

CIVIL SERVICES

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Current Events

The government will begin telecom spectrum auction for on Monday

The government will begin on Monday the auction for telecom spectrum through which it is hoping to meet Rs. 40,000 crore revenue target.

The auction for the airwaves or frequencies freed from the cancellation of 122 telecom licenses, belonging to mainly eight companies, by the Supreme Court in February, will start at 0900 hours on Monday.

The cancelled permits included Uninor's 22 licences, Loop Telecom (21), Sistema Shyam (21), Idea Cellular including Spice Communications (13), Videocon (21), Etisalat DB formerly Swan Telecom (15), S-Tel (6) and Tata Teleservices (3 CDMA licences).

Instead of auctioning entire spectrum freed from cancellation of licences, the government is auctioning a maximum of 11 blocks of airwaves frequencies in each circle, barring Delhi and Mumbai where there are only eight blocks, to attract high price for spectrum.

The apex court had allowed the companies, whose permits were cancelled, to get spectrum reallocated for continuing their business if they win rights for the airwaves frequencies in the auction.

The government has fixed starting price for spectrum in the auction at Rs. 14,000 crore for 5 Mhz of GSM spectrum on pan-India level which is around 7 times more than the price of Rs. 1,658 crore at which telecom companies were given pan-India permits between 2001 to 2008.

Comptroller and Auditor General (CAG) has estimated that allotment of permits in 2008 at 2001 prices caused loss to government exchequer to the tune of around Rs. 1,76,000 crore.

Out of eight companies whose licences were cancelled, only three companies — Idea Cellular, Videocon and Telenor (ma-



jority stakeholder in Uninor) - have submitted bids for auction of airwaves frequencies.

These companies will have to win at least 5 Mhz of spectrum, divided in blocks of 1.25 Mhz each, to continue their services in areas where their licences were cancelled.

Telecom major Airtel and Vodafone are also participating in the auction to buy additional airwaves frequencies. These players can bid for maximum of two blocks in a telecom area.

Since there has been partial impact on permits of Idea Cellular, the company will need to bid for at least four blocks of spectrum, amounting to 5 Mhz of airwaves, in seven telecom circles to continue its operations.

These circles include Tamil Nadu (including Chennai), Kolkata, West Bengal, Orissa, Assam, North East and Jammu and Kashmir service areas. In rest of the circle, Idea Cellular can bid for maximum of 2 blocks only like Airtel and Vodafone.

Industry experts, however, are pessimistic over whether the auction can fetch government the Rs. 40,000 crore targets it seeks to achieve by selling spectrum.

Bharti group Chairman Sunil Bharti Mittal has said that the auction will be over on first day. The last auction held by government of 3G and Wireless Broadband spectrum jointly took around 50 days to end. Auction for another set of airwaves frequencies required for CDMA services has already failed after two applicants, Tata Teleservices and Videocon withdrew from it. The government priced CDMA spectrum 1.3 times higher than GSM spectrum. This auction could have fetched government at least around Rs. 13,000 crore. Citing recommendations of Telecom Regulatory Authority of India (TRAI) to fix minimum price of CDMA spectrum at double the price of GSM spectrum, Mr. Sibal said that the Empowered Group of Ministers' realised that there will be no taker for these airwaves at Rs. 28,000 and hence it lowered it to 1.3 times instead of double price. SSTL, which run services under brand name of MTS, did not participate in the auction as it is waiting for the hearing of its curative petition before Supreme Court.

The company, which did not participate in auction, maintains that it will continue its operations in India.

At the end of the auction, companies will have the option to pay either full amount of 33 per cent of final price by December 25.

The final auction price will then determine the amount that government will get from one-time levy on spectrum held by existing operators beyond 4.4 Mhz.

The government expects to garner Rs. 31,000 crore from this one-time levy throughout the validity period of existing licences. The major portion of the estimates includes price calculation based on reserve price.

Remittances from NRIs robust; to cross \$75billion, up from last year

Remittances from the NRIs in the current financial year 2012-13 are expected to cross \$75 billion mark up from \$66 billion in 2011-12. According to World Bank Estimates, even though the rupee may not see as much depreciation as it did in past 12 months, remittances would remain robust and may well cross \$75 billion in 2012-13. The NRIs from the West Asia region account for over 40 percent of the total foreign remittances to India.

President Barack Obama defeats Romney to win re-election

President Barack Obama has been reelected to a second term, defeating Republican challenger Mitt Romney

America's first black president secured more than the 270 votes in the electoral college needed to win. In his victory speech before supporters in Chicago, Mr Obama said he would talk to Mr Romney about "where we can work together to move this country forward". Mr Obama prevailed despite lingering dissatisfaction with the economy and a hard-fought challenge by Mr Romney. His Democrats also retained their majority in the Senate, which they have held since 2007.

The Republicans kept control of the House of Representatives, which analysts say will likely result in more of the gridlock that characterised Mr Obama's first term, with the House and the president at logger-



heads on most legislation. In his address, the president challenged his opponents, asking them to work with him. With only Florida's 29 electoral votes still undecided, Mr Obama won 303 electoral votes to Mr Romney's 206.

The popular vote, which is symbolically and politically important but not decisive in the race, remains very close.

In 2008, they built a coalition forged in the white heat of passion. In 2012, they carefully constructed it, patiently persuading supporters to become voters. Both candidates said this was a choice of two visions, America has chosen. "One nation' speech

Mr Obama congratulated Mr Romney and Republican vice-presidential candidate Paul Ryan on their hard-fought campaign. "We have picked ourselves up, we have fought our way back and we know in our hearts that for the United States of America the best is yet to come," he said. Mr Obama said he was returning to the White House "more determined, and more inspired than ever about the work there is to do, and the future that lies ahead".

He pledged to work with Republican leaders in Congress to reduce the government's budget deficit, fix the tax code and reform the immigration system. "We are an American family and we rise and fall together as one nation," he said. In Boston, where his campaign was based, Mr Romney congratulated the president and said he and Mr Ryan had "left every-

thing on the field" and had given their all in the campaign.

Referring to the struggling economy, Mr Romney said now was not the time for "partisan bickering and political posturing", and that Republicans and Democrats must "put people before politics". "I so wish that I had been able to fulfil your hopes to lead the country in a different direction but the nation chose another leader and so I join with you to earnestly pray for [Mr Obama] and for this great nation," he said.

Under the US constitution, each state is given a number of electoral votes in rough proportion to its population. The candidate who wins 270 electoral votes - by prevailing in the mostly winner-takes-all state contests - becomes president.

On Tuesday, the president held the White House by assembling solid Democratic states and a number of important swing states such as Colorado, Iowa, Pennsylvania, Michigan, Minnesota, Virginia and Wisconsin. His narrow victory in Ohio, a critical Mid-Western swing state, sealed the victory.

In other key ballots:

- Voters in Maine, Maryland and Washington state approved same-sex marriage in local referendums
- Colorado and Washington state voted to legalise recreational use of marijuana
- California voters rejected a proposal to abolish the death penalty
- Puerto Ricans voted in a referendum on whether to maintain their status as a US

“free associated state”. Early results suggest a majority answered “No”, voting in favour of becoming the 51st US state, if Congress approves the move.

Billions spent

Mr Romney won North Carolina and Indiana, both of which Mr Obama won in 2008, as well as the solid Republican states. But he was unable to win in Ohio or other states needed to breach the 270 threshold. Also on Tuesday’s ballot were 11 state governorships, a third of the seats in the 100-member US Senate and all 435 seats in the House of Representatives. Mr Obama’s victory came despite lingering high unemployment - 7.9% on election day - and tepid economic growth. But voters gave him credit for his 2009 rescue of the US car industry among other policy accomplishments, and rewarded him for ordering the commando mission that killed Osama Bin Laden in Pakistan last year. He and Mr Romney, as well as their respective allies, have spent more than \$2bn (£1.25bn) - largely on adverts in swing states.

Swing state

In United States presidential politics, a swing state (also, battleground state or purple state) is a state in which no single candidate or party has overwhelming support in securing that state’s electoral college votes. Such states are targets of both major political parties in presidential elections, since winning these states is the best opportunity for a party to gain electoral votes. Non-swing states are sometimes called safe states, because one candidate has strong enough support that he or she can safely assume that he or she will win the state’s votes.

Red states and blue states

Red states and blue states refer to those states of the United States whose residents predominantly vote for the Republican Party (red) or Democratic Party (blue) presidential candidates. This came into use in the United States presidential election of 2000 on an episode of the Today show on October 30, 2000. According to AlterNet and The Washington Post, the terms were coined by journalist Tim Russert, during his televised coverage of the 2000 presidential election. That was not the first election during which the

news media used colored maps to graphically depict voter preferences in the various states, but it was the first time a standard color scheme took hold; the colors were often reversed or different colors used before the 2000 election. Since 2000, usage of the term has been expanded to differentiate between states being perceived as liberal and those perceived as conservative. This reverses a long-standing convention, where the red symbols (such as the Red Flag or Red Star) are associated with Socialist and revolutionary movements, and conservative movements often choose blue as a contrasting color.

Austrian skydiver Felix Baumgartner smashes sound barrier

Austrian daredevil Felix Baumgartner broke the sound barrier during his jump from the edge of space, but he did not set a new record for the longest freefall,



a mission spokesperson said. The 43-year-old Austrian achieved the fastest ever freefall speed at 1,137 kilometres per hour during the 4 minutes and 19 seconds of descent from an altitude of 128,097 feet, said spokeswoman Sarah Anderson on Sunday. He was bidding to break records set over 50 years ago by Joseph Kittinger, now a retired US Air Force colonel who made a freefall jump from 31,333 meters in 1960. Kittinger was part of Baumgartner’s backup team. Citing preliminary figures, she said the whole jump lasted nine minutes and three seconds, including 4 minutes and 44 seconds after he deployed his parachute to float down to earth in the New Mexico desert. Baumgartner had hoped to be in freefall for more than five minutes before opening his chute, and had also expected to jump from a lower alti-

tude — 120,000 feet. The reason for the shorter than expected freefall was not immediately clear, although live commentary during the unprecedented leap suggested he opened his parachute at an altitude above the 5,000 feet level announced in advance.

President stresses upon need to promote technology enabled learning

President Pranab Mukherjee has stressed upon the need to promote technology enabled learning. Speaking after inaugurating the National Education Day 2012 at Vigyan Bhavan in New Delhi, the President said that education system of a country should be measured on the basis of number of intellectual citizens it provides to the country.

Human resource development minister MM Pallam Raju, UNESCO Chief Irina Bakova besides other dignitaries were also present on the occasion.

Pranab Mukherjee also threw light on the educational vision of Maulana Abul Kalam Azad, the first education Minister of independent India. He also said that access to elementary education should be the main focus in the 12th five year plan. On the occasion, the President launched a new version of Aakash tablet- the Aakash-2. This new and improved version will come with a higher processor speed and better battery life.

The tablet will also feature a better quality display resolution and many applications which will be helpful for the children. On the occasion, Human resource development minister MM Pallam Raju said that there is need to give special emphasis on research and innovation in higher education to fulfil the needs of developing nations. He also said that several steps are being take ensure better use of technology for education related works and training of teachers.

16th Summit of the Non-Aligned Movement (NAM) Summit

16th Summit of the Non-Aligned Movement in Tehran closed with accepting a 600-page final document that mainly fo-

cuses on the Palestinian issue as well as on Iran's nuclear energy program, but makes no mention of the Syrian civil war. A Chinese state commentary qualifies the summit as an "important" diplomatic "accomplishment from Iran", having hosted "leaders and delegates of over 100 countries". 16th Summit of the Non-Aligned Movement was held from 26 to 31 August 2012 in Tehran, Iran.

Hizb ut-Tahrir

Three hundred Hizb ut-Tahrir supporters protest in Jakarta ahead of Secretary of State Hillary Clinton's visit to Indonesia. Hizb ut-Tahrir is an international Sunni pan-Islamic political organisation. They are commonly associated with the goal of all Muslim countries unifying as an Islamic state or caliphate ruled by Islamic law and with a caliph head of state elected by Muslims. The organization was founded in 1953 in Jerusalem by Taqiuddin al-Nabhani, an Islamic scholar and appeals court judge (Qadi) from the Palestinian village of Ijzim. Since then Hizb ut-Tahrir has spread to more than 40 countries, and by one estimate has about one million members. Hizb ut-Tahrir is very active in the west, particularly in the United Kingdom, and is also active in several Arab and Central Asian countries, despite being banned by some governments. The group also has a growing presence in North America, known as Hizb ut-tahrir America, or HTA.

Ramon Magsaysay Award 2012

The Ramon Magsaysay Award Foundation (RMAF) announced today the six winners of the 2012 Ramon Magsaysay Award. The awardees were from Bangladesh, Cambodia, India, Indonesia, Philippines and Taiwan. A press statement from RMAF said hen Shu-Chu, from Taiwan, is being recognized for "the pure altruism of her personal giving, which reflects a deep, consistent, quiet compassion and has transformed the lives of the numerous Taiwanese she has helped."

Romulo Davide, from the Philippines, is being recognized for "his steadfast passion in placing the power and discipline

of science in the hands of farmers in the Philippines, who have consequently multiplied yields, created productive farming communities and rediscovered the dignity of their labor."

Kulandei Francis of India is recognized for "his visionary zeal, his profound faith in community energies and his sustained programs in pursuing the holistic economic empowerment of thousands of women and their families in rural India." Syeda Rizwana Hasan, from Bangladesh, is being recognized for "her uncompromising courage and impassioned leadership in a campaign of judicial activism in Bangladesh that affirms the people's right to a good environment as nothing less than their right to dignity and life."

Cambodian Yang Saing Koma is being recognized for "his creative fusion of practical science and collective will that has inspired and enabled vast numbers of farmers in Cambodia to become more empowered and productive contributors to their country's economic growth."

Ambrosius Ruwindrijarto, from Indonesia, is being recognized for "his sustained advocacy for community-based natural resource management in Indonesia, leading bold campaigns to stop illegal forest exploitation, as well as fresh social enterprise initiatives that engage the forest communities as their full partners."

Established in 1957, the Ramon Magsaysay Award is Asia's highest honor and is widely regarded as the region's equivalent of the Nobel Prize.

RMAF said the award celebrates the memory and leadership example of the third Philippine President of the Third Republic, Ramon Magsaysay.

The award is given every year to Asian individuals or organizations that manifest the same sense of selfless service that ruled the life of the late and beloved Filipino leader.

RMAF President Carmencita Abella said, "The Magsaysay awardees of 2012 are six remarkable individuals, all deeply involved in creating sustainable solutions to poverty and its accompanying disempowerment, whether in the forests or on farmlands, in exploitative industries or in inadequate education. Working selflessly in unpretentious yet powerful ways,

they are showing how commitment, competence, and collaborative leadership can truly transform millions of individual lives and galvanize progressive community action."

ISRO scores on 100th mission, PSLV rocket launch successful

ISRO's PSLV C21 rocket successfully blasted off into space on its 100th mission on a cloudy on September 9, 2012. Prime Minister Manmohan Singh was among the cheering congregation of officials, scientists and media persons at the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh. On this journey, the PSLV C21 rocket ferried two dollar-paying foreign passengers – a French Earth observation satellite Spot 6 and a Japanese micro satellite Proiteser into polar orbit.

The PSLV C21 was on its way to deliver Spot 6 and Proiteser into a 655km polar orbit inclined at an angle of 98.23 degrees to the equator. SPOT and Indian remote sensing satellites (launched earlier) are the two leading earth observation satellite series. SPOT 6 is the heaviest foreign satellite ever to have been launched by the ISRO, which has made launching satellites as a significant business activity earning precious foreign exchange to the country.

The PSLV C21 cost Rs. 75 crore. away from earth.

More important, it has established the country as a major player in the satellite launching business, which started in 1999 as an additional baggage when ISRO launched India's own satellite. So far, ISRO has launched 27 foreign satellites and the two of this time total up its tally to 29.

India is also a major player in the space with a the largest number of remote sensing satellites that send back imagery in a variety of spatial resolutions – from more than meter ranging up to 500 meters. This rich collection of data also makes India an important player in the data market.

India has 12 remote sensing/earth observation satellites circling the earth which makes it a leader in remote sensing data market. – The 12 satellites are :TES,

Resourcesat 1, Cartosat 1, 2, 2A and 2B, IMS 1, Risat-2, Oceansat 2, Resourcesat-2, Megha-Tropiques and Risat-1.

2012 US Open Tennis

In lawn tennis, Andy Murray of the United Kingdom wins the Men's Singles of the 2012 US Open defeating Novak Djokovic of Serbia to become the first British player to win a Grand Slam singles title since Virginia Wade, and the first British man to do so since Fred Perry.

Women's singles

Serena Williams def. Victoria Azarenka, 6-2, 2-6, 7-5

Men's doubles

Bob Bryan / Mike Bryan def. Leander Paes / Radek Štěpánek, 6-3, 6-4

Women's doubles

Sara Errani / Roberta Vinci def. Andrea Hlaváčková / Lucie Hradecká, 6-4, 6-2

Mixed doubles

Ekaterina Makarova / Bruno Soares def. Kvita Peschke / Marcin Matkowski, 6-7(8-10), 6-1, [12-10]

BCCI holds 83rd Annual General Meeting in Mumbai

The Board of Control for Cricket in India - BCCI held its 83rd Annual General Meeting - AGM in Mumbai on September 27, 2012. Apart from the appointment of the new selection committee; the Indian cricket board replaced Sourav Ganguly as the head of the BCCI's technical committee. Former skipper Anil Kumble will be the new incharge. Meanwhile, Ranjib Biswal will be the chairman of the National Cricket Academy.

