

NATIONAL**A gap analysis survey of Village Panchayats**

The Rural Development Ministry has done a gap analysis of more than 3.5 lakh villages, in more than 1.6 lakh panchayats under the Mission Antyodaya convergence scheme. A team of officials surveyed and scored village level facilities and amenities using parameters related to infrastructure, economic development and livelihood, irrigation facilities, health, nutrition and sanitation, women's empowerment, and financial inclusion.

While in October 2017, an initial baseline survey was carried out in 50,000 gram panchayats, this year, the exercise is expected to cover all of the country's 2.5 lakh panchayats by the end of November. The rankings will be updated as more panchayats are included.

Kuligod in Karnataka's Belagavi district is the country's best developed village, but more than a third of the gram panchayats ranked in the top 10 are in Andhra Pradesh, according to the findings of an ongoing Rural Development Ministry survey.

With multiple panchayats assigned the same score – and thus tied at the same ranking – there are 97 panchayats in the top 10 ranks. Of these, 37 panchayats are in Andhra Pradesh while 24 are in Tamil Nadu.

Analysis of the survey report

- At the national level, the data shows progress in some areas and also spotlights discrepancies in respect of targets met under some other government schemes.
- For example, the survey reveals that more than 95% of villages have electricity available for domestic use, while the government had earlier this year claimed that 100% of villages had power connections.
- Similarly with regard to sanitation, the survey shows only 58% of villages — slightly more than 2 lakh of the 3.5 lakh surveyed villages — are open defecation free (ODF).
- However, according to the Swachh Bharat Abhiyan-Gramin, 5.13 lakh of India's 6 lakh villages are already ODF.
- The survey also shows only 21% of villages having a community waste disposal system.
- About a quarter of all villages have more than 75% of households using clean energy, such as LPG or biogas.
- The survey indicates moderate progress in the rural housing scheme: less than 10% of the villages have more than 80% of their houses with kachha walls and roofs, indicating temporary structures.
- More than 73% of the villages are connected with an all-weather road.
- Financial inclusion still has some way to go, with less than 15% of villages having banks, while just more than 10% have ATMs.
- While more than 26% of villages have post office facilities, only 8% have a soil testing centre and almost 12% have a government seed centre.

Significance of the survey

- The gap analysis allows citizens and policymakers to track development in each individual village, apart from the nationwide trends.
- Making this information available at fingertips for every village in the country allows for greater public accountability.
- It also allows for more evidence-based planning at the panchayat level.

About Mission Antyodaya Scheme

- Mission Antyodaya is a convergence framework for measurable effective outcomes on parameters that transform lives and livelihoods.
- In India, 8.88 crore households are found to be deprived and poor households as per Socio Economic Caste Census (SECC) of 2011 from the perspective of multi-dimensional deprivations such as shelterlessness, landlessness, households headed by single women, SC/ST household or disabled member in the family.
- These households require targeted interventions under government's various schemes and programmes in areas such as wage creation, skill generation, social security, education, health, nutrition and livelihood creation.
- Already, financial resources to the tune of about Rupees four lakh crore are allocated annually to impact lives of rural poor by several government ministries/ departments.
- In this context, 'Mission Antyodaya' seeks to converge government interventions with Gram Panchayats as the basic unit for planning by following a saturation approach by pooling resources – human and financial – to ensure sustainable livelihoods.
- It is a State – led initiative for rural transformation to make a real difference based on measurable outcomes to the lives of 1,00,00,000 households in 5,000 rural clusters or 50,000 Gram Panchayats in 1,000 days.

Should there be two different time zone in india?

Presently IST is maintained by the National Physical Laboratory in Delhi through high-end Caesium atomic clocks. However, it has still not solved the problem of different daylight zones in the country, especially in the northeastern

states, where a good number of daylight hours are wasted because of sticking to IST. As a consequence, people in cities like Guwahati spend an irrational number of daylight saving hours fast asleep and hours of darkness awake. As the earth rotates 360 degrees every 24 hours, a longitudinal span of 15 degrees corresponds to a shift by an hour. India spans a longitudinal difference of 30 degrees from the western state of Gujarat to Arunachal Pradesh in the East. However, India has a single time zone, defined by mean longitude at 82.5 degrees east of the Greenwich Mean Time (GMT), passing through Mirzapur in Uttar Pradesh. This results in almost a two-hour difference in sunrise from east to west. Usually, for the "surplus" in daylight in the morning hours, countries often implement measures such as daylight saving time (DST) and multiple time zones.

The basic objective of introducing DST is to adjust the hours of human activity to make the best use of daylight. It follows from the assumption that human activity is driven by a standardised notion of time. If it were the case that individuals were following local time in a town or village, the need for introducing daylight savings would be futile. Since its conception, more than 70 countries have since used some form of DST, including the United States, Russia, and most of Europe.

