, the focus was on the slender thread by which 90% of humanity's food security hangs — which is, just 103 varieties of plants that are regularly cultivated.

- There is only detailed knowledge of a fifth of all estimated plant species that exist. Yet, vast areas of earth are being deforested before the rest can even be studied.

- A similar lack of full understanding of how plants, animals and the environment interact, with consequences for humans, underscores the need for restraint.

- Half of all wildlife will disappear permanently by the turn of the century.

- As the planet's population continues to grow, and resource consumption rises, the rate of species loss is accelerating.

- There have been five mass extinctions so far in Earth's geological history, with amore than 75% loss of estimated species.

- The earliest, the Ordovician, about 440 million years ago, was followed by the Devonian (365 million years), Permian (245 million), Triassic (210 million), Cretaceous(65 million). The human pressure against natural progression is the key in the current phase of extinction that makes it different from the aforementioned extinction.

3.India to fill gaps in aerial vigilance

- With Pakistan and China rapidly modernising their air forces, India has intensified efforts to fill the gaps in its aerial surveillance.
- Netra – first indigenously developed early warning and control system.

AEW&C

- An airborne early warning and control (AEW&C) system is an airborne radar picket system designed to detect aircraft, ships and vehicles at long ranges and perform command and control of the battle space in an air engagement by directing fighter and attack aircraft strikes.
- When used at altitude, the radar on the aircraft allows the operators to detect and track targets and distinguish between friendly and hostile aircraft much farther away than a similar ground based radar.
- Similar to radar, it can be detected by opposing forces, but because of its mobility, it is much less vulnerable to counter-attack.

AWACS

- Boeing produces a specific system with a rotating radar dome and later pulse-Doppler radar and built by Boeing (Defence & Space Group). It is mounted on either the famous E-3 Sentry aircraft (Boeing 707) or Boeing E-767 (Boeing 767).
- AWACS employed latest (pulse-Doppler) radar technology and in computer aided radar data analysis and digital data correction. Therefore able to track targets in fluidic and cluttered conditions. Earlier Low-flying aircraft could only be tracked over water which changed with the introduction of AWACS.

India and AWACS

- India is also in negotiations with Israel to buy two more Phalcon Airborne Warning And Control System (AWACS) mounted on Russian IL-76 aircraft to add to the three systems in service .
- The DRDO has planned to develop a long-range AWACS with a 360-degree coverage akin to the Phalcon. The plan is to install AWACS in two phases each of 2 and 4 installations.
- The Netra AEW&C system would join the three Phalcon A-50 long-range AWACS mounted on Russian IL-76 transport aircraft. These aerial radars, called eye-in-the-sky, give tactical and strategic advantage to India in warfare.
- The Netra AEW&C system has an indigenous radar mounted on the Embraer Emb-145 aircraft and three systems are being developed. The system handed over is in the initial operational configuration (IOC).
- The DRDO will carry out an advanced testing of the systems and avionics on the Netra and the final operational configuration is expected to be achieved by June.
- India had made similar attempts in the past, which ended tragically. The DRDO began a project in the 1980s to build an AWACS, later renamed Project Airawat, but it was cancelled after a prototype crashed in 1999, killing all eight persons on board.

4. GDP growth pegged at 7.1%, belying demonetisation drag

- The Central Statistics Office (CSO) has kept its January estimate for growth in gross domestic product (GDP) in 2016-17 unchanged at 7.1%, signalling that independent economic forecasters may have overstated the drag on the economy from the November withdrawal of high-value currency notes.
- The CSO, which released its second advance estimates of economic growth, also provided GDP and **Gross Value Added (GVA)** figures for the third quarter, which showed GDP growth slowing to 7%, from 7.3% in the second quarter of the financial year.
- The official figures peg GVA growth for the full year at 6.7% as against the 7% projected in the first advance estimates.
- For Q3, the GVA growth rate is estimated at 6.6%, down from the 7.1% reported in Q2.
- The CSO also revised downward the GVA growth rates for the first two quarters to 6.9% in Q1 and 6.7% in Q2, from the 7.3% and 7.1%.