Addressing a press conference later, BCCI President N Srinivasan said that the IPL Governing Council remained unchanged with Rajiv Shukla being at its helm. He however refused to comment on the decision to terminate IPL franchise Deccan Chargers as the matter is sub-judice but informed that the Board is at liberty to advertise for another franchise. He added that the decision to go with nine teams or add another one will be taken at a later stage.

Mr. Srinivasan further said that there is an increasing interest among former players to become national selectors. He added that the selector's remuneration

has been increased so as to make them more responsible.

Talking about the Board's finances, BCCI President said that the Indian cricket board has recorded a surplus of over Rs 382 crore in the last fiscal and the gross revenue is Rs 849 crore. He informed that BCCI has spent 160 crore rupees for infrastructure development this year.

Lakhdar Brahimi why is in the news

Lakhdar Brahimi, the U.N. and Arab League special envoy for the Syrian civil war, arrives in Damascus; fighting goes on in the east of the capital. Lakhdar Brahimi is an Algerian veteran United Nations envoy and advisor. He is also a member of The Elders, a group of world leaders working for global peace. He retired from his duties at the end of 2005. Born in El Azizia near Tablat about 60 Km in the south of Algiers, Algeria, Brahimi is a member of the Commission on Legal Empowerment of the Poor, the first global initiative to focus specifically on the link between exclusion, poverty and law. He is also a member of the Global Leadership Foundation, an organization which works to promote good governance around the world. He is currently a distinguished senior fellow at the Center for the Study of Global Governance at the London School of Economics and Political Science, and a governing board member of the Stockholm International Peace Research Institute.

Jordan to host World Economic Forum in 2013

Jordan will host the World Economic Forum (WEF) meeting on the Middle East and North Africa (MENA) for the seventh time at the Dead Sea, slated for May 24-26, 2013.

The meeting will include over 1,000 participants from governments, businesses, civil societies and academia.

The announcement came on Monday as His Majesty King Abdullah received WEF Founder and Executive Chairman Klaus Schwab in New York on the sidelines of the UN General Assembly meeting, a Royal Court statement said.

The King Abdullah II Fund for Development (KAFFD) and WEF signed a memo-

randum of understanding on Monday that marks the official start of preparations for the 2013 WEF on MENA.

King Abdullah said the ongoing developments in the MENA region warrant efforts to shape the new regional context to positively support socio-economic development and address youth issues, especially youth unemployment; and to "answer our young people's cry for a normal future, in dignity and opportunity, in view of all the developments and challenges taking place in our MENA region".

"Hot.Cool.Yours." – Sochi 2014 slogan announced

The slogan is a "universal solution" that "reflects Russia's national character, the brand values of Sochi 2014, and also the progressive and innovative approach to organizing and hosting the Games," the organizing committee said in a statement. Its head Dmitry Chernyshenko says the slogan is aimed to bring more foreigners to Sochi and also make Russians proud. "The Sochi 2014 slogan says it's impossible not to take part, impossible not to watch, impossible not to get excited and it's worth being proud because these are our Games," he said, stressing that "hot" and "cool" are also references to Sochi's unique sun-and-snow climate.

The London 2012 Olympics featured the slogan "Inspire a Generation," while visitors in Vancouver were welcomed "With Glowing Hearts," a line from the national anthem.

WHO issues guidance on new virus

The World Health Organization on Wednesday urged health workers everywhere to report patients with acute respiratory infection who may have been in Saudi Arabia or Qatar, following the discovery of a new virus from the same family as SARS.

The new virus shares some of the symptoms of SARS, another coronavirus, which emerged in China in 2002 and killed around a tenth of 8,000 people it infected worldwide. So far scientists do not know how contagious the new virus is, or whether or not it spreads by contact be-

tween people.

WHO's clinical guidance to its 194 member states said health workers should be alert to anyone with acute respiratory syndrome and requiring hospitalisation who had been in the area where the virus was found or in contact with a suspected or confirmed case within the previous 10 days.

WHO has not recommended any travel restrictions in connection with the new virus, but said it was working closely with Saudi authorities on health measures for the haj. WHO said it was identifying a network of laboratories that could provide countries with expertise on coronaviruses. Senkaku Islands dispute

Senkaku Islands dispute concerns a territorial dispute over a group of uninhabited islands known as the Senkaku Islands in Japan and as the Diaoyu (in China) or Tiaoyutai Islands (in Taiwan). Aside from a 1945 to 1972 period of administration by the United States, the archipelago has been controlled by Japan since 1895. The People's Republic of China (PRC) disputed the proposed US handover of authority to Japan in 1971 and has asserted its claims to the islands since that time. The Republic of China (Taiwan) also claims the islands. The territory is close to key shipping lanes, rich fishing grounds, and there may be oil reserves in the area.

Japan argues that it surveyed the islands in the late 19th century and found them to be Terra nullius (Latin: land belonging to no one); subsequently China acquiesced to Japanese sovereignty until the 1970s. The PRC and the ROC argue that documentary evidence prior to the First Sino-Japanese War indicates Chinese possession and that the territory is accordingly a Japanese seizure that should be returned as the rest of Imperial Japan's conquests were returned in 1945. Although the United States does not have an official position on the merits of the competing sovereignty claims, the islands are included within the U.S. Japan Security Treaty meaning that a defense of the islands by Japan may compel support from the United States military.

In September 2012, the Japanese government purchased the remaining three of the disputed islands that it did not already

own from their private owner, prompting large-scale protests in China.

London Olympics 2012 concluded as US topped the Medal Tally

The 30th Summer Olympics (London Olympics 2012) concluded in London on 12 August 2012. The 17-day event was inaugurated at Olympic Stadium at the Olympic Park in East London on 27 July 2012. London Olympics witnessed nearly 10500 athletes from 204 National Olympic Committees participating in as many as 26 sports events.

At the end of the game US topped the medal tally with a total of 104 medals (46 Gold+29 Silver+ 29 Silver) followed by China, which bagged a total of 88 medals (38 Gold+27 Silver+23 Bronze). Great Britain with 65 medals (29 Gold+17 Silver+19 Bronze), Russia with 82 medals (24 Gold+26 Silver+32 Bronze) and South Korea with 27 medals (13 Gold+8 Silver+6 Bronze) finished third, fourth and fifth respectively. India with a total of 6 medals (2 Silver+4Bronze) finished 55th on the medal tally.

India at London Olympics 2012

India had sent 83-member team to the London Olympics 2012, which is the largest ever contingent sent by Indian Olympic Association in the Olympics. India's total number of medals in London Olympics 2012 stood at a record haul of six medals. Shooter Vijay Kumar bagged the silver medal in the 25 m Rapid Fire event, while MC Mary Kom, five-time world women's boxing champion, ace shuttler Saina Nehwal and rifle shooter Gagan Narang won India bronze medals. Gagan Narang opened India's account at the medal tally after he won bronze in shooting event on 30 July 2012.

India's men's hockey team badly disappointed those who were expecting them to reclaim the lost glory of Indian hockey. The team in a show of disastrous performance finished 12th and at the bottom most as they lost all their six matches. It was the worst-ever performance by the Indian hockey team in the history of Olympics. Prior to this the worst ever performance of the Indian Hockey team came

in 1996 Atlanta Olympics when it had finished 8th.

Besides, major medal hopes for the country such as Beijing Gold medalist Abhinav Bindra in shooting and Deepika in Archery also could not meet with the expectations of the people, as they squarely failed to deliver a medal winning performance. Beijing bronze medalist Vijender Kumar also failed to recreate the magic in the boxing ring as he lost to Uzbekistan's Abbas Atoev 17-13 in the quarterfinals.

India's History in Summer Olympics
India started participating in Summer Olympics from Paris Olympics 1900 after Norman Pritchard, an Anglo-Indian, participated in two events and claimed silver in both the events. India first sent its contingent to Summer Olympics in Antwerp Olympics 1920 and has sent its team in every Olympics since then. In the last 112 years of modern Olympics India has won mere nine gold and 8 of them are in hockey and one in individual shooting event. After 6 medal haul at the London Olympics 2012 total number of medals won by India now stands at 26.

Major Medal winning Performances at London Olympics 2012

1. Michael Phelps bagged 6 medals(4 Gold+2 Silver) in swimming, becoming the most decorated Olympian ever with 22 medals.
2. Jamaican sprinter Usain Bolt clinched three gold in three separate events (100 meter race, 200 meter race and 4X100 meter relay team race). He won the 100 metres gold medal with a time of 9.63 seconds, setting a new Olympic record for that distance. He took 19.32 seconds to clinch 200 meters gold. With a storming victory in both 100 and 200 meters race he became the only sprinter in the history to defend both Olympic titles.
3. Germany beat Netherlands 2-1 to win men's hockey gold.
4. Mexico beat Brazil 2-1 to win Soccer gold
5. United States defeated Spain to win men's Basketball gold
6. Andy Murray of Great Britain beat Roger Federer of Switzerland to win tennis men's singles gold
7. Russia defeated Brazil to win men's vol-

leyball gold

8. Dan Lin of China beat Malaysian Chong Wei Lee to clinch Badminton men's singles gold

Mascot for London Olympics 2012

Mascots have been a part of Olympic Games since Munich 1972, when Waldi, a dachshund, was the symbol of the Munich games. The mascots of London Games were Wenlock and Mandeville. While Wenlock is a mascot of Olympics, Mandeville is mascot for Paralympics. These are two ultra-modern one-eyed creatures.

Olympic Torch

Olympic Torch is the symbol of Olympic Games which is lit in Olympia (modern day Greece). The initial editions of Olympics were organized without flame. The tradition of torch was reintroduced in Amsterdam Olympics 1928.

Olympic Medals

There were 4700 medals (Gold, Silver, Bronze) up for grab at the London Olympics 2012. The Olympic medals weigh between 375-400 grams, they are eighty-five millimetres in diameter and seven millimetres thick. The gold medals are not actually made of solid gold. They are in fact 92.5 percent silver and 1.34 percent gold, while the rest is copper. Metals used in the medals were mined in Mongolia and Utah in the United States. On every medal there is the image of Nike, the Greek Goddess of victory.

31st Summer Olympics

The 31st edition of Summer Olympics will be held in Reo de Janeiro, Brazil in 2016. The city was made the host of the event in 121st IOC session. The games are scheduled to be held from 5 August to 21 August 2016.

Scientists at CERN discovered a New Sub-Atomic Particle called Higgs Boson

Scientists at CERN, the European Organization for Nuclear Research, on 4 July 2012, discovered a new sub-atomic particle called Higgs Boson or God's Particle. The new discovery is being considered as a gateway to a new era in understanding the universe's great mysteries including

dark matter.

Scientists had predicted the existence of Higgs Boson, which is also referred to as God's Particle, in 1964. The particle was named Higgs Boson after Peter Higgs and Indian physicist Satyendra Nath Bose. Peter Higgs was one of six authors who wrote the revolutionary papers covering what is now known as the Higgs mechanism and described the related Higgs field and boson.

The term God particle was first used by Nobel Prize-winning physicist Leon Lederman. The term is now a more popular term for Higgs Boson which explains how the subatomic universe works and got started.

IUCN released Red List of Threatened Species for Year 2012

International Union for Conservation of Nature (IUCN) on 19 June 2012 released its latest update of the Red List of Threatened Species. The report showed that of the 63837 species assessed, 19817 are threatened with extinction, including 41 per cent of amphibians, 33 per cent of reef building corals, 25 per cent of mammals, 13 per cent of birds, and 30 per cent of conifers.

From India the IUCN listed 132 species of plants and animals as Critically Endangered, the most threatened category. With as many as 60 different species assessed as Critically Endangered and 141 species as Endangered, plants appeared to be the most threatened life form.

18 species of amphibians, 14 fishes, 10 mammals and 15 varieties of birds were assessed as critically endangered. While, 310 species were included in the list of Endangered species. The list of endangered species includes 69 fishes, 38 mammals and 32 amphibians. Two plant species namely Euphorbia mayuranthanii of Kerala were listed in the extinct in the wild category, while a leaf frog species and six plants were reported to be extinct.

On a global basis the IUCN classified 3947 as Critically Endangered, 81 as Extinct, 63 as Extinct in the Wild. In the lower risk categories, there were 5766 species in Endangered, 10104 in Vulnerable and

4467 in Near Threatened categories. Scientific data regarding 10497 species was not available and hence classified as Data Deficient.

What is International Union for Conservation of Nature (IUCN)?

The International Union for Conservation of Nature (IUCN) is the world's oldest and largest global environmental organization. Founded in 1948, today it is the largest professional global conservation network of the world. As of now the organization has more than 1200 member organizations including 200+ government and 900+ non-government organizations. The IUCN Red List is a critical indicator of the health of the world's biodiversity. Headquartered in Gland near Geneva in Switzerland, IUCN's vision is "a just world that values and conserves nature."

What is IUCN Red List?

Founded in 1969, IUCN Red List is the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species. The goal of the IUCN Red List is to provide information and analyses on the status, trends and threats to species in order to inform and catalyse action for biodiversity conservation.

Smiling Armadillo to be the official Mascot of 2014 FIFA World Cup, Brazil

A Smiling Armadillo is declared to be the official mascot for the 2014 FIFA World Cup in Brazil on 12 September 2012. The reports state that FIFA has registered the patent for this rare animal with the European Patent Office as a symbol to this extreme sporting event. Officials declared that internet poll will help in deciding the name of this mascot. Brauca the name of the ball for the world cup 2014 to be finalized by the opinion poll on internet. The armadillo in Brazil is known by the name of 'tatu-bola' and is known for its abilities of rolling itself in form of a ball to with a leathery shell as a symbol of self defence.

In the previous FIFA World Cup the mascots were:

1. FIFA 2010 World Cup in South Africa- Zakumi the green-haired leopard

2. FIFA 2006 World Cup in Germany- Goleo named lion

3. Taking the Armadillo as an official mascot for the mega event was backed by a NGO named Caatinga Association engaged in protection of the biodiversity of North Eastern Brazil.

Ankur Mittal won the Bronze Medal in the Fourth International Junior Shotgun Cup : Ankur Mittal won the bronze medal in double trap in the fourth International junior shotgun Cup in Orimattila, Finland. He scored 177 points.

Mittal had scored 45, 41 and 45 in qualification and 46 in the final. Shayan Masood, the other Indian came fourth, one point behind. He had scored 130 in qualification following a series of 43, 45 and 42.

The results of Men's double trap: 1. Artem Nekrasov (Rus) 190 (142); 2. Kiril Fokeev (Rus) 183 (139); 3. Ankur Mittal 177 (131); 4. Shayan Masood 176 (130).

Global Carbon Dioxide Emissions

According to the findings of the report Trends in global CO₂ emissions, global carbon dioxide (CO₂), emission increased by three percent in 2011. The three percent increase in CO₂ took the total amount of CO₂ in air at an all-time high of 34 billion tonnes. The report was released on 19 July 2012 by the European Commission's Joint Research Centre (JRC) and the Netherlands Environmental Assessment Agency (PBL).

The United States with 17.3 tones per capita remains one of the top CO₂ emitters, while, China, the world's most populous country, average CO₂ emissions increased by nine percent to 7.2 tonnes per capita. The 27-nation European Union emitted 7.5 tonnes of CO₂ per person. Emissions from 34-member Organisation for Economic Co-operation and Development (OECD) countries account for only one third of global CO₂ emissions in 2011. China (29 percent), the United States (16 percent), the European Union (11 percent), India (six percent), the Russian Federation (five percent) and Japan (four percent) were the top CO₂ emitters in 2011.

UGC set Guidelines for the

Foreign Universities entering India

According to the new set of guidelines approved by University Grants Commission (UGC) on 2 June 2012, only global top 500 universities will be allowed to start their operation in India. The new guidelines set the norms for the foreign universities aspiring to enter into agreement with Indian universities for offering education programmes in the country.

As per the new guidelines the foreign varieties entering into tie-ups with Indian partners should be ranked among the top 500 by the Times Higher Education World University Ranking or by Shanghai Jiaotong University of the top 500 universities.

Institutes who fail to abide by the new UGC guidelines would be suitably penalised which also includes stoppage of grants from the UGC. The UGC came up with the new guidelines following the rising concerns among the educationists in the country over the quality of foreign institutions which is tying up with Indian colleges offering separate education programmes.

India, Myanmar and Thailand decided to implement Trilateral

India, Myanmar and Thailand on 10 September 2012 reviewed the eagerly awaited trilateral connectivity project and decided to make all efforts to implement this by 2016. This was done at the meeting of the India-Myanmar-Thailand Joint Task Force, which met in New Delhi.

It was also agreed during the meeting that steps be initiated to address issues related to harmonisation of customs and immigration procedures at border check-posts to enable seamless movement of goods and people to realise the full potential of the trilateral highway.

Somalia got its new President in form of Hassan Sheikh Mohamud

Hassan Sheikh Mohamud was elected to be the new President of Somalia on 10 September 2012. He won the election by

gaining 190 votes to 79 in the second round of competition. Alliances formed in between the Prime Minister Abdiweli Ali and Hassan Sheikh helped Mohmud to win as the Presidential candidate of the country.

1. He was born in Jalalaqsi on the Shebelle River of central Somalia in the year 1955
2. He completed his education in India and United States
3. Worked in the United Nations development program and World Bank as well as a university lecturer
4. In the year 2008, he worked with Somalia Civil Society
5. In 2009 history of mediation in Somalia is a book written by him was published
6. 2011, founded the peace development party as its chairman

Jal Satyagraha

The most outstanding demonstrations of its own kind in Khandawa district of Madhya Pradesh named Jal Satyagraha continued for 17 days at Omkareshwar Dam Project came to an end on 10 September 2012. Across 1000 acres of cultivatable land has been submerged into water with at least 60 odd villages that will not be visible in the map of India any more. The Satygrahis demanded land for the land compensation following the ruling of Supreme Court. The oustees in the satyagraha remained standing in the neck deep water with demands like lowering down the level of water stored in the dam to 189 meters and to provide land for land compensation, ended the battle on the victory note.