In 2006, the planning endorsed the idea of having two separate time zones, but nothing much was done about it. A year later, scientists from the IISc in Bangalore said that there was no need to split the country into two time zones, rather reset IST six hours ahead of GMT instead of five and a half. This would result in India saving 2.7 billion units of electricity every year. This idea, however, did not take off either.

Sunset and Sunrise Times across Four 'Extreme' Regions

State Capital (Region)	Summer Solstice (2017)		Winter Solstice (2017)	
	Sunrise (IST)	Sunset (IST)	Sunrise (IST)	Sunset (IST)
Srinagar, Jammu and Kashmir (North)	05:19	19:45	07:32	17:25
Thiruvananthapuram, Kerala (South)	06:05	18:42	06:31	18:09
Itanagar, Arunachal Pradesh (East)	04:21	18:12	06:00	16:26
Gandhinagar, Gujarat (West)	05:54	19:28	07:16	17:58

History of time in India

- Indian Standard Time, which is five and a half hours ahead of the Greenwich Mean Time (+5.30 GMT), is an anachronism like many systems that were inherited from the British. In fact, India did not have any single time zone until as late as 1906.
- During the British rule, India did have 2 time zones: Bombay time (+4:51) & Calcutta time (+5:54). Once India gained independence, a standard time zone (+5:30) was introduced in order to facilitate coordination across the country.
- So in colonial times, there was a one-hour-nine-minutes time difference between Kolkata and Mumbai. Yet, today these cities, which are 1,650km apart, share the same time.
- Only in the tea estates of Assam, where the concept of 'Chai Bagan Time' (estate time) exists, is there a provision for a separate time zone inside India. Bagan time is one hour ahead of IST. Leave the tea estates though, and everything reverts to normal.
- In fact, while Kolkata fell in line with IST in 1948, Mumbai retained its own individual time zone till 1955 as a result of the Bombay Municipal Corporation (as it was known then) delaying the introduction of IST in 1906. This was due to popular resentment stemming from the trial of Bal Gangadhar Tilak, which was taking place at that time.

Single time zone argument and disadvantages

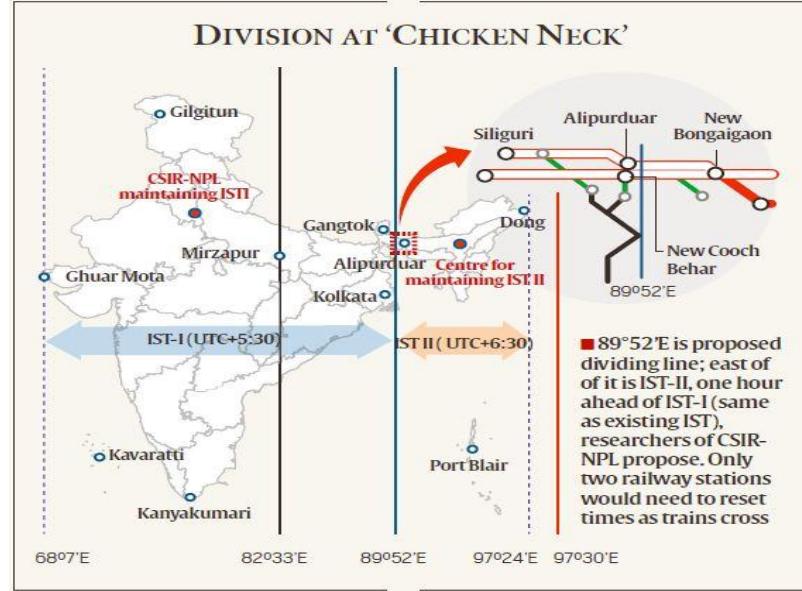
- China, which stretches more than 3,500 kms end-to-end, however, has only one time zone with an aim of fostering 'national unity'.
- It wouldn't be advisable for India to have multiple time zones as it would cause unimaginable chaos, given the country's demographic size. People would have to adjust to multiple time zones & administrative integration would be difficult. Also, India's lifeline, the railways is not yet automated enough to handle time shifts mid-journey and this could induce major accidents due to human error.

Two-time zones argument

- Changing time zones when we travel internationally can seriously disturb physical cycles. If the sun rises too early and sets too early, or vice versa, as per the local time, it can also disturb body cycles.
- But being in the same time zone where the sun is high in the sky in Kolkata and barely rising in Mumbai, is strange. After all, these two cities are an hour apart by their natural time zones.

- There are also economic benefits to having two different time zones; people will be able to work better and plan better, according to natural cycles rather than the one imposed by the state.
- Higher energy consumption: A conservative estimate shows that starting the day an hour earlier would result in a saving of about 550 MW of power in northeast India alone.
- Social stigma with night / darkness: Every city has an apparent safe time limit for strolling in the night. This would be earlier for eastern states by at least a couple of hours. This in turn might cause lesser customers at the night life (restaurants, pubs) venues, and hurting the economy a bit. Moreover, safety of citizens puts additional burden on our already overburdened police force.