Industry-wise data

- Manufacturing saw its GVA growth slide from 12.8% in Q3 2015 to 8.3% in Q3 2016. Finance, real estate and services saw growth collapse from 10.4% to 3.1%. Construction weakened from 3.2% to 2.7%. Balancing the fall on the opposite side, there was 6% rebound in agriculture (2.2% shrinkage last year), 6.8% increase in electricity, gas and water supply and a bumper 11.9% hike in 'public administration, defence and other services' which lifted the GVA.
- Agricultural output bounced back due to a good monsoon after consecutive drought years. Electricity generation was up on better coal availability.
- 'Public administration' reflects higher government pay outs on salaries and pensions after the Seventh Pay Commission.
- Analysis of over 1,700 listed companies showed that they just reported their best quarterly performance in three years, with sales growing over 9% and profits expanding 20%.
- Commodity industries, helped by global price rebound, did very well this quarter. In some sectors, business shifted from the unorganised to organised players due to digital payments.
- The reason why GDP has maintained is because the reduction in GVA has been compensated for by an improved estimate in net indirect taxes.
- The GVA measures the value of output created by different segments of the economy. Indirect taxes (minus subsidies) are added to it, to arrive at the GDP.
- The GVA for FY17, as per CSO data, does show a dent from demonetisation. At 6.7%, it has registered a sharp decline of 110 basis points from 7.8% (revised estimate) for FY16.
- While GVA growth is pretty close to private forecasts, what lifted the GDP is the strong 12.3% surge in indirect taxes that the CSO estimates for this fiscal. Centre's

indirect tax collections already surged by 25% in April-December 2016, powered by higher excise duty on fuel and service tax.

Informal economy

- There is criticism that CSO data fails to capture the performance of the informal economy which was clearly affected by note ban. Over 40-45% of the Indian economy is informal and hardly any data points relating to it are available at a quarterly frequency. Therefore, what the CSO does to arrive at its quick estimates of the GDP is to take the available data from the organised sector and extrapolate it to infer informal activity.
 - The GVA for agriculture is guesstimated based on kharif and rabi crop prospects.
 - The GVA for services is inferred from sales tax collections, deposits and credit, telephone connections and so on.
- Manufacturing GVA uses the index of industrial production and listed company filings.
- The Election Commission had barred CSO from releasing State-specific data on economic growth projections, in view of the on-going Assembly elections. The Commission gave a clearance to the release of only national level data.

5. Montreal Protocol Stage-II in India

- The Union Ministry of Environment, Forests and Climate Change (MoEFCC) has launched Stage II of HCFCs Phase Out Management Plan (HPMP) for the 2017-23 period. It aims to phase out use of Hydro chloro fluorocarbons (HCFCs), harmful ozone-depleting substances (ODS) by switching over to non-ozone depleting and low global warming potential technologies.
- Under HPMP-II India has secured \$44.1 million from Multilateral Fund for implementation of Montreal Protocol for phasing out 8,190 MT of HCFC consumption to meet targets under the protocol for 2020.
- Energy efficiency, development building codes, cold chain development with non-HCFC alternatives and development of standards for new non-ODS and low GWP alternatives will be promoted. Adequate attention to synergize the Refrigeration and Servicing (RAC) servicing sector trainings will be given with the Skill India Mission, in order to multiply the impact of skilling and training.
- Nearly, 16, 000 service technicians will be trained under HPMP-II. It will result in net direct CO₂-equivalent emission reductions of about 8.5 million metric tonne annually from 2023.
- Under the Montreal Protocol, the accelerated phase out of HCFCs is underway with a aim to complete phase out by 2030 of these chemicals that result in ozone depletion and aid global warming.

- HCFCs are used in various sectors like refrigeration and air conditioning (RAC), polyurethane foam manufacturing and cold chains sectors etc. These sectors are directly related to urban development, agriculture through cold chain, and industrial development. India is undertaking phase-out of HCFCs through the implementation of HPMP.
- The Stage-I of HPMP has been already implemented in the country and has successfully met all the ODS phase-out targets, including those of HPMP Stage-I.

Montreal Protocol

- It seeks to gradually cut the production and consumption of ozone depleting substances (ODS) in order to protect the earth's fragile ozone layer. It also aims at phase out HCFCs by 2030. It came into force in 1989 and has been ratified by 197 parties. It is also highly successful international arrangement, as it has phased-out more than 95% of the ODS so far as per its main mandate in less than 30 years of its existence.