The 16th NAM (Non-Aligned Movement) Summit was held in Tehran

The 16th NAM (Non-Aligned Movement) summit was held at Tehran, Iran on 30-31 August 2012. The theme of the summit was Lasting Peace through Joint Global Governance. At the Tehran Summit, the Chairmanship of NAM was passed on from Egypt to Iran in accordance with the NAM's practice of regional rotation. The NAM meeting in Tehran was held in three phases: preparatory senior officials meeting on 26-27 August, ministerial level

meeting on 28-29 August, and the summit on 30-31 August. Heads of the government from over 100 countries participated in the Tehran Summit to discuss the new global challenges.

At the end of the summit, the outcome documents were adopted which put emphasis on peace. Participants called for fundamental changes in global governance and collective management of the world as the precondition of establishing peace, and all of them expressed the call for avoiding conflicts in the world.

Venezuela was selected the host for the 17th NAM Summit in 2015 and two nations, namely Azerbaijan Republic and Fiji, were accepted as the new members of the organization. The NAM was founded in the former Yugoslavia in 1961. It represents almost two-thirds of the UN members and about 55 percent of the world population.

India signed Tax Information Exchange Agreement (TIEA) with Monaco : India signed Tax Information Exchange Agreement (TIEA) with Monaco on 31 July 2012 in New Delhi. It will allow the two countries to check tax evasion and money laundering. This was the ninth TIEA signed by India.

Key features of this agreement are as following :

1. It is based on international standard of transparency and exchange of information.
2. Information must be foreseeably relevant to the administration and enforcement of the domestic laws of the Contracting Parties concerning taxes and tax matters covered by the agreement.
3. The requesting State has to provide some minimum details about the information requested in order to justify the foreseeably relevance criteria.
4. Information is to be treated as secret and can be disclosed to only specified person or authorities, which are tax authorities or the authorities concerned with the determination of tax appeal.
5. It also provides for disclosure of information to any other person or entity or authority or any other jurisdiction (including foreign Governments) with the written consent of the competent authority of the requested Party.

6. There is a specific provision that the requested Party shall provide upon request the information even though that Party may not need such information for its own tax purposes.

7. There is a specific provision for providing banking and ownership information.

8. There is a specific provision for Tax Examination Abroad where authorities of one State can present in the tax examination of taxpayer in the other State.

Hesham Kandil Appointed Egypt's New Prime Minister

Egypt's President Mohamed Morsi elected fifty year old Hisham Kandil as the country's Prime Minister. Morsi ordered the country's former minister of water resources and irrigation, Kandil to form a new government.

Kandil, holds an engineering degree from Cairo University in the year 1984 and a Ph.D. from the University of North Carolina in the year 1993. Kandil, will be the first Egyptian prime minister to wear a beard, which is a sure sign of change in the country.

A number of more experienced names were suggested for the prestigious role, but Morsi chose Kandil, a relatively lesser known face as the Prime Minister of the country, this could be because he wanted someone unlikely to threaten or overshadow him. Kandil is an independent national figure who has never been a member of any party before.

Mohamed Morsi who became the fifth President of the Republic of Egypt on 24 June 2012, is the first to have been freely elected in the country.

Seventh G20 Summit held in Los Cabos, Mexico

The seventh G20 summit took place on 18,19 June 2012. Mexico chaired the summit. The summit took place in the city of Los Cabos in Mexico. It is a twenty member brigade, the summit includes countries, South Africa, Canada, India, Mexico, United States, China, Japan, South Korea, Russia, Turkey, Argentina, Brazil, India, Indonesia, Saudi Arabia, European Union, France, Germany, Italy, United Kingdom, Australia. The objectives and

highlights of the summit is as follows :

THE G 20 DECLARATION

1. The leaders of the world's largest economies will help in boosting growth and job creation to repair the wounded global economy because of the European financial crisis.

2. The statement also included the importance of easing the Spanish Crisis.

3. The Summit declaration also included investment in infrastructure in the developing countries, this decision would help in achieving global growth which was hauled due to the falling state of the world economy and the Eurozone crisis.

4. All the Euro members of the G 20 will indulge in necessary policy measures to not only safe guard the integrity, but also stabilize the whole area. This would be done only by breaking the feedback loop between the sovereigns and the banks.

5. The summit has also recognized the progress made by China in market-determined exchanged rates.

6. The summit has singled out Saudi Arabia, by bringing in a Saudi pledge to keep the oil prices at bay and low. This is a step to ensure global economic well being.

7. European Commission President Jose Manuel Barroso and European Council President Herman Van Rompuy asked markets to focus on a European summit at the end of the month. It would eventually help the continent move deeper and help the economic and political integration to match its single currency.

8. The 14-page statement emphasized the need for growth because this is the only way they will solve the debt problem of the Eurozone.

9. The non-European members of the G20 have sent a message to Europe that it has to find a way that the Eurozone's finances can be supervised by a triumvirate comprising the European Central Bank, the IMF and the EU.

INDIA'S CONTRIBUTION

1. Owing to the debt loaded 17 nation Euro zone, India on 19 June 2012 announced a \$10 Billion contribution to the already existing IMF's \$430 Billion financial money.

2. The announcement was made by Manmohan Singh, Prime Minister, India

in the Seventh Summit, G 20, Mexico.

3. The amount was contributed to the International Monetary Fund (IMF) for the bailout fund, that would help them ease off a little burden from the debt scenario.

4. Seventh G 20 and G 20's history

5. The seventh G 20 take took place in the Mexican resort of Los Cabos. The seventh summit was headed by Mexico's President, Felipe de Jesús Calderón Hinojosa.

6. The G 20 comprises the heads of the State or the Government.

7. The G 20 was first proposed by former Prime Minister of Canada, Paul Martin.

8. The next G20 Summit is scheduled in 2013 with Russia as the new chair.

CAG pegged Public Exchequer's Loss at 1.86 Lakh Crore in Coal Blocks Scam

The Comptroller and Auditor General (CAG) of India in its incisive audit report noted that India's exchequer suffered a massive loss of 1.86 lakh crore due to the distribution of coal blocks without bidding. The CAG report was tabled in the parliament on 17 August 2012.

The CAG in its report stated that 57 coal blocks that were allocated to private companies during 2004-2009, extended them a windfall gain of 1.86 lakh crore rupees. The CAG report has also brought Prime Minister Manmohan Singh under scrutiny as he was holding the charge of Coal Ministry from 2006 to 2009. Besides, the CAG report also raised serious allegations against the PMO which delayed the fair bidding process for coal blocks despite the clearance from Law and Justice Ministry. Tata Group, Reliance Power, Jindal Power and Steel, Abhijit Group, Bhushan Group, Electro Steel, OP Jindal Group were some of the major beneficiaries of the coal blocks distribution.

The government has distributed about 150 coal blocks over the past eight years. During this period Prime Minister Manmohan Singh, Shibu Soren and Prakash Jaiswal has been at the helm of the Coal Ministry. The 1.86 lakh rupees scam is the biggest in the history of India as it surpassed the 1.7 lakh crore 2G spectrum scam.

UNESCO inscribes Western Ghats Mountain Chain on the List of World Heritage Sites

United Nations Educational, Scientific and Cultural Organisation (UNESCO), the science and cultural body of UN, inscribed India's 1600-km long Western Ghats mountain chain on the list of its world heritage sites on 1 June 2012. The Western Ghats mountain chain is globally renowned for its enormous biological diversity. The mountain's chains, which are older than the Himalaya, are widely responsible for the Indian monsoon weather pattern.

The Western Ghats are also considered to be one of the world's eight hottest hotspots of biological diversity.

The 1600-km long ghats, begins at the border of Gujarat and Maharashtra and passes through as many as 5 states including Maharashtra, Goa, Karnataka, Tamil Nadu and Kerala. Kanyakumari in Tamil Nadu marks the ending point of the ghats. The World Heritage Committee of UNESCO holds its meeting once every year where it reviews its list of World Heritage sites. The committee also looks into the implementation of the UNESCO World Heritage Convention, which defines the kind of natural or cultural sites which can be considered for inclusion on the World Heritage List.

Pranab Mukherjee won the Presidential Election 2012

Pranab Mukherjee was elected as the 13th President (in person) of India on 22 July 2012. Pranab Mukherjee defeated his rival PA Sangma with a huge margin as he secured nearly 69 percent of total valid votes. In an electoral college of 10.5 lakh, Pranab Mukherjee secured a vote value of 713763, while, PA Sangma managed to get only a vote value 315987. The victory of Pranab Mukherjee was announced by Returning Officer for the Presidential election VK Agnihotri. Pranab Mukherjee will be sworn in as the thirteenth President of India on 25 July 2012.

Out of the total 748 MPs, Pranab got the support of 527 while his rival, PA Sangma got 206 votes in his favour. Fifteen votes

including that of Samjwadi Party chief Mulayam Singh Yadav were invalid. Of these, nine were to be in favour of Mukherjee while six for Sangma.

Each MP had a vote value of 708 in the Presidential Election 2012. There are a total of 776 voters in both the Houses of Parliament. The Electoral College also consisted of 4120 MLAs in the states.

The Election Commission of India had issued the notification for Presidential Election 2012 on 16 June 2012. 30 June 2012 was the last date for filing the nomination. Elections were held on 19 July 2012. Pranab Mukherjee and PA Sangma were two principle contestants of 14th Presidential Election.

Some important facts related to Presidential elections :

1. Value of Vote of an MLA = State Population / (1000 X Total no. of elected MLA's)
2. On the basis of the above formula, the value of the vote of an MLA from UP has the highest value and that from Sikkim the lowest.
3. Value of Vote of an MP = Total value of votes of MLA's of all States / Total no. of elected MP's (LS + RS)
4. The 1971 census is currently under consideration.
5. The election is held through the system of proportional representation by means of the single - transferable vote by secret ballot.
6. The candidate who gets 50 percent of votes is considered elected.
7. Supreme Court looks into all disputes related to Presidential election.
8. Dr. Rajendra Prasad, the first President of India, was the only President who served two tenures in the office.
9. V.V. Giri is the only person who was elected as the President of the country as an independent candidate in 1969.

The Size of the Nobel Prize Is Being Reduced to Safeguard Long-Term Capital

The size of the Nobel Prize is being reduced by 20% in order to avoid an undermining of its capital in a long-term perspective. At its meeting on June 11, 2012, the Board of Directors of the Nobel Foun-

dation set the amount of the 2012 Nobel Prizes at SEK 8.0 million per prize, at today's exchange rate equivalent to USD 1.1 million. This implies a lowering of the prize sum by 20 per cent. The Nobel Foundation regards this as a necessary measure in order to avoid an undermining of its capital in a long-term perspective. One of the most important tasks of the Nobel Foundation is to safeguard the economic base of the Nobel Prize. The capital left behind by Alfred Nobel must therefore be managed in such a way that it will be possible to award the Nobel Prize in perpetuity, while guaranteeing the independence of the prize-awarding institutions.

Rare Transit of Venus unfolds in morning sky

A rare celestial spectacle, Transit of Venus, the last for this century, unfolded in the morning sky all across the country on June 6, 2012, enthraling the astro enthusiasts. Scientists and amateur astronomers alike celebrated the arrival of the Transit of Venus, peering up to the skies to watch a dark black spot slide over the surface of the Sun. The awesome spectacle was visible all over the country, including the national capital. The next Venus transit will happen after 105.5 years in 2117, making this a lifetime's event, says C B Devgun, Director, Science Popularisation Association of Communicators and Educators (SPACE). From the Earth, this phenomenon is seen when the Venus passes between the Sun and the Earth. It occurs in intervals of 8, 121, 8 and 105 years, Devgun said. The last Transit of Venus occurred on June 8, 2004 and was visible across India.

7th G20 Summit held in Los Cabos, Mexico

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Rio+20 Conference on Sustainable Development concluded in Rio de Janeiro

Rio+20 the United Nations Conference on Sustainable Development took place in Rio de Janeiro, Brazil, from 20 to 22 June 2012. The conference marked the 20th anniversary of the 1992 United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro, and the 10th anniversary of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. The conference also marked four decades of the 1972 Stockholm Conference or the UN Conference on Human Environment.

The global event on Sustainable Development (UNCSD) was organized in accordance with the United Nations General Assembly Resolution 64/236 (A/RES/64/236). The UN Under-Secretary-General for Economic and Social Affairs, Sha Zukang was appointed the UN Secretary-General for the Rio+20 Conference.

Rio+20, saw Heads of 172 States and Government marking their presence at the conference. The summit provided global leaders with a chance to develop a collective framework to meet their poverty eradication goals while not letting the environment get destructed. The summit, which came after the failure of number of conferences such as Kyoto Summit, Copenhagen Summit, widely focused on the need of sustainable development and green economy by addressing environmental degradation and building a bridge to the future.

Objective of the Conference

The basic objective of the Conference was to secure renewed political commitment for sustainable development, assess the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and address new and emerg-

ing challenges.

The themes for Rio+20 Conference were: (1) Green economy in the context of sustainable development poverty eradication

(2) Institutional framework for sustainable development

Focus Area of conference

The conference focused on seven specific areas which comprises decent jobs, energy, sustainable cities, food security and sustainable agriculture, water, oceans and disaster readiness.

The United Nations Environment Programme (UNEP) Report on Global Food Security

The United Nations Environment Programme released its food security report *Avoiding Future Famines: Strengthening the Ecological Basis of Food Security through Sustainable Food Systems* during Rio+20 conference. The report noted that food security must be at the top of the priority list of country's policy if the world has to provide food to its seven billion populations - a number expected to cross nine billion mark by 2050.

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The UNEP report seeks to draw the attention of global community on key environmental aspects, which are largely being ignored by economic activities like over-fishing, unsustainable water use and other human activities. The report also kicks off a debate with respect to the Green Economy and sought for a food security mechanism which does not undermine the crucial ecosystem services. The report, which has been written by a team of eleven scientists and experts, covered several areas of expertise including food consumption patterns, agricultural production, marine fisheries and inland fisheries. International organizations including the International Fund for Agricultural Development (IFAD), the Food and Agriculture Organization (FAO), the World Bank, the World Food Programme (WFP) and the World Resources Institute (WRI), also made their contribution in the first of its kind study, which links global food security to ecological system.

Raja Parvez Ashraf appointed the 17th Prime Minister of Pakistan

Raja Parvez Ashraf, the senior Pakistan People's Party leader, was appointed the 17th Prime Minister of Pakistan on 22 June 2012. In a poll held in the Pakistan's National Assembly to elect new Prime Minister, Raja received 211 votes of the total 342 votes while the Opposition PML (N) candidate, Sardar Mehtab Abbasi, bagged only 89 votes. Pakistan President Asif Ali Zardari administered oath to the new Prime Minister at a special oath taking ceremony held at the Presidency at Islamabad in Pakistan. Ashraf was elected as the Prime Minister following the Supreme Court's verdict to debar Yousaf Raza Gilani from his office on 19 June 2012 in a contempt of court case. Born on 26 December 1950, in Sanghar town in Sindh province, Ashraf completed his higher education from Sindh University in Pakistan in 1970. A successful real estate businessman Ashraf is considered as a key PPP leader in the Rawalpindi region. He was twice elected to the National Assembly of Pakistan from Gujar Khan constituency of Rawalpindi District. Be-

fore being elected as the Prime Minister of the country, he served as the federal minister for water and power, and information and technology in the cabinet headed by former prime minister Yousuf Raza Gilani.

Som Mittal remained as Nasscom President till early 2014

Som Mittal remained Nasscom (National Association of Software and Service Companies) President as per the announcement of IT trade association executive council on 25 June 2012. The agreement was extended till early 2014. He was assigned as Nasscom President in January 2008. The appointment was extended because IT exports expected to grow at a lower rate of 11-14 percent in 2012 as compared to 2011. But the expansion was 17 per cent. Nasscom (National Association of Software and Service Companies) was founded in 1988. It is the 1200 member trade association, of which over 250 are global companies from the US, UK, EU, Japan and China. Nasscom represents India's 100 billion dollar IT services industry.

Shekhar Basu appointed as the Director of Bhabha Atomic Research Centre

Shekhar Basu was appointed as the Director of Bhabha Atomic Research Centre (BARC) on 19 June 2012. Basu, who earlier served as the Chief Executive of Nuclear Recycle Board of the Bhabha Atomic Research Centre (BARC), Trombay succeeded Ratan Kumar Sinha on the top position. Sinha was appointed as the Chairman of the Atomic Energy Commission on 30 April 2012. 59-year-old Basu, an engineering graduate from Victoria Jubilee Technical Institute (VJTI), joined BARC Training School in 1974. During his 38-year service at BARC, Basu served in various capacities including the Chief Executive of Nuclear Recycle Board. Basu was the Project Director of the Plutonium Recycling Project at Kalpakkam, which built India's first indigenous Pressurised Water Reactor (PWR) which is powered by enriched uranium.

Thingalaya marked an Indian Record at Athletics National Championship

Indian Athlete Siddhanth Thingalaya marked an Indian Record on 18 June 2012 at Belgium Athletics National Championship in Brussels. He marked the record in 110 metre hurdles with a timing of 13.65 seconds. At Belgium, when he approached the ninth hurdle on 18 June 2012 he felt pain in the hamstring. The pain placed him behind the Adrien Deghelt of Belgium with a timing of 13.64 seconds. He was disqualified for the Olympic 2012, as the Olympic qualification mark of 13.60 seconds and Siddhanth took 13.65 seconds to finish the championship. He was disqualified for Olympics 2012 qualification by five hundredth second. After 1964, he was the first Indian hurdler to compete in Olympics Games. Siddhanth Thingalaya is 21 years old athlete from Mumbai. He improved his own national record of 13.77 seconds marked at Kolkata meet in September 2011.