Instead, India should permanently advance the IST by 0.5 hours to +6, i.e from 82.5E longitude in Allahabad to 90E near the Assam-Bengal border. This will result in the sun rising and setting 0.5 hours later. This leads to shorter period of artificial lighting needs in the evening while the need for artificial lighting in the morning would increase. But since in the morning, natural lighting can be used, there is a net saving of electricity required for lighting. All states in the country stand to save electricity if the clock is turned forward by 0.5 hours countrywide as opposed to having 2 time zones, where only the North-



Eastern states benefit. By making this one-time change, people are saved the trouble of changing clocks every time they cross a zonal boundary. This is a zero-cost & an easy to implement method with no negative social, political or economic consequences. It is extrapolated that this will result in national savings of 2.72 billion units per annum, amounting to savings of Rs. 1000 crores per annum. This saving is critical for a country where 35 crore people out of the 120 crore have no access to electricity and use kerosene lamps at night. This number will keep on increasing with enhanced use of lights, the overall economic growth and the increasing cost of energy.

Child Sexual Abuse Laws in India – The POCSO Act

India has one of the largest population of children in the world - Census data from 2011 shows that India has a population of 472 million children below the age of eighteen, of which 225 million are girls[1]. Protection of children by the state is guaranteed to Indian citizens by an expansive reading of Article 21[2] of the Indian constitution, and also mandated given India's status as signatory to the UN Convention on the Rights of the Child. Child sexual abuse laws in India have been enacted as part of the nation's child protection policies.

The Union cabinet cleared the ordinance on POCSO act whereby death penalty will be given to those convicted of raping a child up to 12 years of age. Centre has cleared the criminal law amendment ordinance and POCSO Act is a part of this amendment. Death penalty to the child rapist took a centre stage after two separate cases gang rapes took place in Jammu and Kashmir's Kathua and Uttar Pradesh's Unnao, leading to massive outrage across the country. The Centre has increased minimum punishment in case of rape of women from 7 years to 10 years, extendable to life imprisonment. It said that in case of gang rape of a girl below 12 years, punishment will be life imprisonment or death sentence.

What is POCSO Act?

- POCSO or The Protection of Children from Sexual Offences Act (POCSO Act) 2012 was established to protect the children against offences like sexual abuse, sexual harassment and pornography.
- It was formed to provide a child-friendly system for trial underneath which the perpetrators could be punished. The Act defines a child as any person below eighteen years of age. It also makes provisions for avoiding the re-victimisation of the child at the hands of the judicial system. Protection of Children from Sexual Offences Act, 2012 received the President's assent on June 19, 2012. It was notified in the Gazette of India on June 20, in the same year.
- The Act defines different forms of sexual abuse which includes penetrative and non-penetrative assault. It also involves sexual harassment, pornography, etc.

- Under certain specific circumstances POCSO states a sexual assault is to be considered “aggravated if the abused child is mentally ill or when the abuse is committed by a member of the armed forces or security forces or a public servant or a person in a position of trust or authority of the child, like a family member, police officer, teacher, or doctor or a person-management or staff of a hospital — whether Government or private.”
- The Act also makes it mandatory to report such cases. It makes it the legal duty of a person aware of the offence to report the sexual abuse. In case he fails to do so, the person can be punished with six months' imprisonment or fine.
- The Act further states that the evidence of the child should be recorded within a period of thirty days. The Special Court taking cognizance of the matter should be able to complete the trial within the period of one year from the date of taking cognizance of the abuse.
- It provides that the Special Court proceedings should be recorded in camera and the trial should take place in the presence of parents any other person in whom the child has trust or confidence.
- The Act provides for punishment against false complaints or untrue information. It describes strict action against the offender according to the gravity of the offence.
- It prescribes rigorous imprisonment for a term which shall not be less than ten years but which may extend to imprisonment for life and also fine as punishment for aggravated penetrative sexual assault.
- It also prescribes punishment to the people who traffic children for sexual purposes.

Bihar's Shahi litchi gets Geographical Indication tag

Shahi Litchi from Bihar has received Geographical Indication (GI) tag from Chennai based Geographical Indication Registry and Intellectual Property India. The GI registration was done in name of Muzaffarpur-based Litchi Growers Association of Bihar, which had applied for the tag.

What is a GI tag?

A GI tag essentially works like a trademark or intellectual property right in law, wherein a product belongs exclusively to a particular territory, and “a given quality, reputation, or other characteristic of the good is attributable to its geographic origin”. This is as per the World Trade Organisation agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). GI tags last up to a term of 10 years, and can be renewed.

Why are GIs important?

- Certain communities depend entirely on the market success of their indigenous products, and a GI tag provides recognition and protection of economic livelihoods. Products also become synonymous with cultural and geographical identity over time, embodying a history of craftsmanship, community, and civilisation.
- A marker of authenticity is important to ensure that the interests and efforts of generations of artisans, cooks, farmers, and other professionals are encouraged and safeguarded from competitive prices and factory processes.
- GI tags also boost sales and exports, as the geographical limitation on production and official recognition of historical and cultural significance increase demand and create a legacy.