6.Environment and Development - Western Ghats issue

- The Environment Ministry has moved away, for the second time in three years, from bringing into force a law that will make about 56,825 sqkm of the ecologically-rich Western Ghats out of bounds for industrial development. The latest notification would expire on March 4.
- The reiterated February notification — open to public comment for 60 days — allows the Centre to create an Ecological Sensitive Area (ESA) in the Western Ghats (WG), a 1,500 km, ecologically- rich strip along the west coast spanning Gujarat, Maharashtra, Karnataka, Goa, Kerala and Tamil Nadu.
- Regions declared as the ESA will not be allowed to host mining and quarrying projects and building thermal power plants.

Gadgil, Kasturirangan committees

- The Western Ghats Ecology Expert Panel (WGEEP), also known as the Gadgil Commission after its chairman Madhav Gadgil, was an environmental research commission appointed by the Ministry of Environment and Forests of India. The commission submitted the report to the Government of India on 31 August 2011.
- The committee recommended in 2011 that all of the Western Ghats be declared as the Ecologically Sensitive Area — with only limited development allowed in graded zones— States (especially Kerala) have forced the Centre to consistently delay imposing the ESA restrictions.
- People in Kerala, especially Christian organizations strongly protest the implementation of the report since most of the farmers in the hilly regions are Christians, especially in Wayanad.

- During the 20th century, a very large number of Christians had migrated from southern Kerala and acquired forest land in Wayanad and other areas with abundant forest and waste land, in what is known as Malabar Migration.
- The Gadgil Committee report was interestingly criticised for being excessively environment-friendly and not in tune with the ground realities.
- A committee headed by K. Kasturirangan, former ISRO chairman, recommended that only about 60,000 sq km — or about 37% of the WG and a significant reduction from that of the Gadgil committee — be declared as ESA.
- Kerala managed to get this down to about 56,825 sqkm after widespread protests and an all-party resolution in the State forced the Union Ministry of Environment and Forests (MoEF) to exclude 3,117 sq.km. of settlements and agricultural land in the State from the ESA. Last week, the Chief Secretary of the State wrote to the MoEF that a further 887 sq.km. of non-forest land be reduced.

7. Other national developments

- The Union Government has launched across-the-river survey in River Ganga to determine the population of aquatic life (endangered Gangetic dolphin).
- The GST Council meeting approved the final draft of Central GST (CGST) and Inter-State GST (IGST) laws.
- Scientists have claimed that they have discovered oldest fossils on Earth in rocks from Quebec, Canada.
- Parliament has passed the Maternity Benefits (Amendment) Bill, 2016 to raise maternity leave for working women from 12 weeks to 26 weeks for two surviving children.
- India and Belgium have signed a Protocol to amend the existing Double Taxation Avoidance Agreement (DTAA) between the two countries.
- Punjab Agricultural University (PAU) in Ludhiana has claimed developing country's first genetically-modified (GM) varieties of cotton – PAU Bt 1 and F1861. Cotton is the only GM crop allowed to be cultivated in India. All three varieties carry the Cry1Ac gene obtained from Bt (*Bacillus thuringiensis*) bacteria.
- The Union Ministry of Petroleum & Natural Gas has announced new Open Acreage Licensing Policy (OALP) for oil and gas exploration. The new policy will allow bidders to carve out areas where they want to drill. It will help energy hungry India and world's third-largest oil consumer to attract greater foreign investment to boost output.
- The Trade Mark Rules, 2017 have come into effect, streamlining and simplifying the processing of Trade Mark applications.

8. Important articles in newspaper

- Pests eat away 35% of crop yield – ICAR scientists
- River Ganga unlikely to be cleaned up by 2018
- Even hill stations will be hotter this year, warns IMD
- Depression, top cause of disability worldwide
- Global studies on India's air quality flawed - CPCB
- SC agrees to hear bar dance girls' plea
- Impossible to stop upload of vulgar content – Google
- India, Oman to hold counter-terror exercises
- Aadhaar to become must for train tickets
- Sweden to reintroduce conscription after 6 years
- GST levy may go up to 40%, 4-slab structure to remain
- First artificial mouse 'embryo' created
- India to attend Lahore meet on Indus Waters Treaty
- PDS beneficiaries can go for 'give it up' option



Victor Growth
Move to your next level...