IUCN released Red List of Threatened Species for Year 2012

International Union for Conservation of Nature (IUCN) on 19 June 2012 released its latest update of the Red List of Threatened Species. The report showed that of the 63837 species assessed, 19817 are threatened with extinction, including 41 per cent of amphibians, 33 per cent of reef building corals, 25 per cent of mammals, 13 per cent of birds, and 30 per cent of conifers. From India the IUCN listed 132 species of plants and animals as Critically Endangered, the most threatened category. With as many as 60 different species assessed as Critically Endangered and 141 species as Endangered, plants appeared to be the most threatened life form.

18 species of amphibians, 14 fishes, 10 mammals and 15 varieties of birds were assessed as critically endangered. While, 310 species were included in the list of Endangered species. The list of endangered species includes 69 fishes, 38 mammals and 32 amphibians. Two plant species namely *Euphorbia mayuranthanii* of

Kerala were listed in the extinct in the wild category, while a leaf frog species and six plants were reported to be extinct.

On a global basis the IUCN classified 3947 as Critically Endangered, 81 as Extinct, 63 as Extinct in the Wild. In the lower risk categories, there were 5766 species in Endangered, 10104 in Vulnerable and 4467 in Near Threatened categories. Scientific data regarding 10497 species was not available and hence classified as Data Deficient.

Mahendra Singh Dhoni Appointed as a Brand Ambassador of Nepal Cricket Association : Indian Cricket Captain Mahendra Singh Dhoni was appointed as a brand ambassador of Nepal Cricket Association, Nepal on 17 June 2012. The announcement was made by Posta Bahadur Bogati, Minister for Tourism and Civil Aviation of Nepal.

Nik Wallenda Successfully crossed Niagara Falls on a Tightrope

American Stuntman Nik Wallenda became the first person to walk across Niagara Falls on a tightrope on 15 June 2012. Wallenda took more than 25 minutes to complete his 1800-foot long precarious journey. No person in the past 100 years has accomplished this daredevilry act. Wallenda started the walk from the U.S. side of the falls and finished it to the Canadian side. Born at Florida in US on 24 January 1979 Wallenda describes himself as an aerialist, high wire artist, acrobat and daredevil. The six-time Guinness World Record holder Wallenda has to his credit the world record for the longest distance and greatest height ever travelled by bicycle on a high wire, the record which he created during a stunt in New Jersey in year 2008. Stunts of any sort were legally prohibited on Niagara Falls for more than 100 years. Nik Wallenda had to wrangle with the US and Canadian authorities for two years to get the permission to perform the daredevil task. On 23 September 2011, New York Governor Andrew Cuomo signed a bill giving Nik Wallenda final permission to cross Niagara Falls on a tightrope.

Where is Niagara Falls?

The waterfalls of Niagara falls are located on the Niagara river which connect two of the five great lakes. Lake Erie and Lake Ontario. Collectively the waterfalls called the Niagara falls. The falls consist of three different waterfalls, the American falls, the Bridal Veil Falls in America and the Canadian Horseshoe falls in Canada. The Niagara falls marks the international border between USA and Canada.

Sheryl Sandberg First Female and Eighth Member on Facebook's Board

Chief operating officer Sheryl Sandberg is the first female and eighth member on the Facebook Board of Directors announced by Facebook CEO Mark Zuckerberg on 26 June 2012. The promotion praised by The California State Teachers' Retirement System which holds 36922 shares of Facebook. It is the second-largest pension fund in US. She had taken part in the growth at Facebook. She maintained the revenue 3.7 billion dollar in 2011, but not able to validate its 70 billion dollar valuation in public markets. She was involved in the recent Facebook's IPO (initial public offering). She also helped to build the company in online ad business. Including Sandberg, Facebook board has Seven men. They include Facebook CEO Zuckerberg, W Breyer (venture capitalists James), Marc Andreessen and Peter Thiel (Washington Post Co chairman), Donald E Graham, Reed Hastings (Netflix CEO) and Erskine Bowles (a former White House chief of staff and the University of North Carolina president emeritus). Sandberg joined Facebook as a Chief Operating Officer after Google Inc. in 2008. She is ranked no. 12 on the Fortune Most Powerful Women list. She was also named in 25 Most Influential People on the Web by Business Week.

China launched its Fourth Human Spaceflight Shenzhou-9 into Space

China on 16 June 2012 launched its fourth human spaceflight Shenzhou-9 from the Jiuquan satellite launch centre in north-

western Gansu state. The 30.3 feet long and 9.1 feet diameter, Shenzhou -9 spacecraft will conduct the first manned docking mission and set the foundation for Chinese plans to build a space station by 2020. Shenzhou-9 is expected to take at least 20 days to complete its space mission. In the course of the mission the crew will accomplish automated docking procedure followed by scientific experiments, technical tests and physical exercises conducted in the space lab. The crew will conduct manual docking with the Tiangong-1 or heavenly palace space laboratory module, which has been orbiting the earth since 29 September 2011.

World Chess Champion Viswanathan Anand roped as Brand Ambassador of TVH

World Chess Champion Viswanathan Anand as brand ambassador for all its new projects for promoting its project across the World. TVH will be the first South Indian company to be associated with Anand. Previously, Anand was connected with NIIT from last 13 years. TVS has number of projects for Chennai and Coimbatore which was expanding Viswanathan presence in the south. The new project of TVH Quadrant was launched on 25 June 2012 by Ravichandran, chairman of TVH. Quadrant is 600 crore rupees super premium 18-storied project at Advar. It consists of 100 units with 2.2 acres.

The project would likely to be completed in 3 years. The project has the separate sports facilities for chess and other games. The company is also planning to take chess to schools and organise annual tournaments. Viswanathan Anand is the current World Chess Champion. He was awarded by Padma Vibhushan in 2007. He also awarded by Rajiv Gandhi Khel Ratna Award in 1991-92. He was the first player in chess history who won the World Championship in three different formats: knockout, tournament and match.

Israeli Scientist Daniel Hillel won World Food Prize 2012

Daniel Hillel won World Food Prize 2012

on 13 June 2012. He is a scientist from Israel. The work and motivation of Daniel Hillel built the bridge between the divisions and to promote peace and understanding in the Middle East by advancing a breakthrough achievement. His work is relevant for agriculture-dominated economies. He applied the method of micro-irrigation, which maximizes the efficiency of water usage in agriculture.

World Wildlife Fund released its Report on Global Environment

The World Wildlife Fund (WWF) in its report Living Planet Report 2012 released on 15 May 2012 noted that Biodiversity has decreased by an average of 28 percent globally since 1970 and the world would have to be 50 percent bigger to have enough land and forests to provide for current levels of consumption and carbon emissions. The report further added that unless the world addresses the problem, by 2030 even two planet Earths would not be enough to sustain human activity. The WWF also urged the global community to take the issue of environmental degradation seriously. A summit on the global environment is to be held in the Brazilian city Rio De Janeiro from 20 to 22 June 2012. The summit is expected to draw more than 50000 participants from different nations. Politicians in the summit will be under tremendous pressure from environmentalists to agree goals for sustainable development, in the spirit of the Rio Earth Summit that spawned the Kyoto Protocol 20 years ago.

Rahul Khullar appointed as the New Chairman of the Telecom Regulatory Authority of India

The Union Government of India appointed Commerce Secretary Rahul Khullar as the new chairman of the Telecom Regulatory Authority of India (Trai) for a three-year term on 13 May 2012. Khullar, a 1975 batch IAS officer of Delhi cadre, replaced J S Sarma, whose tenure ended on 14 May 2012. The tenure of Khullar, who was due to retire in April next year, will be till May, 2015. As

the chief of Trai, Khullar will have a larger responsibility on his shoulder. At a time when the telecom regulator is facing the ire of telecom operators given its recommendations on spectrum auction, Khullar with the help of his wide ranging experience will be expected to bridge the gap between the Trai and widely divided telecom industry. As Commerce Secretary, Khullar has to his credit the trade normalisation between India and Pakistan. He successfully implemented the measures to help exports cross 300-billion dollar mark in 2011-12. Khullar also represented India's stance at WTO and various other multilateral pacts effectively.

E-Challan and Receipt (ECR) facility launched by Employees' Provident Fund Organisation (EPFO)

Union minister of labour and employment Mallikarjun Kharge inaugurated the E-Challan and Receipt (ECR) facility on 1 May 2012 to bring transparency and accessibility for employers in depositing monthly Employees' Provident Fund or EPF contributions of their workers. Employers under the ECR service would have to register their organisations online and generate challans for making monthly deposits. They can use these challan for either electronically or physically depositing the Provident Fund or PF contributions to the bank. After the bank confirms the deposit, the concerned regional office's system would be automatically notified and individual members' accounts would get updated. The claim settlement process would become much easier as under the new initiative, employee details will be added and updated electronically. Also the need of annual accounts preparation at the end of the year can be done away with under this system.

Miss India World Vinya Mishra awarded with Kalpana Chawla Excellence Award

Yesteryear actress Sushma Seth and Miss India World Vinya Mishra were awarded with Kalpana Chawla excellence award on

6 May 2012 at Mavlankar Auditorium, New Delhi. The other awardees included Padmabhushan kuchipudi and bharatnatyam dancer Swapnasundari, IPS Officer Shalini Singh, who had won the police medal for meritorious service in 2012 and jewellery designer Puneeta Trikha. The award instituted by PECOBA (Punjab Engineering College Chandigarh Old Boys Association) was conferred by late astronaut's father Banarsi Lal Chawla Chawla. The awards are being given every year in the memory of Kalpana, who died in Space Shuttle Columbia disaster on 1 February 2003.

NASA's Nuclear Spectroscopic Telescope Array launched to explore Black Holes

National Aeronautics and Space Administration (NASA) on 13 May 2012 launched Nuclear Spectroscopic Telescope Array (NuSTAR) on a Pegasus rocket. The jet was launched from Kwajalein Atoll in the Marshall Islands. NuSTAR will help scientists find the most subtle and energetic black holes, which will enable them to understand the structure of the universe. The project aims to study energetic phenomena such as clusters of galaxies, black holes and the explosions of massive stars. It will also study the Sun's atmosphere for hints on how it is heated. The NuSTAR will work in coordination with other telescopes in space, including NASA's Chandra X-ray Observatory, which observes lower-energy X-rays. The project will open a new avenue on the universe and will provide complementary data to NASA's larger missions including Fermi, Chandra, Hubble and Spitzer. The total budget of the project is estimated to be 180 million dollar, including the cost of development, the launch vehicle and two years of in-orbit operations. The entire project including the telescope and Pegasus launcher was developed by Orbital Sciences Corp.

What is Black Hole?

A black hole is a place in space where gravity pulls so much that even light cannot get out. The gravity is so strong because matter has been squeezed into a tiny

space. This can happen when a star is dying.

Indian Scientist got US Patent for Cancer Treatment

In a pioneering innovation, the nanotechnology scientist, Rao Papineni and his colleagues invented a cancer treatment system in which a nano-particle carries the payload of anti-cancer drug and releases it only in the cancerous cell, thus protecting healthy cells around. The newly invented system got patented in the USA on 19 June 2012. The title of the patent is 'High Capacity Non-Viral Vectors.' The non-viral vectors are nano-particles. The nano-particles will allow the drug particle to target the diseased site with pinpoint precision. The nano-particles will allow the drug to be released inside the diseased cell. They will enhance the function of the drug. The nano-particles will carry the drug precisely with minimal collateral damage to healthy tissue. Papineni, along with his fellow researchers applied for the patent in 2009. Papineni is presently the chief scientist and senior principal investigator in medical applications of nanotechnology at Carestream Health, Inc USA.

India declared itself Free from Bird Flu, H5N1 : India became free from bird flu, H5N1. The government made a declaration to this effect on 4 January 2012. The states were advised to have strict surveillance, especially in the vulnerable areas bordering the infected countries and in areas visited by migratory birds.

What is H5N1

Influenza A virus subtype H5N1 is also known as bird flu , A(H5N1) or simply H5N1, is a subtype of the influenza A virus .It can cause illness in humans and many other animal species.

59th National Film Awards

The best feature film award was shared by Marathi film Deool and Kannada movie Byari, while the best direction award went to Gurvinder Singh for his Punjabi film Anhe Ghorey Da Daan, which also won the best cinematography title. Hindi film I Am was named the best Hindi film of the year. Chillar Party was adjudged the best

children's film, and it also received the honour for best original screenplay writer. Marathi actor Girish Kulkarni claimed the best actor trophy for his role as a good-hearted simpleton in Deool. Bollywood actress Vidya Balan got the best female actor award for her role in Dirty Picture. The best supporting actor and actress awards were given to Appu Kutty for Tamil film Azhagarsamiyin Kuthirai and Leishangthem Tonthoingambi Devi for Manipuri film Phijgee Mani, respectively. Anand Bhatte, won the best playback singer (male) title for Balgandharva, and Roopa Ganguly, won the same award in the female category for the Bengali film Abosheyshey. Bollywood lyricist Amitabh Bhattacharya received the best lyricist trophy. For the song Agar Zindgi from the movie I Am. Composer Neel Dutt won the best songs award for Bengali rock musical Ranjana Ami Ar Ashbo Na. Mayookh Bhaumik bagged the background score honor for Bengali film Laptop.

RA. One bagged the award for best special effects and the best choreography was given to Bosco-Caesar for Senorita from Zindagi Na Milegi Dobara. The best costume designer award was shared by Niharika Khan for The Dirty Picture and Neeta Lulla for Marathi film Balgandharva. The best child artist was received jointly by Partho Gupte for Stanley Ka Dabba and by the gang of 10 kids for Chillar Party.

Vikram Gaekwad won the best make-up artist for his work in The Dirty Picture as well as in Bal Gandharva. All three awards in the best audiography category were picked by Hindi films. The best location sound recordist title went to Beylon Fonseca for Zindagi Na Milegi Dobara. Game was given the honours in the sound designer and re-recordist of the final mixed track categories.

Kumararaja Thiagarajan won the Indira Gandhi Award for best debut film of a director for Aaranyakandam while the award for the best popular film providing wholesome entertainment went to Tamil film Azhagarsamiyin Kuthirai. Acclaimed filmmaker Girish Kasaravalli picked his 12th National Film Award at the event for Kurmavata, adjudged the best Kannada film.

Traditionally, the national awards are given out by the President. But in the absence of president the vice president presented the awards.

India approved Acquisition of French advanced Missile Systems

India on 4 January 2012 approved 6600 crore rupees acquisition of 490 French advanced missile systems to arm the Mirage-2000 fighter jets. The Cabinet Committee on Security cleared the contract for the fire and forgets MICA with French armament company MBDA. MICA are interception and aerial combat missiles. The MICA systems will be fitted on IAF's 51 Mirage-2000s. French company Dassault Aviation will help in the upgradation of IAF's 51 Mirage-2000s. The Mirage upgrade project will cost around 20000 crore rupees. The project will be completed in 10 years.

In fact, India plans to induct stealth FGFA (Fifth Generation Fighter Aircraft) from 2020 onwards with cooperation from Russia. This defence project is considered to be the biggest-ever defence project and it will cost approximately 35 billion US dollars.

Shanghai Cooperation Organization Summit 2012 concluded in Beijing

The Shanghai Cooperation Organization (SCO) 2012 concluded in Beijing on 7 June 2012, with member states agreeing to further cooperation in a variety of fields. Chinese President Hu Jintao, Russian President Vladimir Putin, Kazakh President Nursultan Nazarbayev, Kyrgyz President Almazbek Atambayev, Tajik President Emomali Rahmon and Uzbek President Islam Karimov, Turkmenistan President Gurbanguly Berdimukhamedov and Afghan President Hamid Karzai were among the top leaders who attended the summit.

Leaders and officials from the four SCO observer countries of Mongolia, Iran, Pakistan and India were also present at the summit. Leaders across the participating nations held a broader discussion over the issues like Afghanistan crisis and the Ira-

nian nuclear programme.

The member states of the SCO adopted 10 agreements on the concluding day of the summit. The agreement includes the Declaration on Building a Region with Lasting Peace and Common Prosperity, the Strategic Plan for the Medium-Term Development of the SCO, and the SCO Regulations on Political and Diplomatic Measures and Mechanism of Response to Events Jeopardizing Regional Peace, Security and Stability.

The SCO also decided to grant Afghanistan observer status and accept Turkey as a dialogue partner. Chinese President Hu Jintao offered a 10 billion U.S. dollars loan to the SCO which will be used to promote the development of SCO members.

The SCO, an intergovernmental mutual security organization, was founded in Shanghai on 15 June 2001. The group has six full time members at present namely China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan.

The Central Asian nation Kyrgyzstan will host the 2013 summit of SCO.

Scientists Successfully sequenced the Genomes of Tomato

Scientists at the Tomato Genome Consortium (TGC) successfully sequenced the genomes of tomato. It will increase the vegetable's production worldwide and decrease its price. It took seven years for the scientists to crack the genome. Indian scientists were also the part of the research. National Research Centre on Plant Biotechnology, National Institute of Plant Genome Research, The University of Delhi (South Campus) and the Indian Agriculture Research Institute under the auspices of the Indian Initiative on Tomato Genome Sequencing participated in the TGC. At present, Indian scientists are trying to develop tomatoes that can remain fresh for 15-30 days in normal weather conditions.