‘Darjeeling tea’ was the first GI-tagged product in India, gaining its label in 2004-2005. So outsiders cannot sell other variety of teas with title/label “Darjeeling”, else they can be punished.

Why is GI-tag important?

- When a product is given GI status, its price increases in international market (because consumers in first world prefer such “exotic” items)
- It boosts exports. It can boost tourism. The poor farmers/artisans from the given region have to face less competition from fake guys selling bogus products.
- leads to sustainable Development.

GI Mechanism: Internationally

- Under WTO Trade related Intellectual property rights (TRIPS), the Member nations have to respect geographical indications.
- They've to take measures to prevent violation of GI rights. (e.g. order custom authorities seize bogus products.)
- If a product enjoys GI status in member nation “A” then, Member nation “B” shouldnot grant trademark for the same.

Multilateral register: problem area

For example, Darjeeling tea is given GI tag in India, under India law. So if someone inside /from India is selling fake Darjeeling tea, he can be jailed/fined in India. But If a Sri Lankan guy exporting fake Darjeeling tea to France, you cannot do anything in India. You've to manually file petition in France's court to protect your GI. (or India Government need pursue the matter via WTO). So, to prevent such problem, you've to again apply for GI status in European Union's office for “Protected Geographical Indication” (PGI).

The ideal system should be:

- You register a product in GI office in your own country. Database is uploaded on WTO website and notification is served to all nations. (=multilateral register).
- Whoever sells fake stuff, in xyz country will be caught and prosecuted. And you don't need to run from pillar to post in every foreign country, to protect your GI-tag.
- But this "Multilateral register" system has not been established yet.
- Because there is disagreement among WTO members. EU wants this system compulsory for everyone.
- But China, Hong Kong want this system compulsory for "only" those countries that agree to participate in it.

Difference between GI Vs. trademark?

GI	Trademark
<ul style="list-style-type: none"> • Product comes from a particular place/region. • Right is enjoyed by a community / association producers.=community right. • Given for "Goods" (physical stuff.) 	<ul style="list-style-type: none"> • Product comes from a particular enterprise/company. • Right enjoyed by only one person/company=individual right. • Can be goods (mobile, PC etc) or service (e.g.music, sp etc.).

FACT FOR PRELIM
Singapore hosts 12th ASEAN Defence Ministers Meeting and 5th ADMM-Plus

The 12th ASEAN Defence Ministers Meeting (ADMM) and 5th ADMM-Plus was held on October 19 and 20, 2018 in Singapore. ASEAN is regional intergovernmental organisation comprising 10 Southeast Asian countries, which promotes intergovernmental cooperation and facilitates economic, political, security, military, educational, and sociocultural integration. ASEAN comprise of Indonesia, Malaysia, Thailand, Singapore, Philippines, Vietnam, Myanmar, Cambodia, Brunei and Laos. India is a full dialogue partner of the ASEAN. Headquarters: Jakarta, Indonesia.

ADMM-Plus

ADMM-Plus is platform for ASEAN and its eight dialogue partners to strengthen security and defence co-operation for peace, stability, and development in the region. Its objective is to promote mutual trust and confidence between defence establishments through greater dialogue and transparency. The inaugural ADMM-Plus was convened in Hanoi, Vietnam in 2010. The defence ministers then had agreed on five areas of practical cooperation, including maritime security, counter-terrorism, peacekeeping operations and humanitarian assistance.

7th Meeting of Education Ministers of SCO Member States held in Astana, Kazakhstan

The seventh meeting of education ministers of member states of Shanghai Cooperation Organisation (SCO) was held in Astana, capital city of Kazakhstan. India was represented by Minister of State (MoS) Human Resource Development Satyapal Singh.

Shanghai Cooperation Organization (SCO)

SCO is Eurasian economic, political and security organisation headquartered in Beijing, China. The declaration on establishment of SCO was signed in Shanghai (China) in June 2001 by six founding states – Russia, China, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan.

The full members of the organization are China, Russia, Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, India and Pakistan. India and Pakistan were granted SCO membership in June 2017. Afghanistan, Belarus, Iran and Mongolia currently enjoy observer status of SCO. Sri Lanka, Turkey, Azerbaijan, Armenia, Cambodia and Nepal are dialogue partners of SCO. SCO's Headquarters: Beijing, China. Secretary General: Rashid Alimov

12th ASEM Summit held in Brussels, Belgium

The 12th Asia-Europe Meeting (ASEM) Summit was held in Brussels, Belgium. The theme of summit was 'Global Partners for Global Challenges'. It was chaired by European Council President Donald Tusk. Vice President M Venkaiah Naidu on a three-day visit to Belgium to attend the 12th Asia-Europe Meeting (ASEM) summit. This edition of summit has prioritised issues related to trade and investment, connectivity, sustainable development, climate change, terrorism, migration, maritime security and cyberspace.

Asia-Europe Meeting Summit (ASEM)

ASEM is informal political dialogue and cooperation forum that brings 53 entities – including 51 countries (including India) from Asia and Europe and two regional bodies European Union (EU) and ASEAN. It represents around 62.3% of the world's population, 57.2% of the global GDP and almost 60% of the world's trade.

ASEM was officially established in March 1996 at the first summit in Bangkok, Thailand. The dialogue addresses political, economic and cultural issues between the two regions. It also seeks to strengthen relationship between the two regions in a spirit of mutual respect and equal partnership. Three main pillars ASEM process are Political & Security, Economic & Financial and Social, Cultural & Educational.

India's longest river bridge will be built on Brahmaputra river in Assam

India's longest river bridge with total length of 19.3 kilometers will be built on Brahmaputra river in Assam. This bridge will connect Dhubri of Assam to Fulbarani of Meghalaya. Its construction will be completed by 2026-27 and will be public-funded work. Japanese Finance Agency (JICA) has approved the loan for this project as part of road infrastructure improvement package in the north-east after assessing the economic benefit of the big project. Two northeastern states of Assam and Meghalaya will be connected by NH127B with the help of this bridge.

North Central Railways launched two mobile apps named NCR RASTA and Yatri RASTA

The North Central Railways (NCR) launched two mobile apps, NCR RASTA (Railway assets Summerised Tracking Application) and Yatri RASTA (Railway Approach to Station Tracking Application) for its employees and passengers, respectively, for locating assets and stations.

NCR RASTA app: It is for use of railway officers and staff and has exact mapping of all railway assets. It will enable railway staff to reach desired asset using Google Navigation in case of any emergency.

Yatri RASTA app: It will allow general public to locate railway stations easily. It is already available for smartphones running on Android and can be downloaded free of cost from Google Play Store.

India's first railway station inside tunnel to come up in Himachal Pradesh

For the first time in India, a railway station will be built inside a tunnel at a height of 3,000 metres, on the strategic Bilaspur-Manali-Leh line close to the China-India border. While many metro stations in Delhi and other cities are inside tunnels, once completed, the Keylong station in Himachal Pradesh will be the first on the railway network to be inside a tunnel. The station will be at a height of around 3,000 metres and will be inside a 27-km-long tunnel. The line once completed will connect all important locations between Bilaspur and Leh

India's highest tricolour unfurled at Haj House in Mumbai

A big Indian tricolour measuring 20x30 feet and 350 feet above the ground was unfurled at the majestic Haj House in Mumbai by Union Minister for Minority Affairs Mukhtar Abbas Naqvi.

The flag atop a 20-metre high mast on top of the iconic building near the Chhatrapati Shivaji Maharaj Terminus (CSMT) in south Mumbai is billed as the highest tricolour installed on the terrace of any building of such height in the country.

Naqvi also inaugurated a special 'viewers gallery' atop the Haj House that offers a panoramic view of south Mumbai with several renowned monuments like CSMT, the BMC Buildings, the Gateway of India, the Victorian Gothic and Art Deco district which secured a UNESCO world heritage tag last July.

In a first, UP govt makes man-animal conflict a 'State Declared Disaster'

The Uttar Pradesh government has made the man-animal conflict a 'State Declared Disaster' bringing such incidents under the ambit of State Disaster Response Fund (SDRF) to ensure better coordination and relief during such mishaps in the state.

Taking the historical decision to this effect, the state government has issued orders which will enable faster monetary relief to the victims of attack of wild animals.

As per the provisions of the order, in cases of human death due to man-animal conflict, relief of Rs 5 lakh would be given to the family of deceased while the disbursement of compensation for injury would be in accordance to SDRF guidelines.

Carnot Prize 2018 to Union Minister Piyush Goyal

Union Minister for Railways, Coal and Corporate Affairs Piyush Goyal will receive the prestigious Carnot prize for his contribution towards sustainable energy solutions.

The former power minister will be awarded by the Kleinman Center for Energy Policy at the University of Pennsylvania School of Design.

The award in the energy sector is named after French physicist Nicolas Sadi Carnot who recognised that the power of the steam engine would "produce a great revolution" in human development.

India, Japan, the US plans for a trilateral joint air exercise

India, Japan and the U.S. are set to elevate the bilateral 'Cope India' air exercise to a trilateral format. The next edition of this exercise is scheduled to be held in December 2018 for which final planning conference to finalise its modalities will be held in Kalaikunda, West Bengal. The three countries already conduct naval war games under the expanded Malabar naval exercise.

INTERNATIONAL**US merges its embassy and Consulate General in Jerusalem into single diplomatic mission**

United States has decided to merge its Consulate General with its new embassy in Israel into single diplomatic mission in Jerusalem. This decision was taken as part of US's global efforts to improve efficiency and effectiveness of its operations. It also comes after US under President Donald Trump administration recognized Jerusalem as Israel's capital in December 2017 and moved its Embassy from Tel Aviv to Jerusalem in May 2018.