The sequences provide a detailed overview of the tomato genome, revealing the orientation, order, types and relative positions of their 35000 genes. The sequences will help scientists decode the

relationships between tomato genes and traits. It will also increase their understanding of genetic and environmental factors that play an important role to determine a field crop's health and viability. Pakistan successfully test-fired Nuclear Capable Hatf 9 Missile

Pakistan on 29 May 2012 successfully test-fired a short-range Hatf 9 (Nasr) missile. The missile which has a range of 60 kilometers is capable of carrying nuclear warheads. The missile test can be seen as a major development in Pakistan's deterrence capability at all levels of the threat spectrum. It was Pakistan's third ballistic missile test since April 2012, after India successfully test-fired the inter-continental Agni 5 missile. Pakistan, on 25 April 2012 had tested an improved version of the nuclear-capable Hatf-IV with a range of 1000 km while the nuclear-capable Hatf-III, with a range of 290 km, was tested on 10 May 2012.

India Successfully test-fired Akash missile from Odisha

India successfully test-fired the indigenously built Akash missile from the DRDO's (Defence Research Development Organisation) Interim Test Range (ITR), at Chandipur in Balasore district of north Odisha on 24 May 2012. The surface-to-air missile was launched from the launch pad number three of the premier missile testing centre at 11:09 hours. 5.7 meter long and 720 kg in weight, anti-aircraft missile can hit its target locating at a distance of 25 to 30 kms. The missile is capable of carrying both conventional as well as nuclear warheads up to 60 kg. It can also track and shot down several targets in one go with the help of Rajendra, a sophisticated radar, built by the DRDO. The missile has been developed by the DRDO under the ambitious Integrated Guided Missile Development Programme (IGMDP). It has already been inducted into the Indian armed forces following several successful trials.

Union Government of India Unveiled the New Policy to Deal with Naxalism

Prime Minister Manmohan Singh un-

veiled the new policy which aims at dealing with Naxalism through a five year integrated plan while addressing the concluding session of the day long national workshop on development strategies in naxal affected districts in New Delhi on 13 September 2011. This programme is aimed at bridging the development deficit in the extremely backward areas that are affected left wing extremism. Lack of development often leads to alienation among the inhabitants of these areas. Establishing governance in the naxal-affected districts is the greatest challenge India faces. Left Wing Extremism poses a greater threat to the country than terrorism or insurgency. The Government is contemplating to bring 20 more naxal affected districts under the Integrated Action Plan. A specialised battalion is being raised to ensure security and development in these districts.

World Environment Day 2012 observed across the World

The world community observed the World Environment Day (WED) on 5 June 2012. The World Environment Day is observed every year on 5 June to raise public awareness on the issues related to global environment. The World Environment Day activities keep going on throughout the year, but culminate on 5 June every year. Theme for the World Environment Day 2012 is: Green Economy: Does it include you? The host for World Environment Day 2012 was the Federative Republic of Brazil. Theme for the World Environment Day 2011 was Forests-Nature At Your Service and India was the global host for the year's events.

The New Version of MGNREGA included more than 25 Agriculture and Allied Activities

More than 25 agriculture and allied activities were included in the new version of Mahatma Gandhi National Rural Employment Guarantee Act, MGNREGA, which will be implemented from 1 April 2012. The new version of MGNREGA will lead to better farm output. After receiving

a report on revised Operational Guidelines for MGNREGA. The new version of act was prepared after receiving a report on revised Operational Guidelines for MGNREGA. It will also respond to demands of the states for location specific flexibility in permissible works as valuable suggestions from the states are incorporated in the guidelines. The Report was prepared by a committee headed by Planning Commission Member Mihir Shah.

India Signed Three Agreements with the World Bank for Cleaning the Ganga River

India signed three agreements with the World Bank for cleaning the Ganga River on 14 June 2011. Besides this, the agreement also held for strengthening Rural Livelihoods and Biodiversity Conservation of India. The World Bank agreed to provide one billion US Dollars (approximately Rs 4,600 crore) for the Ganga river cleaning project. It also agreed for a credit worth approximately 24 million dollars for the two projects, i.e. strengthening Rural Livelihoods and Biodiversity Conservation of India.

The agreements for the Biodiversity Conservation and Rural Livelihood Improvement Project were signed by Mr. Venu Rajamony, Joint Secretary, Department of Economic Affairs, Ministry of Finance, on behalf of the Government of India, and Mr. Roberto Zagha, World Bank Country Director in India in presence of Mr Jairam Ramesh, Minister Environment and Forests, Government of India. The Ganga faces great challenges from expanding population, urbanization and industrial growth. To stop the flow of untreated municipal sewage and industrial effluent into the Ganga river by 2020 is the objective of Ganga project.

Tamae Watanabe became World's Oldest Women to climb the Mount Everest

73-year-old Tamae Watanabe bettered her own record of being the world's oldest women to climb the Mount Everest the world's highest mountain peak. The Japanese woman scaled Everest's 8850-

meter-high (29035-foot-high) peak from the northern side of the mountain in Tibet on 19 May 2012 with four other team members. Watanabe was 63 when she had created the record of being the world's oldest woman to have climbed Everest. She had retained the title until she topped herself a decade later.

Francois Hollande defeated Nicholas Sarkozy to become 24th French President

The Socialist Party leader Francois Hollande defeated the Union for a Popular Movement leader and incumbent president Nicholas Sarkozy to become the 24th French President in the final presidential elections held on 6 May 2012. Hollande the leader of France's largest left wing party is the second socialist president of second largest European economy. The Socialist Party first won power in 1981, when its candidate François Mitterrand was elected President of France in the 1981 presidential election. Under Mitterrand, the party achieved a governing majority in the National Assembly from 1981 to 1986 and again from 1988 to 1993. Born on 12 August 1954 Hollande started his political career as a student leader and fought students' presidential election in 1974 but was defeated. Hollande joined the Socialist Party in 1979. He later held the position of the First Secretary of the French Socialist Party from 1997 to 2008. Hollande also served as a Deputy of the National Assembly of France for Corrèze's 1st Constituency since 1997, the seat he earlier represented from 1988 to 1993. From 2001 to 2008, he served as the Mayor of Tulle and since 2008 he acted as the President of the Corrèze General Council.

Mohammed Morsi won 2012 Presidential Election of Egypt

Mohammed Morsi won 2012 Presidential Election of Egypt on 24 June 2012. He was the candidate from Muslim Brotherhood(Freedom and Justice Party). Mohammed Morsi defeated Ahmed Shafiq by 3.4% of votes.

Mohammed Morsi got 51.7 per cent of votes whereas, Ahmed Shafiq got 48.3 per cent of votes. The victory of Mohammed Morsi is set to vibrate West Asia and North Africa, where Libya is heading for elections in next month and the moderate Islamists are exemplifying Turkey's Justice and Development Party. Mohammed Morsi is 60 years old. He is a trained American engineer and former lawmaker. He is the first Islamist elected as the head of an Arab state. He became the fifth president of Egypt and the first president from outside the military.

Union Government of India notified NCTC (National Counter Terrorism Centre)

The Union Government of India on 3 February 2012 notified the setting up of the anti-terror body called National Counter Terrorism Centre (NCTC). NCTC will have the power to carry out operations including arrest, search and seizure. It will draw its functional power of search and seizures under the provisions of the UAPA (Unlawful Activities (Prevention) Act). It will work as an integral part of Intelligence bureau. The notification mandates the terror-fighting agencies to share their inputs with NCTC and it also appoints the director and his core team. Director of NCTC will have full functional autonomy and he will have the power to seek information on terror from National Investigation Agency, NATGRID, intelligence units of CBI, National Technical Research Organisation and directorate of revenue intelligence in addition to all seven central armed police forces including NSG. He will report to the IB chief and the home ministry. The notification was issued under the Article 73 of the Constitution of India.

Article 73 in The Constitution Of India 1949

73. Extent of executive power of the Union

(1) Subject to the provisions of this Constitution, the executive power of the Union shall extend

(a) to the matters with respect to which Parliament has power to make laws; and
(b) to the exercise of such rights, authority and jurisdiction as are exercisable by

the government of India by virtue of any treaty or agreement: Provided that the executive power referred to in sub clause (a) shall not, save as expressly provided in this constitution or in any law made by Parliament, extend in any State to matters with respect in which the Legislature of the State has also power to make laws (2) Until otherwise provided by Parliament, a State and any officer or authority of a State may, notwithstanding anything in this article, continue to exercise in matters with respect to which Parliament has power to make laws for that State such executive power or functions as the State or officer or authority thereof could exercise immediately before the commencement of this Constitution Council of Ministers

Laura Dekker became the Youngest Sailor to Complete a Solo Circumnavigation of the World

Dutch teenager Laura Dekker on 21 January 2012 became the youngest sailor to complete a solo circumnavigation of the world. The 16-year-old Dekker completed her solo round-the-world journey when she sailed into harbour on the Caribbean island of St Martin, which is shared by Netherlands and France. Dekker, who left the island on 20 January 2011 surpassed the previous record by eight months. Dekker turns 17 on 20 September 20 and she had to complete her journey before September 16 to beat the record for the youngest sailor to make an unassisted world tour. Dekker had to fight the Dutch courts, who at first blocked plans when she was just 14. The court ordered her placed in the care of welfare officers on the grounds that she was too young to guarantee her safety at sea. She had then run away to St Martin, and police had to escort her back.

10th Pravasi Bharatiya Divas

The 10th Pravasi Bhartiya Divas was held in the pink city of Jaipur, Rajasthan. The event is held annually between 7th to 9th January to commemorate the return of Mahatma Gandhi to India from South Af-

rica to join the Indian Freedom Struggle. The annual event provides a platform to the 28 million overseas citizens to connect with their motherland and the root of their culture and tradition. Investment is only a by product of such an event. What is the importance of PBD in general for India? Why we need PBD? Mention the vision behind this. Analyse the highlights of this year PBD. How it adds up to that vision? This year saw the participation of 1800 citizens from 50 different countries. The theme of the event was Global Indian – Inclusive Growth and the chief guest of this year was Indian-origin Prime Minister of Trinidad and Tobago Kamla Persad Bissessar. The event was inaugurated by Prime Minister Dr Monmohan Singh and the President addressed the valedictory session. It was attended by over 10 Union Ministers and more than 10 Chief Ministers of various states.

Palestine Becomes Member of UNESCO

UNESCO (The United Nations Educational, Scientific and Cultural Organization) approves the Palestinian bid for full membership to the UN with a 107 to 14 vote. The favorable vote defies a mandated cut-off of American funding. The U.S. contributes \$70 million to UNESCO per year, about 22 percent of its yearly budget. The vote makes Palestine the 195th member of UNESCO.

Palestinians Officially Request United Nations Membership

Palestinian president Mahmoud Abbas officially requests a bid for statehood at the UN Security Council. The request comes after months of failed European and U.S. efforts to bring Israel and Palestine back to the negotiating table. The Palestinian Authority is pursuing a Security Council vote to gain statehood as a full member of the UN rather than going to the General Assembly. One of the reasons for this is that the General Assembly can only give the Palestinian Authority non-member observer status at the UN, a lesser degree of statehood. In addition, the European states in

the General Assembly have made it clear that they will support the proposal only if the Palestinians drop their demand that Israel halt settlement construction. The Palestinians have long insisted that Israel cease the settlement construction and deem the condition unacceptable. Therefore, the Palestinian Authority prefers to take its case to the Security Council even though the U.S. has vowed to veto the request.

Aung Suu Kyi Accepted the UNESCO Madanjeet Singh Prize after a Decade of its Declaration

On 16 November 2011 Aung Suu Kyi was finally handed over the UNESCO Madanjeet Singh Prize. Suu Kyi was chosen for the UNESCO Madanjeet Singh Prize for the Promotion of Tolerance and Non-Violence in 2002. The Myanmar government did not allow her to accept the award which carries a prize of \$ 1,00,000. At the same ceremony Suu Kyi was proposed to become the Chief Patron of the Madanjeet Singh institute of excellence that would be devoted to Theravada studies, modelled on a similar institute set up in Kashmir for studies of Sufi-Bhakti-Rishi culture.

Helle Thorning-Schmidt was elected Denmark's First Woman Premier

Danish opposition leader Helle Thorning-Schmidt emerged victorious in the elections held on 15 September 2011 and will take over as the country's first female Prime Minister. She belongs to the Social Democrats party. The result ended the center-right government's 10 years in office. Thorning-Schmidt succeeded Lars Lokke Rasmussen who submitted his resignation to Queen Margrethe on 16 September 2011

Saudi Arabia Grants Women the Right to Vote

King Abdullah of Saudi Arabia grants women the right to vote and run for office in future elections. The new ruling will not go into effect until the next election cycle in 2015. Still, this is a big victory for

women in a country where they are not allowed to drive and must have a male chaperone with them in public at all times.

Hina Rabbani Khar became Pakistan's First Woman Foreign Minister

Hina Rabbani Khar from Pakistan People's Party (PP) on 19 July 2011 became Pakistan's first woman foreign minister. The 34-year-old minister of state for foreign affairs was elevated to the post of full minister at a time when both President Asif Ali Zardari and Prime Minister Yousuf Raza Gilani were out of the country. She was sworn in by Acting President Farooq H. Naek at a ceremony at the presidency. As Pakistan's 26th and youngest foreign minister after Zulfikar Ali Bhutto, Khar took up the post five months after her predecessor Shah Mahmood Qureshi lost the job amid a diplomatic row with the United States. Khar will lead Pakistani delegation at the Association for South East Asian Nations (ASEAN) forum on 22-23 July 2011 in Bali, Indonesia. She will also hold talks with her US and Chinese counterparts.

Yingluck Shinawatra poised to become Thailand's First Female Prime Minister

Thailand's Prime Minister-elect, Yingluck Shinawatra, on 4 July 2011 formed a coalition consisting of five parties under the wings of her own Pheu Thai Party following her landslide victory in parliamentary elections in Thailand. The grouping of five constituent parties would have 299 seats in the 500 member new house. Her Pheu Thai Party bagged 265 seats in the final tally and stood in no compulsion to form a coalition. With her landslide victory she is poised to become Thailand's first female prime minister.

Fourth BRICS (BRAZIL, Russia, India, China and South Africa) Summit was held in New Delhi

Fourth BRICS summit was held here. New Delhi is the Capital of India. The Fourth BRICS Summit was held in New Delhi on

29 March 2012. The theme of the Summit was BRICS Partnership for Global Stability, Security and Prosperity. At the Summit, the Leaders of the BRICS countries discussed political, economic and social issues of mutual and international interest. The Summit took forward the continuing efforts towards strengthening cooperation, consultation and coordination among the BRICS countries for the benefit of their peoples and of the international community.

Second Nuclear Security Summit was held in Seoul, Capital of South Korea

Second Nuclear Security Summit was held here on 26-27 March 2012. The second nuclear security summit was held in Seoul, capital of South Korea on 26-27 March 2012. 53 heads of state and government, as well as representatives of the United Nations (UN), International Atomic Energy Agency (IAEA), European Union (EU) and INTERPOL, attended the 2012 Seoul Nuclear Security Summit. Compared to the 2010 Washington Summit, there were seven new participants: Azerbaijan, Denmark, Gabon, Hungary, Lithuania, Romania and INTERPOL.

India and USA held 12th Defence Policy Group meeting in New Delhi

12th Defence Policy Group Meeting was held in New Delhi. Strengthening their military ties further, India and the USA discussed ways of expanding their growing strategic partnership and cooperation at the 12th Defence Policy Group meeting held in New Delhi. The meeting was co-chaired by Defence Secretary Shashi Kant Sharma and US Acting Under Secretary of Defence for Policy Jim Miller. The next meeting of the Defence Policy Group will be held in 2012 in the USA.

The 12th India-EU Summit was held in New Delhi

The 12th India-EU summit was held in New Delhi. New Delhi is the Capital of India. The 12th India-EU Summit was held in New Delhi on 10 February 2012. The Republic of India was represented by the

Prime Minister, Manmohan Singh. EU was represented by Herman Van Rompuy, President of the European Council, and Mr. José Manuel Durão Barroso, President of the European Commission. The leaders expressed satisfaction at the deepening comprehensive bilateral relations. India and EU, as long-standing strategic partners, are committed to working together with a balanced and result-oriented approach, bearing in mind each sides' respective development priorities, based on common shared values, relating to democracy, rule of law, civil liberties, fundamental freedoms and respect for human rights.

46-nation Asia-Europe (ASEM) Meeting Held in Godollo, Hungary

A two-day meeting of foreign ministers of the 46-nation Asia-Europe (ASEM) was held on 4-5 July 2011 in Godollo, Hungary. This was the 10th ASEM Foreign Ministers' Meeting.

APEC Leaders held Conference in Honolulu, Hawaii

APEC summit 2011 was held in Honolulu, Hawaii from 8 November to 13 November 2011. Under the chairmanship of US President Barak Obama, leaders of the Asia-Pacific Economic Cooperation (APEC) forum agreed a comprehensive set of measures to increase economic growth and job creation by expanding trade and investment in the Asia-Pacific region. Leaders agreed to adopt market-driven innovation policies, reduce tariffs and eliminate other barriers to trade in environmental goods and services, and improve regulatory environments to reduce unnecessary burdens on businesses.

Second Africa-India Forum Summit held at Addis Ababa

Addis Ababa (Capital of Ethiopia): Second Africa-India forum summit held at Addis Ababa. Second Africa-India forum summit was held at Addis Ababa from 24 to 25 May 2011 under the theme: Enhancing Partnership: Shared Vision. Addis Ababa is the capital of Ethiopia. First Africa-

India Summit was held in April 2008 in New Delhi.

Union Home Ministry launched RICs (Resident Identity Cards) at Porthrapur Village

The first batch of RICs was launched at Porthrapur Village. The home ministry of India launched the first batch of RICs (Resident Identity Cards) at Porthrapur village in Andaman and Nicobar Islands on 21 January 2012. The RIC cards were distributed to all persons above the age of 18 residing in the nine maritime states and four union territories under the National Population Register (NPR) scheme. The NPR scheme is aimed to provide valid identity to all people in these areas to strengthen the security along the country's coastline.

The World's First Test Tube Eld's Deer born at Khao Kheow Zoo in Thailand

The first Eld's deer was born via in vitro fertilization in Thailand. The researchers at the Smithsonian Conservation Biology Institute (SCBI) collected eggs, inseminated in vitro with thawed semen to produce embryos and transferred the embryos to a surrogate mother. As a result, a fawn was born on 17 October 2011 at the Khao Kheow Open Zoo in Thailand. The Smithsonian Conservation Biology Institute plays a key role in the Smithsonian's global efforts to conserve species and train future generations of conservationists. Eld's Deer is also known as the Thamin or Brow-antlered Deer. It is an endangered species of deer indigenous to southeastern Asia.

IBSA (India Brazil South Africa) Summit Concluded in Pretoria, South Africa

The fifth summit of IBSA was held here. Pretoria is a city located in the northern part of Gauteng Province, South Africa. It is one of the country's three capital cities, serving as the administrative capital; the others are Cape Town, the legislative capital, and Bloemfontein, the judicial capital. The fifth IBSA (India Brazil South

Africa) summit concluded on 18 October 2011 in Pretoria. India, Brazil and South Africa, issued a joint declaration at the end of the summit, which condemned terrorism in all its forms and manifestations. IBSA leaders described terrorism as one of the most serious threats to international peace and security. At their summit meeting, the IBSA leaders said the United Nations should play a central role in co-ordinating international action against terrorism within the framework of the UN Charter and in accordance with the international law.

Arab League Summit was held in Baghdad, Capital of Iraq

Three-day summit was held here from 27 March 2012 to 29 March 2012. The Arab league summit was held in Baghdad from 27 March 2012 to 29 March 2012. The three-day summit was hosted by Iraq for the first time since 1990 when its late dictator Saddam Hussein's forces invaded Kuwait. The leaders of the 22 Arab league states attended the summit. The Baghdad summit discussed the uprising in Syria and the Iraqi debts to its neighbours. The previous Arab league summit was held in Sirte. Syria didn't participate in the Summit. It was suspended in the midst of the uprising against the Assad regime.

The Fifth Edition of the World Future Energy Summit held in UAE Capital Abu Dhabi

The capital of UAE (United Arab Emirates). The fifth edition of the world future energy summit was held in Abu Dhabi. The fifth edition of the World Future Energy Summit was held in Abu Dhabi, capital of UAE from 16 to 19 January 2012. The theme of this year's World Future Energy Summit was - Sustainable Energy for All. The summit discussed the need to harness the alternative sources like solar, wind, small hydro energy, tidal energy etc.

NASA launched a Rover to explore the Red Planet (Mars)

NASA on 26 November 2011, launched

Rover, nicknamed Curiosity to explore the planet Mars. The rover was launched from Florida on an Atlas 5 rocket. The Rover will take eight and a half months to reach the Red Planet (Mars). The cost of the NASA space mission is 2.5 billion US dollars. The Rover will then scour Martian soils and rocks for any signs that could have supported microbial life on the planet. The Atlas flight lasted almost three-quarters of an hour. The rover is also known as the Mars Science laboratory (MSL). It is due to arrive at the Red Planet on 6 August 2012. The Rover will land at a deep equatorial depression called Gale Crater, which contains a central mountain that rises some 5kilometre above the plain below. MSL is equipped with 10 sophisticated instruments to study the rocks, soils and atmosphere in Gale Crater.

Neptune Completed its First Orbit around the Sun since Discovery

Neptune the eighth planet of the solar system completed its first orbit around the sun on 12 July 2011, 165 years after its discovery. Neptune is also the farthest planet from Sun. It was discovered by German astronomer Johann Galle on 23 September 1846. Neptune is blue-green in colour and it was named after Roman God of Sea. Neptune completes one revolution every 165 years.

India Took Over as the Chairman of UN South Asian Regional Commission for Tourism

India took over as the Chairman of United Nations South Asian Regional Commission for tourism. This was announced on 10 October 2011 at the ongoing United Nations World Tourism Organisation (UNWTO) conference at Gyeongju in South Korea. The chairmanship of the Commission was with Iran for the last four years. It signifies the confidence of various countries in India and the efforts of the Indian government in the promotion of tourism in the country as well as across the globe in a responsible and sustainable manner to achieve inclusive growth.

Astronomers in Europe discovered an Ancient Planetary System

Astronomers discovered an ancient planetary system, which belonged to one of the earliest cosmic eras, 13 billion years ago. The planetary system consists of the star HIP 11952 and two planets namely HIP 11952b and HIP 11952c. The 2.2 m telescope at La Silla made the discovery. The newly discovered planetary system will shed light on planet formation in the early universe. During that period, the planet formation was quite different from later planetary information. HIP 11952c is the size of Jupiter while the other, HIP 11952b is three times the size of Jupiter. The planets orbit their sun in 290 days and 7 days respectively.

NASA discovered Water on the Planet called GJ1214b

Researchers at the Harvard Smithsonian centre for Astrophysics discovered that the planet GJ1214b was largely covered in water. They used Hubble Space Telescope to discover the water on planet. GJ1214b was discovered in 2009 by the ground-based MEarth Project. GJ1214b was described as a super-Earth. It is approximately 2.7 times Earth's diameter and weighs almost 7 times as much. This presence of water on the planet was confirmed when it crossed in front of its host star. The light of the star, filtered through the planet's atmosphere, provided clues to the mix of gasses, supporting the water vapor theory.

Vanya Mishra crowned Pantaloons Femina Miss India World 2012 at the 49th Edition of the Pageant

Chandigarh girl Vanya Mishra crowned as the Pantaloons Femina Miss India World 2012 in the grand finale of the 49th edition of the beauty pageant on 30 March 2012 in Mumbai. The Miss India Earth title went to 24-year-old Prachi Mishra of Pune won the Miss India Earth title while Chennai girl Rochelle Maria Rao was crowned as the Miss India International. The 2012 winners selected among 20 finalists were crowned by last year's win-

ners Kanistha Dhankhar, Hasleen Kaur and Ankita Shorey. 19-year-old Vanya will represent India at the Miss World 2012 Pageant. Prachi and Rochelle is to represent the country at Miss Earth 2012 Pageant and Miss International 2012 Pageant, respectively. Femina will not send the beauties to the Miss Universe pageant as it had decided in 2010 to abstain from the event.

Addu Declaration adopted in the 17th SAARC Summit

The 17th SAARC (South Asian Association for Regional Cooperation) Summit (the heads of states) held in Hithadhoo, Addu, Maldives on 10 November and 11 November 2011. A 20-point Addu Declaration was adopted on 11 November 2011 to forge effective cooperation among the member states in a host of areas including economy, connectivity, climate change and food security. The theme of the 17th SAARC Summit was 'Building Bridges'. The Summit recognized the importance of bridging differences, creating better understanding and promoting amity and mutually beneficial and comprehensive cooperation in order to promote effective linkages and connectivity for greater movement of people, enhanced investment and trade in the SAARC members region.

Time Magazine named The Protester as Person of the Year for 2011

The Protester was named Time magazine's 2011 Person of the Year on 14 December 2011. Time defines the Person of the Year as someone who, for better or for worse, influence that individual action can bring collective, colossal change. 2011 witnessed unprecedented rise in both peaceful and sometimes violent unrest and dissent from the Arab Spring to the Occupy Wall Street movement.

India's heaviest satellite GSAT-10 successfully launched

The health checks on various subsystems of the GSAT-10, which was launched by board Ariane-5 rocket from Europe's spaceport in French Guiana, has found all

parameters satisfactory and the satellite is in good health. Bangalore-headquartered ISRO said its Master Control Facility (MCF) in Hassan in Karnataka took over the command and control of the GSAT-10 immediately after the injection. "Preliminary health checks on the various subsystems of the satellite, namely, Power, Thermal, Command, Sensors, Controls, etc, were performed and all the parameters were found satisfactory. Following this, the satellite was oriented towards the Earth and the Sun using the onboard propulsion system. The satellite is in good health", it said in a statement. The launch of ISRO's 101st space mission, GSAT-10 satellite, has been a success, the space agency said. After a smooth countdown lasting 11 hours and 30 minutes, the Ariane-5 launch vehicle lifted off right on schedule at the opening of the launch window at 0248 hrs IST on Saturday. After a flight of 30 minutes and 45 seconds, GSAT-10 was injected into an elliptical Geosynchronous Transfer Orbit (GTO), very close to the intended one. In the coming five days, orbit raising manoeuvres will be performed to place the satellite in the Geostationary Orbit with required inclination with reference to the equator. The satellite will be moved to the Geostationary Orbit (36,000 km above the equator) by using the satellite propulsion system in a three step approach. After the completion of orbit raising operations, the two solar panels and both the dual gridded antenna reflectors of GSAT-10 will be deployed for further tests and operations. It is planned to experimentally turn on the communication payloads in the second week of October. After the successful completion of all in-orbit tests, GSAT-10 will be ready for operational use by November. GSAT-10 will be positioned at 83 deg East orbital location along with INSAT-4A and GSAT-12.

Prithvi II successfully test fired from Odisha

Sharpening its missile prowess, India today successfully test-fired its nuclear-capable Prithvi-II ballistic missile with a strike range of 350 km from a test range near Balasore in Odisha, as part of a user

trial by the army. "The surface-to-surface missile was flight tested at around 0907 hrs from a mobile launcher from Integrated Test Range's launch complex-3 at Chandipur," defence sources said. Describing the trial of the indigenously developed strategic missile as "fully successful", ITR Director MVKV Prasad said, "All the mission objectives were accomplished." The state-of-the-art Prithvi is the first ballistic missile developed under the country's prestigious Integrated Guided Missile Development Programme (IGMPD) and has the capability to carry 500 kg of both nuclear and conventional warheads with a strike range of 350 km, sources said. The missile uses advanced inertial guidance system with manoeuvring trajectory. The test-fire of the sophisticated short-range ballistic missile, already inducted into the armed forces, was a user trial by the army and monitored by scientists of Defence Research and Development Organisation (DRDO). The sleek missile is handled by the strategic force command (SFC), a defence scientist said, adding the trial was conducted to gauge the effectiveness of the weapon in a real time situation and improve accuracy. "The whole exercise was aimed at studying the control and guidance system of the missile besides providing training to the Army," said a DRDO official. The missile is 9 metre-long and one metre in diameter with liquid propulsion twin engine. A defence scientist associated with the trial said radars and electro-optical systems located along the coast tracked and monitored all the parameters of the missile throughout the flight path. Prithvi-II has been successfully flight tested several times as part of the training exercise and the last trial was a complete success on August 25, 2012 when it reached the predefined target in the Bay of Bengal with a high accuracy of better than 10 meters, sources said.

India successfully test fires nuclear capable Dhanush missile

India successfully test-fired nuclear capable Dhanush, the naval version of Prithvi short-range ballistic missile, from a warship off Odisha coast today. The in-

digenously developed naval version of the Prithvi short-range ballistic missile has a strike range of up to 350 km and can carry 500 kg of conventional or nuclear warhead, a DRDO official said. "Dhanush was test-fired from a naval ship off Odisha coast at around 1125 hours," Ravi Kumar Gupta, Director in the Directorate of Public Interface in Defence Research and Development Organisation (DRDO) told the news agency over phone. Describing the trial as fully successful, Gupta said the test was conducted by the strategic force command (SFC) of the Indian Navy. "The trial was a complete success and all the mission objectives were accomplished," he said. Developed by the DRDO, the missile is about 8.53 metre in length and 0.9 metre in diameter. This single stage missile uses liquid propellant. The Dhanush missile can be used as an anti-ship weapon as well as for destroying land targets depending on the range, sources said. BrahMos missile successfully test-fired The Navy on Sunday successfully test-fired the 290-km range BrahMos supersonic cruise missile, capable of carrying a conventional warhead of 300 kg, from a warship off the Goa coast. "The cruise missile was test-fired from guided missile frigate INS Teg—the Indian Navy's latest induction from Russia off the coast of Goa early morning," sources said on Sunday. They said the missile performing high-level manoeuvres successfully hit the target ship which was still on fire. The INS Teg, which has been built at the Yantar shipyard in Russia, had fired the missile successfully during pre-induction trials in Russia last year. The two remaining warships of the project namely INS Tarkah and INS Trikand will also be armed with the lethal missile in vertical launch mode. The two-stage missile, the first one being solid and the second one ramjet liquid propellant, has already been inducted into the Army and Navy, and the Air Force version is in final stage of trial, a defence official said. While induction of the first version of Brahmos missile system in the Indian Navy commenced from 2005 with INS Rajput, it is now fully operational with two regiments of the Army. The air launch version and the submarine launch version of the missile system are in progress, he

said. The Army has so far placed orders for the Brahmos missile to be deployed by three regiments of the Army and two of them have already been inducted operationally. The Defence Ministry has also given a go-ahead to Army to induct a third regiment equipped with the missile system to be deployed in Arunachal Pradesh. Brahmos Aerospace, an Indo-Russian joint venture company, is also working to develop the air as well as the submarine launch version of the missile system and work on the project is in progress.

Lance Armstrong : Bradley Wiggins shocked by Usada report

Tour de France winner Bradley Wiggins says he is shocked at the scale of the evidence against disgraced former champion Lance Armstrong. Armstrong was described by the United States Anti-Doping Agency (Usada) as "a serial drugs cheat" and stripped of his seven Tour de France titles. Lance Armstrong's reputation lies in tatters after the United States Anti-Doping Agency labelled him a "serial" cheat who led "the most sophisticated, professionalised and successful doping programme that sport has ever seen". Usada has already banned the 41-year-old American for life and stripped him of his seven Tour de France titles. But now it has detailed why it took such action, using evidence from 11 of Armstrong's former team-mates. Armstrong has always denied doping. But the Texan has not contested Usada's charges. His lawyer has described Usada's report as a "one-sided hatchet job". Seven-time Tour de France winner Lance Armstrong has announced he will no longer fight drug charges from the US anti-doping agency (USADA). In a statement the American, 40, maintains he is innocent, but says he is weary of the "nonsense" accusations. USADA says it will ban Armstrong from cycling for life and strip him of his seven Tour de France titles. "I refuse to participate in a process that is so one-sided and unfair," said Armstrong of the USADA proceedings.

USADA chief executive Travis Tygart responded: "It is a sad day for all of us who

love sport and our athletic heroes." Armstrong retired from cycling in 2005 after the last of his seven successive Tour de France titles, although he returned to the sport between 2009 and 2012 as part of the Astana and then RadioShack teams. USADA alleges he used banned substances as far back as 1996, including the blood-booster erythropoietin (EPO), steroid and blood transfusions.

Lance Edward Armstrong (born Lance Edward Gunderson, September 18, 1971) is a disgraced American former professional road racing cyclist. He won the Tour de France a record seven consecutive times after surviving testicular cancer and he is also the founder and chairman of the Lance Armstrong Foundation for cancer support.

In August 2012 the United States Anti-Doping Agency charged him with doping. When Armstrong dropped his appeal against the findings, USADA announced that he had received a lifetime ban and that all his results since August 1998 were null and void. On October 10, 2012, the United States Anti-Doping Agency released their 1000 page reasoned decision report which will be reviewed by the Union Cycliste Internationale and the World Anti-Doping Agency.

In his early professional career, Armstrong won the UCI Road World Championship in 1993 and several other minor races. In October 1996, he was diagnosed as having testicular cancer with a tumor that had metastasized to his brain and lungs; his prognosis was initially poor. His cancer treatments included brain and testicular surgery and extensive chemotherapy. He returned to cycling and won the Tour de France each year from 1999 to 2005, riding for the U.S. Postal Service Pro Cycling Team, which became the Discovery Channel Pro Cycling Team in 2004. Armstrong retired from racing after the 2005 Tour de France but returned to competitive cycling in January 2009 and finished third in the 2009 Tour de France. He announced that he had retired again on February 16, 2011. He last rode professionally for UCI ProTeam Team Radio Shack.

In June 2012, the U.S. Anti-Doping Agency (USADA) charged Armstrong with having

used illicit performance enhancing drugs, based on blood samples from 2009 and 2010 as well as the testimony of other cyclists. Armstrong challenged this in federal court, claiming that his right to due process was violated and that USADA did not have jurisdiction over the case; Armstrong's lawsuit was dismissed on August 20, 2012. On August 23, 2012, Armstrong announced that he would not be fighting the USADA's charges. Later that day the USADA confirmed in a statement that Armstrong was banned for life and would be disqualified from any and all competitive results obtained on and subsequent to August 1, 1998, including forfeiture of any medals, titles, winnings, finishes, points and prizes. Armstrong has questioned whether USADA has the legal authority to enforce its ruling. The UCI has not yet enforced any ban, but has requested that USADA provide a reasoned decision explaining the action taken, while the World Anti-Doping Agency (WADA) has expressed its support to USADA and said it has the right to apply a penalty that will be recognized by all WADA code countries. On 10 October 2012, the USADA publicly released its report containing its evidence to be used by the Union Cycliste International (UCI), the World Anti-Doping Agency (WADA), and the World Triathlon Corporation (WTC) in their investigations of Armstrong.

UV Water Treatment

What is UV treatment?

Ultra-violet (UV) treatment is the disinfection process of passing water by a special light source. Immersed in the water in a protective transparent sleeve, the special light source emits UV waves that can inactivate harmful microorganisms. This method of treatment is growing in popularity because it does not necessarily require the addition of chemicals.

UV systems alone are neither intended to treat water that is visually contaminated nor intended to convert wastewater to safe, microbiologically potable water.