The consulate general in Jerusalem was top mission of US for Palestinians, who want East Jerusalem for their capital. Post this merger, US will establish new Palestinian Affairs Unit inside embassy in Jerusalem to continue reporting, outreach and programming in West Bank and Gaza as well as with Palestinians in Jerusalem.

The Israel-Palestine conflict

A Jewish homeland promised

- In 1917, during World War I, the British capture Palestine from the Ottomans and, in the Balfour Declaration of November 2, promise the Jews a "national home" there.
- Opposition from the Palestinians first emerges at a congress in Jerusalem in 1919.
- In 1922, the League of Nations sets out the obligations of a British mandate in Palestine, including securing "establishment of the Jewish national home", the future Israel.
- Britain crushes the great Arab revolt in Palestine of 1936-1939.

Palestine split

- After World War II and the Holocaust in which six million Jewish people were killed, more Jewish people wanted their own country. They were given a large part of Palestine, which they considered their traditional home but the Arabs who already lived there and in neighbouring countries felt that was unfair and didn't accept the new country.
- In 1948, the two sides went to war. When it ended, Gaza was controlled by Egypt and another area, the West Bank including east Jerusalem, by Jordan. They contained thousands of Palestinians who fled what was now the new Jewish home, Israel.
- The Palestine Liberation Organisation (PLO) was created in 1964.

But then, in 1967, after another war, Israel occupied these Palestinian areas and Israeli troops stayed there for years. Israelis hoped they might exchange the land they won for Arab countries recognising Israel's right to exist and an end to the fighting.

Occupation and war

- In the Six-Day War in June 1967, Israel defeats Egypt, Jordan and Syria and occupies east Jerusalem, the West Bank, the Gaza Strip and the Golan Heights. Jewish settlement of the occupied territories starts shortly afterwards and continues in the West Bank, east Jerusalem and the Golan Heights. Arab states attack Israel on October 6, 1973, the Jewish holy day of Yom Kippur. Israel repels the attack.
- Israel invades civil war-wracked Lebanon on June 6, 1982, to attack Palestinian militants after initially sending in its forces in 1978. Israeli-backed Lebanese militias kill hundreds in Palestinian refugee camps in Beirut. Israeli troops remain in southern Lebanon until May 2000. The first intifada, or Palestinian uprising against Israeli rule, rages from 1987 to 1993.

Abortive peace process

- In 1993, Israel and the PLO sign a declaration on principles for Palestinian autonomy after six months of secret negotiations in Oslo, launching an abortive peace process.
- PLO leader Yasser Arafat returns to Gaza in July 1994 to create the Palestinian Authority. Self-rule is established for the first time in the Gaza Strip and the West Bank town of Jericho.
- In September 2000, right-wing Israeli opposition leader and future prime minister Ariel Sharon visits the Al-Aqsa mosque compound in east Jerusalem, a site holy to Muslims and Jews, who refer to it as the Temple Mount, sparking the first clashes of the second intifada.
- Responding to a wave of suicide bombings, Israel in 2002 invades the West Bank in its largest operation there since the 1967 war.
- Moderate Mahmud Abbas takes over the leadership of the Palestinian Authority in January 2005, after the death of Arafat.
- The last Israeli forces leave Gaza after a 38-year occupation in September 2005.



- Israel finally left Gaza in 2005 but soon after, a group called Hamas won elections and took control there. Much of the world calls Hamas a terrorist organisation. It refuses to recognise Israel as a country and wants Palestinians to be able to return to their old home - and will use violence to achieve its aims.

Violence in Gaza

- Though the Palestinians don't have an army, rockets are regularly fired from Gaza into Israel. Israelis living in border towns are used to having to take shelter and adapting their lives to deal with the rockets.
- In the years since Israel withdrew its troops in 2005, Gaza has seen several Israeli offensives. Israel says these were aimed at putting a stop to rocket fire.
- In 2008, Israel sent soldiers into Gaza. An estimated 1,300 people, many of them civilians, were killed in Gaza before a ceasefire was declared; 13 Israeli soldiers also died.
- In 2012, at least 167 Palestinians and six Israelis were killed during an Israeli operation. After eight days a ceasefire was declared with both sides promising to stop attacks.
- Most recently in July 2014, authorities said over 2,200 people were killed - most of them Palestinians - and many more injured, during 50 days of violence. A ceasefire was agreed between Israel and Hamas on 26 August.

Peace Process

Other countries, particularly America, have worked hard to settle the fighting between the Arabs and Israelis but so far nothing has worked. Many people want Gaza and the West Bank to be turned into a new country - Palestine. Israel won't agree to this unless it feels safe - and Hamas accepts its right to exist. The other sticking points are what will happen to Israelis who've settled in the West Bank, who will run Jerusalem and what will happen to the Palestinian refugees.