How does UV treatment work?

The ultra-violet rays, similar to the sun's UV but stronger, alter the nucleic acid (DNA) of viruses, bacteria, molds or para-

sites, so that they cannot reproduce and are considered inactivated. UV treatment does not alter the water chemically as nothing is added except energy. It should be noted that inactivated microorganisms are not removed from the water. UV treatment does not remove dirt and particles, metals such as lead or iron, or hard minerals such as calcium. Other devices are required to remove particles, metals and minerals, and information can be found in other About Your House documents in the water treatment series.

Do I need a UV system?

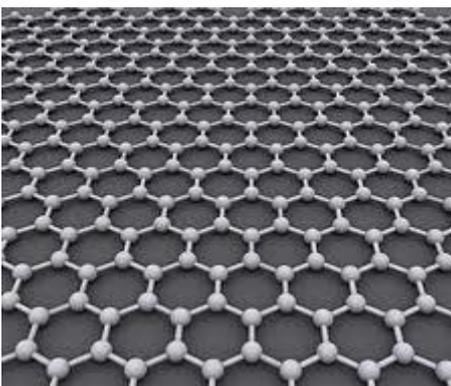
If your drinking water is municipally supplied or your regularly tested water source is safe, it is likely that you do not need a UV system for health purposes. If further peace of mind for safe drinking water is your goal, UV may provide additional treatment to your water.

Is UV-treated water safe to drink?

UV-treated water is safe to drink. UV treatment does not add chemicals or change the chemical composition of the water. When properly sized and installed on a visually clear water source, UV can effectively protect from microorganisms in the water. Prolonged storage of water after UV treatment is not recommended.

Graphene

Graphene is a substance made of pure carbon, with atoms arranged in a regular hexagonal pattern similar to graphite, but in a one-atom thick sheet. It is an allotrope of carbon whose structure is a single planar sheet of sp²-bonded carbon atoms that are densely packed in a honeycomb crystal lattice. The term graphene was coined as a combination of graphite and the suffix -ene by Hanns-Peter Boehm, who described single-layer carbon foils in 1962. Graphene is most easily visualized



as an atomic-scale chicken wire made of carbon atoms and their bonds. The crystalline or "flake" form of graphite consists of many graphene sheets stacked together. The carbon-carbon bond length in graphene is about 0.142 nanometers. Graphene sheets stack to form graphite with an interplanar spacing of 0.335 nm. Graphene is the basic structural element of some carbon allotropes including graphite, charcoal, carbon nanotubes and fullerenes. It can also be considered as an indefinitely large aromatic molecule, the limiting case of the family of flat polycyclic aromatic hydrocarbons.

There is an important silicon analog of graphene, called silicene.

The Nobel Prize in Physics for 2010 was awarded to Andre Geim and Konstantin Novoselov at the University of Manchester "for groundbreaking experiments regarding the two-dimensional material graphene". As early as 1970, there was speculation that carbon fullerenes existed in addition to the well known allotropes of carbon found in the forms of coal, soot, diamond and graphite.^{1,2} The existence of C₆₀ fullerenes, or "buckyballs," was first demonstrated by Kroto, Curl and Smalley of Rice University in 1985. For their work, they were awarded the 1996 Nobel Prize in Chemistry. With the discovery of this new class of carbon allotropes, research interest in this family of materials exploded. In addition to buckyballs, fullerene structures include other spherical, ellipsoidal and tubular shapes, all of which display a hollow, cage-like structure formed by each carbon atom being covalently bonded to three others. The first carbon nanotubes (CNTs) were synthesized in 1991, and they have attracted increased attention since then as a result of their unique and tailorable properties.³ The figure depicts a single-wall carbon nanotube (SWNT). Note that CNTs are composed entirely of sp² bonds, which are stronger than the sp³ bonds found in the diamond form of carbon.⁴ Multiwalled nanotubes (MWNT) also exist, and they are essentially the equivalent of concentric SWNTs.

A number of CNT-based nanomaterials are under development based on their

unique properties, which make them attractive alternatives to traditional materials. CNTs can be formed into a thin sheet. "Buckypaper" is a particular type of CNT sheet. Figure 2 shows a scanning electron microscopy image of buckypaper on the left, as well as a large sheet of CNT paper on the right (produced at Nanocomp Technologies, Inc.). Due to advances in the manufacturability of buckypaper, it is becoming increasingly common to find this form of CNTs being used in structural, electromagnetic interference (EMI) shielding and thermal applications.

Graphene is another carbon-based nanomaterial that is receiving a lot of attention since Geim and Novoselov were awarded the 2010 Nobel Prize in Physics for its discovery. Graphene is a single atomic layer of carbon, equivalent to a CNT that has been "unrolled" into a two-dimensional structure. Graphene is highly transparent yet conductive, making it an excellent candidate for photovoltaic applications, liquid crystal displays (LCDs) and light-emitting diodes (LEDs).

CNTs can behave as semiconductors or metals, depending on their structure, and they can support high current densities. The thermal conductivity of CNTs is elevated along the nanotube axis and is approximately ten times that of copper. Yet, CNTs are excellent thermal insulators along their radial axis.

In addition to their electrical and thermal characteristics, CNTs are promising for structural applications due to their high strength and stiffness. With diameters on the order on 1/10 nanometers (nm), and lengths ranging from the submicron scale to several millimeters or more, CNTs exhibit tensile strengths along their axes approximately ten times that of Kevlar.

At Raytheon, CNTs are being developed for use in EMI shielding and high-strength applications where lightweight materials are required. They are also being developed for use as thermally conducting interfaces in high-power devices. Additional uses for CNTs are being investigated through collaborations with university laboratories. However, challenges still exist in the development of CNT technologies for real-world applications. The behavior of bulk CNT materials often falls

short for that of a single nanotube. Novel CNT growth techniques, as well as CNT alignment and integration into bulk materials, are ongoing and critical research areas. In fact, twenty years after they were first synthesized, the potential for CNTs is just now being realized.

Stem cells

Stem cells are biological cells found in all multicellular organisms, that can divide (through mitosis) and differentiate into diverse specialized cell types and can self-renew to produce more stem cells. In mammals, there are two broad types of stem cells: embryonic stem cells, which are isolated from the inner cell mass of blastocysts, and adult stem cells, which are found in various tissues. In adult organisms, stem cells and progenitor cells act as a repair system for the body, replenishing adult tissues. In a developing embryo, stem cells can differentiate into all the specialized cells (these are called pluripotent cells), but also maintain the normal turnover of regenerative organs, such as blood, skin, or intestinal tissues. There are three accessible sources of au-

tologous adult stem cells in humans:

1. Bone marrow, which requires extraction by harvesting, that is, drilling into bone (typically the femur or iliac crest),
2. Adipose tissue (lipid cells), which requires extraction by liposuction, and
3. Blood, which requires extraction through pheresis, wherein blood is drawn from the donor (similar to a blood donation), passed through a machine that extracts the stem cells and returns other portions of the blood to the donor.

Stem cells can also be taken from umbilical cord blood just after birth. Of all stem cell types, autologous harvesting involves the least risk. By definition, autologous cells are obtained from one's own body, just as one may bank his or her own blood for elective surgical procedures.

Highly plastic adult stem cells are routinely used in medical therapies, for example in bone marrow transplantation. Stem cells can now be artificially grown and transformed (differentiated) into specialized cell types with characteristics consistent with cells of various tissues such as muscles or nerves through cell culture. Embryonic cell lines and autologous em-

bryonic stem cells generated through therapeutic cloning have also been proposed as promising candidates for future therapies. Research into stem cells grew out of findings by Ernest A. McCulloch and James E. Till at the University of Toronto in the 1960s.

Uses of CFCs

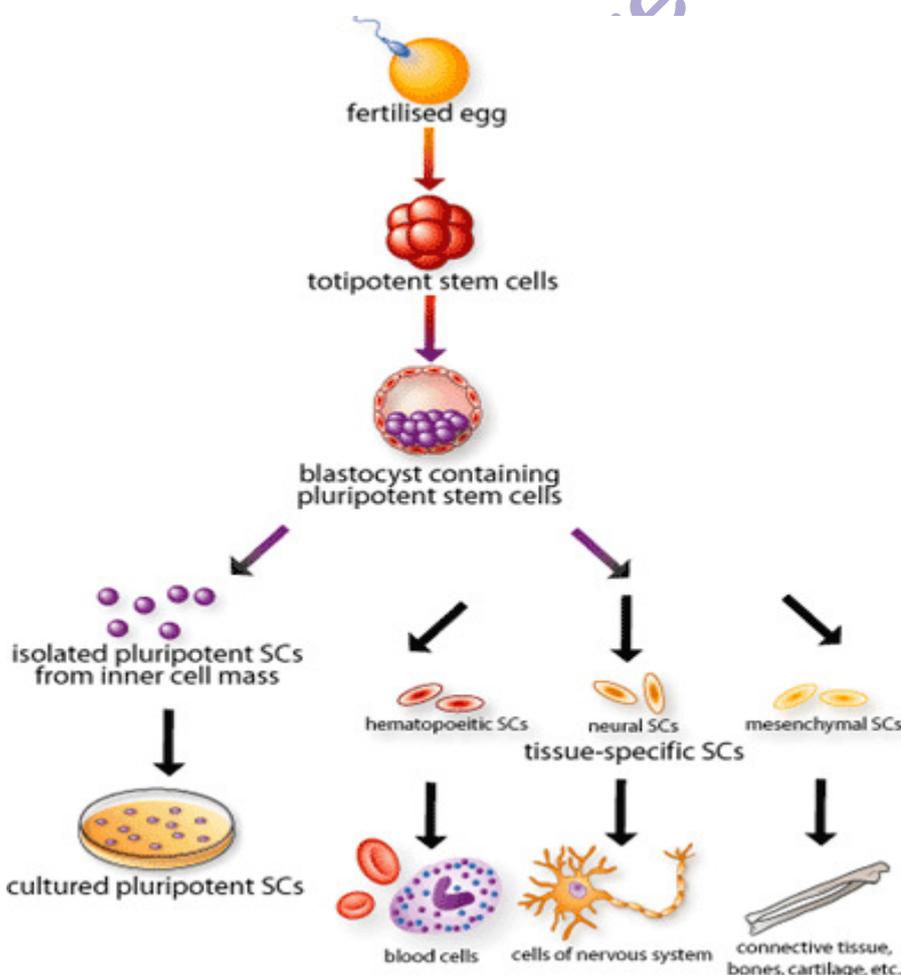
Chlorofluorocarbons, commonly known as CFCs, are a group of man-made compounds containing chlorine, fluorine and carbon. They are not found anywhere in nature. The production of CFCs began in the 1930s for the purpose of refrigeration. Since then they have been extensively utilised as propellants in aerosols, as blowing agents in foam manufacture and in air conditioning. There are no removal processes or sinks for CFCs in the lowest part of the atmosphere called the troposphere. As a result they are transported up into the stratosphere, between 10 to 50 km above the Earth's surface, where they are broken down by ultraviolet (UV) radiation from the Sun, releasing free chlorine atoms which cause significant ozone depletion.

Although the amounts of CFCs in the atmosphere are very small, measured in parts per trillion (million million), they do contribute significantly to the enhancement of the natural greenhouse effect, because they are very good at trapping heat. Molecule for molecule some CFCs are thousands of times stronger than carbon dioxide as greenhouse gases.

Since the dangers caused by CFCs to the ozone layer were first identified, their use has gradually been phased out, according to international agreements made in Montreal, Canada, in 1987. However, CFCs have long lifetimes in the atmosphere before they are broken down by sunlight, and consequently they will continue to enhance the greenhouse effect well into the 21st century.

US scientists get glimpse of antihelium

They were gone as soon as they appeared, but for a fleeting moment they were the heaviest particles of antimatter a laboratory has seen. Scientists in the US pro-



duced a clutch of antihelium particles, the antimatter equivalents of the helium nucleus, after smashing gold ions together nearly 1bn times at close to the speed of light. The discovery of antihelium at the Relativistic Heavy Ion Collider at Brookhaven national laboratory in New York will aid the search for exotic phenomena in the distant universe, including antimatter versions of stars and even galaxies. Antimatter looks and behaves like normal matter but has one crucial difference:

particles of antimatter have an equal and opposite charge to those that make up the world around us. When antimatter meets matter, the two annihilate one another, leaving nothing but a burst of energy.

Researchers at the US laboratory recorded 18 antihelium particles that survived for about 10 billionths of a second before they crashed into the collider's detector and vanished in the tiniest of fireballs. "Antihelium is stable, so if it doesn't encounter anything it will survive forever,"

said Aihong Tang, a physicist at the laboratory. "Unless there is a major breakthrough in accelerator technology, this will be the heaviest antimatter made for decades to come."

Antihelium is the heaviest breed of antimatter created by scientists, with each particle roughly 10 million billion times lighter than a grain of sand. The next heaviest that is stable is antilithium, but this is so rare the Brookhaven collider would have to run for thousands of years to detect just one particle.

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MALALA YOUSAFZAI

A 14-year-old Pakistani girl shot in the head by Taliban gunmen has been transferred to a new military hospital with better facilities. We take for granted the fact that we do not have to fight for our education, we do not have to struggle for it and most importantly we do not have to risk our lives for it. But there are many for whom such struggles are a constant reality. Many like Malala Yousafzai, who have that privilege stolen from them and for whom education is deemed unnecessary.

The issue regarding women being educated is one that has been prevalent throughout the ages, stemming largely from the belief that by educating a woman you are doing more harm than good, a view that still exists in fragments today within our own society. Many women will tell you that men feel intimidated by their knowledge or expertise in a certain field, indicating that the archaic view of the man being the dominant leader and omniscient, is still apparent within us.

I can understand why the Taliban banned the education of girls when they took over the Swat Valley. They, like my great uncle and many others in Pakistan, felt threatened by the effect of educating a girl. You see Malcolm X pretty much has summed it up for us. When you educate a woman, you don't just educate her, you liberate her. You allow her to travel on a path of self-discovery and you enable her to question her position in society. You empower her by giving her knowledge of what she

can become. And this is dangerous. It is dangerous to the Taliban because it means that they will not be able to impose their patriarchal laws upon liberated women, it means that if they do they will be presented with a challenge and a force greater than them. And their rule will be effectively diminished. It was a threat and a risk they couldn't take.

So for those asking what Malala Yousafzai has done to the Taliban, this is exactly what she has done. At the tender age of 11, Malala started writing in order to articulate her hopes and fears under a false



name. When her cover was blown and she was threatened by the Taliban and its sympathizers, she did not cease her writing. In contrast she went public, so that by the age of 14 she was a name and a force to be reckoned with. You see by educating Malala, her parents had given her her greatest gift. They had enabled her to understand her potential and to recognise that her writing was a tool, it was the sword of opposition to the men who had taken away her privilege of studying. It was her opportunity to stick her middle finger up in defiance and to seek vengeance and boy, did she strike fear in their hearts! Malala Yousafzai was a threat because her defiance was an inspiration to

others, others who lacked her bravery and her strength of character and determination. It was an act of defiance that could ignite a movement of opposition, an opposition the Taliban desperately wanted to quash, threaten and intimidate.

Their motive behind shooting Malala is a simple one: shoot the leader and you scare the followers. To them it is a message of force, but in reality it is an act of cowardice. It is an act which demonstrates how pig-headed the Taliban really are. It demonstrates their weakness and fragility. So weak that a young girl armed with

her writing can be seen as a great threat, a threat so damaging to them that even after shooting her they state that if she does not die they will strike once more. It is this latter thought that makes them real fools. By believing that they have eliminated a threat

by shooting Malala, or even, God forbid, by killing her, they are seriously deluded. This act will inspire many more like Malala, frustrated with the oppression of women that they encounter daily, frustrated with their lack of human rights and frustrated by their governments inability to protect them.

Malala Yousafzai (born 1998) is a school student from the town of Mingora in Swat District, Khyber Pakhtunkhwa, northwestern Pakistan. She is known for her education and women's rights activism in the Swat Valley, where the Tehrik-i-Taliban regime had banned girls from attending school in early 2009. During that period, at the age of 11, Yousafzai came to prominence through a blog she wrote for the BBC detailing her life under the Taliban

CLONING

World's first cloned Pashmina female Goat 'Noori' born in Kashmir

The faculty of Veterinary Sciences and Animal Husbandry Sheri Kashmir University of Agriculture Sciences and Technology, Kashmir has made a breakthrough by successfully cloning the first pashmina goat using the advanced reproductive techniques under the leadership of Dr Riaz Ahmad Shah, associate professor, Centre of Animal Biotechnology, Kashmir.

"Success was achieved under the World Bank-funded project called the National Agricultural Innovation Project of the Indian Council of Agricultural Research and took two years for standardisation of the technique. The healthy female kid was born on March 9, 2012 using a foster mother.

The world's first pashmina goat clone, produced in Kashmir, has been named Noori, an Arabic word referring to light, in Srinagar by a group of scientists and researchers.

"Noori has gained weight. From 1.3 kg at the time of birth on March 9, 2012, it's 5 kg. She is healthy and was allowed to be part of more than two dozen pashmina goats assembled at Alastaingh laboratory for the purpose," said Dr Fazili.

Noori took two years of scientific research. "It took two years for standardisation of the technique," said Dr Shah.

The clone has come as good news for fine fiber-producing pashmina goats, which are only spotted at an altitude of 14,000 feet in Ladakh, the coldest region of the state. "With Noori there is hope that pashmina can be yielded in lower altitude like Kashmir valley," said Dr Fazili.

The valley owes its fame, besides natural beauty, to famed fine wool of pashmina, gathered from mountainous of Ladakh after the goat sheds its wool as a natural process.

The goat survives minus 40 degree Celsius temperature at an altitude of 14,000 feet. In spring, the animal sheds its fiber, called soft pashm, six times finer than human hair. The fiber is used to spun famous kashmiri shawls, scarves, and stoles.

It is hoped that this research will help other labs across the region clone their own goats and even revive endangered species.

Cashmere wool, particularly made into shawls, is a major source of income for Kashmir, generating about \$80 million a year for the Indian-controlled portion of the mountain area. A shawl can cost \$200 in Kashmir and much more when sold abroad — a boon given the average salary of \$800 a year for Kashmir's 10.2 million people.

Experts say their numbers are dwindling. In recent years, Kashmir has started importing cashmere from neighboring China to keep up with orders for the region's hand-woven shawls.

'This is the cheapest, easier and less time-consuming' method of cloning, compared with conventional methods that use high-tech machinery and sometimes chemicals, Shah said.

Noori is the first cashmere goat cloned by this method, though



Shah earlier cloned a buffalo. They plan to spread the goat-cloning knowledge across the Indian Himalayas so others can grow their own goats.

Cloning – the history

The world first animal clone Dolly, a sheep, was created on 5 July 1996. It survived for seven years.

This is a list of animals that have been cloned in alphabetical order. One significant aspect of this list is documenting the transition from early concerns that animal cloning procedures might be limited to a few species that cloned animals might be physiologically abnormal, or cloning might lack utility for society.

Camel: Injaz is a female dromedary camel, credited with being the world's first cloned camel. Dr. Nisar Ahmad Wani, who headed the research team in Dubai, United Arab Emirates, announced on April 14, 2009, that the cloned camel was born after an "uncomplicated" gestation of 378 days.

Carp: Chinese embryologist Tong Dizhou successfully inserted the DNA from a male Asian carp into the egg of a female Asian carp to create the first fish clone in 1963. In 1973 Dizhou inserted Asian carp DNA into a European crucian carp to create the first interspecies clone.

Cattle : First World cloned calf (Gene) was born on February 7, 1997 on American Breeders Service facilities in Deforest, Wisconsin. Later it was transferred and kept to Minnesota Zoo Education Center.

A Holstein heifer named Amy was cloned by Dr. Xiangzhong (Jerry) Yang using ear skin cells from a high-merit cow named Aspen at the University of Connecticut on June 10, 1999, followed by three additional clones, Betty, Cathy and Daisy by July 7, 1999.

Second Chance, a Brahman bull was cloned from Chance, a beloved celebrity bull. Second Chance was born August 9, 1999 at Texas A&M University.

Texas A&M University cloned a Black Angus bull named 86 Squared in 2000, after cells from his donor, Bull 86, had been frozen for 15 years. Both bulls exhibit a natural resistance to Brucellosis, Tuberculosis and other diseases which can be transferred in meat.

Millie and Emma were two female Jersey cows cloned at the University of Tennessee in 2001. They were the first cows to be produced using standard cell-culturing techniques.

Pampa the first animal cloned in Argentina by Biosidus (2002)

Ten more Jersey cows were cloned at the University of Tennessee. (females, 2002) Bonyana and Tamina cloned calf in Royan Research Institute, Isfahan, Iran in summer of 2009.

In 2010 the first Spanish Fighting Bull was cloned by Spanish scientists.

Anatolian Grey bull (Efe) was cloned in Turkey in 2009 and cattle from the same breed no (Ece, Ecem, Nilufer, Kiraz) by TUBITAK

GARIMA- I: world's first buffalo calf through the "Hand guided Cloning Technique" was born on February 6, 2009 at NDRI, Karnal (India).

GARIMA- II: NDRI, Karnal (India).

Cloned male buffalo calf Shresth born on August 26, 2010 at National Dairy Research Institute, Karnal, India

Deer : Dewey was born on May 23, 2003 at Texas A&M University.

Dog : South Korean scientist Hwang Woo-Suk cloned the first dog, an Afghan hound named Snuppy. Later in 2005 Hwang Woo-Suk was found to have fabricated evidence in stem cell research projects. This caused some to question the veracity of his other experiments, including Snuppy. In their investigation of Hwang Woo-Suk's publication, however, a team from SNU confirmed that Snuppy was a true clone of Tei, the DNA donor dog. South Korean scientists recently cloned 'sniffer' dogs.

BioArts International held a dog cloning contest where people would send in submissions about which dog was the most suited to be cloned. The winner was Trakr, a K-9 police dog who was a 9/11 hero.

In summer 2011, South Korean researchers cloned a beagle dog named Tegen, which glowed in ultraviolet light

Ferret : Clones Libby and Lilly were produced via nuclear transfer by cell fusion in 2004

Frog : In 1958, John Gurdon, then at Oxford University, explained that he had successfully cloned a frog. He did this by us-

ing intact nuclei from somatic cells from a *Xenopus* tadpole. This was an important extension of work of Briggs and King in 1952 on transplanting nuclei from embryonic blastula cells

Gaur : A species of wild cattle, the first endangered species to be cloned. In 2001 at the Trans Ova Genetics in Sioux Center, Iowa, USA, a cloned Gaur was born from a surrogate domestic cow mother. However, the calf died within 48 hours

Goat : Downen TX 63 684 (nicknamed Megan) was cloned from a top producing Boer goat born on March 29, 2001 at Texas A&M University.

The Middle East's first and the world's fifth cloned goat, 'Hanna', has been successfully born at Royan institute in Isfahan, Iran. The cloned goat was developed in the surrogate uterus of a black Bakhtiari goat for 147 days and was born, Wednesday, at 1:30 a.m. through a cesarean section. She is reported to be in a good health. Hanna, also known as R-CAP-C1, is completely distinguished from other goats because of its white and henna-like color. Iran's first cloned lamb, Royana, was born September 30, 2006 in Royan institute and was able to survive the post-natal complications common in cloned animals. Iranian researchers are looking to use cloned goats to produce the genetically modified animals required for manufacturing new recombinant medications. (April 2009) Isfahan, Iran

Horse : Prometea, female, born May 2003, Italy

Pieraz, male, born February 2005, Italy
Paris-Texas, male, born March 2005, USA
Gemini, male, born September 2008, USA, clone of multiple recipient of "Horse of the Year" award for jumping Gem Twist

Saphir, male, born February 2010, USA, clone of show jumper Sapphire

Mice : Possibly the first cloned mammal was a mouse (named "Masha") in 1986, in the Soviet Union. However, the cloning was done from an embryo cell, while the sheep Dolly in 1996 was cloned from an adult cell.

The first mouse from adult cells, Cumulina, was born in 1997 at the University of Hawai'i at Ma-noa in the laboratory of Ryuzo Yanagimachi using the Honolulu technique. Over a dozen clones

as of 2002.

Mouflan : An endangered species, the Mouflon was the first to live past infancy. Cloned 2001

Mule : Idaho Gem (male, May 2003)

Utah Pioneer (male, June 2003)

Idaho Star (male, July 2003)

Pig : 5 Scottish PPL piglets (Millie, Alexis, Dotcom, Carrel, and Christa) (March 5, 2000) .

Xena (female, August 2000).

Pyrenean Ibex : In 2009, one clone was alive, but died seven minutes later, due to physical defects in the lungs. The Pyrenean Ibex became the first taxon ever to come back from extinction, for a period of seven minutes in January 2009.

Rabbit : In France (March-April, 2003)

Rat : Ralph (male, 2003)

Rhesus Monkey : Tetra (female, January 2000) by embryo splitting.

Cloned embryos (November 2007) by transfer of DNA from adult cells

Sheep : From early embryonic cells by Steen Willadsen (1986). Megan and Morag cloned from differentiated embryonic cells in June 1995.

Dolly (1996-2003), first cloned mammal from somatic cells.

Polly and Molly (July 1997), first transgenic cloned mammal.

Royanan (2006) cloned in Royan Research institute in Isfahan, Iran.

Oyali and Zarife were cloned in November 2007 in Istanbul University in Istanbul, Turkey.

Water Buffalo : The world's first water buffalo was cloned either in Beijing China in 2005 or New Delhi, India in 2009 "Samrupa", the world's first cloned buffalo calf, which died a week later from a lung infection.

Wolf : An endangered species of wolf cloned by Korean scientists including the controversial scientist Hwang Woo-Suk.

There are two cloned wolves in a zoo in Korea for public view, they are called Snuwolf and Snuwolffy which are names taken from the university in Korea, Seoul National University.

CYBERCRIMES

The Convention on Cybercrime, also known as the Budapest Convention on Cybercrime or just the Budapest Convention, is the first international treaty seeking to address Computer crime and Internet crimes by harmonizing national laws, improving investigative techniques and)increasing cooperation among nations. It was drawn up by the Council of Europe in Strasbourg with the active participation of the Council of Europe's observer states Canada, Japan and China. The Convention and its Explanatory Report was adopted by the Committee of Ministers of the Council of Europe at its 109th Session on 8 November 2001. It was opened for signature in Budapest, on 23 November 2001 and it entered into force on 1 July 2004.[3] As of 28 October 2010, 30 states had signed, ratified and acceded to the convention, while a further 16 states had signed the convention but not ratified it.

On 1 March 2006 the Additional Protocol to the Convention on Cybercrime came into force. Those States that have ratified the additional protocol are required to criminalize the dissemination of racist and xenophobic material through computer systems, as well as of racist and xenophobic-motivated threats and insults.

Objectives

The Convention is the first international treaty on crimes committed via the Internet and other computer networks, dealing particularly with infringements of copyright, computer-related fraud, child pornography, hate crimes and violations of network security. It also contains a series of powers and procedures such as the search of computer networks and Lawful interception.

Its main objective, set out in the preamble, is to pursue a common criminal policy aimed at the protection of society against cybercrime, especially by adopting appropriate legislation and fostering international co-operation.

The Convention aims principally at:



harmonising the domestic criminal substantive law elements of offences and connected provisions in the area of cyber-crime providing for domestic criminal procedural law powers necessary for the investigation and prosecution of such offences as well as other offences committed by means of a computer system or evidence in relation to which is in electronic form setting up a fast and effective regime of international co-operation.

The following offences are defined by the Convention :

illegal access, illegal interception, data interference, system interference, misuse of devices, computer-related forgery, computer-related fraud, offences related to child pornography and offences related to copyright and neighbouring rights.

It also sets out such procedural law issues as expedited preservation of stored data, expedited preservation and partial disclosure of traffic data, production order, search and seizure of computer data, real-

nation to ratify the convention. Forty-three nations have signed the treaty. The Convention entered into force in the USA on January 1, 2007.

“While balancing civil liberty and privacy concerns, this treaty encourages the sharing of critical electronic evidence among foreign countries so that law enforcement can more effectively investigate and combat these crimes,” said Senate Majority Leader Bill Frist.

“The Convention includes a list of crimes that each signatory state must transpose into their own law. It requires the criminalization of such activities as hacking (including the production, sale, or distribution of hacking tools) and offenses relating to child pornography, and expands criminal liability for intellectual property violations. It also requires each signatory state to implement certain procedural mechanisms within their laws. For example, law enforcement authorities must be granted the power to compel an Internet Service Provider to monitor a person’s activities online in real time. Fi-

nally, the Convention requires signatory states to provide international cooperation to the widest extent possible for investigations and proceedings concerning criminal offenses related to computer systems and data, or for the collection of evidence in electronic form of a criminal offense. Law enforcement agencies will have to assist police from other participating countries to cooperate with their mutual assistance requests.”

Although a common legal framework would eliminate jurisdictional hurdles to facilitate the law enforcement of borderless cyber crimes, a complete re-alization of a common legal framework may not be possible. Transposing Convention provisions into domestic law is difficult especially if it requires the incorporation of substantive expansions that run counter to constitutional principles. For instance, the U.S. may not be able to criminalize all the offenses relating to child pornography that are stated in the Convention, specifically the ban on virtual child pornography, because of its First Amendment free speech principles. Under Article 9(2)(c) of the Convention, a ban on child pornography includes any “realistic images representing a minor engaged in sexually explicit conduct.” According to the Convention, the U.S. would have to adopt this ban on virtual child pornography as well, however, the U.S. Supreme Court, in *Ashcroft v. Free Speech Coalition*, struck down as unconstitutional a provision of the CPPA that prohibited “any visual depiction” that “is, or appears to be, of a minor engaging in sexually explicit conduct.” In response to the rejection, the U.S. Congress enacted the PROTECT Act to amend the provision, limiting the ban to any visual depiction “that is, or is indistinguishable from, that of a minor engaging in sexually explicit conduct.” 18 U.S.C

The United States will not become a Party to the Additional Protocol to the Convention on Cybercrime.

Ten Years On: The Budapest Convention – A Common Force against Cybercrime

The 10th anniversary of the Budapest Convention received special attention last week at the Octopus Conference (21 – 23 November), part of the Council of

Europe’s Global Project on Cybercrime. After ten years the Budapest Convention remains the only accepted international text on how to “protect against and control online crime while at the same time respecting human rights”, the Secretary General, Thorbjørn Jagland emphasized in his concluding speech at the close of the Strasbourg held three-day Octopus Conference.

The overall consensus of the conference was that despite some criticism of the Convention it provides the only effective and practical tool to fight global on-line crime.

In its new role as Chair of the Council of Europe, the UK representative, Parliamentary Under-Secretary for Crime and Security, James Brokenshire, took the opportunity to outline the continued support that the UK intends to give to the Budapest Convention as “the most important international agreement on cyber crime.” UK support is evidenced in the UK Cyber Security Strategy, released on Friday, where it commits to using its chairmanship to encourage a wider adoption of the Budapest Convention. A key element of the UK plan will be to enable ‘compatible frameworks of law and effective cross-border law enforcement to deny safe havens to cybercriminals.’ The UK plans to achieve this by: promoting greater levels of international cooperation; by sharing understanding on cyber crime as begun ‘by the London Conference on Cyberspace’; by promoting the Council of Europe’s Convention on Cyber crime (the Budapest Convention); and by building on the new EU Directive on attacks on information systems. There is also a further commitment to contributing to the review of security provisions of the EU Data Protection Directive and the proposed EU Strategy on Information Security.

At the close of the Conference, Mr Brokenshire admitted that the London conference had raised questions about some parts of the Convention’s articles, although he repeated the view of William Hague, UK Foreign Secretary, that there was ‘no appetite’ for an alternative Convention. Brokenshire paid tribute to the Convention’s “great achievement” and to

those who developed it. As well he emphasized the effectiveness of the Convention during an era of great technical change and of the need to ensure that it stays relevant which will require all parties to “develop additional protocols and other changes as the need arises.”

Ahead of Australia joining the other 32 parties of the Convention, Australian Attorney General, Robert McClelland, spoke of the ‘duality of modernity’ that Internet connectivity has brought where the positives are tempered by the darker side of the human condition, as evidenced in crimes and exploitation. Major cyber intrusions, McClelland said, is costing Australian organizations “an average of \$2 million per incident” and more than a billion dollars a year to the Australian economy. This requires a global response, McClelland emphasized.

The Attorney General praised too the drafters of the Convention and their ‘remarkable’ foresight adding that any suggestion that it (the Convention) is ‘out of date’ was unfounded. McClelland gave examples of the practical approach offered by the Convention and the reason why it remains the world’s leading international legal tool in combating cybercrime. For example; Article 24 requires parties to provide real time assistance to one another; Article 35 requires that assistance be made available on a 24 hour 7 day a week basis facilitated through a central contact point; that parties ensure that their law enforcement responders are properly trained and equipped and that parties have an obligation to provide appropriate technical assistance to others.

McClelland noted that a further two dozen countries will soon be joining the Convention and called for all to “rise to the challenge to ensure that Governments, businesses and individuals realize the full benefits of cyberspace” whilst also ensuring that current and emerging risks are managed.

The Deputy Secretary General of the Council of Europe, Maud de Boer-Buquicchio, acknowledged that there were challenges ahead for all members, although there was reason for optimism, and summed up the magic formula in one

word: CO-OPERATE.

Challenges include the need for:

More engagement from political decision-makers in the co-operation against cybercrime.

More co-operation with and between countries from all regions of the world.

A stronger public-private co-operation against cybercrime.

A stronger co-operation between international organizations.

More technical co-operation to assist countries worldwide in the implementation of the Budapest Convention and related tools and good practices.

Ms de Boer-Buquicchio further emphasized that the Budapest Convention is not a static treaty and allows for an effective response to new challenges, for example, the problems of jurisdiction and law enforcement as posed by cloud computing. One thing is certain, The Deputy Secretary General stated, the Budapest Convention is the “best tool that exists to effectively fight crime on-line.”

In summing up Secretary General, Thorbjørn Jagland, used recent events in his home country, Norway, to highlight the threat that online criminality poses. Norwegian key defense and energy companies have found themselves the target of recent and ongoing attacks illustrating that the need for global cooperation has never been greater. The Secretary General iterated the commitment of the Council of Europe to enhancing cooperation and in furthering the Budapest Convention as a “treaty with global impact.” “Together, we can take pride in the results,” Jagland said:

“The convention has proven to work. Thanks to it, there has been a broad harmonization of cybercrime legislation. Not only in Europe but worldwide. In addition, offences such as illegal access to computer data or illegal interception of computer data or computer-related forgery or fraud, have been criminalized.”

By way of caution, Jagland reminded delegates that technology and, with it, the techniques used by cybercriminals evolve much faster than legal responses and although the Budapest Convention is certainly not a static treaty no one can claim to have “all the answers to all the emerg-

ing challenges.” The multistakeholder approach has its part to play as does the need to look for “complementarity rather than duplication.”

Jagland concluded, “The Budapest Convention is the international community’s most forceful and agreed upon response. It serves as a common ground for international co-operation and partnerships and has the interest of you and me in mind: to protect our rights in cyberspace!”