Fake moon : China Plans To Launch Artificial Moon By 2020

China is planning to launch its own 'artificial moon' by 2020 to replace streetlamps and lower electricity costs in urban areas.

Chengdu, a city in southwestern Sichuan province, is developing "illumination satellites" which will shine in tandem with the real moon, but are eight times brighter, according to China Daily. The first man-made moon will launch from Xichang Satellite Launch Center in Sichuan, with three more to follow in 2022 if the first test goes well, said Wu Chunfeng, head of Tian Fu New Area Science Society, the organization responsible for the project.

How might a 'fake moon' work?

- The artificial moon would work as a mirror, reflecting sunlight back to Earth, according to China Daily.
- It would orbit 500km about Earth - roughly the same height as the International Space Station. The Moon orbits, on average, about 380,000km above Earth.
- The reports gave no details about what the fake moon would look like, but Mr Wu said it would reflect sunlight across an area of between 10km and 80km with brightness "eight times" that of the real Moon. Both the accuracy and intensity of the light would be controllable.

But... why?

- To save money. It might sound ridiculous but the Chengdu aerospace officials say putting a fake moon in space could actually end up being cheaper than paying for street lights.
- Illuminating an area of 50sq km could save up to 1.2bn yuan (\$173m; £132m) a year in electricity charges.
- It could also "illuminate blackout areas" after, say, a natural disaster like an earthquake.
- Electricity at night is very expensive so if you could say, have free illumination for up to 15 years, it might work out better economically in the long term.

How is it possible?

- Scientifically, it's viable. But to serve its purpose, the fake moon would have to be permanently in orbit over Chengdu - a relatively tiny area when you look at the Earth from space.
- That would mean it would need to be in geostationary orbit, which is about 37,000km from the Earth.
- The only problem is at that distance you'd need the satellite pointing direction to be extremely accurate.
- If you want to light up an area with an error of say 10km, even if you miss by one 100th of a degree you'll have the light pointing at another place.
- And to have any impact from that distance, the mirror would have to be truly colossal.

What impact would this have on the environment?

- The light of the satellite would be similar to a "dusk-like glow" and "should not affect animals' routines".
- Some said it will surely confuse nocturnal animals, while others say that many cities in China already suffer from light pollution.
- The moon would significantly increase the night-time brightness of an already light-polluted city, creating problems for Chengdu's residents who are unable to screen out the unwanted light.
- If the light is too strong "it will disrupt the night cycle of nature and this could possibly affect animals.

- But conversely if the light is so faint then the question is, what is the point of it?

Is this a first?

- No, a space mirror to create daylight at night has actually been tried before.
- In 1993, Russian scientists released a 20m-wide reflector from a supply ship heading to the Mir Space Station, which was orbiting at between 200km and 420km.
- Znamya 2 briefly beamed a spot of light about 5km in diameter to Earth. The light marched across Europe at 8km/hr, before the satellite burned up on re-entry.

Ocean Dumping : Causes & Impact

There are several contributing factors to ocean dumping. Carelessness, ignorance, and lack of effective disposal systems are just some of the biggest causes. Since 70% of the earth is filled with water, the oceans and the seas continue to face all manner of dumping especially in terms of waste material deposits from industries, sewerage, tankers and factories. The dumping of trash such as plastics and construction waste has also aggravated the situation. It is not a new environmental concern: as a matter of fact, it continues to escalate. Here are the cited causes and effects of ocean dumping including solutions to the matter.

Causes of Ocean Dumping

The various cargo activities at the port persistently contribute to the problem of ocean dumping. Dumping often takes place from the cargo that sweeps from the ships as they leave the port. In most cases, it occurs during the removal of wastes such as slag, coal and limestone from the deck. This is one of the unstoppable activities at the port that incessantly contributes to ocean dumping.

Carelessness in terms of sewer and industrial waste dumping
 The intensity of careless dumping of sewer and industrial wastes into the ocean has increased the magnitude and scale of ocean dumping, especially considering the volume of sewage coming from ships, homes, industries, and factories. Due to carelessness, the wastes from sewers and industries are not treated before they are discharged into the ocean. In some cases, the sewer drainage systems run directly into the ocean with all the dangerous materials such as viruses, bacteria, cryolite, mercury, lead and DDT. What's more, some of the industrial wastes contain radioactive materials.

1. Spillage from offshore rigs and oil tankers

Spillages from offshore rigs and oil tankers are prime examples of the contributors to ocean dumping. It usually occurs either in large scale due to accidents that spill massive volumes of oil on the ocean surface or without knowledge where small amounts of oil are leaked into the ocean from oil tankers or by tanker ships. Large scale oil spills are among the worst recorded cases of ocean dumping in history. One such notable scenario is the Gulf of Mexico oil spill that resulted in the death of thousands of ocean creatures.

Direct dumping of waste materials

Non-degradable and one time use materials such as plastics often find their way into the oceans because of direct dumping. It qualifies as one of the major contributing factors to ocean dumping on the account that once the materials are introduced in the oceans, they last there for hundreds to thousands of years. A very good example of the destructive impacts of direct dumping of plastic into the ocean is the Pacific Ocean Garbage Patch.

Lack of strict regulations and observation acts

The absence of strict regulatory and observation acts to control the problem of ocean dumping is another huge contributor to the menace. The regulatory authorities and individuals assigned the task of monitoring and observing the regions that are highly likely to be affected habitually take a back seat instead of being in the forefront at executing the laws put in place to guard against ocean dumping. This is the reason some people and factories or industries take advantage thereby engaging in direct dumping and the discharge of industrial waste into the ocean.

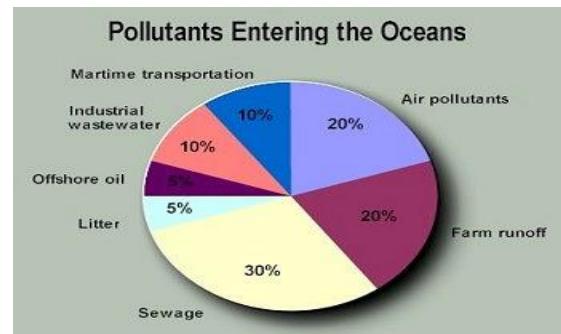
Effects of Ocean Dumping

1. Marine life extinction

The highly registered direct impact of ocean dumping is the death and extinction of marine life. All manners of ocean dumping threaten the existence and survival of marine creatures. Oil spills, for instance, are life-threatening for marine life and can destroy coral reefs which provide suitable breeding grounds and shelter for numerous marine species. Oil is particularly known to clog the gills of fish which is used for respiration. Oil can also trap marine creatures like the sea birds, mammals and turtles thereby making them vulnerable to attack or suffocation.

When oil floats on the surface of the ocean, it blocks sunlight from penetration which is vital for photosynthesis.

Presence of viruses, bacteria and toxic chemicals such as mercury, arsenic in the dumped materials, on the other hand, can spread serious diseases or destroy some of the marine creature's vital organs causing them to die. Plastics



are also usually confused for food by the sea creatures that at times result in death if swallowed. In fact, several sea birds and turtles have been found dead with plastics in their stomachs.

2. Adverse effects on human health

According to environmentalists, the oceans are living and interconnected. What they mean can otherwise be defined as – whatever is fed into the ocean is what is got out of the ocean. This thus means that if dumping is done in areas close to where fishing is done, the toxic substances will be consumed by fish and gradually accumulates in their bodies. Upon consumption of the fish by humans, the toxic substances are introduced in the body thereby making the victims experience undesired health complications.

Cases of food poisoning due to consumption of fish affected with toxic waste substances have been reported. For instance, WHO reported that more than 50,000 people have been affected with sea food poisoning. It also linked a serious disease by the name Minamata with mercury sea food poisoning which has been registered in more than 2,000 cases since the 1950's in China, Greenland, Canada, Brazil and Columbia. Besides, consumption of poisoned sea food such as crabs, shrimp and cuttlefish has widely been associated with paralysis, delirium, brain damage, birth defects and cancers.

3. Poor oceanic scenery

The problem with contaminated oceans and the ones experiencing high rates of dumping is that they look disgusting and dirty. As a result, they affect the scenery as the color of the water might turn to black or green. This kills tourism and recreational activities such as boating, surfing, fishing and swimming. In the long-run, it impacts the country's image and economy.

Solutions to Ocean Dumping

1. Management and minimization of waste dumping at the port

Ocean dumping challenges compound day after day. Regardless, the waste substances that are disposed in the oceans can be controlled through effective management and minimization efforts. Primarily, efforts should focus on controlling and monitoring cargo activity at the port while limiting the amount of waste substances dumped into the ocean from the ships. By taking effective management and minimization strategies at the ports, cargo sweeping activity that releases slag and iron ore pellets can be controlled to reduce the possibilities of ocean dumping.

2. Education and awareness creation

The initiation of campaigns aimed at stopping ocean dumping can go a long way in educating people and creating awareness on the hard facts regarding the problem. Most people are unaware of the dangers of ocean dumping simply because they are not enlightened about its repercussions.

3. Regulations and laws

Regulations and laws account for the most effective tool for addressing the issues surrounding ocean dumping. As much as laws are put in place, further implementation of the laws is important. It's not just enough to enact laws and regulations to mitigate the ocean dumping problems. Rather, responsible parties, people and organizations must seriously assume their responsibility to deal with the common problems. Bans should center on convicting industries, institutions and people that engage in ocean dumping activities.

A great example is the Ocean Ban Act of 1988 intended to put an end to industrial sewage sludge and waste dumping at sea in the US. Other prominent effective acts in history include the Ocean Dumping Act (ODA) and Clear Water Act (CWA) initiated by the US to deal with ocean dumping problems. In other words, the enactment and use of appropriate laws and regulation against ocean dumping can do wonders in mitigating the problem.